Final Environmental Impact Report Fifth Avenue Landing Project and Port Master Plan Amendment

San Diego Unified Port District 3165 Pacific Highway San Diego, CA 92101



OCTOBER 2020 (UPD #EIR-2016-06; SCH #2016081053)

Volume 1 of 3

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Acronyms and Abbreviations

ALUC	Airport Land Use Commission
ARC	Amended, Restated and Combined
BMP	best management practice
Board	Board of Port Commissioners
C&D	construction and demolition
Caltrans	California Department of Transportation
CAO	cleanup and abatement order
САР	Climate Action Plan
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of San Diego
Disposal Plan	Soil and Groundwater Disposal Plan
District	San Diego Unified Port District
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EFH	essential fish habitat
EIR	environmental impact report
FAA	Federal Aviation Administration
FAL	Fifth Avenue Landing, LLC
GHG	greenhouse gas
GPS	global positioning system
HCM	Highway Capacity Manual
I-	Interstate
ICE	Intersection Control Evaluation
КОР	Key Observation Point
Landside Characterization Report	Landside Site Contamination Characterization Report
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
LID	low-impact development
MMRP	Mitigation Monitoring and Reporting Program
MTCO ₂ e	metric tons of carbon dioxide equivalent
MWh/year	megawatt-hours per year
NB	northbound
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
P&GP	Planning & Green Port

РАН	polycyclic aromatic hydrocarbon
РАР	Public Access Program
PCBs	polychlorinated biphenyls
PMP	Port Master Plan
РМРА	Port Master Plan Amendment
Program	Community Health and Safety Program
PV	photovoltaic
PVC	polyvinyl chloride
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
Safety Plan	Site Worker Health and Safety Plan
SB	southbound
SB	Senate Bill
SDCC	San Diego Convention Center
SDCCC	San Diego Convention Center Corporation
SDG&E	San Diego Gas & Electric
Sediment Characterization Report	Marine Sediment Contamination Characterization Report
Sediment Management Plan	Contaminated Sediment Management Plan
SOHO	Save Our Heritage Organisation
SR-	State Route
TDM	Transportation Demand Management
Testing and Profiling Plan	Soil and Groundwater Testing and Profiling Plan
TIA	Traffic Impact Analysis
ТРН	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound
WTC	water transportation center

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1.1 Project History and Background

In January 2016, Fifth Avenue Landing, LLC. (FAL), as the applicant and project proponent, submitted a proposal to the San Diego Unified Port District (District) to construct and operate a fully functioning market-rate hotel and lower-cost, visitor-serving hotel, marina, water transportation center, publicly accessible waterfront with retail options, and publicly accessible plaza and park areas. The District prepared a Draft Environmental Impact Report (EIR) to analyze the potential environmental effects associated with the Fifth Avenue Landing and Port Master Plan Amendment Project (proposed project). The Draft EIR was available for public review for 49 days beginning on December 13, 2017, and ending on January 30, 2018.

Since public review of the Draft EIR, the project proponent proposed some minor changes in the project description. These changes are reflected in Chapter 2, *Executive Summary*, and Chapter 3, *Project Description*, of the Final EIR. Additionally, Attachment 4, *Updated Project Description* provides a strikeout-underline version of Chapter 3, *Project Description*, of the Draft EIR to clearly indicate what changes were made to the project description since public review. An analysis of the project changes, of the Final EIR. In addition, Chapter 5, *Errata and Revisions*, of the Final EIR, identifies the changes to the Draft EIR based on the revised project and comments received on the Draft EIR during public review. As documented in the Final EIR, the revised project would not result in a new significant environmental impact or substantially increase the severity of an environmental impact, and no feasible project alternatives or mitigation measures have been identified different than those analyzed in the Draft EIR. Therefore, pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15088.5, recirculation of the Draft EIR is not required.

1.2 Project Overview

FAL, as the project proponent, is proposing a commercial and recreational bayside redevelopment on approximately 18 acres (approximately 784,100 square feet) (project or proposed project). As proposed, the project would include construction and operation of the following.

- An 843-room, approximately 498-foot-high, 44-story, market-rate hotel tower.
- Approximately 69,100 square feet of meeting space.
- Up to 220-room, approximately 82-foot-high, 5-story, lower-cost, visitor-serving hotel.
- Approximately 7,749 square feet of retail development along the Embarcadero Promenade.
- Approximately 2.26 acres (98,448 square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel.
- Approximately 260 onsite parking spaces (combination of striped and valet parking spaces).

- A two-phase expanded marina with up to 50 new slips (approximately 23 slips in Phase I and 27 slips in Phase II) that, combined with the existing 12 slips, would total up to 62 slips.
- An optional connecting bridge from the hotel rooftop public plaza and park area to the San Diego Convention Center (SDCC) that would require potential concurrence of the City of San Diego (City) and an amendment to the existing Convention Center Management Agreement for the SDCC by and between the City and the District (District Document No. 37944) (Management Agreement) prior to implementation.

In addition to the above improvements, the proposed project also includes an amendment to the existing Port Master Plan (PMP). The current certified PMP designates a portion of the landside portion of the project site for the SDCC Phase III expansion. In addition, other land and water uses proposed as part of the project are not consistent with the existing PMP land and water use designations. Therefore, the proposed project proposes an amendment to PMP Planning District 3, Centre City Embarcadero. This PMP Amendment (PMPA) is proposed to change portions of the existing land and water use designations and to update the PMP maps, text, and tables to reflect the proposed project and corresponding land and water uses (see Figure 3-19). In addition, as shown in Figure 3-19, the PMPA identifies up to eight new designated vista areas to replace the five existing designated vista areas that would displaced by the proposed project. The South Embarcadero Public Access Program (PAP) has also been amended to include the proposed project, and is included in Chapter 5, *Errata and Revisions*, of this Final EIR.

1.3 Certification of the Final EIR

The District is the Lead Agency, as defined in State CEQA Guidelines Section 15367, because it has principal responsibility for approving the proposed project. As Lead Agency, the District also has primary responsibility for complying with CEQA. Therefore, the Board of Port Commissioners (Board), as the decision-making body of the District, is required to consider the information contained in the Final EIR prior to approving the proposed project. Specifically, the Board must certify that:

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the decision-making body of the Lead Agency and the decisionmaking body reviewed and considered the information contained in the Final EIR prior to approving the project; and
- The Final EIR reflects the Lead Agency's independent judgment and analysis.

Other agencies may use the information contained in this Final EIR when considering issuance or authorization of any other approvals for the project. The Final EIR, in compliance with Section 15132 of the State CEQA guidelines, includes Volumes 1–3 listed under Section 1.4 below.

1.4 Contents and Organization of the Final EIR

The content and format of this Final EIR is designed to meet the requirements of CEQA; the State CEQA Guidelines, Article 9, specifically State CEQA Guidelines Section 15132; and the District's CEQA Guidelines. Table 1-1 summarizes the organization and content of the Final EIR.

The Draft EIR that was previously circulated for public review is an integral part of the Final EIR; both documents are intended to be used together. The Final EIR (including the Draft EIR and its appendices) may be viewed on the District's website. A paper copy of the Final EIR (including the Draft EIR and its appendices), will be available at the District Clerk office at 3165 Pacific Highway, San Diego, CA 92101, once regular business hours resume, which are Monday through (every other) Friday, 8 a.m. to 5 p.m.

Location	Contents
VOLUME 1	
Chapter 1 Introduction	Provides background on the proposed project, the requirements for a Final EIR and other related documents, and the organization of the Final EIR.
Chapter 2 <i>Executive Summary</i>	Briefly summarizes the proposed project; identifies each significant effect, with proposed mitigation measures and alternatives that would reduce or avoid that effect; identifies the areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and summarizes the issues to be resolved, including the choice among alternatives and how to mitigate the significant effects (State CEQA Guidelines Section 15123).
Chapter 3 Project Description	Contains both a map of the precise location and boundaries of the proposed project and its location relative to the region; lists the proposed project's central objectives, underlying purpose, and benefits; and provides a detailed description of the proposed project's technical, economic, and environmental characteristics (State CEQA Guidelines Section 15124(a), (b), and (c)).
Chapter 4 Analysis of Project Changes	Provides an analysis of the changes to the proposed project to determine whether any revisions to analysis and conclusions of the Draft EIR are required.
Chapter 5 Errata and Revisions	Includes the revisions to the Draft EIR and its technical appendices (where appropriate), which were prepared in response to comments received during the public review period for the Draft EIR (State CEQA Guidelines Section 15132) as well as changes to the project description proposed by the project proponent since public review.
Chapter 6 Comments Received and District Responses	Includes a list of agencies, organizations, and individuals that provided comments on the Draft EIR during the public review period. Each comment is assigned a comment number, which corresponds to a response (State CEQA Guidelines Section 15132).
Attachment 1 <i>Mitigation Monitoring and</i> <i>Reporting Program</i>	The Mitigation Monitoring and Reporting Program (MMRP) for the project is included as a chapter of the Final EIR. The MMRP is presented in table format and identifies mitigation measures for the proposed project, the party responsible for implementing the mitigation measures, the timing of implementing the mitigation measures, and the monitoring and reporting procedures for each mitigation measure (State CEQA Guidelines Section 15097).

Table 1-1. Document Organization and CEQA Requirements

Location	Contents				
Attachment 2 Air Quality and Greenhouse Gas Emissions Memo	Provides updated air quality and greenhouse gas emissions calculations based on the changes to the project.				
Attachment 3 Transportation Memo	Provides an analysis of the project changes as it relates to the transportation analysis in the Draft EIR.				
Attachment 4 <i>Updated Project Description</i>	Provides a strikeout-underline version of Chapter 3, <i>Project Description</i> , of the Draft EIR.				
Attachment 5 Utilities and Solid Waste Memos	Provides updated utilities and sold waste calculations based on changes to the project.				
VOLUME 2					
Draft EIR	Volume 2 of the Final EIR contains the Draft EIR (Volume I of II of the Draft EIR) that was previously circulated for public review. The Draft EIR contains all the contents described within CEQA, the State CEQA Guidelines, Article 9, and the District's CEQA Guidelines. The Draft EIR is included on the enclosed CD, as Volume 2 of the Final EIR. A hard copy is available at the District Clerk's office.				
VOLUME 3					
Draft EIR Technical Appendices	Volume 3 of the Final EIR consists of Appendices A through L-2 of the Draft EIR (Volume II of II of the Draft EIR). The appendices include additional background information and technical detail for several of the resource areas, as well as the Initial Study/Notice of Preparation and any comments received during the scoping process. The technical appendices to the Draft EIR are included on the enclosed CD, as Volume 3 of the Final EIR. A hard copy is available at the District Clerk's office.				
Under Separate Cover					
Findings of Fact and Statement of Overriding Considerations	Provides findings on each significant impact and alternative, accompanied by a brief explanation of the rationale for each finding. The findings are supported by substantial evidence in the record (State CEQA Guidelines Section 15091). The statement of overriding considerations provides a written statement related to balancing, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (State CEQA Guidelines Section 15093).				

2.1 **Project Overview**

Fifth Avenue Landing, LLC, as the project proponent, is proposing a commercial and recreational bayside redevelopment on approximately 18 acres (approximately 784,100 square feet) (project or proposed project). As proposed, the project would include construction and operation of the following.

- An 843-room, approximately 498-foot-high, 44-story, market-rate hotel tower.
- Approximately 69,100 square feet of meeting space.
- Up to 220-room, approximately 82-foot-high, 5-story, lower-cost, visitor-serving hotel.
- Approximately 7,749 square feet of retail development along the Embarcadero Promenade.
- Approximately 2.26 acres (98,448 square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel.
- Approximately 260 onsite parking spaces (combination of striped and valet parking spaces).
- A two-phase expanded marina with up to 50 new slips (approximately 23 slips in Phase I and 27 slips in Phase II) that, combined with the existing 12 slips, would total up to 62 slips.
- An optional connecting bridge from the hotel rooftop public plaza and park area to the San Diego Convention Center (SDCC) that would require potential concurrence of the City of San Diego (City) and an amendment to the existing Convention Center Management Agreement for the SDCC by and between the City and the District (District Document No. 37944) (Management Agreement) prior to implementation.

2.2 Project Location

The proposed project would be located in downtown San Diego within the District's jurisdiction on an 18-acre project site, which consists of 5 landside acres south of Harbor Drive and the SDCC and west of the existing Hilton San Diego Bayfront Hotel and 13 waterside acres of San Diego Bay east of Embarcadero Marina Park South. The waterside portion of the project site is approximately 350 feet and the landside approximately 1,000 feet from the 96-acre Tenth Avenue Marine Terminal, an omni-terminal that handles refrigerated containers, dry bulk, liquid bulk, and general cargo immediately southeast of the Hilton San Diego Bayfront Hotel. The Bay is southwest of the project site, and the City of Coronado is across the Bay, approximately 0.6 mile to the southwest.

Major circulation facilities in the area include Interstate (I-) 5 and State Route (SR-) 94 to the east and SR-163 to the north. Several freeway ramps are within 1 mile of the project site. The site is also within proximity to rail, with the closest trolley stop, Gaslamp Quarter Station, approximately 900 feet across Harbor Drive to the north and Santa Fe Depot less than 1 mile to the northwest. Figure 21 shows the regional location and access to the project site. Figure 2-2 provides the precise location and boundaries of the project site.

2.3 Project Objectives

The project proponent has identified the following objectives for the proposed project.

- 1. Provide for the development and operation of a full-service hotel of a size, quality, and location appropriate for first-class convention operations that is a financially viable operation and is of a similar size and stature as nearby hotels such as the Hilton San Diego Bayfront Hotel (approximately 1,200 rooms), Manchester Grand Hyatt Hotel (approximately 1,625 rooms), and Marriott Marquis San Diego Marina Hotel (approximately 1,355 rooms).
- 2. Provide lower-cost, visitor-serving accommodations to allow greater access and enjoyment by the public that complies with Board Policy 775, *Guidelines for the Protection, Encouragement, and, Where Feasible, Provision of Lower Cost Visitor and Recreational Facilities.*
- 3. Provide for infill development on District tidelands that: (a) is compatible with surrounding uses; (b) maximizes the economic benefit to the District and City of San Diego and surrounding region by maximizing hotel room revenue, restaurant and retail sales, and hotel and retail sales taxes; and (c) generates sufficient leasehold revenue to support the District's participation in financing its mission of developing a balance between economic benefits, environmental stewardship, and public safety on behalf of the citizens of California.
- 4. Increase activation at the project site and along the bayfront by providing public plaza and park spaces, accompanied by visitor-serving retail, an expanded marina, a new water transportation center, and continuing operation of the existing public in-Bay water transportation system.
- 5. Provide new public vista opportunities of San Diego Bay from vantage points such as the SDCC and proposed public plaza and park areas.
- 6. Improve public access by providing linkages from the City to the waterfront and Embarcadero Promenade by providing wayfinding signage at multiple entry points, including potential development of a pedestrian bridge that connects the project site with the SDCC and the Gaslamp Quarter of downtown San Diego.
- 7. Pursue Leadership in Energy and Environmental Design (LEED) Silver certification or achieve an equivalent level of sustainability by incorporating sustainable practices in all elements of project design and construction, leading to a reduction in energy use, water use, and solid waste generation as compared to standard hotel and visitor-serving developments.



Figure 2-1 Regional Location Fifth Avenue Landing Project

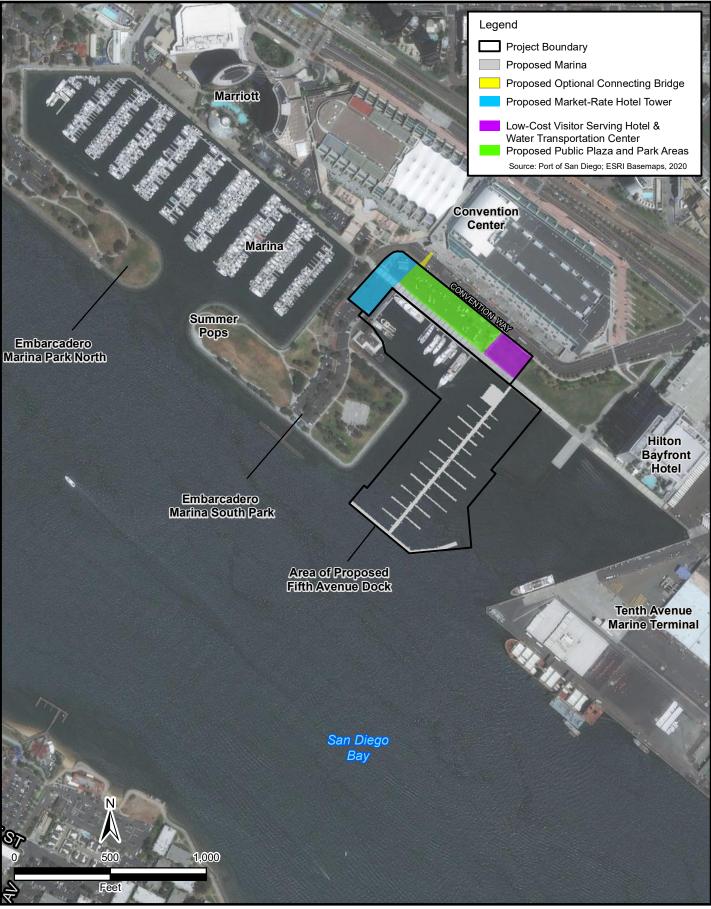


Figure 2-2 Project Site Boundaries Fifth Avenue Landing Project

2.4 Project Components

2.4.1 Market-Rate Hotel Tower

The proposed project would include the construction of an approximately 843-room market-rate hotel tower and open-air pedestrian archway that spans the Embarcadero Promenade. The market-rate hotel tower would rise approximately 498 feet above mean sea level and would total 44 stories in height. The market-rate hotel tower, including the associated retail, restaurant, and meeting space, would be approximately 911,736 gross square feet. Table 3-1 in Chapter 3, *Project Description*, identifies the specific components of the market-rate hotel tower, which includes 843 guest rooms. Figures 2-3 and 2-4 provide the proposed hotel stacking plan and cross-section.

The market-rate hotel tower design is inspired by sail structures of the latest generation of America's Cup sailboats. This design would be a recognition of the maritime uses of San Diego Bay and the high-tech nature of the America's Cup sailboats. A rendering of the proposed hotel is provided as Figure 2-5.

As depicted on Figure 2-6, the open-air pedestrian archway would span the Embarcadero Promenade as visitors approach the market-rate hotel tower and would connect the market-rate hotel tower to its ballroom and meeting facilities, located above the proposed parking structure. The archway would be approximately 43 feet wide, reach a height of approximately 40 feet, and include a smaller glass bridge at a lower height, which would span the Embarcadero Promenade to allow visitors to cross onto the plaza and access other project amenities. The depth and height of the archway would allow pedestrians to experience Bay views, and its design would provide visual connection between the northern and southern portions of the Embarcadero Promenade.

Servicing of the proposed market-rate hotel tower would be accomplished by incorporating up to three loading docks near the north SDCC garage entrance.

2.4.2 Lower-Cost Visitor-Serving Hotel with Water Transportation Center

The proposed project includes the construction of an approximately 220-room lower-cost visitorserving hotel, renderings of which are shown on Figures 2-7 and 2-8. The proposed lower-cost visitor-serving hotel would be a five-story structure and would reach an approximate height of 82 feet, with retail abutting the Embarcadero Promenade along the eastern side of the building. This hotel would be near the Hilton San Diego Bayfront Hotel and its bayside park, and include an approximately 3,903-square-foot at-grade public pedestrian walkway. The lower-cost visitorserving hotel would be situated on its own leasehold parcel as a stand-alone development.

Additionally, an approximately 2,000-square-foot water transportation center (WTC) would be integrated into the building footprint of the lower-cost visitor-serving hotel and would consist of an accessory office/marina business center and marina guest lounge (1,000 square feet), ticketing (400 square feet), and marina crew restroom/showers (600 square feet), all of which are illustrated on Figure 2-9. The WTC would serve marina customers and their boats, as well as provide operational support for the marina and the existing water transportation ferry service. Parking for the WTC would be provided within the proposed parking garage.

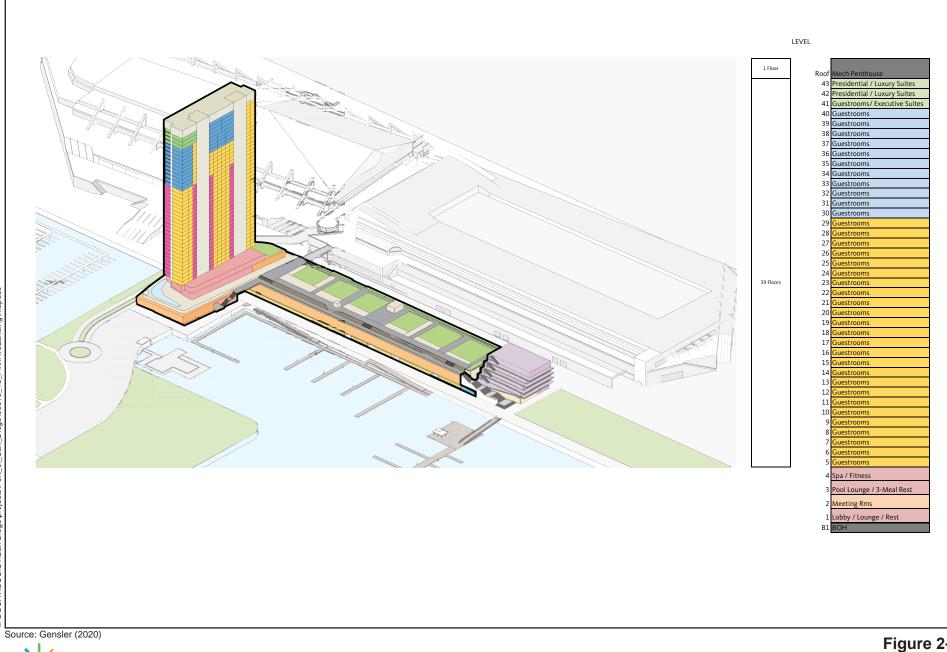
2.4.3 Optional Connecting Bridge to the San Diego Convention Center

As an optional project feature, the proposed project may potentially include a new public access bridge connecting the proposed market-rate hotel tower rooftop public plaza and park areas to the SDCC view deck. This optional bridge connection would provide visitors with elevated and expansive views of the entire north and mid-Bay and would allow for travel to the City's Gaslamp Quarter. This optional bridge would be approximately 1,882 square feet with a length of 85 feet and a width at the narrow end of 18 feet and wide end of 26 feet. The paving materials for the proposed bridge would be designed to be integrated with the proposed rooftop public plaza and park areas and may consist of a variety of enhanced materials including integral color decorative finished concrete, precast pavers, and/or stone accent paving. In addition, planting material would be included along the bridge in either integrated or free-standing planters. The guardrails are proposed to be constructed of painted metal or stainless steel or a combination of these along with solid planter walls. Concurrence by the District, and potentially the City as the contractual managing entity of the SDCC, would be required prior to implementing this portion of the proposed project. An amendment to the Management Agreement between the District and the City may also be required. Therefore, the bridge is identified as an optional project component in this environmental impact report (EIR). The EIR analyzes the project with and without the optional public access bridge component.

2.4.4 Public Plaza and Park Areas and Design Features

The proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.70 acre) to approximately 98,448 square feet (2.26 acres). The public plaza and park areas would serve as resting and viewing areas for visitors and would include interpretive signage and public art. All the proposed public plaza and park areas would be designed with a combination of hardscape, drought-tolerant landscape, grass lawns, and artificial turf. In total, the proposed project would include four public plaza and parks areas and a public promenade spread throughout the project site. Table 2-1 identifies each of the public plaza and park areas and the percent of public and private usage of the areas. Figure 2-10 depicts the public plaza and park area locations, and Table 2-1 provides further detail on each area. The proposed project would also maintain and enhance the existing 35-foot-wide Embarcadero Promenade across the site. The existing promenade does not count toward the acreage of the proposed project's public plaza and park areas. The proposed project would enhance the existing Embarcadero Promenade by providing retail adjacent to the promenade; increased seating areas; public restrooms; connection of the lower-cost visitor-serving hotel and market-rate hotel tower with the promenade with small plazas or lobbies; and access to the parking structure from the promenade; additionally, an optional pedestrian bridge that would serve to connect pedestrian circulation from Downtown San Diego and SDCC to the Embarcadero Promenade.

As depicted on Figure 2-10, in addition to the proposed public plaza and park areas, the proposed project provides public access throughout the project site and connects to surrounding uses. One of the public access features includes the construction of a walkway around the market-rate hotel tower in order to maintain public access to the views along the Bay.





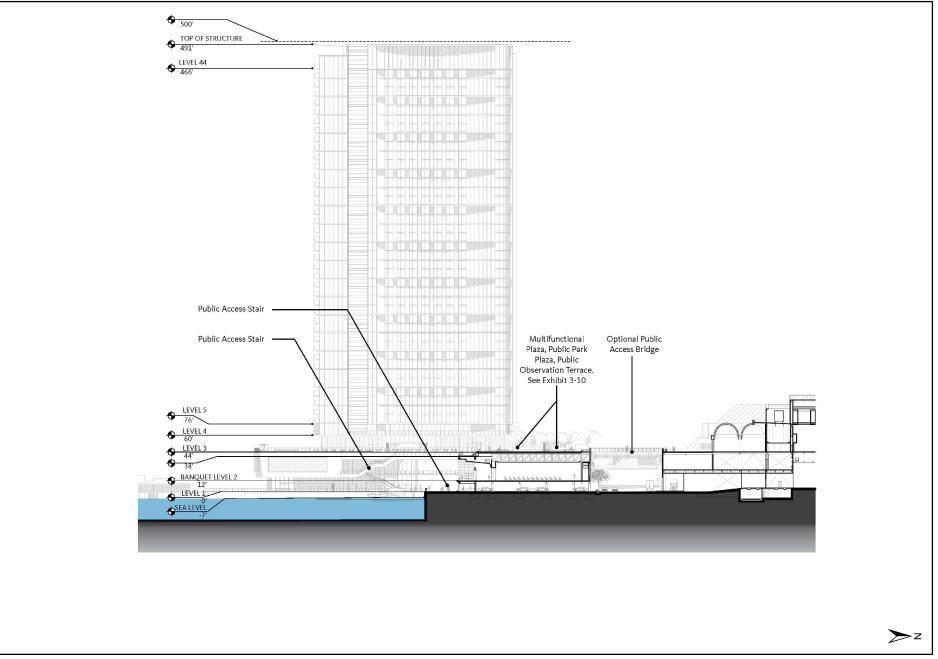






Figure 2-5 Hotel Tower Rendering Fifth Avenue Landing Project





Figure 2-6 Open-Air Pedestrian Archway Rendering Fifth Avenue Landing Project



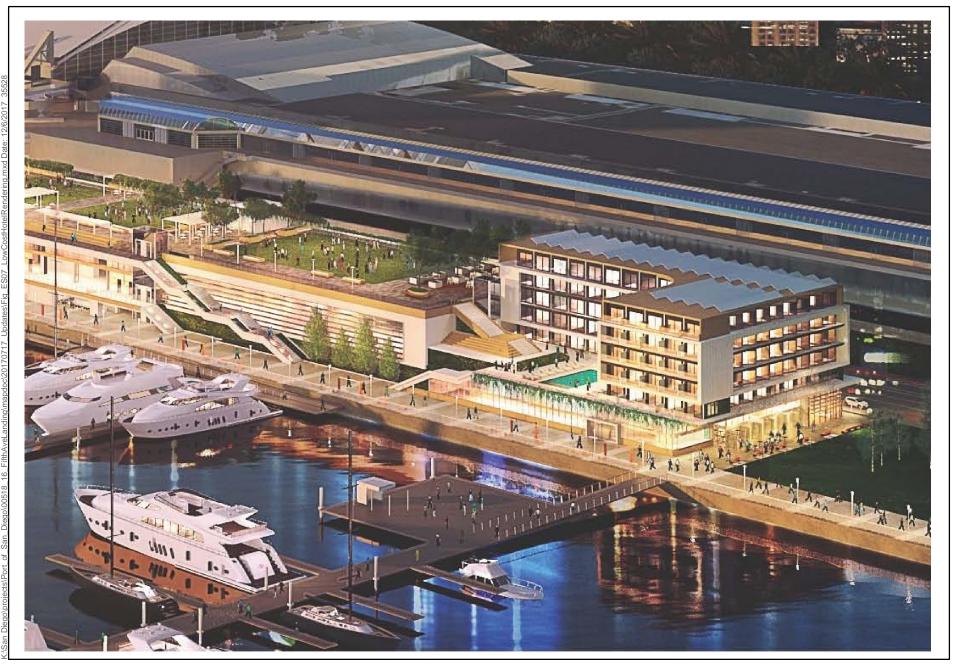




Figure 2-7 Proposed Lower-Cost Visitor-Serving Hotel Rendering Fifth Avenue Landing Project



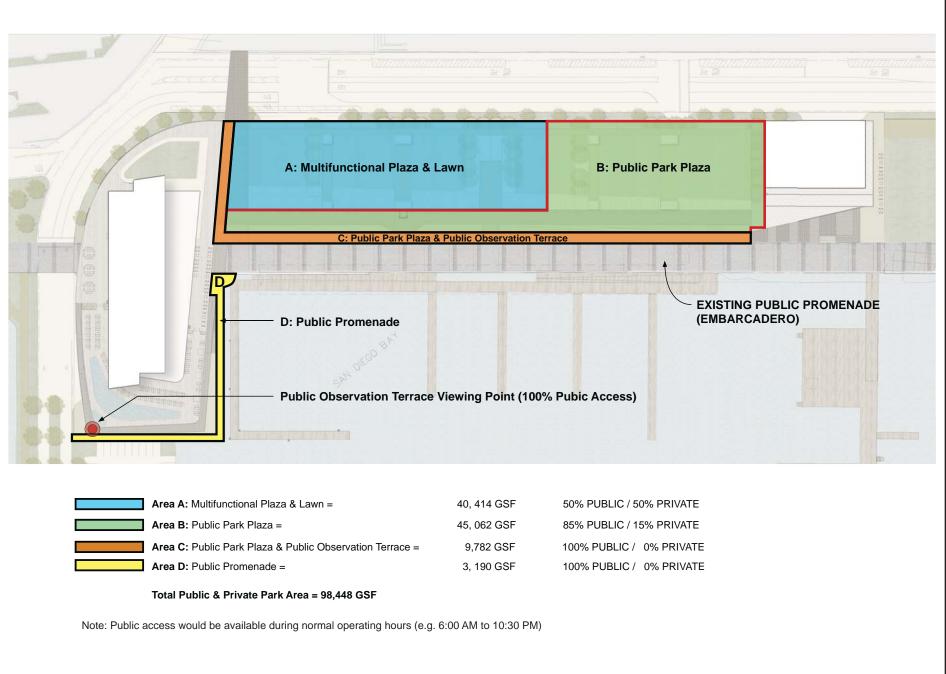


Figure 2-8 Proposed Lower-Cost Visitor-Serving Hotel Rendering Fifth Avenue Landing Project



Figure 2-9 Proposed Water Transportation Center Rendering Fifth Avenue Landing Project





Source: Gensler (2020)



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Figure 2-	Title	Area	Location	Aaaaaa	Available to Dublic
10 Key A	Title Multifunctional Plaza and Lawn	(square feet) ¹ 40,414	Location Above the ballrooms, meeting rooms, and parking structure ²	Access Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	Available to Public 50% public access/50% private access/Managed by Operator
В	Public Park Plaza	45,062	Above the ballrooms, meeting rooms, and parking structure ²	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	85% public access/15% private access/Managed by Operator
C	Public Park Plaza and Public Observation Terrace	9,782	Marina overlook	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	100% public access
D	Public Promenade	3,190	Approximately 10-foot wide walkway along the southeast portion of the market-rate hotel tower; will include a public viewing deck.	Ground-level via the public Embarcadero Promenade	100% public access
	Total	98,448			

Table 2-1. Proposed Public Plaza and Park Areas

¹ Values are approximate.

² This plaza and park area would be on the roof of the market-rate hotel tower ballroom and parking structure, described in *Market-Rate Hotel Tower*.

³ This plaza is associated with the lower-cost visitor-serving hotel, described in *Lower-Cost Visitor-Serving Hotel with Water Transportation Center*.

NOTE: A more detailed description of these areas can be found on Figure 2-14, Landscape Concept Site Plan.

2.4.5 Visitor-Serving Retail Storefronts

The proposed project would include up to five visitor-serving retail storefronts consisting of openair cafés, food and beverage outlets, gift shops, and other visitor-serving retail establishments along the Embarcadero Promenade. These retail venues would total approximately 7,749 square feet and are intended to encourage activation of the existing Embarcadero Promenade. Figure 2-11 provides a site plan of the proposed retail storefronts.

2.4.6 Marina Expansion

The proposed project marina expansion would include waterside and landside components. The waterside components include adding new vessel slip space, constructing a new pile-supported pier, possibly constructing a breakwater with wave attenuation panels, and improving public access to the waterfront. The landside component involves removing the existing office trailer, WTC ticket booth, public restroom, and pavement; and reconstructing the bulkhead and anchors.¹

The existing vessel slip space, which consists of three 170-foot slips, four 125-foot slips, two 115foot slips, one 233-foot slip, and two 130-foot slips, would be expanded by an additional 57,696 square feet of pile-supported dock space. The marina would be constructed in two phases. Phase I (approximately 31, 564 square feet) would add 23 new marina slips ranging in size from 50 feet to 200 feet and would be constructed during the hotel construction timeframe. These slips would be accessible from the proposed pile-supported dock, which would be approximately 20 feet in width and extend approximately 439 feet for Phase I. A breakwater with wave attenuation panels may be included as part of the proposed project to reduce wave energy coming into the marina. The breakwater, located at the end of the proposed dock, would be approximately 400 linear feet and 20 feet in width.

Phase II (approximately 26, 132 square feet) would provide an additional 27 slips ranging in size from 50 feet to 240 feet and would be constructed when market conditions allow, approximately 5 years after the hotels are in operation, but no sooner. Total buildout would allow for 50 additional slips, for a combined total of 62 slips, including the existing 12 slips, to accommodate both small and large vessels. These slips would be accessible from the proposed pile-supported dock, which would be approximately 20 feet in width and extend approximately 922 feet into the San Diego Bay for Phase II with a breakwater of approximately 630 linear feet and 20 feet in width. Each slip would have shoreside power, as well as connections to the City's water and sewer systems.

The possible fleet mix of the expanded marina would allow for smaller boats to be integrated into the marina while at the same time allowing larger vessels to dock. Figures 2-12 and 2-13 depict the proposed Phase I and Phase II marina layouts, respectively, and the proposed dock and slip lengths and quantities. The proposed fleet mix may change slightly, but Figures 2-12 and 2-13 represent the worst-case scenario (i.e., result in the most impacts) for purposes of the EIR analysis.

Improvements to public access as a result of the proposed project include signage and dock space for larger and smaller vessels.

¹ Note that the existing marina office would be replaced with the WTC and enhanced as part of the lower-cost visitor-serving hotel development component.

The proposed landside marina improvements would include relocating the existing marina office to the promenade level of the lower-cost visitor-serving hotel. In 2015, the ferry service transported approximately 290,000 passengers, and in 2016 it transported approximately 222,672 passengers. At this time, there no plans in place to expand the ferry service; accordingly, an expansion of service is not analyzed in this EIR. In addition, the project site operates an existing water taxi service, which is a pre-arranged service that provides transportation throughout the Bay to groups of no fewer than 20 people. The service is typically only used a few times per year. This service would continue to be operated at the project site with the implementation of the proposed project.

2.4.7 Parking

A one-level parking structure would be incorporated into the development between the market-rate hotel tower and the lower-cost visitor-serving hotel. As depicted on Figure 2-11, the parking structure would be constructed at ground level and would be beneath the market-rate hotel tower meeting space/ballrooms and the rooftop public plaza and park areas. The proposed visitor-serving retail (as described in *Visitor-Serving Retail Storefronts*) would mask the parking structure from public view along the promenade. The capacity for approximately 260 onsite parking spaces, including both striped and valet parking would be provided, and access to the proposed parking structure would be provided on Convention Way.

The proposed parking structure would incorporate the use of natural light, light-emitting diode (LED) lighting, and natural Bay breezes to cool the garage. Limited mechanical systems would be needed to ventilate or provide fresh air to the garage. Approximately 29 electric car charging stations would also be installed to accommodate electric vehicles.

As part of the existing Amended, Restated and Combined (ARC) lease between the SDCC Corporation and the District for the project site, the project proponent has the right to seek 110 parking spaces in the offsite District-owned SDCC garage contingent upon availability, amendments to the existing SDCC Management Agreement, and the District issuing a lease agreement to the project proponent for the use of the 110 offsite parking spaces. At this time, there is no excess parking available in the SDCC garage, and it is not reasonably foreseeable that such parking would be available to the project proponent. However, in the event 110 parking spaces become available and the remaining aforementioned conditions are satisfied, the EIR analyzes the proposed project with and without the SDCC offsite parking spaces.

Nearby parking facilities may be available for shared parking; however, the project proponent currently does not have any contractual rights to use any other parking garage, and no parking has been set aside for the proposed project.

Parking supply and demand are discussed in detail in Chapter 4, Section 4.12, *Transportation, Circulation, and Parking,* of the Draft EIR.

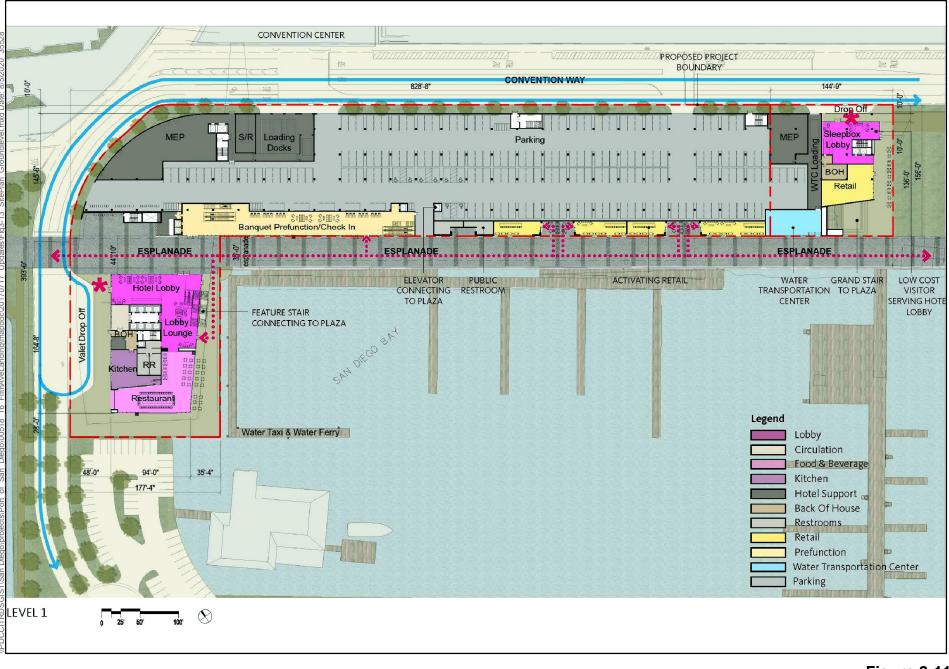
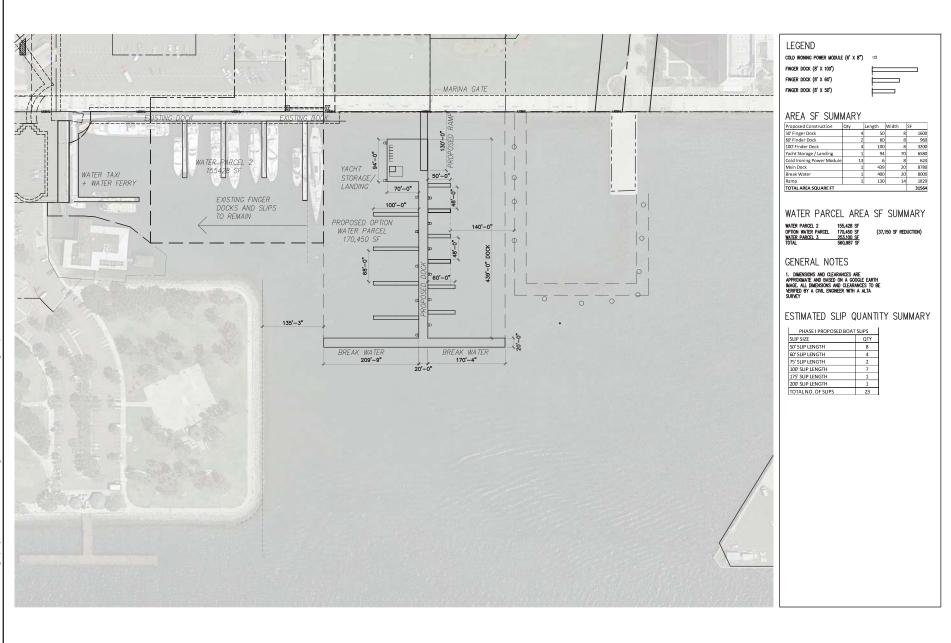


Figure 2-11 Proposed Site Plan at the Ground Level Fifth Avenue Landing Project

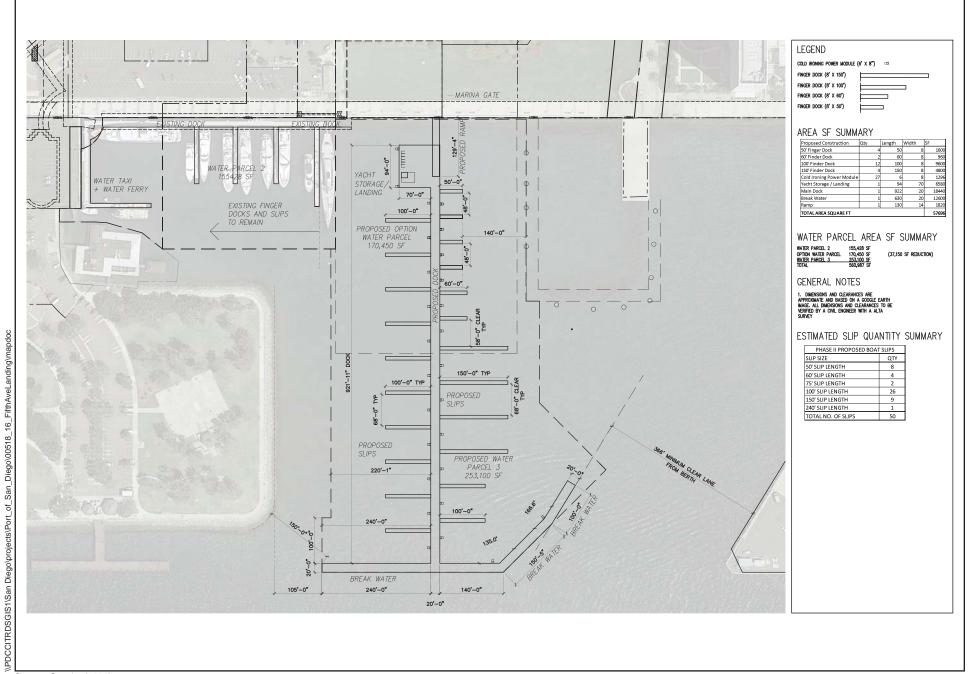


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Source: Gensler (2020)



Figure 2-12 Proposed Phase I Marina Expansion Fifth Avenue Landing Project



Source: Gensler (2020)



Figure 2-13 Proposed Phase II Marina Expansion Fifth Avenue Landing Project

2.4.8 Onsite Circulation and Wayfinding

Visitors and hotel guests would access the project site from Harbor Drive and Park Boulevard, which turns into Convention Way. Convention Way would retain its current alignment and would be used for car and truck access to the project site during construction and operation of the proposed project.

Public signage along the promenade would illustrate San Diego Bay history, including its past and present working waterfront, interpretive signage, and location and wayfinding maps. This signage would conform to the South Embarcadero Urban Design Guidelines and California Coastal Access signage statewide program. These guidelines include utilizing banners on street lights and minimizing signs that obstruct views of the San Diego Bay.

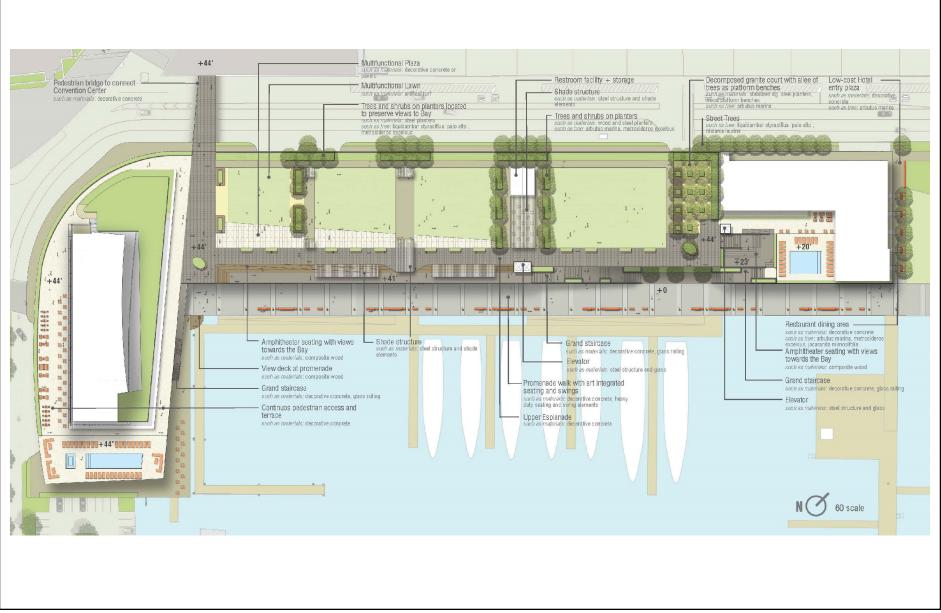
Signage off tidelands would be designed with input from and in cooperation with the SDCC, City, and the District. Signage locations are proposed to include areas along Harbor Drive, Fifth Avenue, Convention Way, and the Gaslamp and Ballpark Districts.

2.4.9 Landscape and Water Quality Design Features

The proposed project would require the removal of 39 ornamental trees located within the existing parking lot area and park/plaza area. Figure 2-14 provides the conceptual landscape plan for the proposed project. The proposed project would include 75 trees, as well as shrubs, throughout the project site. Figures 2-15 and 2-16 provide the existing and proposed impervious and pervious surfaces on the site. The proposed project would increase the impervious surface by 18,540 square feet. The proposed project would include stormwater protection systems, including the capture of runoff, and various landscape measures to improve Bay water quality. Landscaping would consist of drought-tolerant and non-invasive plants acceptable to the State of California, California Native Plant Society, and the California Invasive Plant Council. In addition, most runoff water would be recaptured through a filtered system that employs landscape troughs and other measures. Permeable surfaces would be used in place of concrete or asphalt where feasible.

The marina would be a zero-discharge facility. A marina Best Management Practice Plan would be drafted and implemented to ensure that marina operations do not degrade Bay water quality. The plan would be approved by the District prior to commencement of the marina development. Components of the plan include the use of educational materials to be provided to boat owners and their crews. Docking agreements would contain specific use restrictions to prevent degradation of water quality. The marina operator would restrict boat repairs and cleaning operations. Hull bottom scraping and the use of toxic detergents used to clean vessels would be prohibited, and no overwater repairs would be allowed. Refueling would occur off site. The marina's onsite manager would enforce these restrictions and discharge any dock user who fails to comply with these restrictions after verbal warnings have been provided.²

² These features and measures are also included within mitigation measure **MM-HWQ-1** in Section 4.8, *Hydrology and Water Quality*, of the Draft EIR.





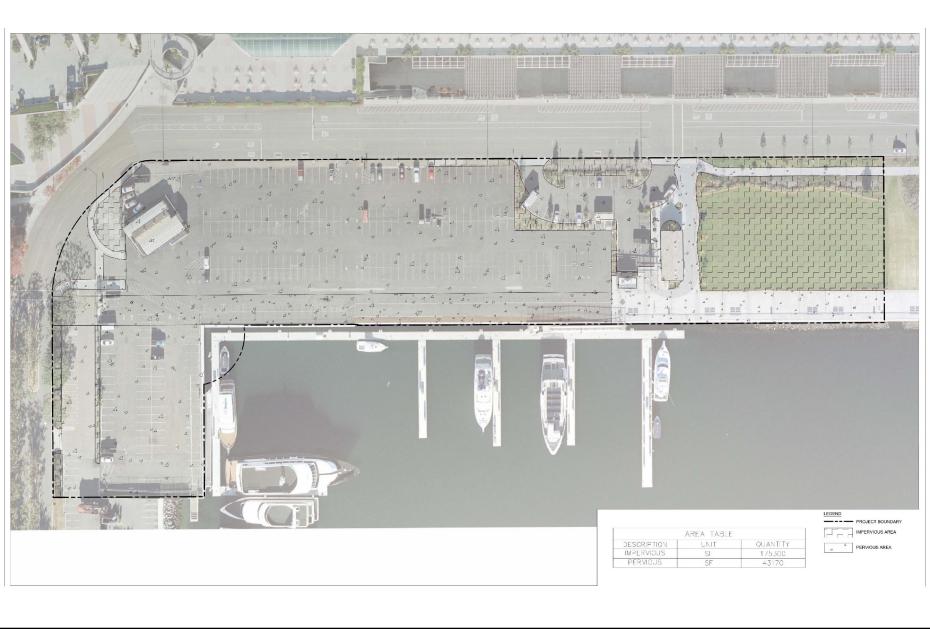


Figure 2-15 Existing Impervious and Pervious Areas Fifth Avenue Landing Project

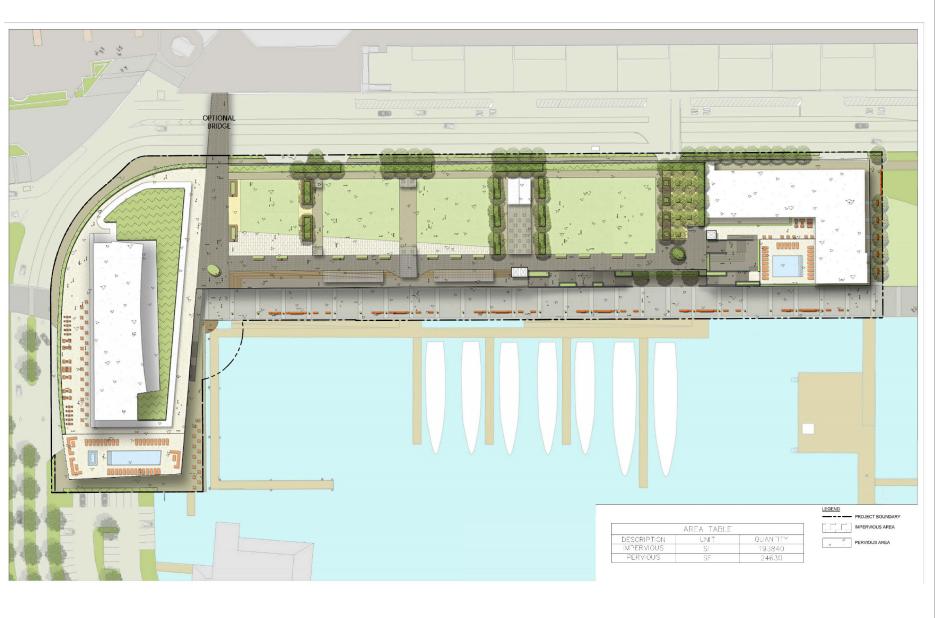


Figure 2-16 Proposed Impervious and Pervious Areas Fifth Avenue Landing Project

2.4.10 Port Master Plan Amendment

As discussed further in Chapter 2, *Environmental Setting*, of the Draft EIR, the current certified Port Master Plan (PMP) designates a portion of the landside portion of the project site for the SDCC Phase III expansion. In addition, other land and water uses proposed as part of the project are not consistent with the existing PMP land and water use designations. Therefore, the proposed project proposes an amendment to PMP Planning District 3, Centre City Embarcadero. This PMP Amendment (PMPA) is proposed to change portions of the existing land and water use designations and to update the PMP maps, text, and tables to reflect the proposed project and corresponding land and water uses (see Figure 2-17). In addition, as shown in Figure 2-17, the PMPA identifies up to eight new designated vista areas to replace the five existing designated vista areas that would be displaced by the proposed project.

The proposed PMPA land and water use designation changes include, but are not limited to, the following.

- Commercial Recreation to Street
- Street to Commercial Recreation
- Specialized Berthing to Recreational Boat Berthing
- Ship Navigation Corridor to Recreational Boat Berthing
- Promenade to Commercial Recreation
- Park to Commercial Recreation
- Commercial Recreation to Park

The proposed PMPA and the amended South Embarcadero Public Access Program (PAP), which includes the proposed project and is attached to the PMPA, are provided in Chapter 5, *Errata and Revisions*, of the Final EIR.

2.5 **Project Alternatives**

Alternatives analyzed in Chapter 7, *Alternatives to the Proposed Project*, of the Draft EIR include the No Project/No Build Alternative, the No Project/Port Master Plan Consistency Alternative (SDCC Phase III Expansion), the No Net New Marina Alternative, the Phase I Only Marina Alternative, the Reduced Density Alternative, and the Below Grade Parking Alternative. Pursuant to the California Environmental Quality Act (CEQA), the EIR is required to identify the environmentally superior alternative. Although the No Project/No Build Alternative (Alternative 1) reduces the greatest number of significant impacts, CEQA requires that another alternative be identified when the environmentally superior alternative is the No Project/No Build Alternative. The No Project/Port Master Plan Consistency Alternative (Alternative 2) reduces the second largest number of significant impacts; however, this alternative would not achieve most of the project objectives and is also a No Project alternative.

Considering the importance of parking in the area, the Below Grade Parking Alternative (Alternative 6) would add additional parking on site and meet all the basic project objectives. However, this alternative would result in similar and, in some cases, greater impacts than the proposed project.

Therefore, as indicated in Table 2-2 below, the No Net New Marina Alternative (Alternative 3) is considered the environmentally superior alternative because it would reduce the greatest number of impacts while still achieving most of the project objectives (see Table 2-3). Alternative 3 would eliminate the marina expansion, which would avoid all of the waterside impacts that would result under the proposed project; the alternative would result in reduced impacts on biological resources, greenhouse gas (GHG) emissions, hazardous materials, hydrology and water quality, and noise and vibration. However, Alternative 3 would not meet all the basic project objectives. Specifically, it would only partially meet Objective #4 because the project would not include an expanded marina. The lack of an expanded marina would reduce public access to the project site as compared to the proposed project. However, all other project components would be incorporated, including an infill development that provides a full-service hotel that is comparable in size to adjacent hotels, a lower-cost visitor-serving hotel, plaza and park areas, restaurant and retail space, a WTC, improved links to the waterfront, and sustainable development features.

Table 2-2 below presents the impacts associated with the proposed project compared with the alternatives. Table 2-3 provides a comparison of the project alternatives and their ability to meet the project objectives.

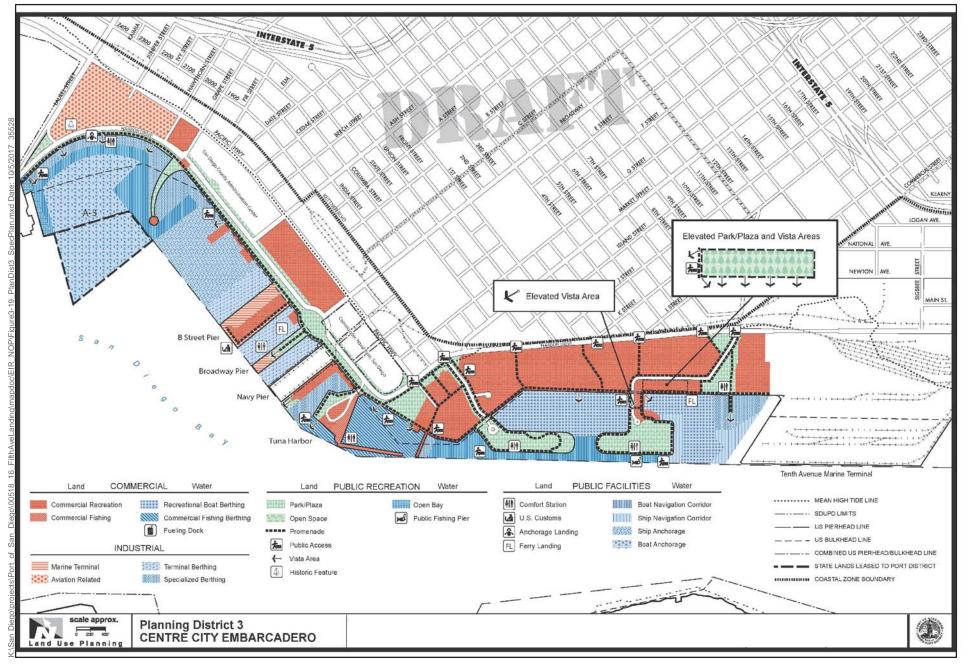


Figure 2-17 Proposed Planning District 3 Precise Plan Fifth Avenue Landing Project

Environmental Resource	Proposed Project Determination	No Project/ No Build (Alternative 1)	No Project/Port Master Plan Consistency Alternative (Alternative 2)	No Net New Marina Alternative (Alternative 3)	Phase I Only Marina Alternative (Alternative 4)	Reduced Density Alternative (Alternative 5)	Below Grade Parking Alternative (Alternative 6)
Aesthetics and Visual Resources	Significant and Unavoidable	-2	-2	0	0	0	0
Air Quality and Health Risk	Less than Significant w/Mitigation	-2	-1	0	0	0	+1
Biological Resources	Less than Significant w/Mitigation	-2	-1	-1	-1	0	0
Cultural Resources	Less than Significant w/Mitigation	-2	0	0	0	0	+1
Geology and Soils	Less than Significant w/Mitigation	-2	0	0	0	0	+1
Greenhouse Gas Emissions and Climate Change	Significant and Unavoidable	-2	-2	-2	-1	-1	+1
Hazards and Hazardous Materials	Significant and Unavoidable	-2	-1	-1	-1	0	+1
Hydrology and Water Quality	Less than Significant w/Mitigation	-2	-1	-2	-1	0	0
Land Use and Planning	Less than Significant w/Mitigation	-2	0	0	0	0	0
Noise and Vibration	Significant and Unavoidable	-2	0	-1	-1	0	0
Public Services and Recreation	Significant and Unavoidable	-2	0	0	0	0	0
Transportation, Circulation, and Parking	Significant and Unavoidable	-2	-1	0	0	-2	-1
Tribal Cultural Resources	Less than Significant	0	0	0	0	0	0

Table 2-2. Summary Impacts of Alternatives Relative to the Proposed Project

Chapter 2. Executive Summary

Environmental Resource	Proposed Project Determination	No Project/ No Build (Alternative 1)	No Project/Port Master Plan Consistency Alternative (Alternative 2)	No Net New Marina Alternative (Alternative 3)	Phase I Only Marina Alternative (Alternative 4)	Reduced Density Alternative (Alternative 5)	Below Grade Parking Alternative (Alternative 6)
Utilities and Energy Use	Less than Significant w/Mitigation	-2	0	0	0	0	0
Total ¹		-26	-9	-7	-5	-3	+4

-2= Substantially Reduced; -1= Slightly Reduced; 0 = Similar; +1 = Slightly Greater; +2 = Substantially Greater ¹ Lowest score is environmentally superior

Table 2-3. Summary Project Objective Comparison of Proposed Project Alternatives

Project Objective	No Project/ No Build (Alternative 1)	No Project/Port Master Plan Consistency Alternative (Alternative 2)	No Net New Marina Alternative (Alternative 3)	Phase I Only Marina Alternative (Alternative 4)	Reduced Density Alternative (Alternative 5)	Below Grade Parking Alternative (Alternative 6)
1. Provide full service hotel	No	No	Yes	Yes	Partially	Yes
2. Provide lower-cost visitor- serving hotel	No	No	Yes	Yes	Partially	Yes
3. Provide infill development, maximum hotel room revenue, restaurant and retail sales	No	Partially	Yes	Yes	Partially	Yes
4. Increase activation on site by providing public park, plaza space, retail, expanded marina, water transportation center	No	Partially	Partially	Partially	Yes	Yes
5. Provide new public vista opportunities of San Diego Bay from vantage points	No	Yes	Yes	Yes	Yes	Yes
6. Improve access to the waterfront and Embarcadero	No	Yes	Yes	Yes	Yes	Yes

San Diego Unified Port District

Chapter 2. Executive Summary

Project Objective	No Project/ No Build (Alternative 1)	No Project/Port Master Plan Consistency Alternative (Alternative 2)	No Net New Marina Alternative (Alternative 3)	Phase I Only Marina Alternative (Alternative 4)	Reduced Density Alternative (Alternative 5)	Below Grade Parking Alternative (Alternative 6)
Promenade by providing wayfinding signage						
7. Pursue LEED Certification	No	Yes	Yes	Yes	Yes	Yes

2.6 Impact Summary

The proposed project would result in significant project impacts related to aesthetics and visual resources, air quality and health risk, biological resources, cultural resources, geology and soils, GHG emissions and climate change, hazards and hazardous materials, hydrology and water quality, land use and planning, noise and vibration, public services and recreation, transportation, circulation and parking, and utilities and energy use. Additionally, the proposed project would contribute to cumulative impacts related to air quality and health risk, GHG emissions and climate change, noise and vibration, circulation and parking, and utilities and energy use. Table 2-4 presents the significant impacts, the proposed mitigation measures, and the level of significance after mitigation.

Table 2-4. Project Impacts and Mitigation Measures

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.1 Aesthetics and	d Visual Resources			
Project Impacts				
Substantial Adverse Effect on a Scenic Vista	Impact-AES-1: Visual Impacts due to Obstructed Views Within a Vista Area During Project Construction. The protrusion of large construction equipment, including cranes, scaffolding, and other construction materials, into the viewshed of the SDCC rooftop plaza would result in a temporary significant impact.	PS	MM-AES-1: Construction Screening and Fencing. The project proponent shall install construction- screening fencing around the entire perimeter of the project site that would shield construction activities from sight and prior to issuance of demolition permits, the District's Development Services Department shall confirm such fencing is depicted on the appropriate demolition and construction plans. Construction screening shall include, at a minimum, installation of 8-foot-tall fencing for the duration of the construction period that is covered with view-blocking materials, such as tarp or mesh in a color that blends in with the existing environment such as green or blue.	SU
	Impact-AES-2: Visual Impacts due to Obstructed Views Within a Vista Area During Project Operations. Operation of the proposed project would substantially interfere with existing expansive views of the San Diego Bay from the existing SDCC plaza and the SDCC grand staircase.	PS	MM-AES-2: Install Wayfinding and Public Accessibility Signage. Prior to the issuance of occupancy permits, the project proponent shall post wayfinding signage and signage at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge, and two locations along the existing Embarcadero Promenade, that directs visitors to the proposed public plaza and park areas on the rooftop of the parking structure and hotel ballrooms as well as the walkway around the market- rate hotel tower (the areas identified as Exterior Areas B, C, and D on Figure 3-12 in Chapter 3, <i>Project</i> <i>Description</i> , of the EIR), and designates the areas as available to the public with open hours listed (i.e., 6:00 a.m. to 10:30 p.m.). The project proponent shall submit the signage characteristics (e.g., size, color, materials) to the District's Development Services Department for review and approval. Photographic	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			proof of the wayfinding signage and designation signage shall be submitted to the District's Development Services Department prior to issuance of the certificate of occupancy. In addition, the project proponent shall allow the District to conduct periodic inspections to ensure that this space remains publicly accessible. The wayfinding signage shall clearly direct the public to the public plaza and park areas and public observation terrace and indicate that the space is open to the public except during certain circumstances consistent with the PMP Amendment. MM-AES-3: Transparent Fencing Materials at Pool Deck. Prior to the issuance of the certification of occupancy for the market-rate hotel tower, the project proponent shall install transparent fencing in front of the pool to separate the pool deck from the public observation terrace viewing point on the second floor of the west side of the market-rate hotel tower, using transparent materials such as glass or cable rail. Prior to issuance of a building permit for the market-rate hotel tower, the District's Development Services Department shall confirm such transparent fencing is	
	Impact-AES-3: Visual Impacts due to Displacement of Existing Designated Vista Areas During Project Operations. Operation of the proposed project would displace five vista areas that are designated in the PMP at the planned rooftop plaza and park areas.	PS	depicted on the appropriate building plans. MM-AES-4: Designated Public Vista Areas. To replace the five public vista areas currently designated on the project site and/or the SDCC Expansion Rooftop park, the PMP Amendment shall include five new public vista points as shown on Figure 3-19; four shall be located along the public observation terrace on the rooftop public plaza and park areas and the fifth shall be located on the west end of the market-rate hotel tower terrace (public observation terrace viewing point, Figure 3-12). These designated vista points shall be delineated with signage and open to the public at all times.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Substantially Damage Scenic Resources	Implementation of the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	LS	No mitigation is required.	LS
Existing Visual Character or Quality	Implementation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings.	LS	No mitigation is required.	LS
New Source of Substantial Light or Glare	Impact-AES-4: Temporary New Source of Nighttime Lighting During Construction. Construction of the proposed project would potentially introduce a new source of temporary nighttime lighting from the use of overnight security lights at the project site.	PS	MM-AES-5: Down-shield All Construction Security Lighting. The project proponent shall ensure that all overnight construction security lighting used at the project site is down-shielded to prevent any light spillover off site consistent with City of San Diego regulations on glare and outdoor lighting (Municipal Code Sections 142.0730 and 142.0740).	LS
	Impact-AES-5: New Permanent Source of Glare Generated by the Proposed Market-Rate Hotel Tower. The proposed market-rate hotel tower would have a curtainwall façade that would use architectural finishes and façade materials that would increase the amount of glare produced at the project site by moderate amounts, which would represent a significant new source of substantial glare at the project site compared to existing conditions that would potentially affect daytime views in the area.		MM-AES-6: Incorporate the Use of Reduced Glare Building Materials. The proposed market-rate hotel tower shall incorporate non-reflective exterior building materials in its design, and any glass incorporated into the façade of the building shall either be of low reflectivity or accompanied by a non- glare coating. Prior to issuance of a building permit for the market-rate hotel tower, the District's Development Services Department shall confirm such non-reflective materials and low reflectivity or non- glare coating are depicted on the appropriate building plans.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Cumulative Impa	acts			
The proposed pro	ject's incremental contribution to cumulat	ive aesthetics ar	nd visual resources impacts would not be cumulatively cor	siderable.
4.2 Air Quality a	nd Health Risk			
Project Impacts				
Conflict with Applicable Air Quality Plan	Impact-AQ-1: New Land Use Designations not Accounted for in the RAQS and SIP. The proposed project would re-designate Commercial Recreation to Street, Street to Commercial Recreational Boat Berthing to Recreational Boat Berthing, Ship Navigation Corridor to Recreational Boat Berthing, Promenade to Commercial Recreation, Park to Commercial Recreation, and Commercial Recreation to Park. As these land use changes were not known at the time the RAQS and SIP were last updated, this would result in a conflict with the applicable state and regional air quality plans because the proposed land use and the intensity proposed are not consistent with the current RAQS and SIP.	PS	MM-AQ-1: Update the RAQS and SIP with New Growth Projections. Prior to the San Diego Air Pollution Control District's next review of the RAQS, the District shall coordinate with the San Diego Air Pollution Control District to amend the growth assumptions using the Port Master Plan Amendment. This includes changing the designation of Commercial Recreation to Street, Street to Commercial Recreation, Specialized Berthing to Recreational Boat Berthing, Ship Navigation Corridor to Recreational Boat Berthing, Promenade to Commercial Recreation, Park to Commercial Recreation, and Commercial Recreation to Park within the proposed project site.	LS
Violate an Air Quality Standard	Impact-AQ-2: Emissions in Excess of Criteria Pollutant Thresholds During Proposed Project Construction. Project emissions during construction, before mitigation, would exceed the San Diego County SLTs for VOC. The contribution of	PS	MM-AQ-2: Use Low-VOC Interior and Exterior Coatings During Construction. During construction, the project proponent shall use low-VOC coatings for all surfaces that go beyond the requirements of San Diego Air Pollution Control District Rule 67.0, and have a VOC content of 75 grams per liter or less. Prior to the commencement of construction activities, the	LS
	project-related emissions is considered significant because the		project proponent shall submit a list of coatings to be used and their respective VOC content to the District's	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.		Development Services Department and shall submit a report verifying the use of said low-VOC coatings. The District may conduct inspections during construction to verify the use of low-VOC coatings.	
			MM-AQ-3: Limit Soil Hauling Truck Counts during Excavation to Reduce Daily Construction-Related Emissions. During construction, the project proponent shall ensure that daily heavy-duty truck counts during soil hauling do not exceed 85 trucks per day. During excavation work (Phase 2.1), the project proponent shall submit record of daily truck counts to the District's Development Services Department. The District may conduct inspections during construction to verify the number of trucks does not exceed 85 on a given day.	
Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant	Impact-AQ-3: Cumulative Emissions in Excess of Criteria Pollutant Thresholds During Proposed Project Construction. Project emissions during construction, before mitigation, would exceed the San Diego County SLTs for VOC, and when combined with other nearby past, present, and probable future projects, the proposed project's contribution would be cumulatively considerable. The contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.	PS	Implement MM-AQ-2 and MM-AQ-3 , as described above.	LS

San Diego Unified Port District

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Expose Sensitive Receptors to Substantial Pollutant Concentrations	Impact-AQ-2 , as described above.	PS	Implement MM-AQ-2 and MM-AQ-3 , as described above.	LS
Create Objectionable Odors	Implementation of the proposed project would not create objectionable odors affecting a substantial number of people.	LS	No mitigation is required.	LS
Cumulative Impa	cts			
Conflict with Applicable Air Quality Plan	Impact-C-AQ-1: New Land Use Designations not Accounted for in the RAQS and SIP. The proposed project would redesignate Commercial Recreation to Street, Street to Commercial Recreation, Specialized Berthing to Recreational Boat Berthing, Ship Navigation Corridor to Recreational Boat Berthing, Promenade to Commercial Recreation, Park to Commercial Recreation, and Commercial Recreation to Park. As these land use changes were not known at the time the RAQS and SIP were last updated, this would result in a conflict with the applicable state and regional air quality plans.	PS	Implement MM-AQ-1 , as described above.	LS
Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant	Impact-C-AQ-2: Emissions in Excess of Cumulative Thresholds during Construction. Emissions during construction the proposed project would exceed the cumulative San Diego County SLTs for VOC.	PS	Implement MM-AQ-2 and MM-AQ-3 , as described above.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.3 Biological Res	ources			
Project Impacts				
Substantial Adverse Effect on any Candidate, Sensitive, or Special-Status Species in Local or Regional Plans, Policies or Regulations	Impact-BIO-1: Water Quality Impairment Impacts on California Least Tern and California Brown Pelican Foraging. Construction and operation of the proposed project will lead to water quality impairment in San Diego Bay, which will inhibit foraging of both California least tern and California Brown Pelican by reducing water clarity and making it more difficult to identify prey species within the project site.	PS	 MM-BIO-1: Avoid California Least Tern Breeding Season or Implement Construction Measures to Eliminate Impacts on California Least Tern Breeding. The project proponent shall schedule and complete all in-water construction activity outside of the nesting season for California least tern (generally between mid-April and late September). Should in- water construction occur during the California least tern nesting season, the following construction measures shall be implemented in accordance with regulations, including CWA Section 401, the NPDES permit, and Stormwater Management and Discharge Control Ordinance: The contractor shall deploy a turbidity curtain around the pile driving areas to restrict the visible surface turbidity plume to the area of construction and pile driving. It shall consist of a hanging weighted curtain with a surface float line and shall extend from the surface to 20 feet down into the water column. The goal of this measure is to minimize the area in which visibility of prey by terns is obstructed. The contractor shall retain a qualified ornithologist (with knowledge of the species to be surveyed) approved by the District who shall conduct monitoring within 500 feet of construction activities to identify presence of terns displaying foraging behavior (e.g., searching and diving) and assess adverse impacts, if any, on California least terns. Should adverse impacts on terns occur (e.g., agitation or startling during foraging activities), construction shall cease until least terns have left the project site. 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 The contractor shall follow all regulatory requirements to minimize reduction in water quality in San Diego Bay. Construction of the proposed project would include preparation and implementation of a SWPPP, and implementation of appropriate regulatory permits, including the CWA Section 401 Water Quality Certification. A full explanation of these requirements can be found in Section 4.8, <i>Hydrology and Water Quality</i>. Implement MM-HWQ-1 and MM-HWQ-2, as described 	
	Impact-BIO-2: Potential Disruption or Injury of California Least Tern, Green Sea Turtle, and Marine Mammals During Pile Driving Activities. Pile driving activities would potentially generate a noise disturbance to California least tern from in air pile driving noise. Pile driving could also generate enough underwater noise to injure (Level A Harassment) or alter behavior (Level B Harassment) of both green sea turtle and marine mammals.	PS	 below under Hydrology and Water Quality. Implement MM-BIO-1, as described above. MM-BIO-2: Implement a Marine Mammal and Green Sea Turtle Monitoring Program During Pile Driving Activities. Prior to construction activities involving in-water pile driving, the project proponent shall prepare and implement a marine mammal and green sea turtle monitoring program. This monitoring program shall be approved by the District and shall include the following requirements: For a period of 15 minutes prior to the start of in- water construction, a qualified biologist, retained by the project proponent and approved by the District's Director of Real Estate Development or designee of the District, shall monitor a 384-foot surface radius around the active pile driving areas to ensure that special-status species are not present. The construction contractor shall not start work if any observations of special-status species are made prior to starting pile driving. 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 In-water pile driving within the marina shall begin with soft starts, gradually increasing the force of the pile driving. Level B harassment of marine mammals and green sea turtles (harassment level leading to behavior modification) from pile driving shall be avoided at a distance of 384 feet. Monitoring by a qualified biologist for marine mammals and green sea turtles within 384 feet shall be implemented during all pile driving activities to prevent impacts on these species by identifying when they are approaching or within 384 feet, and by coordinating with construction crews to halt pile driving until the species have left this area. In addition, hydroacoustic monitoring shall be conducted during all pile driving activities and the qualified biologist shall work directly with construction contractor to ensure that noise levels remain at levels that would not affect any marine species, including fish. All monitors must meet the minimum requirements as defined by the National Oceanic Atmospheric Administration's <i>Guidance for Developing a Marine Mammal Monitoring Plan</i> (NOAA 2017). 	
	Impact-BIO-3: Potential Disturbance or Destruction of Nests Protected by the Migratory Bird Treaty Act and California Fish and Game Code. Removal of mature trees during construction, as well as noise from construction activity, could impede the use of bird breeding sites during the nesting season (February	PS	MM-BIO-3: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all vegetation removal (e.g., ornamental trees) during the non-breeding season between September 1 and February 14 or shall implement the following:	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	15 through August 31). The destruction of an occupied nest would be considered a significant impact if it were a violation of the MBTA or California Fish and Game Code. Therefore, this impact would be potentially significant.		 If construction activities are scheduled between February 15 and August 31, the project proponent shall retain a qualified ornithologist (with knowledge of the species to be surveyed) who shall conduct a focused nesting bird survey within potential nesting habitat prior to the start of vegetation removal. The survey shall be submitted to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of vegetation removal on the project site. The nesting bird survey area shall include the entire limits of disturbance plus a 300-foot buffer for non-raptors and a 500-foot buffer for raptors to ensure indirect impacts would be avoided. The nesting surveys shall be conducted within 1 week prior to initiation of construction activities and shall consist of a thorough inspection of the project area by a qualified ornithologist(s). The survey shall occur between sunrise and 12:00 p.m., when birds are most active. If no active nests are detected during these surveys, only a letter report documenting the results shall be prepared. If the survey confirms nesting within 300 feet of the disturbance footprint for non-raptors or within 500 feet for raptors, a no-disturbance buffer shall be established around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints of the no- disturbance buffer shall be determined by the qualified biologist, in consultation with the California Department of Fish and Wildlife, at the time of discovery, but shall not be greater than 300 feet for non-raptors and 500 feet for raptors.If 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			there is a delay of more than 7 days between when the nesting bird survey is performed and vegetation removal begins, the qualified biologist shall resurvey to confirm that no new nests have been established. In addition, if any subsequent reports are prepared, the reports shall be sent to the District and California Department of Fish and Wildlife.	
	Impact-BIO-4: Reflective Materials and Increased Bird Strikes (market- rate hotel tower, lower-cost visitor- serving hotel, and retail development). Use of reflective building and glass finishes may confuse birds in flight, leading to an increase in strikes. This impact would be potentially significant.	PS	 MM-BIO-4: Implement Bird Strike Reduction Measures on New Structures. Prior to issuance of any building permits, building plans shall be reviewed by an ornithologist familiar with local species, retained by the developer and approved by the District, to verify that the proposed building has incorporated specific design strategies that qualify for Leadership in Energy and Environmental Design (LEED) credits, as described in the American Bird Conservancy's <i>Bird-Friendly Building Design</i> (Sheppard and Phillips 2015) or an equivalent guide to avoid or reduce the potential for bird strikes. Final building design must demonstrate to the satisfaction of the ornithologist and the District that design strategies will be in accordance with the <i>Bird-Friendly Building Design</i>, and confirmed with USFWS and/or CDFW by incorporating strategies to minimize the threat to avian species, including but not limited to the following: Building Façade and Site Structures Develop a building façade and site design that are visible as physical barriers to birds Incorporate elements like netting, screens, grilles, shutters, and exterior shades to preclude collisions Incorporate materials that have a low threat potential based on the Bird Collision Threat 	LS

Issue Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		 Rating and the Bird Collision Threat Rating Calculation Spreadsheet to achieve a maximum total building Bird Collision Threat Rating of 15 or less. High Threat Potential: Glass: Highly reflective and/or completely transparent surface Least Threat Potential: Opaque Surface Exterior Lighting Fixtures not necessary for safety, entrances, and circulation shall be automatically shut off from midnight until 6:00 a.m. Exterior luminaires must meet these requirements for all exterior luminaires located inside project boundary based on the following: Photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and The lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the <i>Illuminating Engineering Society and International Dark Sky Association</i> (<i>IES/IDA</i>) Model Lighting Ordinance (MLO) User Guide (2011). Performance Monitoring Plan Develop a 3-year post-construction monitoring plan to routinely monitor the effectiveness of the building and site design in preventing bird collisions. Include methods to identify and document locations where 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 collisions, the date, the approximate time, and features that may be contributing to collisions. List potential design solutions and provide a process for voluntary corrective action. Provide a performance monitoring report demonstrating which design strategies have been incorporated and results of performance monitoring for review and approval by the District, USFWS and/or CDFW. A full list and explanation of these design strategies can be found in Appendix E-4. 	
	Impact-BIO-5: Loss of Open Water Habitat from Marina Operations. The California least tern has the potential to utilize open water habitat within and adjacent to the project site for foraging opportunities. The increase in overwater coverage resulting from the marina expansion is approximately 58,319 square feet or 1.34 acres, and would reduce the available open water habitat that is used for foraging by fish-eating avian species. In addition to the impact on avian species, NMFS acknowledges that overwater coverage can have a cumulative impact on nearshore marine environments, although the impacts are often project specific and difficult to quantify. While the proposed configuration of overwater structures would not generate shade over eelgrass, overwater structures have the potential to affect nearshore	PS	 MM-BIO-5: Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, CCC, and the District to Compensate for Loss of Open Water Habitat and Function. The project proponent shall implement the following: Prior to issuance of a Coastal Development Permit, the project proponent shall request and participate in stakeholder meetings with NMFS, CDFW, USFWS, RWQCB, USACE, CCC, and the District to identify locations within San Diego Bay or the San Diego region to mitigate impacts on both sensitive avian species and nearshore habitat associated with loss of beneficial uses associated with overwater coverage and loss of open water habitat function as a result of increased structural fill within the Bay. Prior to the commencement of construction activities of the marina expansion, the project proponent shall implement one of the following mitigation options, or a combination thereof, that are listed below in order of preference; however, selection of 2.A, 2.B, 2.C and 2.D, or an equivalent 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	habitat through a number of mechanisms including reduced primary production, altered wave and tidal energy, increased substrate disturbances, and increased nutrient loading (Nightingale and Simenstad 2001). This impact would be potentially significant.		 combination thereof, would successfully reduce Impact-BIO-5 to a level below significance. A. Remove 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill within San Diego Bay or San Diego region, which would replace the area affected by the proposed project at a 1:1 mitigation ratio, subject to the District's review and approval. If evidence is presented that demonstrates that all or a portion of the required removal of overwater coverage or structural fill is infeasible, the project proponent shall implement 2.B. B. Restore 71,942 square feet of eelgrass habitat at the South Bay Power Plant cooling water intake channel at a 1:1 ratio, which would offset 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill impacts. The project proponent may identify an alternative mitigation site of equivalent size and value within San Diego Bay, subject to the District's review and approval. Prior to the commencement of construction activities for the marina expansion, the project proponent shall submit a mitigation plan for review and approval by the Development Services and Planning and Green Port (P&GP) Departments of the District. The mitigation plan at a minimum shall include a description of the transplant site, eelgrass mitigation requirements, eelgrass mitigation requirements, eelgrass mitigation for review and approval by the Development services and Planning and Green Port (P&GP) Departments of the District. The mitigation plan (e.g., transplant sites, donor sites, reference site), restoration methods (e.g., plant collection, transplant units, planning eelgrass units), timing of the restoration work, and a 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significanc After Mitigatior
			monitoring program (e.g., esta monitoring and mitigation suc The project proponent shall se applicable permits for the miti to commencement of watersid Additionally, the project propo- ensure that all fill materials pr- discharge into San Diego Bay for development of the mitigation the requirements of the U.S. An Engineers' Evaluation of Dredg Proposed for Discharge in Wate Testing Manual (Inland Testing) evidence is presented that den restoration of all or a portion of 71,942 square feet of eelgrass infeasible, the project propone implement 2.C.	blishment of cess criteria). cure all gation site prior e construction. onent shall oposed for or the site shall meet rmy Corps of <i>ted Material</i> <i>ers of the U.S. –</i> <i>Manual</i>). If nonstrates that of the required habitat is
			 C. If a suitable in lieu fee program bank within the Coastal Zone t available becomes available in to construction of the propose project proponent shall purcha offset 58,319 square feet (1.34 overwater coverage and 13,62 (0.31 acre) of structural fill, or square footage of the impacts i of other above options are sele is presented that demonstrates of credits toward an in lieu fee mitigation bank is infeasible, the proponent shall implement 2.1 D. Subject to the Board of Port Co approval and findings, the program the program is a selection of the sele	hat is not yet the future, prior d marina, the ase credits to acres) of 3 square feet the remaining f a combination ected. If evidence s that purchase program or he project 0.
			may purchase credits from the shading credit program establi	District's

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 to board Policy 735 at a fair market value equivalent to that of the proposed project's final shading total (i.e., less any reductions achieved by design modifications to the satisfaction of NMFS, USFWS, RWQCB, CDFW, USACE, and CCC). E. Any combination of the above that sufficiently offsets 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill impacts. F. This shall be the minimum mitigation for overwater coverage and structural fill impacts. One or more of the aforementioned state and federal agencies may require additional or greater mitigation. This mitigation measure in no way supersedes mitigation measures that may be required by state and federal agencies. Should the project proponent only construct Phase 1 of the marina expansion, the mitigation requirement shall be reduced proportionate to the overwater coverage and structural fill impacts of the Phase I only expansion, consistent with a 1:1 mitigation ratio. 3. The project proponent shall secure all applicable permits for the mitigation of overwater coverage and structural fill impacts of the Phase I only expansion, consistent with a 1:1 mitigation ratio. 	
	Impact-BIO-6: Loss of Open Water Function from Structural Fill. Several species utilize the open water habitat. The proposed project would result in an increase of 13,623 square feet or 0.31 acre of structural fill with the construction of 188 piles and the breakwater for the marina expansion.	PS	Implement MM-BIO-5 , as described above.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	The increase in structural fill would reduce the amount of open water within the San Diego Bay. The piles and breakwater could restrict or change water circulation. The restriction in circulation would likely have a minimal but unpredictable impact on eelgrass beds in the areas inside of the breakwater (Appendix E- 1).			
Substantial	Impact-BIO-5, as described above.	PS	Implement MM-BIO-5, as described above.	LS
Adverse Effect on any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations or by CDFW, NMFS, or USFWS	Impact-BIO-7: Potential Reduction in Eelgrass Habitat and Productivity During Construction. In-water construction activities have the potential to affect eelgrass beds adjacent to the marina expansion portion of the project. Impacts may include direct physical disturbance to the beds from anchoring and staging of equipment, through shading from construction-related equipment, and from elevated turbidity levels from construction-related activities such as pile driving. The potential reduction in eelgrass habitat would be significant.	PS	 MM-BIO-6: Develop an Eelgrass Mitigation and Monitoring Plan in Compliance with the California Eelgrass Mitigation Policy. Prior to the start of any in-water construction, the project proponent shall retain a qualified marine biologist to develop an eelgrass mitigation plan in compliance with the California Eelgrass Mitigation Policy (Appendix E-5). The mitigation plan shall be submitted to the District and resource agencies for approval and shall be implemented to compensate for losses to eelgrass in the event that the surveys described below indicate the project has impacts on eelgrass. The specific eelgrass mitigation plan elements shall include: Prior to the commencement of any in-water construction activities, a qualified marine biologist retained by the project proponent and approved by the District shall conduct a preconstruction eelgrass survey. Surveys for eelgrass shall be conducted during the active eelgrass growing season (March-October), and results will be valid for 60 days, unless completed in September or October; if completed in September or October, results will be valid until resumption of the next growing season. The qualified marine biologist 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 shall submit the results of the preconstruction survey to the District and resource agencies within 30 days. Within 30 days of completion of in-water construction activities, a qualified marine biologist retained by the project proponent and approved by the District shall conduct a post-construction eelgrass survey during the active eelgrass growing season. The post-construction survey shall evaluate potential eelgrass impacts associated with construction. Upon completion of the post-construction survey, the qualified marine biologist shall submit the survey report to District and resource agencies within 30 days. Post-construction eelgrass surveys shall be conducted during the active eelgrass growing season to evaluate the potential for operational impacts on eelgrass. The survey monitoring shall follow the following monitoring schedule: Annual monitoring for years 1 through 5 Bi-annual monitoring for years 5 through 10 Monitoring every 5 years for years 10 to 30 Specifically, the surveys shall be designed to evaluate potential shading, vessels associated, and water circulation impacts noted in the project's marine biological assessment (Appendix E-1). As noted above, the Eelgrass Mitigation and Monitoring Plan will be submitted to the resource agencies and the District for review. During this review and consultation, under the California Eelgrass Mitigation Policy (Section II.G.), agencies will determine the appropriate number of years of post-construction eelgrass monitoring. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 In the event that impacts on eelgrass are detected, the project proponent shall implement the following: A qualified marine biologist retained by the project proponent and approved by the District shall develop a mitigation plan for inkind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and resource agencies within 60 days following the post-construction survey. Mitigation for eelgrass impacts shall be at a ratio of 1.2:1 at the proposed mitigation site identified at the decommissioned South Bay Power Plant cooling water intake channel. Mitigation shall commence within 135 days of any noted impacts on eelgrass, such that mitigation commences within the same eelgrass growing season that impacts occur. Upon completing mitigation, the qualified biologist shall conduct mitigation performance monitoring at performance milestones of 0, 12, 24, 36, 48, and 60 months. The qualified biologist shall conduct all mitigation monitoring during the active eelgrass growing season and shall avoid the low growth season (November-February). Performance standards shall be in accordance with those prescribed in the California Eelgrass Mitigation Policy (Appendix E-5). The qualified biologist shall submit the monitoring reports and spatial data to the District and resource agencies within 30 days after the completion of each monitoring period. The monitoring reports shall include all of the specific requirements identified in 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			the California Eelgrass Mitigation Policy (Appendix E-5).	
			MM-BIO-7: Avoid or Mitigate Impacts on Eelgrass Due to Anchored Barges, Boat Navigation, and Propeller Wash. Tug and barge operators shall ensure that anchored construction barges are located outside of eelgrass beds. The preconstruction and post-construction eelgrass surveys required under MM-BIO-6 shall also identify and demarcate the distribution of eelgrass to assist tug and barge operators and to assess any impacts on eelgrass that may occur. Additionally, tug boat operators shall be instructed that propeller wash can damage eelgrass beds and the integrity of the sediment cap at the adjacent Campbell Shipyard Mitigation Cap Site. No anchoring (and other bottom-disturbing activities) shall occur within eelgrass beds, and propeller wash shall not be directed toward eelgrass beds. If an unanticipated impact on eelgrass occurs, this impact shall be mitigated by replacing the eelgrass Mitigation Policy (Appendix E-5), and included in the mitigation and monitoring plan identified under MM- BIO-6.	
	Impact-BIO-8: Potential Loss of Eelgrass Habitat Due to Increased Boat Traffic, Marina Operations, and Increased Shade from Hotel Operations. Operations associated with both the landside and waterside portions of the proposed project have the potential to affect eelgrass beds due to increased boating traffic disturbing eelgrass beds, and shading	PS	MM-BIO-8: Implement Boater Education and Marina Lease Requirements, and Install Navigation Aids and Demarcate Eelgrass Adjacent to the Marina. Prior to operation of the proposed marina, the project proponent shall draft and implement marina lease requirements and a boater education program, and install navigation aids and a floating barrier to demarcate the eelgrass beds and create a visible barrier to better protect the eelgrass mitigation site from being affected by negligent boating.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	of eelgrass habitat from overwater structures and the hotel. This impact would be potentially significant.		Implement MM-BIO-6 , as described above, and MM-HWQ-1 , as described below under <i>Hydrology and Water Quality</i> .	
Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act	Implementation of the proposed project would not have a substantial adverse effect on federally protected wetlands.	LS	No mitigation is required.	LS
Substantial Interference with the Movement of any Native Resident or Migratory Fish or Wildlife Species	Implementation of the proposed project would not substantially interfere with the movement of fish or other wildlife species. Moreover, it would not substantially impede the use of native wildlife nursery habitat.	LS	No mitigation is required.	LS
Conflict with any Applicable Local Policies or Ordinances	Implementation of the proposed project would not conflict any applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or with the provisions of an applicable adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	LS	No mitigation is required.	LS

The proposed project's incremental contribution to cumulative biological resource impacts would not be cumulatively considerable.

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.4 Cultural Reso	ources			
Project Impacts				
Substantial Adverse Change in the Significance of a Historical or Archaeological Resource as Defined in Section 15064.5	Impact-CUL-1: Excavation Related to the Proposed Project would Potentially Damage Significant Archaeological Resources. Portions of CA-SDI-15118H, a large historic period dump under the SDCC that may continue to the south into the project site, have the potential to be unearthed during excavation undertaken as part of the proposed construction activities on the project site. Impacts would be significant without mitigation.	PS	 MM-CUL-1: Archaeological Monitoring in Areas of Sensitivity. The project proponent shall retain a qualified archaeologist(s) who meets the Secretary of the Interior's Professional Qualifications Standards, as promulgated in 36 Code of Federal Regulations 61. The qualified archaeologist shall monitor all proposed grading and excavating for the proposed project in the archaeologically sensitive portion of the project site. The sensitive portion of the project site, where it is possible that cultural materials associated with CA- SDI-15118H exist, consists of the northeastern section currently occupied by the paved parking lot along Convention Way (Figure 4.4-4 of the Draft EIR). The following measures shall only apply to the archaeologically sensitive portion of the project site during earthwork activities, including, but not limited to, grading and excavation. The qualified archaeologist shall participate in a preconstruction meeting to inform all personnel of the potential for historical archaeological materials to be encountered during ground- disturbing activities. If an isolated artifact or historic period deposit is discovered that requires salvaging, the qualified archaeologist shall have the authority to temporarily halt construction activities within 100 feet of the find and shall be given sufficient time to recover the item(s) and map its location with a global positioning system (GPS) device. If buried cultural materials are discovered that require salvaging, the qualified archaeologist shall be empowered to divert construction activities 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 recover the item(s) and map its location with a GPS device. The qualified archaeologist shall treat recovered items in accordance with current professional standards by properly provenancing, cleaning, analyzing, researching, reporting, and curating them in a collection facility meeting the Secretary of the Interior's Standards, as promulgated in 36 CFR 79, such as the San Diego Archaeological Center. Within 60 days after completion of the ground-disturbing activity, the qualified archaeologist shall prepare and submit a final report to the District's Development Services Department for review and approval, which shall discuss the monitoring program and its results, and provide interpretations about the recovered materials, noting to the extent feasible each item's class, material, function, and origin. 	
Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature	Impact-CUL-2: Potential to Disturb Buried Paleontological Resources. There is the potential to significantly affect highly sensitive paleontological resources due to excavation that would extend 10 feet or more below ground surface and would include the movement of more than 1,000 cubic yards of soil.	PS	 MM-CUL-2: Paleontological Monitoring in Areas of Sensitivity. To reduce potential impacts on paleontological resources, all proposed grading and excavating to depths greater than 10 feet shall be monitored by a qualified paleontologist(s), approved by the District's Development Services Department and paid for by the project proponent. Specifically, the project proponent and/or its construction supervisor shall ensure the following measures are implemented. A qualified Paleontologist shall attend the preconstruction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified Paleontologist is defined as an individual with a M.S. or Ph.D. in paleontology or geology who is 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the County for at least 1 year. A paleontological monitor shall be on site on a full-time basis during excavation and pile-driving activities that occur 10 feet or more below ground surface, to inspect exposures for contained fossils. The paleontological monitor shall work under the direction of the qualified Paleontologist. A paleontological monitor is defined as an individual selected by the qualified Paleontologist who has experience in the collection and salvage of fossil materials. If fossils are discovered, the Paleontologist shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and catalogued. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum. Donation of the fossils shall be accompanied by financial support for initial specimen storage, paid for by the project proponent. Within 30 days after the completion of an excavation and pile-driving activities, a final data recovery report shall be completed by the qualified Paleontologist that outlines the results of the mitigation program. This report shall be completed by the 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.	
Disturb any Human Remains, Including Those Interred Outside of Formal Cemeteries	The proposed project would not result in the disturbance of human remains, including those interred outside of formal cemeteries.	LS	No mitigation required.	LS
Cumulative Impa	cts			
The proposed proj cumulatively cons		ogical resources	s, paleontological resources, and human remains would be	e less than
4.5 Geology and S	Soils			
Project Impacts				
Exacerbate the Potential of a: (I) Rupture of a Known Earthquake Fault; (II) Strong Seismic Ground Shaking; (III) Seismic-Related Ground Failure, Including Liquefaction; or (IV) Landslides	Impact-GEO-1: Potential to Exacerbate Conditions That Would Result in Liquefaction. There is the potential that construction activities could loosen soil compaction and change the existing geologic conditions in a way that would increase the potential for liquefaction to occur.	PS	MM-GEO-1: Demonstrate Compliance with Regulations, including CBC and City of San Diego Municipal Code, by Preparing a Geotechnical Investigation Report. To reduce potential impacts related to soil hazards, the project proponent shall conduct a geotechnical investigation for the project prior to the completion of the final design of the project. The geotechnical investigation shall be submitted to the District and the City of San Diego and be approved by the City of San Diego. The project proponent shall be required to implement the recommendations identified in the geotechnical report. The geotechnical report shall be prepared in compliance with CBC regulations and include the following:	LS
			 Site-specific geotechnical and fault evaluation. Suitability determination for construction within soil hazard areas. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Degult in	Implementation of the proposed		 Recommendations for design and construction practices based on the suitability determination, such as: Temporary shoring Supporting structures on pile foundations Measures to protect structures against corrosion Ground improvement techniques, such as deep soil mixing and compaction grouting 	
Result in Substantial Soil Erosion or the Loss of Topsoil	Implementation of the proposed project would not result in substantial soil erosion or the loss of topsoil.	LS	No mitigation is required.	LS
Result in On- or Offsite Lateral Spreading, Subsidence, or Collapse	Impact-GEO-2: Potential to Exacerbate Conditions That Would Result in Lateral Spreading or Soil Collapse. There is the potential that construction activities could loosen soil compaction and change the existing geologic conditions in a way that would increase the potential for lateral spreading or soil collapse to occur.	PS	Implement MM-GEO-1 , as described above.	LS
Located on Expansive Soil, as Defined in Table 18-1-B of the Uniform Building Code (1994)	Implementation of the proposed project would not exacerbate the potential for impacts associated with expansive soils.	LS	No mitigation is required.	LS
Involve Soils that Would Be Incapable of Adequately Supporting the	The proposed project does not feature the use of septic tanks or alternative wastewater disposal systems.	NI	No mitigation is required.	NI

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Use of Septic Tanks or Alternative Wastewater Disposal Systems				
Cumulative Impa	acts			
The proposed pro	ject's incremental contribution to cumulat	ive geology and	soils impacts would not be cumulatively considerable.	
4.6 Greenhouse	Gas Emissions and Climate Change			
Project Impacts				
Consistent with Plans, Policies and Regulatory Programs	Impact-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 2025. Project GHG emissions during combined project construction and operational activities would be inconsistent with the CAP because the project would not meet the performance benchmark for recreational boating (i.e., 53% reduction) and would only partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by ARB for the purpose of reducing the emissions of GHGs.	PS	 MM-GHG-1: Implement Diesel Emission-Reduction Measures During Project Construction. The project proponent shall implement the following measures during project construction and, where specified below, shall submit reports to the District's Development Services Department for its review and approval, evidencing compliance. i. The project proponent shall limit all equipment and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the District. This measure shall be enforced by the hotel and marina supervisors, and repeat violators shall be subject to penalties pursuant to California Code of Regulations Section 2485. The project proponent shall submit evidence of the use of diesel reduction measures to the District's Development Services Department through annual reporting, with the first report due 1 year from the date of project completion. 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact	Mitigation	 Mitigation Measure(s) ii. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, using diesel-powered vehicles or equipment, the project proponent shall verify that all vehicles and equipment have been checked by a certified mechanic and determined to be running in proper condition prior to admittance into the delivery driveway and loading areas. The project proponent shall submit a report by the certified mechanic of the condition of the construction and operations vehicles and equipment to the District's Development Services Department prior to commencement of their use. MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. Effective opening day, the project proponent shall implement the following measures. No commercial drive-through shall be implemented. Reduce indoor water consumption by 20% lower than baseline buildings (defined by Leadership in Energy and Environmental Design [LEED] as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements) through use of low-flow fixtures in all hotel room and common area bathrooms. Compliance with Assembly Bill 939 and the City of San Diego's Construction and Demolition Debris 	Mitigation

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 include recycling at least 65% of all construction and demolition debris. This measure shall be applied during construction and operation of the proposed project. Use only fluorescent, Light-Emitting Diodes (LEDs), Compact Fluorescent Lights (CFLs), or the most energy-efficient lighting that meets required lighting standards and is commercially available. This measure also requires replacement of existing lighting on the project site if not already highly energy efficient. Implement a parking management plan that incentivizes transit, provides bike racks and a bike share station, and provides shuttle programs to reduce worker trips and parking demand, as described in MM-TRA-8. By December 31, 2029, the project proponent shall implement and have operational the following measure. Install 29 electric car charging stations in the parking garage. 	
			MM-GHG-3: Implement Sustainability Features during Project Operations. Prior to approval of the final design plans, the project proponent shall list all GHG-reducing measures and shall demonstrate in the plans where these measures will be located. The following shall be implemented by the project proponent. A report shall be submitted to the District's Development Services Department evidencing compliance. The project has registered its intent to achieve certification under the Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems with the Green Building Certification Institute.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 The project proponent has proposed various sustainable design features equivalent to LEED v.3.0 Silver level. The following is a list of proposed sustainability measures that will be required and incorporated into the Coastal Development Permit for the project. Incorporate indoor water-reduction measures, including high-efficiency toilets, high-efficiency urinals, low-flow faucets, and low-flow showers (as applicable) into the design of all hotel room and common area bathrooms. The project shall achieve a minimum 20% water reduction compared to baseline buildings (defined by LEED as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements). Install Energy Star rated appliances. Install a high-efficiency lighting system that takes advantage of natural daylighting, augmented by daylighting controls and occupancy sensors that turn off the lights in unoccupied spaces. Install high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination. Install a stormwater retention and filtration system. Install low-water plantings and drip irrigation, and minimize domestic water demand from the City system for landscaping purposes. Implement onsite recycling. Install a high-performance chiller/heating plant. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Work with San Diego Gas & Electric's "Savings by Design" program during the design and construction process and incorporate recommended suggestions where feasible. Utilize low-volatile organic compound materials to improve indoor air quality. Provide bicycle parking for 24 bicycles. Integrate light-colored paving at the rooftop plaza and park area to minimize the heat island effect. Provide education for hotel and marina guests and visitors on sustainability and Bay conservation using various media. Divert construction and demolition debris from disposal in landfills and incineration facilities by 65%. Use recycled, regional, and/or rapidly renewable materials where feasible. Provide parking structure. 	
			 MM-GHG-4: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program. A. Options for Reducing GHG Emissions. To reach the waterside performance standard for 2025, the project proponent shall, in order of preference, considering availability of structures and feasibility, implement the following, which may be combined with consideration to the preference described below: 	

 Mitigation Measure(s) 1. Incorporate renewable energy a) on the project site; b) within the District's jurisdiction; or c) within the adjacent community or member city outside of the District's jurisdiction. 2. Undertake other verifiable actions or activities on 	
b) within the District's jurisdiction; orc) within the adjacent community or member city outside of the District's jurisdiction.	
b) within the District's jurisdiction; orc) within the adjacent community or member city outside of the District's jurisdiction.	
c) within the adjacent community or member city outside of the District's jurisdiction.	
2. Undertake other verifiable actions or activities on	
Tidelands, approved by the District, such as electrification of equipment including vehicles and trucks, financial contribution to a future local or District GHG emission reduction program on Tidelands (locally approved equivalent program), or similar activities or actions that reduce operational GHG emissions;	
3. Purchase GHG emission offset credits that (1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in California Health and Safety Code § 38562(d)(1) and (2) and as these terms are further defined in California Code of Regulations, Title 17, § 95802 (see below); (2) use a protocol consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and (3) are issued by an ARB-approved offset registry. ³ Offset credits from projects outside California must be located in states within the United States of America that have laws equivalent to or stricter than California's laws and regulations ensuring the validity of offset credits.	
B. Required Annual GHG Emissions Reductions:	
To meet the 2025 waterside reduction target, GHG	
	 Tidelands (locally approved equivalent program), or similar activities or actions that reduce operational GHG emissions; Purchase GHG emission offset credits that (1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in California Health and Safety Code § 38562(d)(1) and (2) and as these terms are further defined in California Code of Regulations, Title 17, § 95802 (see below); (2) use a protocol consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and (3) are issued by an ARB-approved offset registry.³ Offset credits from projects outside California must be located in states within the United States of America that have laws equivalent to or stricter than California's laws and regulations ensuring the validity of offset credits. Required Annual GHG Emissions Reductions:

³ Currently approved offset registries include the American Carbon Registry (ACR), Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: <u>https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm.</u>

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			would amount to 6,321 MTCO ₂ e over 5 years (between 2025 and 2030).	
			C. Implementation of GHG Emissions Reduction Options.	
			Prior to becoming operational, the project applicant shall notify the District with plans to achieve the annual GHG emissions reduction in the order of priority specified above:	
			 Develop a renewable energy project(s) or take other verifiable actions or activities identified by the District to meet or partially meet the required amount of MTCO₂e or MWh reductions specified above. 	
			 a. If the project applicant develops a renewable energy project(s), or takes other verifiable actions or activities to reduce GHG emissions, the project applicant shall submit to the District's Energy Department/Team, for its review and approval, a report specifying the annual amount of MTCO₂e or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable energy project, actions, or activities are not being used to offset GHG emissions for any other project or entity; and submit any other information requested by the District's 	
			Energy Department/Team to verify the amount of GHG emissions reduction achieved by the project, actions or activities (collectively, "GHG Emission Reduction Report").	
			b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the District's Energy Department/Team, and the reduction of	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count towards the required GHG reduction for the proposed project ("GHG Reduction").	
			 Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount sufficient to achieve the required reduction of MTCO₂e or MWh specified above, which may be decreased by the amount of annual MTCO₂e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO₂e or MWh shall occur as follows: a. Purchase offsets for the first 5 years of operation; 	
			 b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emission offset credits set forth in paragraph A(3) above, to the District's Energy Department/Team. 	
			D. Adjustments to Required GHG Emissions Reductions.	
			If the project applicant complies with paragraphs $A(1)$ or $A(2)$ above, in an amount that meets the total amount of MTCO ₂ e or MWh reductions specified above to meet the 2025 reduction target, or complies with paragraph $A(3)$ above and purchases the requisite	

San Diego Unified Port District

Chapter 2. Executive Summary

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Parallel the State's Overall Reduction Targets Identified in SB 32 and EO S-03- 05 and Compliance with Plans, Policies, and Regulatory Programs Adopted by ARB or Other California Agencies for Post-2020	Impact-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating. Project GHG emissions during combined project construction and operational activities would not meet the landside efficiency target in 2030 and 2050, and would not meet the performance standard for recreational boating in both 2030 and 2050. Additionally, the proposed project would not comply with plans, policies, and regulatory programs outlined in the 2017 Scoping Plan Update because emissions are not sufficiently reduced to meet statewide targets.	PS	 Implement MM-GHG-1 through MM-GHG-4, as described above. MM-GHG-5: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program. A. Options for Reducing GHG Emissions To reach the landside and waterside reduction target for 2030 and 2050, the project proponent shall, in order of preference, considering availability of structures and feasibility, implement the following, which may be combined with consideration to the preference described below: 1. Incorporate renewable energy a) on the project site; b) within the District's jurisdiction; or c) within the adjacent community or member city outside of the District's jurisdiction 2. Undertake other verifiable actions or activities on Tidelands, approved by the District, such as electrification of equipment including vehicles and trucks, financial contribution to a future local or District GHG emission reduction program on Tidelands (locally approved equivalent program), or similar activities or actions that reduce operational GHG emission offset credits that (1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in 	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	*	5	California Health and Safety Code § 38562(d)(1)	0
			and (2) and as these terms are further defined in	
			California Code of Regulations, Title 17, § 95802	
			(see below); (2) use a protocol consistent with or	
			as stringent as ARB protocol requirements under	
			California Code of Regulations, Title 17, §	
			95972(a); and (3) are issued by an ARB-approved	
			offset registry. ⁴ Offset credits from projects	
			outside California must be located in states within	
			the United States of America that have laws	
			equivalent to or stricter than California's laws and	
			regulations ensuring the validity of offset credits.	
			B. Required Annual GHG Emissions Reductions:	
			The option(s) implemented pursuant to paragraph A above shall achieve the following required GHG	
			reductions for the activities of the Proposed Project	
			for years 2030 and 2050:	
			1. To meet the 2030 landside and waterside	
			reduction target, GHG reductions must be equal to	
			3,851 MTCO ₂ e per year or 17,258 MWh/year,	
			which would amount to 77,021 MTCO ₂ e over 20	
			years (between 2030 and 2050).	
			2. To meet the 2050 landside and waterside	
			reduction target, GHG reductions must be equal to	
			5,703 MTCO ₂ e per year 25,556 MWh/year, which	
			would amount to 211,004 MTCO ₂ e over 37 years	
			(between 2050 and the end of the lease, 2087).	
			C. Implementation of GHG Emissions Reduction	
			Options.	
			Prior to becoming operational, the project applicant	
			shall notify the District with plans to achieve the	

⁴ Currently approved offset registries include the American Carbon Registry (ACR), Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: <u>https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm</u>

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 annual GHG emissions reduction in the order of priority specified above: 1. Develop a renewable energy project(s) or take other verifiable actions or activities identified by the District to meet or partially meet the required amount of MTCO2e or MWh reductions specified above. a. If the project applicant develops a renewable energy project(s), or takes other verifiable actions or activities to reduce GHG emissions, the project applicant shall submit to the District's Energy Department/Team, for its review and approval, a report specifying the annual amount of MTCO2e or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable energy project, actions, or activities are not being used to offset GHG emissions for any other project or entity; and submit any other information requested by the District's Energy Department/Team to verify the amount of GHG emissions reduction Report"). b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the District's Energy Department/Team, and the reduction of offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction for the Proposed Project ("GHG Reduction"). 	
			2. Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 sufficient to achieve the required reduction of MTCO₂e or MWh specified above, which may be decreased by the amount of annual MTCO₂e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO₂e or MWh shall occur as follows: a. Purchase offsets for the 20 year period from 2030 to 2050 prior to 2030, then for the 37 year period from 2050 to 2087 prior to 2050; b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emissions Reductions. If the project applicant complies with paragraphs A(1) or A(2) above, in an amount that meets the total amount of MTCO₂e or MWh reductions specified above to meet the 2030 and 2050 reduction target, or complies with paragraph A(3) above and purchases the requisite offsets, or does a combination of paragraphs A(1), (2), and (3) to meet the 2030 and 2050 reduction target. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			none are identified at this time, the project applicant may be required by the District to develop a renewable energy project at any time during the life of the project (subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the development of a renewable energy project(s), the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1) above and required offsets shall be determined by the District and reduced.	
			2. Reduction of Emissions through Verifiable Actions or Activities on Tidelands Requirement: Although none are identified at this time, the project applicant may be required by the District to take other verifiable actions or activities at any time during the life of the project (subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the other verifiable actions or activities on tidelands, the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1), and required offsets shall be determined by the District and reduced.	
Exacerbate any Existing and/or Projected Damage to the Environment	Implementation of the proposed project would not exacerbate any existing and/or projected damage to the environment, including existing structures and sensitive resources,	LS	No mitigation is required. However, as discussed in Section 4.9, <i>Land Use and Planning</i> , MM-LU-1 is required to ensure consistency with the CCA by improving the project site's potential to avoid damage from SLR by implementing specific measures through	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Including Sea Level Rise	due to predicted climate change effects, particularly SLR.		smart planning to protect coastal resources into the foreseeable future.	
Cumulative Impa	octs			
Consistent with Plans, Policies and Regulatory Programs	Impact-C-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 2025. Project GHG emissions during combined project construction and operational activities would be inconsistent with the CAP because the project would not meet the performance benchmark for recreational boating (i.e., 53% reduction) and would only partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by ARB for the purpose of reducing the emissions of GHGs.	PS	Implement MM-GHG-1, MM-GHG-2, MM-GHG-3, and MM-GHG-4, as described above.	LS
Parallel the State's Overall Reduction Targets Identified in SB 32 and EO S-03- 05 and Compliance with Plans, Policies, and Regulatory Programs Adopted by ARB	Impact-C-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating. Project GHG emissions during combined project construction and operational activities would not meet the landside efficiency target in 2030 and 2050, and would not meet the performance benchmark for recreational boating in both 2030 and 2050. Additionally, the proposed project would not comply with plans,	PS	Implement MM-GHG-1, MM-GHG-2, MM-GHG-3, MM-GHG-4, and MM-GHG-5, as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
or Other California Agencies for Post-2020	policies, and regulatory programs outlined in the 2017 Scoping Plan Update because emissions are not sufficiently reduced to meet statewide targets.			
4.7 Hazards and I	Hazardous Materials			
Project Impacts				
Routine Transport, Use, or Disposal of Hazardous Materials	Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	No mitigation is required.	LS
Release of Hazardous Materials into the Environment	Impact-HAZ-1: Landside Soil Contamination. The historical information reviewed for this analysis indicates that the project site has a history of handling, disposal, and releases of hazardous materials. Therefore, contaminated soils may be encountered during construction activities, which could potentially result in a release of hazardous materials and exacerbate the existing hazardous conditions; impacts would be significant.	PS	 MM-HAZ-1: Prepare and Implement a Soil and Groundwater Management Plan. Prior to the District's approval of the project's landside working drawings, the project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with experience in contaminated site redevelopment and restoration, to prepare and submit a Soil and Groundwater Management Plan to the District's Development Services Department for review and approval. After the District's review and approval, the project proponent shall implement the Soil and Groundwater Management Plan. The Soil and Groundwater Management Plan shall include the following: A Landside Site Contamination Characterization Report (Landside Characterization Report) delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	-		gas plant waste disposal area. The Landside	-
			Characterization Report shall include compilation	
			of data based on historical records review and	
			from prior reports and investigations and, where	
			data gaps are found, include new soil and	
			groundwater sampling to characterize the existing	
			vertical and lateral extent and concentration of	
			landside residual contamination. A complete soil	
			vapor analysis will also be conducted during	
			preparation of the Landside Characterization	
			Report and will include soil gas sampling and an	
			indoor air quality risk assessment. The project	
			applicant also shall enroll in the Voluntary	
			Assistance Program with the County of San Diego	
			Department of Environmental Health and shall submit the results of the Landside	
			Characterization Report to Department of Environmental Health staff for regulatory	
			concurrence of results.	
			If the Landside Characterization Report identifies	
			residual contamination that would be disturbed	
			by the proposed project and potentially cause harm to human health or the environment,	
			additional remedial actions shall be taken, in	
			accordance with Department of Environmental	
			Health oversight. These remedial actions shall be	
			coordinated with the Department of	
			Environmental Health and shall include, but not	
			be limited to, the removal of contaminated soils	
			that pose a vapor intrusion risk and/or the	
			incorporation of project design features that	
			prevent vapor intrusion into the proposed new	
			buildings and structures. In addition, a soil vapor	
			analysis and an indoor air quality risk assessment	
			shall be conducted after the remedial action is	
			complete to confirm that no residual VOC	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 contamination remains or that it is below applicable and relevant state guidelines. A Soil and Groundwater Testing and Profiling Plan (Testing and Profiling Plan) for those materials that will be imported to the project site and disposed of during construction. Testing shall occur for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semivolatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22-compliant offsite disposal facility. All excavation activities shall be actively monitored by a Registered Environmental Assessor for the potential presence of contaminated soils and for compliance with the Soil and Groundwater Disposal Plan (Disposal Plan), which shall describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. This plan shall be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CA Title 22, and DOT Title 40 CFR Part 263, CAC Title 27), and current industry best practices for the prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring. In the event contaminated soil or groundwater is encountered, it shall be removed and disposed of 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			in accordance with CA Title 22 and DOT Title 40	
			CFR Part 263, CAC Title 27 and under the	
			oversight of the County of San Diego Department	
			of Environmental Health, which serves as the local	
			regulatory agency responsible for oversight of	
			hazardous materials issues in San Diego County.	
			Hazardous waste shall be disposed of at three	
			types of facilities, depending on the kind of waste,	
			which will be identified in the Testing and	
			Profiling Plan. Non-hazardous waste can be	
			disposed of at a Class III landfill, such as the Otay	
			Landfill. Waste that is considered hazardous in	
			California but not in other states can be disposed	
			of outside of California, including at the South	
			Yuma County Landfill or the Republic Services Copper Mountain Landfill in Arizona. RCRA	
			hazardous waste must be disposed of at a Class I	
			landfill, such as US Ecology in Nevada.	
			 A Site Worker Health and Safety Plan (Safety Plan) 	
			to ensure compliance with 29 CFR Part 120,	
			Hazardous Waste Operations and Emergency	
			Response regulations for site workers at	
			uncontrolled hazardous waste sites. The Safety	
			Plan shall be based on the Landside	
			Characterization Report and the planned site	
			construction activity to ensure that site workers	
			potentially exposed to site contamination in soil	
			and groundwater are trained, equipped, and	
			monitored during site activity. The training,	
			equipment, and monitoring activities shall ensure	
			that workers are not exposed to contaminants	
			above personnel exposure limits established by	
			Table Z, 29 CFR Part 1910.1000. The Safety Plan	
			shall be signed by and implemented under the	
			oversight of a California State Certified Industrial	
			Hygienist.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM-HAZ-2: Prepare and Submit a Monitoring and Reporting Program. During and upon completion of landside construction, the project proponent shall prepare a Monitoring and Reporting Program and submit it to the District's Development Services Department for review and approval. The Monitoring and Reporting Program shall document implementation of the Soil and Groundwater Management Plan, including the Testing and Profiling Plan, Disposal Plan, and Safety Plan, as required by MM-HAZ-1. The Monitoring and Reporting Program shall include the project proponent's submittal of monthly reports (starting with the first ground disturbance activities) to the District's Development Services Department, signed and certified by the licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer, as applicable, documenting compliance with the provisions of these and plans and the overall Soil and Groundwater Management Plan.	
			MM-HAZ-3: Prepare and Submit a Project Closeout Report. Within 30 days of completion of landside construction, the project proponent shall prepare a Project Closeout Report and submit it to the District's Development Services Department for review and approval. The Project Closeout Report shall summarize all environmental activity at the site and document implementation of the Soil and Groundwater Management Plan, as required by MM- HAZ-1, and the Monitoring and Reporting Program, as required by MM-HAZ-2.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM-HAZ-4: Develop and Implement a Site-Specific Community Health and Safety Program . Prior to the District's approval of the project's landside working drawings, the project proponent shall develop a site- specific Community Health and Safety Program (Program) that addresses the chemical constituents of concern for the project site. The guidelines of the Program shall be in accordance with the County of San Diego Department of Environmental Health's <i>Site</i> <i>Assessment and Mitigation Manual</i> (2009) and EPA's <i>SW-846 Manual</i> (1986). The Program shall include detailed plans on environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. The Program shall be reviewed, approved, and monitored for compliance by the District. After the District's approval, the project proponent shall implement the Program. The contractor shall utilize a Certified Industrial Hygienist with significant experience with chemicals of concern on the project site to actively monitor compliance with the Program and ensure its proper implementation during project construction activities.	
	Impact-HAZ-2: Waterside Sediment Contamination and Damage to the Cap. Historical information and monitoring reports compiled from previous site assessments and database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during construction activities within the marina portion of the project site. As such, construction activities that disturb the sediment	PS	 MM-HAZ-5: Avoidance of the Engineered Cap. During construction of the marina expansion, the project proponent shall avoid disturbance of the engineered cap and installation of all piles for the marina expansion shall occur outside of the engineered cap. MM-HAZ-6: Conduct Sediment Sampling and Implement Measures to Mitigate Potential Cross-Contamination of Marine Sediment from Pile Driving and In-Water Construction. Prior to the 	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	would potentially result in a release of hazardous materials and create a potentially significant hazard within the environment by bringing and releasing subsurface sediment contaminants to the surface of the Bay floor or exacerbating the existing hazardous conditions by spreading contaminated sediment. In addition, installation of piles for the marina could damage the existing cap during construction of the marina expansion if piles or construction equipment were placed on the cap. Disruption of contaminated sediment and/or the cap could result in a potential violation of/interfere with the goals of Order No. R9-2004-0295 and would be considered a significant impact.		District's approval of the project's in-water working drawings, the project proponent shall retain a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment contamination, sediment sampling, and contamination remediation to perform all sediment sampling and analysis required by the Sampling and Analysis Plan (SAP) and Marine Sediment Contamination Characterization Report (Sediment Characterization Report)—both of which are discussed in detail within this mitigation measure. The results of all sediment sampling shall be documented in a report and submitted to the District prior to any project development-related marine-side sediment-disturbing activities. If remediation is required, the remediation shall be conducted with oversight from the appropriate local, State, or federal regulatory agency. In addition, documentation evidencing the remediation work and completion thereof shall be submitted to the District. The project proponent shall monitor the remediation for its effectiveness for a period of time consistent with guidance from the regulatory agency with jurisdiction, but for no less than 1 year. A monitoring report shall be submitted to the District and the RWQCB for their review on a monthly basis, or at a frequency determined appropriate by relevant agencies having jurisdiction over the remediation. Additional details of this mitigation measure are provided below. The project proponent and the professionally licensed Professional Engineer retained by the project proponent shall complete the following requirements, which shall be reviewed and approved by the District's Development Services Department, the RWQCB, and any other appropriate regulatory agencies.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significanc After Mitigation
	*	0	construction activities that are located outside of	0
			the engineered cap. Sampling shall be conducted	
			in accordance with the Water Quality Control Plan	
			for Enclosed Bays and Estuaries Plan (August	
			2009). Specifically, the samples shall include	
			analysis of (1) grain size analysis, (2) physical	
			parameters, (3) total organic carbon, (4) Target	
			Analyte List metals, (5) pesticides, (6) PAHs, (7)	
			total PCBs (all 209 individual PCB congeners), as	
			analyzed and reported by EPA Method 1668, (8)	
			total polychlorinated terphenyls, (9) TPHs, and	
			(10) TBT. The sampling area shall encompass the	
			waterside project footprint and sample locations	
			shall be representative of areas of potential	
			project disturbance. Areas of potential	
			disturbance include, but are not limited to,	
			proposed pile locations for the marina expansion;	
			the locations of construction equipment, including	
			without limitation to the location of any proposed	
			spudding or other anchoring systems that will be	
			utilized during construction of the marina	
			expansion; potential deposition areas within the	
			proposed silt curtain footprint; and any other	
			areas where the Bay floor will be disturbed.	
			Prepare a Sediment Characterization Report	
			delineating the vertical and lateral extent and	
			concentration of the project site's sediment	
			contamination outside the engineered cap	
			(Sediment Characterization). The Sediment	
			Characterization Report shall be based on the	
			sediment sampling results and shall rely on the	
			Effects Range – Low (ER-L) and Effects Range –	
			Median (ER-M) guideline values of the National	
			Oceanic and Atmospheric Administration's	
			Sediment Quality Guidelines (1999) as the basis for	
			characterizing the sediment. The project	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 proponent shall disclose the results of the Sediment Characterization Report to the RWQCB and the District (and any other appropriate regulatory agencies), and consult with the RWQCB on the contamination characterization of the sediment. If contaminated sediment is identified in the Sediment Characterization Report, the project proponent shall prepare a Contaminated Sediment Management Plan (Sediment Management Plan) for the District's, RWQCB's, and any other appropriate regulatory agencies' review and approval, if applicable. Once approved, the Sediment Management Plan shall be implemented by the project proponent subject to oversight by the District, RWQCB, and any other appropriate regulatory agencies, if applicable. The Sediment Management Plan shall describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the contaminated sediment outside the engineered cap as identified in the Sediment Characterization Report and the monitoring that will occur post-construction, including, at a minimum: Pile Construction Options. Piles shall be constructed using:	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			proponent shall delineate the extent of cross-	_
			contamination and propose remediation	
			approaches (subject to approval by the	
			District and any other agencies with	
			jurisdiction over site contamination) that may	
			include, but are not limited to, dredging,	
			placement of sand cover, or Enhanced	
			Monitored Natural Recovery (EMNR) sand	
			containing active carbon. The results of the	
			sampling and remediation approaches shall be	
			documented in a report to be reviewed and	
			approved by the District, RWQCB, and any	
			other appropriate regulatory agencies.	
			OR	
			(2) Internal Jetting. This method includes a jet	
			pipe running the length of the pile where the	
			water exits at a small-diameter port at the	
			bottom of the pile and a high-pressure water	
			line is attached near the top tip of the pile. The	
			high-pressure water shall reduce the skin	
			friction between the pile and the marine	
			sediments and avoid the creation of a large	
			hole and a significant amount of turbidity.	
			Turbidity curtains shall completely surround	
			each pile from the top of the pile to the Bay	
			floor and be placed no more than 2 feet from	
			the pile. At the conclusion of the internal	
			jetting, the project proponent shall conduct	
			sediment sampling of representative areas of	
			potential disturbance near the locations of the	
			piles, consistent with the sampling approach	
			set forth in the SAP, above. If the sediment	
			samples show concentrations of sediment	
			contamination above the Sediment	
			Characterization, the project proponent shall	
			delineate the extent of cross-contamination	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, or EMNR sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies. Spudding. If spuds are used, then when lifted during in-water construction, they shall be lifted slowly at least a quarter of the speed they are lifted during normal operation of spuds. Before the spud reaches the subsurface of the Bay floor during deployment, the operator shall pause the spud lift for 1- to 2-minute intervals to reduce the disturbance of Bay sediment. At the conclusion of the marina construction, the project proponent shall conduct sediment sampling of representative areas of potential disturbance from spudding and other construction activities that may have disturbed the Bay floor within the project footprint, consistent with the sampling approach set forth in the SAP, above. If the sediment samples show concentrations of sediment contamination above the Sediment Characterization, the project proponent shall delineate the extent of cross-contamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			or EMNR sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies.	
			MM-HAZ-7: Compliance with Federal and State Permits: No Impedance of Investigative Order No. R9-2017-0081. Prior to in-water construction, the project proponent shall obtain all federal and state permits required for in-water construction activities and demonstrate to the District compliance with all permit conditions during in-water construction. In addition, the project proponent shall not impede the District's compliance with Investigative Order No. R9- 2017-0081 as it pertains to the project site.	
Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School	Implementation of the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter mile of an existing or proposed school.	NI	No mitigation is required.	NI
Be Located on a Site that Is	Impact-HAZ-1, as described above.	PS	Implement MM-HAZ-1 through MM-HAZ-4 as described above.	LS
Included on a List of Hazardous Materials Sites Compiled	Impact-HAZ-2, as described above.	PS	Implement MM-HAZ-5 through MM-HAZ-7 as described above.	SU

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Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Pursuant to Government Code Section 65962.5				
Be Located within an Airport Land Use Plan or, Where Such a Plan Has Not Been Adopted, Be Within Two Miles of a Public Airport or Public Use Airport	Impact-HAZ-3: Exacerbate an Existing Safety Hazard for People Residing or Working within the Vicinity of the Project Site. Because the project site is located within an airport land use plan, the proposed project could affect the safe and efficient utilization of the navigable airspace by aircraft or the operation of air navigation facilities due to the height of construction and operational equipment and structures. This could result in a safety hazard for people residing or working within the vicinity of the project site.	PS	MM-HAZ-8: Obtain FAA Approval and ALUC Formal Review and Determination. Prior to the Board of Port Commissioners taking final action to adopt the PMPA in accordance with 14 California Code of Regulations Section 13632(e), the project proponent shall obtain FAA approval and ALUC review and determination for construction equipment and operational structures.	LS
Be Located Within the Vicinity of a Private Airstrip	The proposed project would not be located within the vicinity of a private airstrip, and, as a result, would not exacerbate an existing safety hazard for people residing or working within the vicinity of the project area.	NI	No mitigation is required.	NI
Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan	Implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	No mitigation is required.	LS
Expose People or Structures to a Significant Risk of Loss, Injury, or	Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland	NI	No mitigation is required.	NI

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Death Involving Wildland Fires	fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands by exacerbating the existing hazardous conditions.			
Cumulative Impa	icts			
The proposed prop	ject's incremental contribution to hazard a	nd hazardous m	aterials impacts would not be cumulatively considerable.	
4.8 Hydrology an	d Water Quality			
Project Impacts				
Violate any Water Quality Standards	Impact-HWQ-1: Potential to Violate Water Quality Standards or Waste Discharge Requirements for the Waterside Improvements. Expanded marina operations and boater activities have the potential to significantly impair water quality in the long term.	PS	 MM-HWQ-1: Marina Best Management Practice Plan and Copper Reduction Measures. To reduce potential impacts on water quality, the project proponent shall prepare a Marina Best Management Practice Plan that shall be reviewed and approved by the District specifically identifying best management practices that will be used within the Marina to (1) minimize the pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively protect water quality of the Bay and (2) reduce inputs of total and dissolved copper resulting from increased berthing of boats. The Marina Best Management Practice Plan and Copper Reduction Measures shall be reviewed and approved by the District prior to the opening of marina operations. The Marina Operator shall be responsible for implementation and maintenance of the Marina Best Management Practice Plan and Copper Reduction Measures. At a minimum, the Marina Best Management Practice Plan shall include, but not be limited to, the following: Use of educational materials to be provided to boat owners and their crews that specify types of activities that shall be avoided or types of BMPs that shall be implemented in order to protect 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 water quality, such as emptying of septic tanks and refueling only at approved locations, respectively. Recommendations to reduce oil leaks, include conducting periodic maintenance of all fuel lines, hoses, and gaskets; putting an oil-absorbent pad in the bilge; and installing a filtration system to remove oil from bilge water. Docking agreements containing specific use restrictions to prevent degradation of water quality, such as restricting boat repairs and cleaning operations within the marina. These specific use restrictions shall be similar to the recommendations from the <i>San Diego Bay Boaters Guide</i> (District 2006) and the California State Parks Division of Boating and Waterways and the California Coastal Commission Boating Clean and Green Program (California DBW 2017), both of which promote environmentally sound boating practices to marine business and boaters in California. Implementation and monitoring of the District-adopted in-water hull cleaning regulations. Ordinance No. 2681 requires the use of BMPs for businesses doing in-water hull cleaning. The In-Water Hull Cleaning Permit is a Bay-wide permit to reduce or eliminate copper pollution caused by in-water hull cleaning activities. No fueling on site. MM-HWQ-2: Water Quality Sampling for Total and Dissolved Copper. Prior to the commencement of marina development, the project proponent shall conduct water quality sampling to develop an updated baseline for total and dissolved copper as follows: Develop a sampling and analysis plan that will be reviewed and approved by the District prior to 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 sampling. The plan shall identify a minimum of three points, denoting edges and midpoint of marina footprint. Sample for total and dissolved copper. The project proponent shall use an Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for all analytical testing. Compare dissolved copper levels to Basin Plan water quality objectives. The project proponent shall submit the baseline monitoring report to the District for its review and approval. The project proponent shall conduct ongoing water quality monitoring and testing for total and dissolved copper, following the process outlined above for the updated baseline sampling, over the course of marina development/occupancy at the following frequency for each phase of marina development: After 75% occupancy, and After full occupancy (95% slips under rental agreements). Reports of all monitoring and testing results shall be prepared and paid for by the project proponent (i.e., tenant) and submitted to the District's Development Services Department for review and approval within 30 days after the occupancy milestones identified above. If at any time during monitoring the water quality equals or exceeds or the Basin Plan water quality objectives and comparison with the updated baseline indicates that the exceedance is a result of the proposed project, the project proponent shall immediately notify the District's Development 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			further development and/or occupancy until additional BMPs addressing the issue are employed and reduce the copper levels.	
			 Water quality testing shall occur every year following full occupancy of the marina or until the marina is fully occupied by non-copper hulled boats. The project proponent shall prepare written reports of the water quality testing results annually and submit the reports to the District's Development Services Department for review and approval within 30 days after the end of each calendar year. Any exceedance attributed to the proposed project (based on a comparison with the updated baseline assessment) shall require additional BMPs if determined necessary to reduce total and dissolved copper to below the Basin Plan water quality objectives. BMPs that must be considered include, but are not limited to: Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats. 	
			 Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina. 	
			• Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, and no overwater repairs would be allowed.	
			 Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year). 	
			If the project proponent (i.e., tenant) finds that one or more are infeasible, the tenant must provide written proof of infeasibility, which shall be subject to District	
			review and concurrence. BMPs that are implemented	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			must reduce total and dissolved copper to levels below the Basin Plan water quality objectives.	
Deplete Groundwater Supplies	Implementation of the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	LS	No mitigation is required.	LS
Alter the Existing Drainage Pattern of the Site or Area	Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in: (1) substantial erosion or siltation on or off site; or (2) flooding on or off site.	LS	No mitigation is required.	LS
Create or Contribute Runoff Water	Impact-HWQ-2: Potential to Provide Substantial Additional Sources of Polluted Runoff for the Waterside Improvements. The proposed marina expansion and breakwater have the potential to significantly impair water quality in the long term. The proposed marina expansion and breakwater could reduce tidal flushing and prevent pollutants or excess nutrients from being carried out to sea.	PS	 MM-HWQ-3: Marina Design Measures to Promote Tidal Flushing. To reduce potential impacts on water quality, prior to the commencement of any construction of the marina, the project proponent shall design the marina so that structures do not significantly restrict the natural circulation of water caused by tidal action. The expanded marina shall be designed to promote water circulation within the basin. The degree of flushing necessary to maintain water quality in a marina shall be balanced with safety, vessel protection, and sedimentation. Flushing rates shall be maximized by proper design of the marina entrance channel and basin. 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			• Prior to marina construction, a qualified engineer shall conduct a marina flushing analysis using an applicable tidal or hydrodynamic model to determine if sufficient flushing is provided by the proposed design or if forced flushing is necessary to enhance the flushing rate of the marina to meet Basin Plan water quality objectives. The engineer shall provide recommendations for forced flushing if determined necessary. The analysis methodologies and results shall be reviewed and approved by the District prior to marina construction.	
Place Housing within a 100- Year Flood Hazard Area	Implementation of the proposed project would not place housing within a 100-year flood hazard area such that the existing environment is substantially affected.	LS	No mitigation is required.	LS
100-Year Flood Hazard Area	Implementation of the proposed project would not place within a 100- year flood hazard area structures that would impede or redirect flood flows.	LS	No mitigation is required.	LS
Risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam	Implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding.	LS	No mitigation is required.	LS
Contribute to Inundation by Seiche, Tsunami, or Mudflow	Implementation of the proposed project would not result in inundation by seiche or tsunami.	LS	No mitigation is required.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Cumulative Impa	cts	0		
The proposed proj	ect's incremental contribution to cumulat	ive hydrology ai	nd water quality impacts would not be cumulatively consid	lerable.
4.9 Land Use and	Planning			
Project Impact				
Physically Divide an Established Community	Implementation of the proposed project would not physically divide an established community.	LS	No mitigation is required.	LS
Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction Over the Project (Including but not Limited to,	Impact LU-1: Potential Inconsistency with the PMP Due to Displacement of Five Designated Vista Areas. Implementation of the proposed project would result in the displacement of five vista areas that are currently designated at the project site in the PMP, which would be inconsistent with the PMP.	PS	Implement MM-AES-4 , as described above under <i>Aesthetics and Visual Resources</i> .	LS
the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	Impact-LU-2: Potential for Insufficient Wayfinding and Accessibility Signage to Inform Public that Public Plaza and Park Areas Are Available for Public Use and Enjoyment Related to Impact- PS-3. As analyzed in Section 4.11, <i>Public Services and Recreation</i> , the proposed project would result in a significant impact if public access is limited within public plaza and park areas for a long period of time or if there is no wayfinding signage to inform the public that the recreational areas are available.	PS	Implement MM-PS-1 , as described below under <i>Public</i> Services and Recreation, and MM-AES-2 , as described above under Aesthetics and Visual Resources.	LS
	Impact-LU-3: Potential Inconsistency with the California Coastal Act's Requirement to	PS	MM-LU-1: Smart Design Decisions, Future Adaptation Strategies, and Operational Strategies. To reduce potential impacts related to bulkhead	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Minimize Coastal Hazards through Planning and Development, Resulting in a Physical Impact on the Environment. Based on the best available science, the proposed project would place people or structures at risk due to SLR effects over the latter portion of the project's life, which would not minimize coastal hazards (i.e., SLR) and the effect on future amenities and facilities within the Coastal Zone. Therefore, if not mitigated, the proposed project would be inconsistent with the CCA.		 overtopping in mid-century during extreme storms, the project proponent shall implement the following into building design and construction, and during operation. Prior to the issuance of building permits for the project, the project applicant shall submit design plans and operational strategies to the District's Development Services Department for its review and approval. Smart Design Decisions - to be incorporated into building design and as part of construction: Place mechanical and electrical equipment at least 2 feet above the design flood elevation to reduce risk of flood damage. If equipment must be placed in lower areas, elevate base or ensure assets are composed of flood damage-resistant materials. Design water supply, sanitary sewage, and stormwater systems to minimize or eliminate infiltration of flood waters into systems and vice versa. For example, this may include installing backwater valves at building connections or at outfalls, increasing outfall elevations when replacing them, installing forced mains, or increasing pump capacity. Ensure that all building exterior walls are composed of materials that have an impermeable and waterproof membrane. Contribute a "fair share" payment in an amount to be determined by the District based on an analysis for the cost of construction of future bulkhead improvements that would offer direct flood mitigation benefits to the project site. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Ensure that building foundations are capable of supporting future flood walls or temporary flood barriers. Design building openings (e.g., doors, windows, utility penetrations) to be capable of future retrofitting to make them watertight and resistant to flood loads. If replacing or constructing additional bulkheads, design key structural elements to allow future increases in the elevation of the bulkhead crest. Upon receipt of the operational strategies report (see below), the District's Development Services Department shall determine, if given the most up-to-date sea level rise projections, the current coastal protection features (e.g., the existing bulkheads) would be overtopped if a 100-year storm surge were to occur in the next 10 years. If so, within the next 5 years, the project proponent, in consultation with and approved by the District's Development Services, must either install onsite protections (e.g., flood walls and flood-proof openings) to protect the buildings from a high sea level rise scenario and a 100-year storm surge through the end of the Port lease (2082) or, as mentioned above, contribute a "fair share" to future bulkhead improvements that would offer the same or a greater level of protection. Operational Strategies – to be implemented during operation and updated every 5 years using the best available science: Establish an early warning system to monitor the risk of flooding. An early warning system should consist of: Protocols for obtaining information on local weather alerts, and established levels at 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 which additional action (e.g., sandbagging) will be taken. Protocols for monitoring water levels at nearby storm gauges prior to the storm arrival, and regularly checking the water levels along the project bulkhead as the storm progresses. Establish emergency evacuation procedures for people to relocate to higher ground on short notice. Obtain or execute on-call contracts for backup power generators for critical functions, such as the operation of one elevator and emergency lighting systems. Also obtain or execute on-call contracts for portable pumps, and ensure that there is sufficient fuel to operate these. Establish protocols for operating said generators and pumps during storm events or other such events. Before a storm that is forecasted to overtop the bulkheads, deploy sandbags or inflatable barriers. Over time, monitor and track the rainfall amounts and storm projections that result in localized flooding and update the deployment protocol to account for this experience. Before a storm that is forecasted to result in localized flooding, test emergency power sources and pumps and ensure that there is sufficient fuel to run these, and inspect building exterior to ensure that there are no penetrations that lack flood proofing. If cracks or leaks are identified, seal them or temporarily cover with a flood-proof material, to the extent feasible, prior to the storm. Over time, monitor and track the rainfall amounts and storm projections that result in localized 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 flooding and update the deployment protocol to account for this experience. Restrict public access during storms or flooding events if water levels are forecasted to rise to unsafe levels. 	
	Impact LU-4: Potential Inconsistency with the ALUCP. Implementation of the proposed project would potentially be inconsistent with the ALUCP if an FAA determination and ALUC Consistency Determination are not obtained.	PS	Implement MM-HAZ-8 as described above under <i>Hazards and Hazardous Materials</i> .	LS
Conflict with any Applicable Habitat Conservation Plan or Natural Community Conservation Plan	Implementation of the proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan.	LS	No mitigation is required.	LS
Cumulative Impa	cts			
The proposed proj	ect's incremental contribution to cumulat	ive land use and	planning impacts would not be cumulatively considerabl	e.
4.10 Noise and Vi	bration			
Project Impacts				
Expose Persons to or Generate Noise Levels in Excess of Established Standards	Impact-NOI-1: Exceedance of an Adopted Noise Standard During Project Construction. Noise impacts due to project construction would exceed 75 dBA 12-hour L _{eq} between 7 a.m. and 7 p.m. at noise-sensitive receptors. These impacts would occur at Embarcadero Marina Park South and Fifth Avenue Landing Park. Impacts would primarily be caused by	PS	MM-NOI-1: Avoid or Reduce Construction Noise from Impact-Type Pile Driving During Both Landside and Marina Construction. The project proponent and its construction contractor shall prohibit all pile driving activities outside the hours of 7:00 a.m. to 7:00 p.m. on Monday through Saturday. No associated activity shall occur at any time on Sundays or legal holidays. Construction personnel shall not be permitted on the project site (including laydown and storage areas), and material or	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	activities that include pile driving; however, some impacts at Fifth Avenue Landing Park are also related to overlapping activities that would lead to an increased level of construction equipment usage at the site.		equipment deliveries and collections shall not be permitted during the prohibited hours. In addition, impact pile driving shall be avoided by using alternative, quieter installation methods such as press- in piles or drilled pile techniques (e.g., cast-in-drilled- hole, poured-in-place). If the project proponent and its construction contractor determine that alternative pile installation methods are infeasible at some or all areas of the project site and that such areas require impact pile driving, then an acoustical shroud shall be utilized, as described below. Alternative pile installation methods shall only be considered infeasible if the project proponent and its construction contractor provide sufficient evidence, to the satisfaction of District Development Services Department, that such methods are infeasible based on technical, structural, geological, safety, and/or cost considerations. Wherever impact pile driving is required for landside or waterside construction, it shall be conducted only with the use of an acoustical shroud to reduce noise levels. The shroud shall enclose the pile and hammer on all sides and shall extend from the water or ground surface to a point at least 5 feet above the top of the pile to be driven. The acoustical shroud, held in place by a crane, shall surround the pile driving assembly during pile driving activities, and shall be constructed	
			 as follows. a. A metal framework (cylindrical or square/rectangular) shall be constructed for the shroud to support the weight of the attached acoustical blankets. The framework shall be centered on the pile to be driven. b. Acoustical blankets shall be firmly secured to the outside of the framework with the sound-absorptive side of the blankets oriented toward 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 the interior of the shroud (i.e., toward the pile). The blankets shall be overlapped by at least 6 inches at seams and taped to eliminate gaps. The largest blankets available shall be used to form the shroud in order to minimize the number of seams. The blankets shall be draped to the water or ground surface to eliminate any gaps at the base of the shroud. c. The number and size of gaps needed for the safe operation of the pile driver shall be kept to a minimum. d. The acoustical blankets shall provide a minimum noise reduction coefficient of 1.00. e. The acoustical blankets shall be waterproof, oil- and UV-resistant, anti-fungal, and flame retardant. f. If necessary, a view window may be incorporated into the acoustical blankets in order to facilitate the operation of the pile driver. The window shall be constructed of clear vinyl material that weighs at least 1 pound per square foot. The seams where the window attaches to the acoustical blankets shall be tightly sealed to eliminate gaps. The size of the window shall be kept to the minimum required for safe operation of the pile driver. At all times the window shall be oriented away from the nearby parks (Embarcadero Marina Park North and South, and Fifth Avenue Landing Park). 	
			MM-NOI-2: Notify Users of Nearby Recreational Areas. If impact-type pile driving construction techniques cannot be avoided, the project proponent or its construction contractor shall post public noticing not less than 48 hours prior to initiating landside or waterside pile driving activities within 700	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			feet of a public recreational area (e.g., Embarcadero Marina Park South and Fifth Avenue Landing Park). The project proponent shall include this measure in the construction specification documents for the proposed project. Prior to issuance of the construction specification documents for bid, the project proponent shall submit a copy of the construction specification documents and the proposed public notice sign to the District's Development Services Department for approval. Prior to the commencement of impact-type pile driving activities, the project proponent shall submit documentation (including photographs) to the District's Development Services Department demonstrating compliance with this measure.	
			 MM-NOI-3: Reduce Construction Noise from Other (Non-Pile Driving) Activities. During all construction activity, the project proponent and its construction contractor shall implement the following techniques and best practices to reduce noise levels from non-pile driving construction activities. a. Prohibit all construction activities outside the hours of 7:00 a.m. to 7:00 p.m. on Monday through Saturday. No construction activity shall occur at any time on Sundays or legal holidays. Construction personnel shall not be permitted on the project site (including laydown and storage areas), and material or equipment deliveries and collections shall not be permitted during the prohibited hours. b. Ensure that all construction equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency complies with such regulation while in the course of project activity and use on site. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			c. Properly maintain all construction equipment used during project construction and remove any equipment from service, until it is properly repaired, that generates increased noise levels because of any defect or damage.	
			d. Equip all construction equipment, where applicable, with properly operating and maintained mufflers, air-inlet silencers, and any other shrouds, shields, or other noise-reducing features that meet or exceed original factory specifications.	
			e. Operate construction equipment only when necessary, and switch off powered equipment when not in use. Prohibit the idling of inactive construction equipment for more than 2 minutes.	
			 Restrict the use of noise-producing signals, including horns, whistles, alarms, and bells, for safety warning purposes only. 	
			g. Install temporary noise barriers around the project site during the demolition, site preparation (including dewatering and shoring), excavation, and foundation phases of construction, to the extent practicable. For periods (if any) when these construction activities are restricted to a smaller portion of the whole site, barriers may be installed around that smaller portion of the site. Alternatively, if a site perimeter barrier cannot be constructed, a localized barrier shall be installed around any noisy stationary construction equipment such as generators or dewatering pumps. For barriers to be effective, they should break the line of sight between the construction equipment and any noise-sensitive receiver. These barriers may be constructed as follows:	

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		 From commercially available acoustical panels lined with sound-absorbing material (the sound-absorptive faces of the panels should face the construction equipment). 	
		• From common construction materials such as plywood and lined with sound-absorptive material (the sound-absorptive material should face the construction equipment).	
		• From acoustical blankets hung over or from a supporting frame. The blankets should provide a minimum sound transmission class rating of 28 and a minimum noise reduction coefficient of 0.80 and should be firmly	
		secured to the framework with the sound- absorptive side of the blankets oriented toward the construction equipment. The blankets should be overlapped by at least 6	
		exist. The largest blankets available should be used in order to minimize the number of seams. The blankets shall be draped to the ground to eliminate any gaps at the base of	
		 the barrier. h. Train all construction employees in the proper operation and use of the equipment they use during the course of their work. 	
Impact-NOI-2: Potential Exceedance of an Adopted Noise Standard Due to Onsite Operational Noise from Mechanical Equipment. Potentially significant noise impacts could occur due to onsite operation of mechanical equipment for the proposed project, which could exceed the standards of	PS	MM-NOI-4: Design and Construct Project Facilities to Control Noise from All Onsite Mechanical Equipment. The project proponent shall design and construct all building systems and mechanical equipment proposed as part of the project to ensure their compliance with the City of San Diego noise ordinance (Municipal Code section 59.5.0401). To achieve this performance standard, during the	LS
	Impact-NOI-2: Potential Exceedance of an Adopted Noise Standard Due to Onsite Operational Noise from Mechanical Equipment. Potentially significant noise impacts could occur due to onsite operation of mechanical equipment for the proposed project,	Impact Before Mitigation Impact-NOI-2: Potential Exceedance of an Adopted Noise Standard Due to Onsite Operational Noise from Mechanical Equipment. Potentially significant noise impacts could occur due to onsite operation of mechanical equipment for the proposed project, PS	Before MitigationMitigation Measure(s)ImpactFrom commercially available acoustical panels lined with sound-absorbing material (the sound-absorptive faces of the panels should face the construction equipment).From common construction materials such as plywood and lined with sound-absorptive material (the sound-absorptive material should face the construction equipment).From acoustical blankets hung over or from a supporting frame. The blankets should provide a minimum sound transmission class rating of 28 and a minimum noise reduction coefficient 0.80 and should be firmly secured to the framework with the sound- absorptive side of the blankets oriented toward the construction equipment. The blankets should be overlapped by at least 6 inches at seams and taped so that no gaps exist. The largest blankets available should be used in order to minimize the number of seams. The blankets shall be draped to the ground to eliminate any gaps at the base of the barrier.Impact-NOI-2: Potential Exceedance of an Adopted Noise Standard Due to Onsite Operational Noise from Mechanical Equipment. Potertially significant noise impacts could occur due to onsite operation of mechanical equipment for the proposed project,PS MM-NOI-4: Design and Construct Project Facilities to Control Noise from All Onsite Mechanical equipment for the project progonent shall design and construct al building systems and mechanical equipment for the project, roo mise ordinance (Kuncipal Code section 59:5.0401). To

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	the City of San Diego's noise ordinance.		element of the proposed project (e.g., market-rate hotel tower, lower-cost visitor-serving hotel, retail, marina), and prior to the issuance of any building permits for the proposed project, the project proponent shall retain an acoustical consultant to evaluate the design and provide recommendations, as necessary, to ensure that all aspects of the proposed project, including without limitation the mechanical equipment and other onsite stationary sources (e.g., trash compactors, loading docks), shall be constructed so as to comply with the City of San Diego noise ordinance (Municipal Code section 59.5.0401). Such recommendations may include, but are not limited to, changes in equipment locations; sound power limits or specifications; rooftop parapet walls; acoustical absorption, louvers, screens, or enclosures; or intake and exhaust silencers.	
	Impact-NOI-3: Potential Exceedance of an Adopted Noise Standard Due to Outdoor Special Events. Outdoor event noise has the potential to exceed the standards of the City of San Diego's noise ordinance dependent upon the exact nature and timing of events and the sound system used.	PS	 MM-NOI-5: Incorporate Operational/Contract Specifications to Minimize Exterior Special Event Noise. The project proponent and any future owner/operator of the proposed project shall observe the following requirements and/or incorporate them into the contract specifications for outdoor events: 1. Any exterior special event associated with the proposed project shall not exceed 65 dBA Leq at the proposed project's property line between the hours of 7:00 a.m. and 7:00 p.m. as mandated by the City of San Diego Municipal Code 59.5.0401. Any concert associated with the proposed project shall not exceed 60 dBA Leq at the project's property line between the hours of 7:00 p.m. and 7:00 a.m. as mandated by the City of San Diego Municipal Code 59.5.0401. 2. Any event that fails to comply with requirement 1, above, shall only be permitted if an applicable 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			event permit, or variance or exemption from the code, has been sought and granted by the appropriate agency (City or District).3. The project shall comply with all City and District requirements related to hosting outdoor events.	
Expose Persons to or Generate Excessive Groundborne Vibration or Groundborne Noise Levels	Implementation of the proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.	LS	No mitigation is required.	LS
Permanent Increase in Ambient Noise Levels	Impact-NOI-4: Potentially Substantial Increase in Ambient Noise Levels Due to Onsite Operational Noise from Mechanical Equipment. Potentially significant noise increases could occur due to onsite project operations if mechanical systems and other stationary noise sources (e.g., trash compactors, loading docks) are not properly designed to control noise.	PS	Implement MM-NOI-4 , as described above.	LS
	Impact-NOI-5: Potentially Substantial Increase in Ambient Noise Levels Due to Outdoor Special Events. Outdoor event noise has the potential to increase existing ambient noise levels by more than 5 dB at nearby noise-sensitive receptors dependent upon the exact nature and timing of events and the sound system used.	PS	Implement MM-NOI-5 , as described above.	SU
Temporary or Periodic Increase	Impact-NOI-6: Significant Temporary Increase in Ambient	PS	Implement MM-NOI-1 , MM-NOI-2 , and MM-NOI-3 , as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
in Ambient Noise Levels	Noise Levels During Project Construction. Significant noise increases of 5 dBA or more would occur at noise-sensitive receptors during project construction. These impacts would occur at Embarcadero Marina Park North and South, and Fifth Avenue Landing Park during multiple phases of project construction, and at homes on the north side of East Harbor Drive during simultaneous pile driving for the market-rate hotel tower and meeting areas, and the low-cost visitor-serving hotel (phases 2.1 and 3.1 combined).			
Exacerbate the Existing Exposure of People within 2 Miles of a Public Airport or Public Use Airport	Implementation of the proposed project would not exacerbate the existing exposure of people residing or working in the project area within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, to excessive noise levels.	NI	No mitigation is required.	NI
Exposure of People Residing or Working in the Project Area within the Vicinity of a Private Airstrip to Excessive Noise Levels	Implementation of the proposed project would not exacerbate the existing exposure of people residing or working in the project area within the vicinity of a private airstrip to excessive noise levels.	NI	No mitigation is required.	NI
Cumulative Impa	cts			
Temporary or Periodic Increase	Impact-C-NOI-1: Exacerbate Significant Construction Noise	PS	Implement MM-NOI-1 , MM-NOI-2 , and MM-NOI-3 , as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
in Ambient Noise Levels	Levels if Cumulative Construction Activities Overlap. Project-related construction noise in excess of established City standards would be exacerbated by construction activity for related projects. It is noted that this impact would only occur if construction activities for related projects within 1,500 feet of the proposed project site (i.e., Ballpark Village Parcel D and the Bayside Performance Park), were to overlap with proposed project construction.			
	ces and Recreation			
Project Impacts Fire Protection and Emergency Services	Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.	LS	No mitigation is required.	LS
Police Protection	Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other	LS	No mitigation is required.	LS

San Diego Unified Port District

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	performance objectives for police protection.			
Schools	Implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools.	NI	No mitigation is required.	LS
Parks	Impact-PS-1: Construction of the Rooftop Public Plaza and Park Areas Would Contribute to Significant Impacts Related to Impact-AES-1, Impact-AES-4, Impact-CUL-1, Impact-CUL-2, Impact-GEO-1, Impact-GEO-2, Impact-HAZ-1, Impact-HAZ-3, Impact-NOI-1, Impact-TRA-2, and Impact-TRA-1, Impact-TRA-2, and Impact-TRA-6. As analyzed in Sections 4.1, <i>Aesthetics and Visual</i> <i>Resources</i> ; 4.4, Cultural Resources; 4.5, <i>Geology and Soils</i> ; 4.7, <i>Hazards and</i> <i>Hazardous Materials</i> ; 4.10, <i>Noise and</i> <i>Vibration</i> ; and 4.12, <i>Transportation</i> , <i>Circulation, and Parking</i> , the proposed project would result in significant impacts as identified by Impact-AES- 1, Impact-CUL-2, Impact-GEO-1, Impact-GEO-2, Impact-HAZ-1, Impact-HAZ-3, Impact-NOI-1,	PS	Implement MM-AES-1 and MM-AES-5 as described in Aesthetics and Visual Resources, above; MM-CUL-1 and MM-CUL-2 as described in Cultural Resources, above; MM-GEO-1 as described in Geology and Soils, above; MM-HAZ-1 through MM-HAZ-4 and MM-HAZ-8 as described in Hazards and Hazardous Materials, above; MM-NOI-1, MM-NOI-2, and MM-NOI-3 as described in Noise and Vibration, above; and MM-TRA-1 and MM- TRA-7 as described Transportation, Circulation, and Parking, below.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Impact-NOI-6, Impact-TRA-1, Impact-TRA-2, and Impact-TRA-6. Construction of the public plaza and park areas would be a component of the proposed project that would contribute to these significant impacts. As such, the impacts from the construction of the public plaza and park areas would be considered significant.			
	Impact-PS-2: Operation of the Rooftop Public Plaza and Park Areas Would Contribute to Significant Impacts Related to Impact-AES-2, Impact-TRA-2, Impact-TRA-3, and Impact-TRA-5. As analyzed in Sections 4.1 <i>Aesthetics</i> and Visual Resources; 4.10, Noise and Vibration; and 4.12, Transportation, Circulation, and Parking, the proposed project would result in significant impacts as identified by Impact-AES- 2, Impact-AES-3, Impact-NOI-3, Impact-NOI-5, Impact-TRA-7. Operation of the public plaza and park areas would be a component of the proposed project that would contribute to these significant impacts. As such, the impacts from the operation of the public plaza and park areas would be considered significant.	PS	Implement MM-AES-2, MM-AES-3, and MM-AES-4 as described in <i>Aesthetics and Visual Resources</i> , above; MM-NOI-5 as described in <i>Noise and Vibration</i> , above; and MM-TRA-2 through MM-TRA-5 and MM-TRA-8 as described in <i>Transportation</i> , <i>Circulation</i> , and <i>Parking</i> , below.	SU
	Impact-PS-3: Potential for Insufficient Wayfinding and Accessibility Signage to Inform	PS	Implement MM-AES-2 as described in <i>Aesthetics and Visual Resources</i> , above.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Public that Public Plaza and Park Areas Are Available for Public Use and Enjoyment. Limited public access for long periods of time due to hotel programming could result in the perception that the entire 2.26-acre public plaza and park area is not open to the public while private events are in session. Additionally, because the rooftop public plaza and park area and terraces are raised from ground level, the public may not readily know that these recreational areas are available for public use. As such, without sufficient wayfinding signage, the general public may be unaware of their existence and availability. These impacts would be considered significant.		 MM-PS-1: Operation Requirements for the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace Areas. Under no circumstances shall the closure of the public plaza and park areas for private hotel events be more than the following percentages. Multifunctional Plaza and Lawn (40,414 square feet): 50% private access (50% public access). This area would be available for private events 50% of the year, which is defined as the equivalent of 182.5 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 50% of the year (182.5 days). For clarification purposes, if a private event occupies the Multifunctional Plaza and Lawn for part of a day, it shall count as occupying the Multifunctional Plaza and Lawn for an entire day when calculating the 182.5-day private event limit. Public Park Plaza (45,062 square feet): 15% private access (85% public access). This area would be available for private events 15% of the year, which is defined as the equivalent of 55 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 85% of the year (310 days). For clarification purposes, if a private event occupies the Public Park Plaza for part of a day, it shall count as occupying the Public Park Plaza for an entire day when calculating the 55-day private event limit. Public Park Plaza and Public Observation Terrace (9,782 square feet): 0% private access (100% public access). This area would be not be available 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 for private events, and would be open to the public at no cost 100% of the year. Public Promenade (3,190 square feet): shall be an approximate 10-foot-wide walkway along the southeast portion of the market-rate hotel tower and shall be 0% private access (100% public access). This promenade would not be available for private events, and would be open to the public at no cost 100% of the year. If the private event area is blocked off from the public usable area, such barriers shall not be solid materials but shall be a material like ropes. To ensure the private event area is restored for the public use, all trash and debris shall be immediately picked up and disposed of appropriately during and after the private event. During times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during non-private event times), the hours of operation. During all private events, clear signage shall be placed in publicly visible locations (i.e., not posted inside the hotel) at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge (if developed), and two locations along the existing Embarcadero Promenade, that indicate the Multifunctional Plaza area is directed at the Public Park Plaza areas, if applicable, are open to the public. Clear signage shall be placed at the Public Park Plaza and Public Observation Terrace that indicates it is open to the public. 	
			After project construction is complete, on January 31 of each year, the project proponent shall submit an annual public access usage report to the District's	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		maganon	 Development Services Department that demonstrates, for the preceding year, that the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private access (for private events) as follows and consistent with this MM-PS-1: Multifunctional Plaza and Lawn (50% public access/50% private access) Public Park Plaza (85% public access/15% private access) Public Park Plaza and Public Observation Terrace (100% public access) The report shall be broken down by the Multifunctional Plaza and Lawn and Public Park Plaza areas and shall list the date, private event, start and end times, duration of each event, setup and breakdown time, and total number of days and percentage of private use for that year. Furthermore, the report shall contain confirmation, such as photographs or a signature by the hotel manager, that for each private event, signage indicating public use of the remaining area (if applicable) was placed consistent with this MM-PS-1. For the Public Park Plaza and Public Observation Terrace area, the report shall confirm that this area was accessible to the public 100% of the year and contained signage indicating such. 	Indgetton
	Impact-PS-4: Limited Public Access to the Marina. The marina expansion component of the proposed project would not offer lower-cost slips or no- cost public slips. Consequently, a significant impact related to public	PS	MM-PS-2: Low-Cost or No-Cost Boat Slip. The project proponent shall provide at least one boat slip for a vessel of a maximum size of 30 feet at low cost or no cost for public use. To ensure sufficient availability to the public, berthing at the low-cost or no-cost slip shall be a maximum of 6 hours. Signage shall be provided and availability of the low-cost or no-cost	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	accessibility of the proposed marina may occur.		slip shall be posted on the project proponent's website.	
Increase the Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities	Implementation of the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	LS	No mitigation is required.	LS
Facilities Require the Construction or Expansion of Recreational Facilities	Impact-PS-1, as described above.	PS	Implement MM-AES-1 and MM-AES-5 as described in, Aesthetics and Visual Resources, above; MM-CUL-1 and MM-CUL-2 as described in Cultural Resources, above; MM-GEO-1 as described in Geology and Soils, above; MM-HAZ-1 through MM-HAZ-4 and MM-HAZ-8 as described in Hazards and Hazardous Materials, above; MM-NOI-1, MM-NOI-2, and MM-NOI-3 as described in Noise and Vibration, above; and MM-TRA-1 and MM- TRA-7 as described Transportation, Circulation, and Parking, below.	SU
	Impact-PS-2, as described above.	PS	Implement MM-AES-2, MM-AES-3, and MM-AES-4 as described in <i>Aesthetics and Visual Resources</i> , above; MM-NOI-5 as described in <i>Noise and Vibration</i> , above; and MM-TRA-2 through MM-TRA-5 and MM-TRA-8 as described in <i>Transportation</i> , <i>Circulation</i> , and <i>Parking</i> , below.	SU

The proposed project's incremental contribution to cumulative impacts related to public services and recreation would not be cumulatively considerable.

4.12 Transportat	4.12 Transportation, Circulation, and Parking					
Project Impacts						
Conflict with an Applicable Plan,	Impact-TRA-1: Construction- Related Impacts along the 28th Street Roadway Segment Between National Avenue and Boston	PS	MM-TRA-1: Transportation Demand Management Plan. Prior to commencing any construction or demolition activities, the project proponent shall provide a Transportation Demand Management (TDM)	SU		

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Ordinance, or Policy	Avenue Under Existing Plus Project Construction. Construction of the proposed project would worsen the existing LOS along 28th Street between National Avenue and Boston Avenue from an already unacceptable LOS E to LOS F. Therefore, impacts would be significant.		 Plan to the San Diego Unified Port District, City of San Diego, and Caltrans for approval that shall limit the number of construction worker trips that travel through the affected intersections during peak periods to 50 trips. The TDM plan shall incorporate TDM strategies to be implemented during construction, including, but not limited to: Implementation of a ride-sharing program to encourage carpooling among the workers. Adjustment of work schedules (e.g., arrive before 7 a.m. or after 9 a.m.; leave before 4 p.m. or after 6 p.m.) so that workers do not access the site during peak hours. Provision of offsite parking locations for workers outside of the area with shuttle services to bring them on site, as identified in MM-TRA-7. Provision of subsidized transit passes for construction workers. In addition, for impacts on the I-5 southbound/Boston Avenue intersection during construction, prior to commencing construction or demolition activities, the project proponent shall provide a Traffic Control Plan in accordance with Caltrans policies to the San Diego Unified Port District and Caltrans for approval. 	
	Impact-TRA-2: Construction- Related Impacts on Study Area Intersections Under Existing Plus Project Construction: Sampson Street/Harbor Drive (AM and PM Peak Hours) and I-5 SB On- Ramp/Boston Avenue (PM Peak Hour). Construction of the proposed project would worsen the existing delay experienced by more than 2.0 seconds during peak hours at three	PS	Implement MM-TRA-1 , as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	study area intersections currently operating at LOS E or F, including Sampson Street and Harbor Drive (during the AM peak hour when the project reaches 90% of its construction traffic trip generation and during the PM peak hour when the project reaches 65% of its construction traffic trip generation) and I-5 SB on-ramp and Boston Avenue during the PM peak hour (when the project reaches 3% of its construction traffic trip generation). Therefore, impacts would be significant.			-
	Impact-TRA-3: Impact-TRA-3: Operation-Related Impacts on Study Area Intersections Under Existing Plus Project Conditions: 15th Street/F Street (PM Peak Hour); 17th Street/G Street (PM Peak Hour); 19th Street/J Street (PM Peak Hour). Operation of the proposed project would worsen the existing delay experienced during the peak hours at three study area intersections: 15th and Grape Streets by 15.8 seconds (LOS F) during the PM peak hour, 17th and G Streets by 28.0 seconds (LOS F) during the PM peak hour, and 19th and J Streets by 18.6 seconds (LOS F) during the PM peak hour, where a threshold of 1.0 second of additional delay applies to LOS F.	PS	 MM-TRA-2: Signalization of the 15th Street/F Street Intersection. Prior to issuance of occupancy permits, the project proponent shall pay for or directly install a traffic signal at the intersection of 15th Street and F Street. Installation of the traffic signal will require approval from the City of San Diego. After installation is complete, the project proponent shall provide proof of signalization to the District for verification before issuance of the occupancy permits may occur. MM-TRA-3: Signalization of the 17th Street/G Street Intersection. Prior to issuance of occupancy permits, the project proponent shall pay for or directly install a traffic signal at the intersection of 17th Street and G Street. Installation of the traffic signal will require approval from the City of San Diego. After the required payment or installation is complete, the project proponent shall provide proof of completion to the District for verification before issuance of the 	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM-TRA-4: Restriping of Northbound Left-Turn Lane at 19th Street/J Street Intersection. Prior to the issuance of occupancy permits, the project proponent shall pay for or directly implement restriping the northbound left-turn lane into a northbound left-turn and through-share lane at the intersection of 19 th Street and J Street. Restriping lanes will require approval from the City of San Diego and coordination with Caltrans. The project proponent shall provide proof of payment or completion to the District for verification before issuance of the occupancy permits may occur.	
	Impact-TRA-4: Operation-Related Impacts on a Study Area Freeway Segment Under Existing Plus Project Conditions: NB I-5 Between Grape Street and First Avenue (AM Peak Hour). Operation of the proposed project would worsen the V/C ratio by 0.012 along the segment of NB I-5 between Grape Street and First Avenue (currently operating at LOS E) during the AM peak hour, which would exceed the threshold of 0.010 for a segment operating at LOS E. This impact would be significant.		MM-TRA-5: Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements. Prior to the issuance of occupancy permits, the project proponent shall enter into a Traffic Mitigation Agreement with Caltrans for I-5 operational improvements for the segment of northbound I-5 between Grape Street and First Avenue, in compliance with <i>San Diego Forward: The Regional Plan</i> prepared by SANDAG (SANDAG 2015) and proof of this agreement shall be provided to the District. The installation of the I-5 operational improvements is under Caltrans jurisdiction.	
Conflict with an Applicable Congestion Management Program	Implementation of the proposed project would not conflict with an applicable congestion management program, including, but not limited to, LOS standards and travel demand measures, or other standards established by the county congestion	LS	No mitigation is required.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	management agency for designated roads or highways.			
Result in a Change in Air Traffic Patterns	Implementation of the proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	LS	No mitigation is required.	LS
Substantially Increase Hazards due to a Design Feature	Implementation of the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS	No mitigation is required.	LS
Result in Inadequate Emergency Access	Implementation of the proposed project would not result in inadequate emergency access.	LS	No mitigation is required.	LS
Conflict with Adopted Policies, Plans, or Programs	Impact-TRA-5: Temporary Closure of Embarcadero Promenade During Construction. During construction of the proposed project, the portion of the Embarcadero Promenade fronting the project site would remain open, but would be narrowed temporarily from 35 feet to 15 feet. However, the Embarcadero Promenade would be closed for approximately 18 months during construction of the market-rate hotel tower lobby, which spans the entire width of the Embarcadero Promenade, and therefore would require pedestrian traffic to be re- routed. As such, the proposed project	PS	MM-TRA-6: Maintain Public Access Along Embarcadero Promenade During Construction. The project proponent, in coordination with the District, shall ensure that public access is maintained along the Embarcadero Promenade during construction by providing reduced or replacement points of public access. The project proponent shall install and maintain clear wayfinding and public access signage in publicly visible locations (i.e., not posted inside the hotel) adjacent to and at the public entrances to the reduced or replacement public access areas.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	would result in a temporary significant impact on public access along the Embarcadero Promenade during construction.			
Result in Inadequate Parking Supply	Impact-TRA-6: Insufficient Parking Supply During Construction. The construction phase would experience up to 495 construction worker vehicles traveling to the site per day that would require parking. The project site would not be able to accommodate parking for that many vehicles due to onsite staging of materials and construction equipment, as well as the phasing of construction that would be occurring. In addition, existing parking would be removed from service once onsite grading and demolition activities begin.	PS	MM-TRA-7: Provide Offsite Parking and Shuttle Transportation and Require Incentives for Transit Use and Wayfinding Signage for Visitors. Prior to the commencement of any construction activity, the project proponent shall provide an offsite parking location at the R.E. Staite property at 2145 East Belt Street, San Diego, CA for construction workers and shall provide shuttle service from the offsite parking location to the project site and back. In addition, the project proponent shall provide incentives for construction workers to use public transit. Workers who cannot commute by transit and must use personal vehicles shall be required to park at the offsite parking facility. The parking requirements for the workers shall be detailed in their contract with the project proponent. Moreover, during the construction phase, the project proponent shall provide conspicuous on- street signage to direct waterfront visitors to available parking facilities throughout the duration of the construction period.	SU
	Impact-TRA-7: Insufficient Parking Supply During Operation. As proposed, the project would provide 260 onsite parking spaces through a combination of valet and striped spaces. Per the Tideland Parking Guidelines, the proposed project is required to provide an adjusted rate of 449 parking spaces. Therefore, the proposed project would result in a parking deficit of 189 spaces during its	PS	MM-TRA-8: Implement a Parking Management Plan that Provides Parking Management Strategies. Prior to the issuance of the certificate of occupancy for market-rate hotel operations, the project proponent shall submit a Parking Management Plan to the District for approval. Upon approval and during project operations, the project proponent shall provide a quarterly report on the Parking Management Plan to the District's Development Services Department, which shall be subject to verification by District staff. The project proponent	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	highest demand period. A significant impact on parking supply would occur.		 shall implement the following parking management strategies and any other strategies identified in the Parking Management Plan to mitigate the projected parking deficiency: Valet Parking – Secure 189 parking spaces (Secured Parking) at one or more offsite parking lots and provide a valet service that allows guests to utilize the secured spots, in order to avoid overflow in the immediate surrounding parking areas. Prior to commencement of hotel operations, the project proponent will enter into a contract or agreement with a parking operator or equivalent entity securing the Secured Parking and provide the agreement to the District's Development Services Department. The agreement shall be updated and submitted to the District's Development Services Department on an annual basis to provide proof of maintaining said agreement. Until a long-term parking solution is identified for the area, after project construction is complete, on January 15 of each year the project proponent shall submit an annual parking implementation report to the District's Development Services Department for its review, which shall include the following components: A specific peak parking implementation program, broken down into morning, afternoon, and evening timeframes, in its annual submittal. Evidence in the form of parking utilization counts that show that sufficient valet spaces are available to meet the project's overflow parking demand from the parking lot or valet vendor. The parking counts shall be conducted at times throughout the day on 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 both weekdays and weekends, during both the summer and winter, and shall be compared to projected and actual valet use at the project site. The location of the lots available for valet use and the number of spaces available in each lot based upon recent parking utilization counts. The dates, times, and duration of any period the valet was closed due to no available parking spaces. In the event that the District establishes a longterm parking program for the area, the project proponent shall contribute a fair share to the analysis, design, and construction and operating costs associated with the program. <i>Transportation Network Companies</i> – The project proponent shall coordinate with transportation companies (such as Lyft and Uber) and shall provide designated pick-up/drop-off locations to encourage hotel patrons to utilize this mode of transportation as an alternative to driving their personal vehicles. <i>Water Taxi</i> – The project proponent shall provide a direct path and wayfinding signage from the Water Taxi Landing to the hotel facilities, and provide brochures and other materials in the hotel lobbies to inform hotel guests of the water taxi service and the destinations that can be reached. <i>Bike Racks</i> – The project proponent shall provide bike racks to accommodate a minimum of 24 bicycle parking spaces on the project site or adjacent thereto on the Embarcadero Promenade to encourage employees/patrons to bike to the proposed project. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Bike Share Stations - The project proponent shall coordinate with companies like DECOBIKE to ensure a bike share station is maintained within walking distance (approximately 1,000 feet) to the proposed project. If a third-party bikeshare service cannot be provided, the project proponent shall provide bikes for its guests to rent. Public Transit - On its website, the project proponent shall promote and encourage employees and patrons to utilize alternative modes of transportation as an alternative to driving their personal vehicles. Public Transit Subsidies for Employees - The project proponent shall provide reimbursement or subsidies for public transportation costs for all employees. The level of transit reimbursements and subsidies shall be based on the standards set forth by the California Air Pollution Control Officers Association resource document Quantifying Greenhouse Gas Mitigation Measures (August 2010) to achieve a reduction in project vehicle miles traveled by 20%. Port of San Diego (formerly Big Bay) Shuttle - The project proponent shall participate in the Port of San Diego Shuttle system as a condition precedent to issuance of a certificate of occupancy for the market-rate hotel or lower-cost visitor-serving hotel, whichever hotel is completed first. Participation may include: collection of fares, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for District tenant projects within the South Embarcadero, and other forms of participation as identified by the District. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Airport Shuttle - The project proponent shall provide a shuttle to and from the airport for hotel guests. SANDAG-operated iCommute Program - The project proponent shall participate in SANDAG's iCommute Program. Employee Carpool and Vanpool Parking Spaces - The project proponent shall provide designated parking spaces for employee carpool and vanpool parking spaces onsite. Onsite Employee Alternative Commute Options Coordinator - The project proponent shall designate an onsite employee coordinator to provide inform employees of alternative commute options. 	
Cumulative	Impacts Impact-C-TRA-1: Near-Term Construction-Related Impact on the Roadway Segment of 28 th Street between National Avenue and Boston Avenue. Construction of the proposed project would worsen the existing LOS along 28 th Street between National Avenue and Boston Avenue from an already unacceptable LOS E to LOS F under 2021 near-term conditions. Therefore, impacts would be significant.	PS	Implement MM-TRA-1 , as described above.	SU
	Impact-C-TRA-2: Near-Term Construction-Related Impacts on Study Area Intersections: Sampson Street/Harbor Drive; I-5 Southbound On-Ramp/Boston Avenue. Construction of the proposed project would worsen the existing	PS	Implement MM-TRA-1 , as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	delay experienced during peak hours at the study area intersections of Sampson Street and Harbor Drive and 1-5 southbound on-ramp and Boston Avenue by more than 2.0 seconds under 2021 near-term conditions.			
	Impact-C-TRA-3: Failing Roadway Segment – Harbor Drive between Laurel Street and Hawthorne Street (Near-Term). Near-term operation of the proposed project would worsen conditions along Harbor Drive between Laurel Street and Hawthorne Street, which operates at an LOS F, by increasing the V/C ratio by more than 0.01.	PS	No feasible mitigation identified to improve operations.	SU
	 Impact-C-TRA-4: Failing Intersections in AM Peak Hour in Near-Term Cumulative Conditions: 16th Street/F Street; Logan Avenue/I-5 Southbound Off-Ramp; and Logan Avenue/I-5 Southbound On-Ramp. Operation of the proposed project would worsen existing delays at failing study area intersections during the AM peak hour under near- term conditions as follows. 16th and F Streets – 5.3 seconds Logan Avenue and I-5 southbound 	PS	16 th Street/F Street: no feasible mitigation identified to improve operations. MM-C-TRA-1: Signalization of Logan Avenue/I-5 Southbound Off-Ramp . Prior to issuance of occupancy permits, the project proponent shall enter into a Traffic Mitigation Agreement with California Department of Transportation (Caltrans) for the payment of a fair-share contribution of 22 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 off-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from Caltrans.	SU
	 Logan Avenue and I-5 southbound on-ramp – 5.5 seconds 		MM-C-TRA-2: Signalization of Logan Avenue/I-5 Southbound On-Ramp. Prior to issuance of occupancy permits, the project proponent shall enter into a Traffic Mitigation Agreement with the California Department of Transportation (Caltrans) for the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			payment of a fair-share contribution of 6 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 on-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from Caltrans.	
	Impact-C-TRA-5: Failing Intersections in PM Peak Hour in Near-Term Cumulative Conditions:	PS	First Avenue/Beech Street: no feasible mitigation identified to improve operations.	SU
	First Avenue/Beech Street; 14 th Street/G Street; 15 th Street/F Street;		Implement MM-C-TRA-2 , as described above.	
	 16th Street/G Street; 16th Street/Island Avenue; 16th Street/K Street; 17th Street/G Street; 19th Street/J Street; Logan Avenue/I-5 Southbound On-Ramp. Operation of the proposed project would worsen existing delays at failing study area intersections during the PM peak hour under near-term conditions as follows. First Avenue and Beech Street – 9 seconds 14th and G Streets – 4.4 seconds 15th and F Streets – 19.9 seconds 16th And G Streets – 4.3 seconds 16th and G Streets – 4.3 seconds 16th and K Streets – 15 seconds 		MM-C-TRA-3: New Travel Lane on G Street (3 Percent Fair-Share) . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 3 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of 14 th and G Streets, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on- street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
	 17th and G Streets – by more than 2.0 seconds (delay exceeds calculation capacity of the traffic 		MM-C-TRA-4: Signalization of the Intersection of 15 th Street and F Street. Prior to issuance of occupancy permits, the project proponent shall	
	 analysis software) 19th and J Streets – 20.6 seconds Logan Avenue and I-5 southbound on-ramp – by more than 2.0 		provide proof to the District of payment of a fair-share contribution of 4 percent of the improvement costs to install a traffic signal at the intersection of 15 th Street and F Street, per the recommendations in the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	seconds (delay exceeds calculation capacity of the traffic analysis software)		Downtown Mobility Plan Supplemental EIR. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
			MM-C-TRA-5: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
			MM-C-TRA-6: Signalization of the Intersection of 16th Street and Island Avenue . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 18 percent of the improvement costs to install a traffic signal at the intersection of 16 th Street and Island Avenue, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			measure be determined infeasible after consultation	
			with the City of San Diego, the project proponent must	
			supply evidence to the District's satisfaction to allow	
			the project to proceed to occupancy.	
			MM-C-TRA-7: Signalization of the Intersection of	
			16 th Street and K Street. Prior to issuance of	
			occupancy permits, the project proponent shall	
			provide proof to the District of payment of a fair-share	
			contribution of 9 percent of the improvement costs to	
			install a traffic signal at the intersection of 16 th Street	
			and K Street. Installation of the traffic signal will	
			require approval from the City of San Diego. Should this mitigation measure be determined infeasible after	
			consultation with the City of San Diego, the project	
			proponent must supply evidence to the District's	
			satisfaction to allow the project to proceed to	
			occupancy.	
			MM-C-TRA-8: Signalization of 17 th Street and G	
			Street Intersection. Prior to issuance of occupancy	
			permits, the project proponent shall provide proof to	
			the District of payment of a fair-share contribution of 2	
			percent of the improvement costs to install a traffic	
			signal at the intersection of $17^{ m th}$ Street and G Street,	
			per the recommendations in the Downtown Mobility	
			Plan Supplemental EIR. Installation of the traffic signal	
			will require approval from the City of San Diego.	
			MM-C-TRA-9: Restriping Left-Turn Lane on J Street.	
			Prior to issuance of occupancy permits, the project	
			proponent shall provide proof to the District of	
			payment of a fair-share contribution of 20 percent of	
			the improvement costs to restripe the northbound	
			left-turn lane along J Street at its intersection with 19 th	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Street into a northbound left-turn and through-shared lane, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Restriping of J Street will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
	Impact-C-TRA-6: Failing Freeway Mainline Segment during AM Peak Hour under Near-Term Cumulative Conditions: I-5 Northbound, between Grape Street and First Avenue. Operation of the proposed project would worsen the existing V/C ratio along northbound I-5 between Grape Street and First Avenue, which currently operates at LOS E, by 0.012 during the AM peak period.	PS	Implement MM-TRA-5 , as described above.	SU
	Impact-C-TRA-7: Failing Roadway Segment – Harbor Drive between Laurel Street and Hawthorne Street (Future Year). Long-term operation of the proposed project would worsen conditions along Harbor Drive between Laurel Street and Hawthorne Street, which operates at an LOS F, by increasing the V/C ratio by more than 0.01.	PS	No feasible mitigation identified to improve operations.	SU
	Impact-C-TRA-8: Failing Intersections in AM Peak Hour in Future Year Cumulative Conditions: 16 th Street/F Street; 15 th Street/F Street; and 17 th Street/G Street.	PS	16 th Street/F Street: no feasible mitigation identified to improve operations Implement MM-C-TRA-4 and MM-C-TRA-8 , as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	 Operation of the proposed project would worsen existing delays at failing study area intersections during the AM peak hour under Future Year conditions as follows. 15th and F Streets – by more than 2.0 seconds (delay exceeds calculation capacity of the traffic analysis software) 16th and F Streets – 3.2 seconds 17th Street and G Street – by more than 2.0 seconds (delay exceeds calculation capacity of the traffic analysis software) 			
	Impact-C-TRA-9: Failing Intersections in PM Peak Hour in Future Year Cumulative Conditions: Front Street and Broadway; First Avenue and Broadway; 11 th Avenue and Broadway; 11 th Avenue and G Street; 11 th Avenue and Market Street; Park Boulevard and G Street; 13 th Street and G Street; 14 th Street and G Street; 15 th Street and F Street; 16 th Street and G Street; 16 th Street and K Street; Imperial Avenue and 16 th Street; and 17 th and G Streets. Operation of the proposed project would worsen existing delays at failing study area intersections during the PM peak hour under Future Year conditions as follows.	PS	 Front Street/Broadway: no feasible mitigation identified to improve operations First Avenue/Broadway: no feasible mitigation identified to improve operations 11th Avenue/Broadway: no feasible mitigation identified to improve operations 11th Avenue/Market Street: no feasible mitigation identified to improve operations 16th Street and K Street: no feasible mitigation identified to improve operations 16th Street and K Street: no feasible mitigation identified to improve operations Implement MM-C-TRA-4, MM-C-TRA-5, MM-C-TRA-7, and MM-C-TRA-8, as described above. MM-C-TRA-10: New Travel Lane on G Street (1 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 1 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11th 	SU

Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
)	Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of 11 th Avenue and G Streets, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy. MM-C-TRA-11: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
	Before	Before MitigationMitigation Measure(s)Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of 11th Avenue and G Streets, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.MM-C-TRA-11: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

the District of payment of a fair-share contribution of 1 percent of the improvement costs to convert the onstreet parking to a travel lane on G Street between 11th

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Avenue and $17^{ ext{th}}$ Street during the PM peak hour for	
			impacts occurring at the intersection of Park	
			Boulevard and G Street, per the recommendations in	
			the Downtown Mobility Plan Supplemental EIR.	
			Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should	
			this mitigation measure be determined infeasible after	
			consultation with the City of San Diego, the project	
			proponent must supply evidence to the District's	
			satisfaction to allow the project to proceed to	
			occupancy.	
			MM-C-TRA-13: New Travel Lane on G Street (3	
			Percent Fair Share). Prior to issuance of occupancy	
			permits, the project proponent shall provide proof to	
			the District of payment of a fair-share contribution of 3	
			percent of the improvement costs to convert the on-	
			street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for	
			impacts occurring at the intersection of Park	
			Boulevard and G Street, per the recommendations in	
			the Downtown Mobility Plan Supplemental EIR.	
			Conversion of on-street parking to a travel lane will	
			require approval from the City of San Diego. Should	
			this mitigation measure be determined infeasible after	
			consultation with the City of San Diego, the project	
			proponent must supply evidence to the District's	
			satisfaction to allow the project to proceed to	
			occupancy.	
			MM-C-TRA-14: Restripe Northbound and	
			Southbound Approaches to Imperial and 16 th	
			Street. Prior to issuance of occupancy permits, the	
			project proponent shall provide proof to the District of	
			payment of a fair-share contribution of 18 percent of the improvement costs to restripe the northbound and	
			the improvement costs to resurpe the northbound and	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			southbound approaches to the intersection of Imperial Avenue and 16 th Street to include an exclusive right- turn lane in each direction. Restriping of the intersection will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
	 Impact-C-TRA-10: Failing Freeway Mainline Segment during AM Peak Hour under Future Year Cumulative Conditions: I-5 Northbound, between Grape Street and First Avenue, First Avenue and SR-163, B Street and SR-94, and SR-94 and Imperial Avenue; and during the PM Peak Hour I-5 Southbound between First Avenue and SR-163 and B Street and SR-94. Operation of the proposed project would cause a significant change in the V/C ratio (i.e., add more than 0.010 for LOS E or 0.005 for LOS F) along the following northbound I-5 segments that are projected to operate at LOS F during the AM peak period. Between Grape Street and First Avenue – 0.011 Between B Street and SR-94 – 0.012 Between SR-94 and Imperial Avenue – 0.010 	PS	Implement MM-TRA-5, as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	 In addition, the proposed project would cause a significant change in the V/C ratio along the following southbound I-5 segments that are currently operating at LOS F. Between First Avenue and SR-163 – 0.008 Between B Street and SR-94 – 			
	0.010 Impact-C-TRA-11: Cumulatively Considerable Contribution to a Cumulative Parking Impact. Reasonably foreseeable future projects are expected to contribute to a parking deficit in the downtown area. The proposed project's contribution to the cumulative parking impact from past, present, and reasonably foreseeable future projects would be cumulatively considerable and significant.	PS	Implement MM-TRA-8 , as described above.	SU
4.13 Tribal Cultur	ral Resources			
Project Impacts Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in Public Resources Code Section 21074	Implementation of the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.	LS	No mitigation is required.	LS
Cumulative Impa	cts			

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
The proposed proj	ect's incremental contribution to cumulat	ive tribal cultura	al resources impacts would not be cumulatively consideral	ole.
Section 4.14 Utili	ties and Energy Use			
Project Impacts				
Exceed Wastewater Treatment Requirements of the RWQCB; Inadequate Wastewater Treatment Capacity; or Result in the Construction of New Wastewater Treatment Facilities or Expansion of Existing Facilities	Impact-UTIL-1: Construction of Utility Improvements Would Contribute to Impact-CUL-1, Impact- CUL-2, Impact-GEO-1, Impact-GEO- 2, and Impact-HAZ-1. As analyzed in Sections 4.4, <i>Cultural Resources</i> , 4.5, <i>Geology and Soils</i> , and 4.7, <i>Hazards and</i> <i>Hazardous Materials</i> , the proposed project would result in significant impacts as identified by Impact-CUL-1, Impact-CUL-2, Impact-GEO-1, Impact- GEO-2, and Impact-HAZ-1. Construction of the various utility improvements would be a component of the proposed project that would contribute to these significant impacts. As such, impacts from the construction of the proposed utility improvements would be considered significant.	PS	Implement MM-CUL-1 and MM-CUL-2 as described above under <i>Cultural Resources</i> ; MM-GEO-1 as described above under <i>Geology and Soils</i> ; and MM- HAZ-1 through MM-HAZ-4 as described above under <i>Hazards and Hazardous Materials</i> .	LS
	Impact-UTIL-2: Insufficient Sewer Capacity to Convey Project- Generated Wastewater. The Ballpark Village project has a performance bond with the City to upsize the existing West Harbor Drive trunk sewer main from 15 inches to 30 inches, and the upsizing improvements are anticipated to be completed prior to construction of the proposed project. However, in the event that upsizing of the existing 15- inch trunk sewer main does not occur.	PS	MM-UTIL-1: Upsize the Existing West Harbor Drive Trunk Sewer Main to Accommodate Project- Generated Wastewater. Prior to occupancy and operation of the proposed market-rate hotel tower or the lower-cost visitor-serving hotel, whichever is first, the project proponent shall upsize the existing 15-inch trunk sewer main located at the intersection of West Harbor Drive and Park Boulevard to a 30-inch trunk sewer main. The financing of the upsizing may include a cost-sharing agreement with one or more parties, or any other alternative means of financing to ensure that the upsizing occurs. Alternatively, the project proponent may wait until the upgrades are completed	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	there would be insufficient capacity to accommodate project-generated wastewater. Therefore, due to the uncertainty surrounding the implementation of the 15-inch trunk sewer upsizing to 30 inches, which is necessary to convey project-generated wastewater, potential impacts are considered to be significant.		by another entity to operate the market-rate hotel tower or the lower-cost visitor-serving hotel, whichever is ready for operation first. At no point shall the project proponent operate one or both prior to the trunk sewer main being upsized.	
Result in Insufficient Water Supplies; or Result in the Construction of New Water Treatment Facilities or Expansion of Existing Facilities	Implementation of the proposed project would not result in insufficient water supplies from existing entitlements and resources, resulting in the need for new or expanded entitlements, nor would it require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LS	No mitigation is required.	LS
Require the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities	Impact-UTIL-1, as described above.	PS	Implement MM-CUL-1 and MM-CUL-2 as described above under <i>Cultural Resources;</i> MM-GEO-1 as described above under <i>Geology and Soils;</i> and MM- HAZ-1 through MM-HAZ-4 as described above under <i>Hazards and Hazardous Materials.</i>	LS
Be Served by a Landfill with Sufficient Permitted Capacity to Accommodate the Project's Solid Waste	Implementation of the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and would comply with federal, state, and local statutes and regulations related to solid waste.	LS	No mitigation is required.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Disposal Needs; and Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste				
Result in the Wasteful, Inefficient, or Unnecessary Use of Energy; and Require or Result in the Construction of New Energy System Infrastructure or the Expansion of Existing Infrastructure	Impact-UTIL-1 , as described above.	PS	Implement MM-CUL-1 and MM-CUL-2 as described above under <i>Cultural Resources;</i> MM-GEO-1 as described above under <i>Geology and Soils;</i> and MM- HAZ-1 through MM-HAZ-4 as described above under <i>Hazards and Hazardous Materials.</i>	LS
Cumulative Impa Be Served by a Landfill with Sufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs; and Comply with Federal, State, and Local	cts Impact-C-UTIL-1: The Proposed Project Would Generate Solid Waste that Would Exceed the City's Threshold. Operation of the proposed project would generate an annual amount of solid waste in excess of 60 tons, which would exceed the City's cumulative solid waste threshold.	PS	 MM-C-UTIL-1: Prepare a Waste Management Plan. Prior to issuance of the construction permits, the project proponent shall prepare a waste management plan and submit the plan to the City's Environmental Services Department for approval. The plan shall address the demolition, construction, and operation phases of the proposed project as applicable, and shall include the following. A timeline for each of the main phases of the proposed plan and near-term improvements (construction and operation). 	LS

Chapter 2. Executive Summary

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Statutes and Regulations	*		2. Tons of waste anticipated to be generated (construction and operation).	0
Related to Solid Waste			3. Type of waste to be generated (construction and operation).	
			 Description of how the proposed project will reduce the generation of construction and demolition (C&D) debris. 	
			5. Description of how C&D material will be reused on site.	
			6. The name and location of recycling, reuse, and landfill facilities where recyclables and waste will be taken if not reused on site.	
			 Description of how the C&D waste will be separated if a mixed C&D facility is not used for recycling. 	
			 Description of how the waste reduction and recycling goals will be communicated to subcontractors. 	
			 Description of how a "buy recycled" program for green construction products will be incorporated into the proposed project. 	
			10. Description of any ISO ⁵ or other certification, if any.	

Notes: PS = Potentially significant; LS = Less than significant; NI = No Impact; SU = Significant and Unavoidable

⁵ ISO certification means there has been a commitment to reduce ongoing waste.

2.7 Areas of Known Controversy/ Issues Raised by Agencies and the Public

Section 15123 of the State CEQA Guidelines requires the summary of an EIR to include areas of controversy known to the Lead Agency including issues raised by agencies and the public. The District circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis to be included in the Draft EIR beginning on August 18, 2016 and ending on September 16, 2016. The Initial Study/Environmental Checklist and NOP are included as Appendix A of the Draft EIR.

A total of 10 comment letters were received during the NOP public review period. The primary issues raised related to biological resources; GHGs; hazards and hazardous materials; utilities; transportation, parking, and traffic; and inconsistency with the SDCC Phase III Expansion project previously approved by the District. A summary of all comments received is included in Table 1-2 of Chapter 1, *Introduction*, of the Draft EIR, and all NOP comment letters are included in Appendix B of the Draft EIR.

The District circulated the Draft EIR for public review beginning on December 13, 2017 and ending on January 30, 2018. A total of 13 comment letters were received during the Draft EIR public review period. Comments received on the Draft EIR included concerns related to aesthetics and visual quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, public services and recreation (public access), and transportation, circulation, and parking. The comment letters and the District's responses are provided in Chapter 6, *Comments Received and District Responses*, of this Final EIR.

As part of their consideration of whether or not to approve the proposed project, the Board of Port Commissioners will determine whether the benefits of the project outweigh the significant and unavoidable impacts and warrant the adoption of a Statement of Overriding Considerations.

In addition, comments were received requesting consideration of possible alternatives to the proposed project. Suggested alternatives included additional onsite parking, a joint convention center expansion and hotel, and a joint stadium and convention center expansion. The Board of Port Commissioners will consider whether an alternative to the proposed project would meet the basic objectives of the project, avoid or substantially lessen any of the unavoidable significant impacts of the proposed project, and be feasible. It is also within the Board of Port Commissioners' discretion to adopt the no project alternative.

3.1 Introduction

Fifth Avenue Landing, LLC, as the project proponent, is proposing a commercial and recreational bayside redevelopment on approximately 18 acres (approximately 784,100 square feet) (project or proposed project). As proposed, the project would include construction and operation of the following.

- An 843-room, approximately 498-foot-high, 44-story, market-rate hotel tower.
- Approximately 69,100 square feet of meeting space.
- Up to 220-room, approximately 82-foot-high, 5-story, lower-cost, visitor-serving hotel.
- Approximately 7,749 square feet of retail development along the Embarcadero Promenade.
- Approximately 2.26 acres (98,448 square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel.
- Approximately 260 onsite parking spaces (combination of striped and valet parking spaces).
- A two-phase expanded marina with up to 50 new slips (approximately 23 slips in Phase I and 27 slips in Phase II) that, combined with the existing 12 slips, would total up to 62 slips.
- An optional connecting bridge from the hotel rooftop public plaza and park area to the San Diego Convention Center (SDCC) that would require potential concurrence of the City of San Diego (City) and an amendment to the existing Convention Center Management Agreement for the SDCC by and between the City and the District (District Document No. 37944) (Management Agreement) prior to implementation.

This chapter's contents include the project need and purpose, project objectives, project description, and necessary project approvals. A detailed description of the project site location and existing conditions is provided in Chapter 2, *Executive Summary*, which includes a location map provided as Figure 2-2.

The project was presented to the Board for preliminary project review on March 8, 2016. At that time, the Board authorized staff to commence the environmental review process.

3.2 **Project Need and Purpose**

The District's 2012–2017 COMPASS Strategic Plan establishes the goal of providing a "vibrant waterfront destination where residents and visitors converge." Currently, the Centre City Embarcadero (Embarcadero) is the waterfront area for an urban region supporting over 2.7 million people. The pierside maritime activities of commercial fishing boats, merchant ships, Navy vessels, and pleasure craft contribute to the fabric of the Embarcadero. The existing project site contains two parking lots, one of which is used for overflow parking and setup and breakdown associated with

the SDCC, a 30,300-square-foot park area, a water transportation center (WTC) ticket booth, a public bathroom, a portion of the Embarcadero Promenade, a 12-slip marina, a water transportation ferry service, and an on-call water transportation service. The project site is currently not seen as a destination in and of itself; visitors currently pass by it on their way to another location or it is used as a staging area for SDCC operations. As a result, the project site, in its current state, does not address the goal of the COMPASS Strategic Plan and more can be done to create a more vibrant waterfront destination.

The purpose of the proposed project is to further activate the Embarcadero by (1) providing additional overnight accommodations for visitors to the Embarcadero, the SDCC, downtown San Diego, and the numerous waterfront amenities in the area; (2) providing additional accommodations for a wide range of visitors (the proposed project would include both a market-rate hotel tower and lower-cost, visitor-serving hotel to ensure overnight visitors have a range of options at the waterfront); (3) expanding recreational amenities within the Embarcadero area, including an increase of approximately 2.26 acres of public plaza and park areas, and expanding the existing marina; and (4) maintaining and activating the existing promenade by providing visitor-serving retail such as cafés, gift shops, and outdoor eateries. Each of these components would encourage visitors to see the project site as a destination, rather than as an area to pass through.

The proposed 843-room market-rate hotel tower would meet or exceed the service quality of standard of the Hilton San Diego Bayfront, Marriott Marquis San Diego Marina, and Manchester Grand Hyatt hotels. Public access would be enhanced by providing way-finding signage, which would allow and encourage visitors to access the waterfront from the downtown area more easily, and provide activities and services to increase their length of stay along the waterfront.

3.3 **Project Objectives**

The project proponent has identified the following objectives for the proposed project.

- 1. Provide for the development and operation of a full-service hotel of a size, quality, and location appropriate for first-class convention operations that is a financially viable operation and is of a similar size and stature as nearby hotels such as the Hilton San Diego Bayfront Hotel (approximately 1,200 rooms), Manchester Grand Hyatt Hotel (approximately 1,625 rooms), and Marriott Marquis San Diego Marina Hotel (approximately 1,355 rooms).
- 2. Provide lower-cost, visitor-serving accommodations to allow greater access and enjoyment by the public that complies with Board Policy 775, *Guidelines for the Protection, Encouragement, and, Where Feasible, Provision of Lower Cost Visitor and Recreational Facilities.*
- 3. Provide for infill development on District tidelands that: (a) is compatible with surrounding uses; (b) maximizes the economic benefit to the District and City of San Diego and surrounding region by maximizing hotel room revenue, restaurant and retail sales, and hotel and retail sales taxes; and (c) generates sufficient leasehold revenue to support the District's participation in financing its mission of developing a balance between economic benefits, environmental stewardship, and public safety on behalf of the citizens of California.
- 4. Increase activation at the project site and along the bayfront by providing public plaza and park spaces, accompanied by visitor-serving retail, an expanded marina, a new water transportation center, and continuing operation of the existing public in-Bay water transportation system.

- 5. Provide new public vista opportunities of San Diego Bay from vantage points such as the San Diego Convention Center (SDCC) and proposed public plaza and park areas.
- 6. Improve public access by providing linkages from the City to the waterfront and Embarcadero Promenade by providing wayfinding signage at multiple entry points, including potential development of a pedestrian bridge that connects the project site with the SDCC and the Gaslamp Quarter of downtown San Diego.
- 7. Pursue Leadership in Energy and Environmental Design (LEED) Silver certification or achieve an equivalent level of sustainability by incorporating sustainable practices in all elements of project design and construction, leading to a reduction in energy use, water use, and solid waste generation as compared to standard hotel and visitor-serving developments.

3.4 Proposed Project Description

The proposed project includes landside and waterside components as well as an amendment to the Port Master Plan (PMP) Planning District 3, Centre City Embarcadero (see Section 3.4.10 for details). The landside components include a market-rate hotel tower; lower-cost, visitor-serving hotel; a new WTC; an onsite parking structure; and several enhanced public spaces and amenities: an optional connecting bridge to the public viewing areas of the SDCC, open space plazas and parks, and visitor-serving retail development. The waterside components include a marina expansion with additional slips and continuing operation of the existing public in-Bay water transportation system. Figure 3-1 provides an overall site plan for the proposed project, while Figure 3-2 through Figure 3-4 provide renderings of the project from landside and waterside angles.

Table 3-1 identifies the land uses proposed as part of the proposed project. The subsections that follow the table describe the key components in further detail.

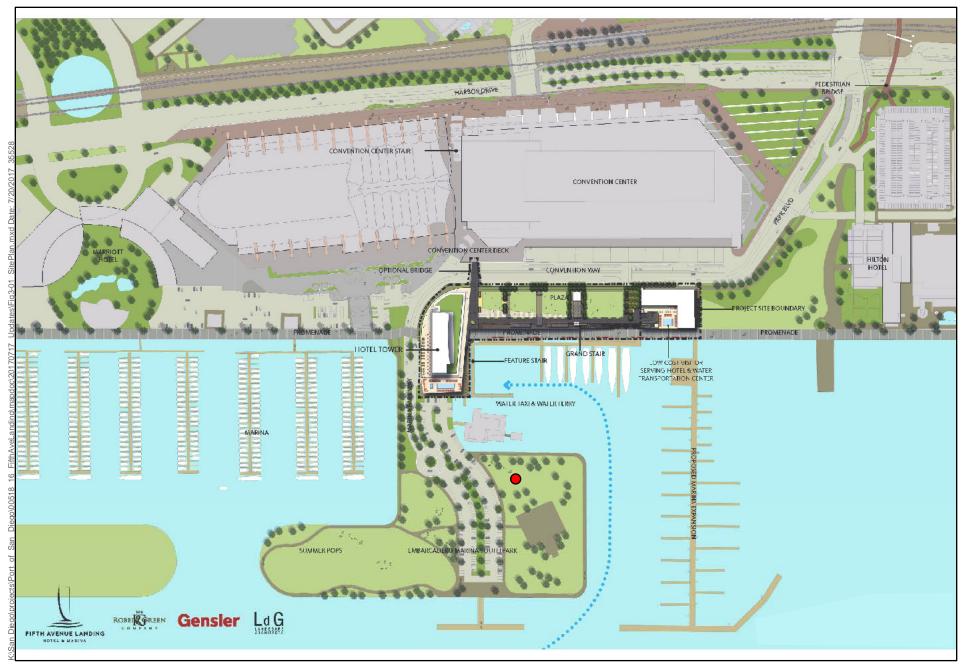


Figure 3-1 Proposed Project Site Plan Fifth Avenue Landing Project

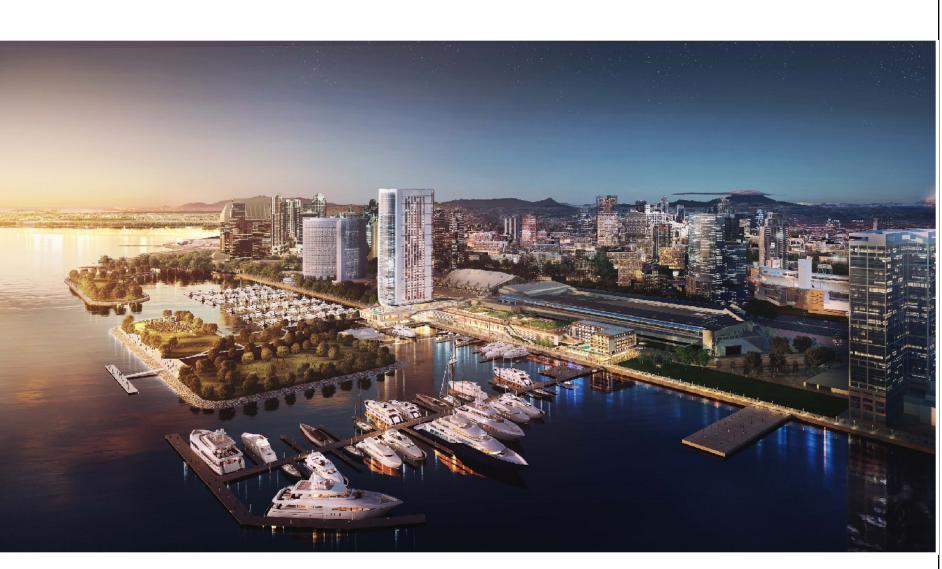


Figure 3-2 Proposed Project Rendering Fifth Avenue Landing Project



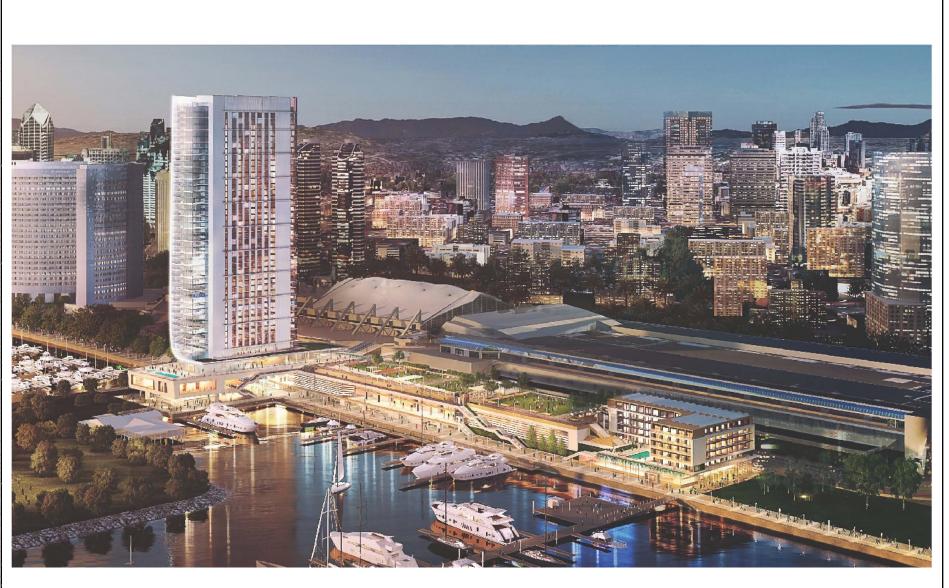


Figure 3-3 Landside Overview Rendering Fifth Avenue Landing Project





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Figure 3-4 Proposed Marina Expansion Rendering Fifth Avenue Landing Project



Proposed Project Components	Approximate Size (Square Feet)	Description	Location
Market-Rate Hotel Tower (44- stories, 498 feet high)	911,736 gross square feet (not including public plaza, park areas, and public promenade)	 843 rooms 69,100 square feet of meeting space, including: 30,196-square-foot ballroom 18,720 square feet of junior ballrooms 20,184 square feet of additional meeting rooms 40,705 square feet of pre- function space 95,258-square-foot rooftop public plaza and park area. Includes a multifunctional plaza, and public park plaza and public observation terrace 3,190-square-foot at-grade public promenade Feature Staircase and Grand Staircase from rooftop public plaza and park area 	Northwestern portion of the project site
Lower-Cost, Visitor-Serving Hotel with Water Transportation Center (WTC) (5 stories, 82 feet high)	 Hotel: 60,000 gross square feet WTC: 2,000 square feet 	 220 rooms 3,903-square-foot at-grade public pedestrian walkway WTC consisting of an accessory office, business center, marina guest lounge, ticketing, and marina crew restroom and showers 	Southeastern portion of the project site
Optional Connection Bridge to the SDCC	1,882 square feet (length of 85 feet and a width at the narrow end of 18 feet and wide end of 26 feet)	• Optional bridge that provides direct pedestrian connection from the project site to the SDCC	Connects view deck of the SDCC to the proposed rooftop plaza
Hotel Exterior Space	98,448 gross square feet (2.26 acres) and optional 1,882-square-foot bridge	See Table 3-2 and Figure 3-12 below	Throughout the project site
Visitor-Serving Retail Storefronts	7,749 square feet	 Five visitor-serving retail storefronts Open-air cafés, food and beverage outlets, gift shops, etc. 	Along promenade and masking proposed parking structure
Marina Expansion	Additional 57,696 square feet consisting of 31,564 square feet in Phase 1	See Figures 3-14 and 3-15 below	Within the adjacent Bay

Table 3-1. Proposed Project Components

Proposed Project Components	Approximate Size (Square Feet)	Description	Location
	and 26,132 square feet in Phase 2		
Parking Structure (approximately 20 feet high from ground floor)	79,780 square feet	 Approximately 260 spaces for either striped or valet Ground-level parking structure 	 Between market- rate hotel tower and low-cost visitor serving hotel Beneath hotel meeting space and rooftop public plaza and park area

3.4.1 Market-Rate Hotel Tower

The proposed project would include the construction of an approximately 843-room market-rate hotel tower and open-air pedestrian archway that spans the Embarcadero Promenade. The market-rate hotel tower would rise approximately 498 feet above mean sea level and would total 44 stories in height. The market-rate hotel tower, including the associated retail, restaurant, and meeting space, would be approximately 911,736 gross square feet. In addition to the 843 guest rooms, specific components of the market-rate hotel tower are described in Table 3-1. Figures 3-5 and 3-6 provide the proposed hotel stacking plan and cross-section.

The market-rate hotel tower design is inspired by sail structures of the latest generation of America's Cup sailboats. This design would be a recognition of the maritime uses of San Diego Bay and the high-tech nature of the America's Cup sailboats. A rendering of the proposed hotel is provided as Figure 3-7.

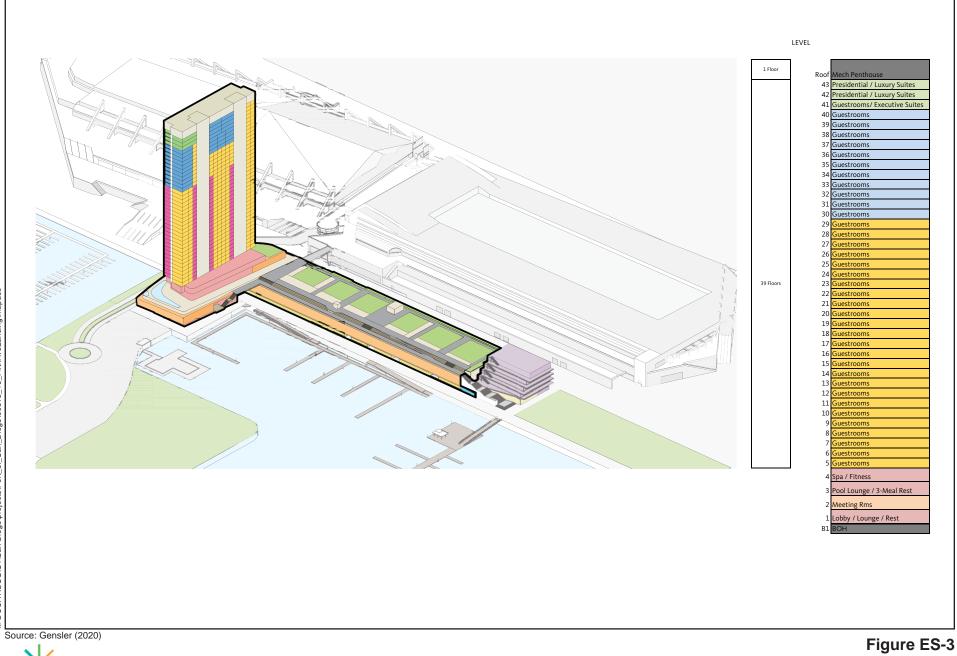
As depicted on Figure 3-8, the open-air pedestrian archway would span the Embarcadero Promenade as visitors approach the market-rate hotel tower and would connect the market-rate hotel tower to its ballroom and meeting facilities, located above the proposed parking structure. The archway would be approximately 43 feet wide, reach a height of approximately 40 feet, and include a smaller glass bridge at a lower height, which would span the Embarcadero Promenade to allow visitors to cross onto the plaza and access other project amenities. The depth and height of the archway would allow pedestrians to experience Bay views, and its design would provide visual connection between the northern and southern portions of the Embarcadero Promenade.

Servicing of the proposed market-rate hotel tower would be accomplished by incorporating up to three loading docks near the north SDCC garage entrance.

3.4.2 Lower-Cost, Visitor-Serving Hotel with Water Transportation Center

The proposed project includes the construction by the project proponent of an approximately 220room lower-cost, visitor-serving hotel, renderings of which are shown on Figures 3-9 and 3-10. The proposed hotel would be a five-story structure and would reach an approximate height of 82 feet, with retail abutting the Embarcadero Promenade along the eastern side of the building. This hotel would be near the Hilton San Diego Bayfront Hotel and its bayside park, and include an approximately 3,903-square-foot at-grade public pedestrian walkway. The lower-cost, visitor-serving hotel would be situated on its own leasehold parcel as a stand-alone development.

Additionally, an approximately 2,000-square-foot water transportation center (WTC) would be integrated into the building footprint of the lower-cost visitor-serving hotel and would consist of an accessory office/marina business center and marina guest lounge (1,000 square feet), ticketing (400 square feet), and marina crew restroom/showers (600 square feet), all of which are illustrated on Figure 3-11. The WTC would serve marina customers and their boats as well as provide operational support for the marina and the existing water transportation ferry service. Parking for the WTC would be provided within the proposed parking garage (see Section 3.4.7, *Parking*).



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Figure ES-3 Proposed Hotel Tower Stacking Diagram Fifth Avenue Landing Project

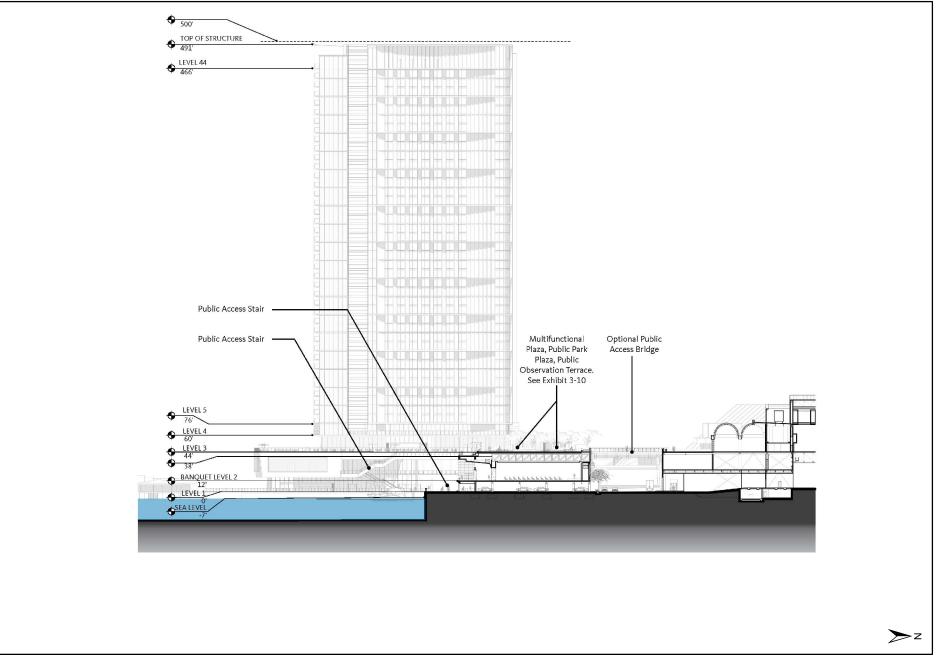


Figure 3-6 Hotel Tower and Public Access Plaza Cross-Section Fifth Avenue Landing Project





Figure 3-7 Hotel Tower Rendering Fifth Avenue Landing Project





Figure 3-8 Open-Air Pedestrian Archway Rendering Fifth Avenue Landing Project







Figure 3-9 Proposed Lower-Cost Visitor-Serving Hotel Rendering Fifth Avenue Landing Project





Figure 3-10 Proposed Lower-Cost Visitor-Serving Hotel Rendering Fifth Avenue Landing Project





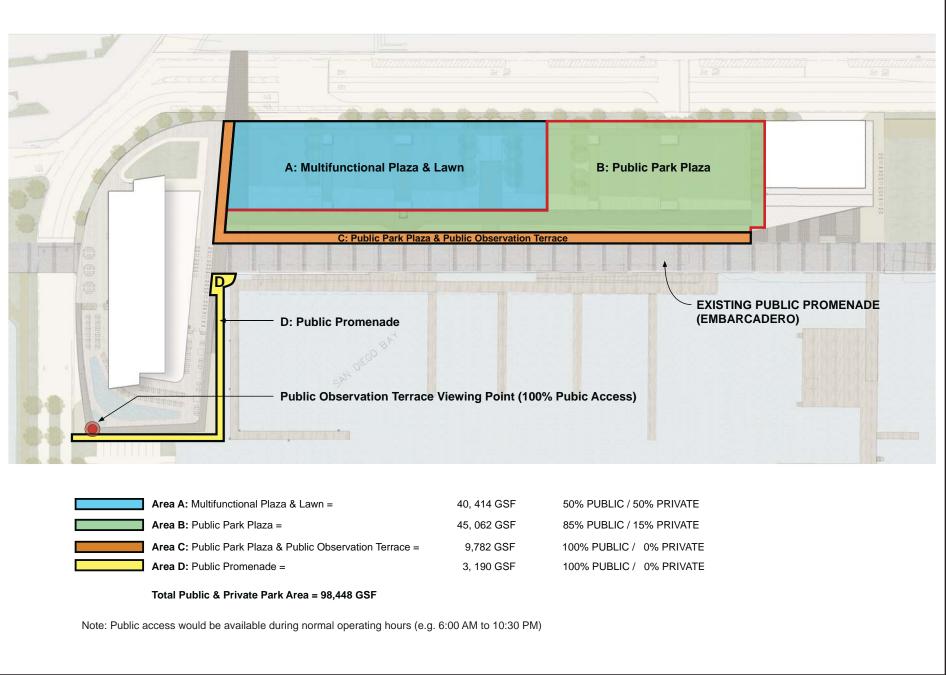
3.4.3 Optional Connecting Bridge to the San Diego Convention Center

As an optional project feature, the proposed project may potentially include a new public access bridge connecting the proposed market-rate hotel tower rooftop public plaza and park area to the SDCC view deck. This optional bridge connection would provide visitors with elevated and expansive views of the entire north and mid-Bay and would allow for travel to the City's Gaslamp Quarter. This optional bridge would be approximately 1,882 square feet with a length of 85 feet and a width at the narrow end of 18 feet and wide end of 26 feet. The paving materials for the proposed bridge would be designed to be integrated with the proposed rooftop public plaza and park area and may consist of a variety of enhanced materials including integral color decorative finished concrete, precast pavers, and/or stone accent paving. In addition, planting material would be included along the bridge in either integrated or free-standing planters. The guardrails are proposed to be constructed of painted metal or stainless steel or a combination of these along with solid planter walls. Concurrence of the District, and potentially the City as the contractual managing entity of the SDCC, would be required prior to implementing this portion of the proposed project. An amendment to the Management Agreement between the District and the City may also be required. Therefore, the bridge is identified as optional in this EIR. The EIR analyzes the project with and without the optional public access bridge component.

3.4.4 Public Plaza and Park Areas and Design Features

The proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.70 acre) to approximately 98,448 square feet (2.26 acres). The public plaza and park areas would serve as resting and viewing areas for visitors and would include interpretive signage and public art. All the proposed public plaza and park areas would be designed with a combination of hardscape, drought-tolerant landscape, grass lawns, and artificial turf. In total, the proposed project would include four public plaza and park areas and a public promenade spread throughout the project site. Table 3-2 identifies each of the public plaza and park areas and the percentages of public and private usage of the areas. Figure 3-12 depicts the plaza and park area locations and Table 3-2 provides further detail on each. The proposed project would also maintain the existing 35-foot-wide Embarcadero Promenade across the site. The existing promenade does not count toward the proposed project's public plaza and park area described in Table 3-1. The proposed project would enhance the existing Embarcadero Promenade by providing retail adjacent to the promenade; increased seating areas; public restrooms; connection of lower-cost, visitorserving hotel and market-rate hotel tower with the promenade with small plazas or lobbies; and access to the parking structure from the promenade; additionally, an optional pedestrian bridge would serve to connect pedestrian circulation from Downtown San Diego and SDCC to the Promenade.

As depicted on Figure 3-12, in addition to the proposed public plaza and park areas, the proposed project provides public access throughout the project site and to connect to surrounding uses. One of the public access features includes the construction of a walkway around the market-rate hotel tower in order to maintain public access to the views along the San Diego Bay.



Source: Gensler (2020)

Figure 3-12 Proposed Public Access Areas Fifth Avenue Landing Project

Figure 3-12 Key	Title	Area (square feet) ¹	Location	Access	Available to Public
А	Multifunctional Plaza and Lawn	40,414	Above the ballrooms, meeting rooms, and parking structure ²	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	50% public access/50% private access/Managed by Operator
В	Public Park Plaza	45,062	Above the ballrooms, meeting rooms, and parking structure ²	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	85% public access/15% private access/Managed by Operator
C	Public Park Plaza and Public Observation Terrace	9,782	Marina overlook	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	100% public access
D	Public Promenade	3,190	Approximately 10-foot- wide walkway along the southeast portion of the market-rate hotel tower; will include a public viewing deck.	Ground-level via the public Embarcadero Promenade	100% public access
	Total	98,448			

¹ Values are approximate.

² This plaza and park area would be on the roof of the market-rate hotel tower ballroom and parking structure, described in Section 3.4.1, *Market-Rate Hotel Tower*.

Note: A more detailed description of these areas can be found on Figure 3-16, *Landscape Concept Site Plan*.

3.4.5 Visitor-Serving Retail Storefronts

The proposed project would include up to five visitor-serving retail storefronts consisting of openair cafés, food and beverage outlets, gift shops, and other visitor-serving retail establishments along the Embarcadero Promenade. These retail venues would total approximately 7,749 square feet and are intended to encourage activation of the existing Embarcadero Promenade. Figure 3-13 provides a site plan of the proposed retail storefronts.

3.4.6 Marina Expansion

The proposed project marina expansion would include waterside and landside components (see Figure 3-1). The waterside components include adding new vessel slip space, constructing a new pile-supported pier, possibly constructing a breakwater with wave attenuation panels, and improving public access to the waterfront. The landside component involves removing the existing office trailer, WTC ticket booth, public restroom, and pavement; and reconstructing the bulkhead and anchors.¹

The existing vessel slip space, which consists of three 170-foot slips, four 125-foot slips, two 115foot slips, one 233-foot slip, and two 130-foot slips, would be expanded by an additional 57,696 square feet of pile-supported dock space. The marina would be constructed in two phases. Phase I (approximately 31, 564 square feet) would add 23 new marina slips ranging in size from 50 feet to 200 feet and would be constructed during the hotel construction timeframe. These slips would be accessible from the proposed pile-supported dock, which would be approximately 20 feet in width and extend approximately 439 feet for Phase I. A breakwater with wave attenuation panels may be included as part of the proposed project to reduce wave energy coming into the marina. The breakwater, located at the end of the proposed dock, would be approximately 400 linear feet and 20 feet in width.

Phase II (approximately 26, 132 square feet) would provide an additional 27 slips ranging in size from 50 feet to 240 feet and would be constructed when market conditions allow, approximately 5 years after the hotels are in operation, but is not anticipated to occur any sooner. Total buildout would allow for 50 additional slips, for a combined total of 62 slips, including the existing 12 slips, to accommodate both small and large vessels. These slips would be accessible from the proposed pile-supported dock, which would be approximately 20 feet in width and extend approximately 922 feet into the San Diego Bay for Phase II with a breakwater of approximately 630 linear feet and 20 feet in width. Each slip would have shoreside power, as well as connections to the City's water and sewer systems.

The possible fleet mix of the expanded marina would allow for smaller boats to be integrated into the marina while at the same time allowing larger vessels to dock. Figures 3-14 and 3-15 depict the proposed Phase I and Phase II marina layouts, respectively, and the proposed dock and slip lengths and quantities. The proposed fleet mix may change slightly, but Figures 3-14 and 3-15 represent the worst-case scenario (i.e., resulting in the most impacts) for purposes of the EIR analysis.

Improvements to public access as a result of the proposed project include signage and dock space for larger and smaller vessels.

¹ Note that the existing marina office would be replaced with the WTC and enhanced as part of the lower-cost, visitor-serving hotel development component described in Section 3.4.2.

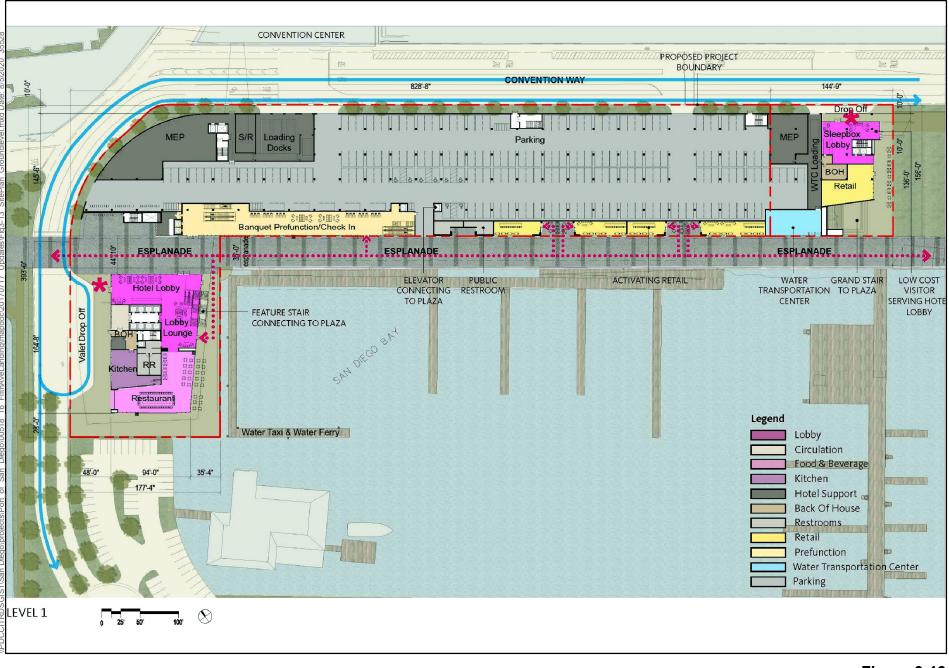
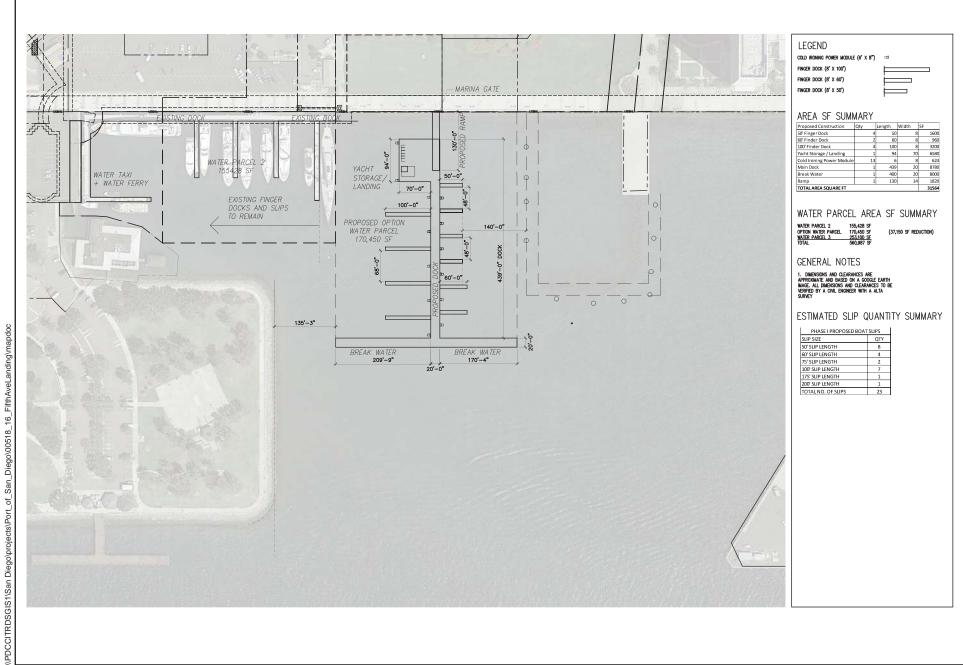


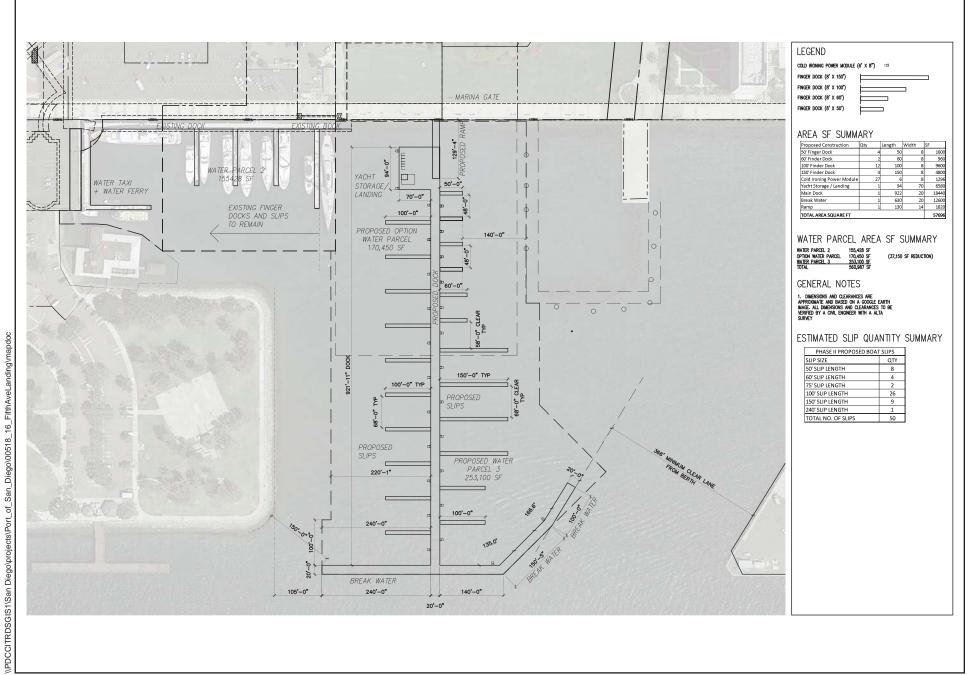
Figure 3-13 Proposed Site Plan at the Ground Level Fifth Avenue Landing Project



Source: Gensler (2020)

/ICF

Figure 3-14 Proposed Phase I Marina Expansion Fifth Avenue Landing Project



Source: Gensler (2020)



Figure 3-15 Proposed Phase II Marina Expansion Fifth Avenue Landing Project The proposed landside marina improvements would include relocating the existing marina office to the promenade level of the lower-cost, visitor-serving hotel (see Section 3.4.2 for a description of the new water transportation center). In 2015, the ferry service transported approximately 290,000 passengers, and in 2016 it transported approximately 222,672 passengers. There currently are no plans to expand the ferry service; accordingly, no expansion is analyzed in this EIR. In addition, the project site operates an existing water taxi service, which is a pre-arranged service that provides transportation throughout the Bay to groups of no fewer than 20 people. The service is typically only used a few times per year. This service would continue to be operated at the project site with the implementation of the proposed project.

3.4.7 Parking

A one-level parking structure would be incorporated into the development between the market-rate hotel tower and the lower-cost, visitor-serving hotel. As depicted on Figure 3-13, the parking structure would be constructed at ground level and would be beneath the market-rate hotel tower meeting space/ballrooms and the rooftop public plaza and park area. The proposed visitor-serving retail (as described in Section 3.4.5, *Visitor-Serving Retail Storefronts*) would mask the parking structure from public view along the promenade. The capacity for approximately 260 onsite parking spaces, both striped and valet parking, would be provided, and access to the proposed parking structure would be provided on Convention Way.

The proposed parking structure would incorporate the use of natural light, LED lighting, and natural Bay breezes to cool the garage. Limited mechanical systems would be needed to ventilate or provide fresh air to the garage. Approximately 29 electric car charging stations would also be installed to accommodate electric vehicles.

As part of the existing ARC lease between the SDCC Corporation and the District for the project site, the project proponent has the right to seek 110 parking spaces in the offsite District-owned SDCC garage contingent upon availability, amendments to the existing Management Agreement, and the District issuing a lease agreement to the project proponent for the use of the 110 offsite parking spaces. At this time, there is no excess parking available in the SDCC garage and it is not reasonably foreseeable that such parking would be available to the project proponent. However, in the event 110 parking spaces become available and the remaining aforementioned conditions are satisfied, the EIR analyzes the proposed project with and without the offsite parking spaces.

Nearby parking facilities may be available for shared parking; however, the project proponent currently does not have any contractual rights to use any other parking garage, and no parking has been set aside for the proposed project. Parking supply and demand are discussed in detail in Chapter 4, Section 4.12, *Transportation, Circulation, and Parking*, of the Draft EIR.

3.4.8 Onsite Circulation and Wayfinding

Visitors and hotel guests would access the project site from Harbor Drive and Park Boulevard, which turns into Convention Way. Convention Way would retain its current alignment and would be used for car and truck access to the project site during construction and operation of the proposed project.

Public signage along the promenade would illustrate San Diego Bay history, including its past and present working waterfront, interpretive signage, and location and wayfinding maps. This signage

would conform to the South Embarcadero Urban Design Guidelines and California Coastal Access signage statewide program. These guidelines include utilizing banners on street lights and minimizing signs that obstruct views of the San Diego Bay.

Signage off tidelands would be designed with input from and in cooperation with the SDCC, City, and the District. Signage locations are proposed to include areas along Harbor Drive, Fifth Avenue, Convention Way, and the Gaslamp and Ballpark Districts.

3.4.9 Landscape and Water Quality Design Features

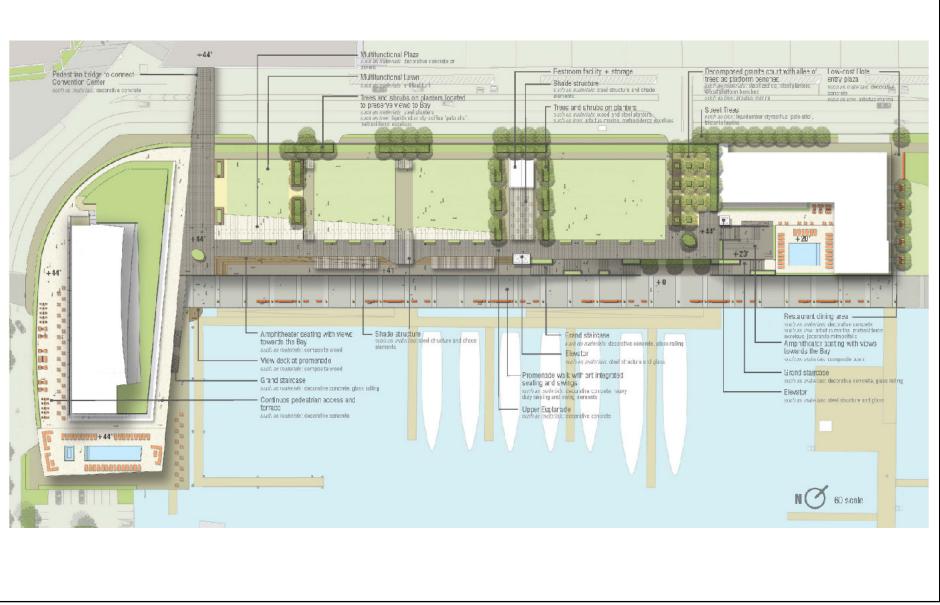
The proposed project would require the removal of 39 ornamental trees located within the existing parking lot area and park/plaza area. Figure 3-16 provides the conceptual landscape plan for the proposed project. The proposed project would include 75 trees, as well as shrubs, throughout the project site. Figures 3-17 and 3-18 provide the existing and proposed impervious and pervious surfaces on the site. The proposed project would include stormwater protection systems, including the capture of runoff and various landscape measures to improve Bay water quality. Landscaping would consist of drought-tolerant and non-invasive plants acceptable to the State of California, California Native Plant Society, and California Invasive Plant Council. In addition, most runoff water would be recaptured through a filtered system that employs landscape troughs and other measures. Permeable surfaces would be used in place of concrete or asphalt where feasible.

The marina would be a zero-discharge facility. A marina Best Management Practice Plan would be drafted and implemented to ensure that marina operations do not degrade Bay water quality. The plan would be approved by the District prior to commencement of the marina development. Components of the plan include the use of educational materials that would be provided to boat owners and their crews. Docking agreements would contain specific use restrictions to prevent degradation of water quality. The marina operator would restrict boat repairs and cleaning operations. Hull bottom scraping and the use of toxic detergents used to clean vessels would be prohibited, and no overwater repairs would be allowed. Refueling would occur off site. The marina's onsite manager would enforce these restrictions and discharge any dock user who fails to comply with these restrictions after verbal warnings have been provided.²

3.4.10 Port Master Plan Amendment

As discussed further in Chapter 2, *Executive Summary*, the current certified PMP designates a portion of the landside portion of the project site for the SDCC Phase III expansion. In addition, other land and water uses proposed as part of the project are not consistent with the existing PMP land and water use designations. Therefore, the proposed project proposes an amendment to PMP Planning District 3, Centre City Embarcadero. This PMP Amendment (PMPA) is proposed to change portions of the existing land and water use designations and to update the PMP maps, text, and tables to reflect the proposed project and corresponding land and water uses (see Figure 3-19). In addition, as shown in Figure 3-19, the PMPA identifies up to eight new designated vista areas to replace the five existing designated vista areas that would be displaced by the proposed project.

² These features and measures are also included within mitigation measure MM-HWQ-1 in Section 4.8, *Hydrology and Water Quality*, of the Draft EIR.

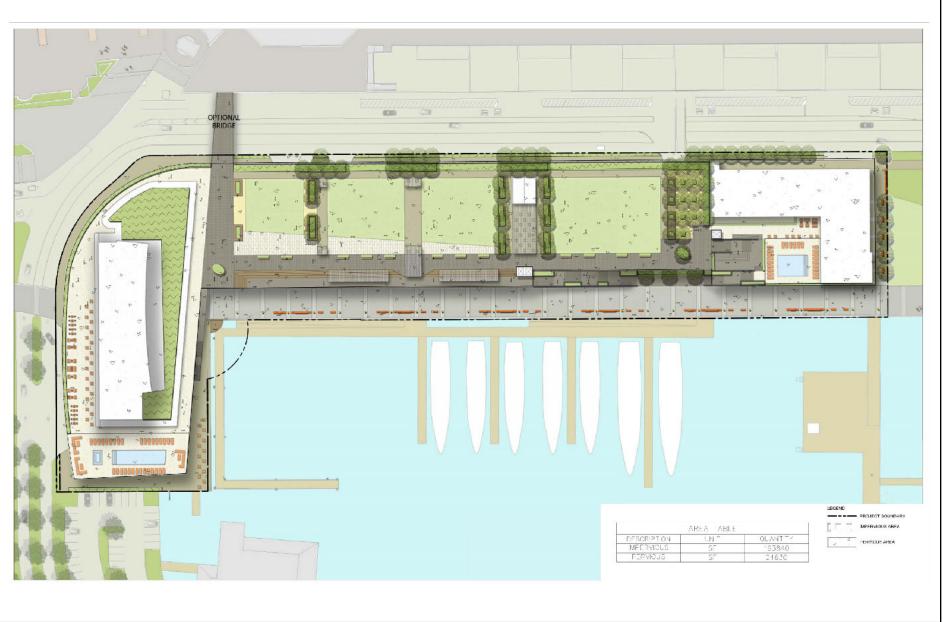


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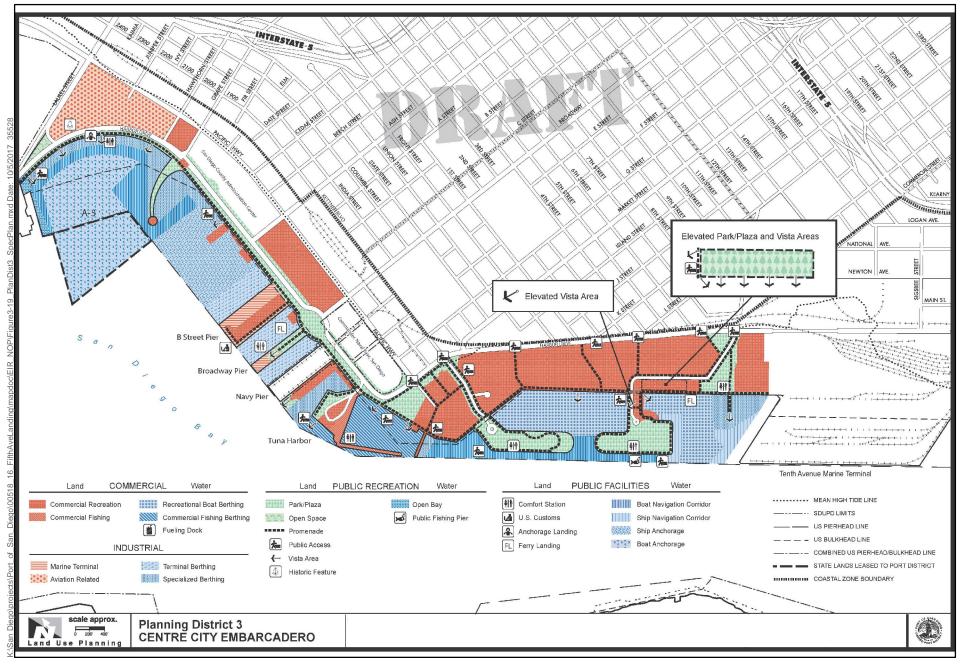


Figure 3-19 Proposed Planning District 3 Precise Plan Fifth Avenue Landing Project The proposed PMPA land and water use designation changes include, but are not limited to, the following.

- Commercial Recreation to Street
- Street to Commercial Recreation
- Specialized Berthing to Recreational Boat Berthing
- Ship Navigation Corridor to Recreational Boat Berthing
- Promenade to Commercial Recreation
- Park to Commercial Recreation
- Commercial Recreation to Park

The proposed PMPA is provided in Appendix C of the Draft EIR (Volume III of the Final EIR) and Chapter 5, *Errata and Revisions*, of the Final EIR.

3.4.11 Project Construction

Construction of the hotels and Phase I of the marina expansion are anticipated to occur during approximately 24 to 30 months. Construction activities would occur between 7 a.m. and 7 p.m. in compliance with City of San Diego building code and regulations.³ Construction staging and laydown activities would occur within the project site. All proposed staging areas are paved or heavily disturbed with no existing vegetation. During construction, once all of the landside buildings are under construction, staging would have to occur off site. Offsite staging would be at the R.E. Staite property located at 2145 Belt Street, San Diego. This site is heavily disturbed with no existing vegetation because the site is already used as a construction staging location for R.E. Staite's construction equipment. Construction parking is also proposed at the R.E. Staite site. Shuttles would be used to transport the construction workers to the project site and/or public transportation incentives would be provided.

As discussed above, the marina expansion would be constructed in two phases (Phase I and Phase II). The Phase I marina expansion would be constructed at the same time the market-rate hotel tower is constructed and would take approximately 6 to 9 months to be completed. However, the construction of the Phase II marina expansion would be market driven and customer dependent. It is anticipated that the Phase II marina expansion would be constructed within approximately 5 years after the market-rate hotel tower is constructed and is not anticipated to be constructed before then. Phase II of the marina expansion construction is expected to include similar equipment and occur over a similar timeframe (e.g., 6–9 months) as Phase I.

Demolition, grading, and pouring of foundations would occur first. All of the existing landside uses on the project site would be demolished to accommodate the construction of the proposed project. The existing 35-foot-wide Embarcadero Promenade would be maintained during construction and in the event that there is a temporary disruption that portion of the promenade would be diverted within the project site. In total, approximately 5 acres would be graded that would require demolition of approximately 1,711 cubic yards of the parking lot, 1,407 cubic yards of the hardscape, and 38,350 cubic yards of other materials, including concrete from existing buildings.

³ When the District has not adopted its own code or regulation on a specific topic, it defers to the corresponding member city's codes and regulations for the same.

Approximately 98% of the asphalt would be recycled on site, as well as 25% of the hardscape. In addition, construction within the landside area would require the removal of 39 existing ornamental trees located on the project site.

The type of construction materials that are anticipated to be used for the proposed project consist of structural steel and concrete; electrical and mechanical systems; interior and finish materials; landscaping and security systems; and interior furnishings, fixtures, and equipment. Material delivery would occur daily throughout the construction period. Some construction components may arrive by sea, such as steel beams, and be offloaded to either the Tenth Avenue Marine Terminal or at the nearby marina.

For the landside development, standard construction equipment would be used, such as earthmoving equipment and pile drivers. Dewatering pumps, cranes, and concrete pump-towers would also be utilized. Several construction cranes may be set in place during construction to support steel beam placement and concrete pouring. The foundations for all major structure would be pile supported, similar to other bayside, multi-story structures. Approximately 1,200 piles would be utilized for construction of the landside portion of the project site, and would be driven to a depth of approximately 60 feet.

The waterside development construction equipment would include the use of Derek barges, push boats, anchors or spuds, and equipment to either internal jetting or straight pile driving the piles. For the marina expansion, approximately 188 piles (623 square feet) would be driven to depths ranging from 50 to 90 feet. With the addition of the breakwater, the proposed project would result in approximately 13,623 square feet of bay fill. Specifically, Phase I would require approximately 60 piles (199 square feet) and Phase II, which includes the breakwater, would require approximately 128 piles (424 square feet).

Construction of the proposed project would not require permanent dewatering. Short-term dewatering may be necessary during construction of the foundations for the market-rate hotel tower and its related project elements. The proposed project would comply with dewatering requirements imposed by the San Diego Regional Water Quality Control Board.

During construction of the proposed project the Embarcadero Promenade fronting the project site would remain open but would be temporarily narrowed from 35 feet to 15 feet. However, for approximately 18 months during construction of the market-rate hotel tower lobby, which spans the promenade, pedestrian traffic would be routed along Convention Way. All closures, construction, and delivery schedules would be coordinated with the District and the SDCC.

The workforce during the construction phase would range from 500 to 1,100 construction workers, with a daily average around 186 workers.

3.4.12 Project Operation

The proposed project would operate as a fully functioning market-rate hotel and lower-cost, visitorserving hotel, marina, WTC, publicly accessible waterfront with retail options, and publicly accessible plaza and park areas. The usage of the public plaza and park areas is described in detail above in Table 3-2. In addition to hotel rooms, the hotels would provide space within the hotel and on the public plaza and park area for special events such as weddings and conferences. The marina would allow for a variety of vessels to dock as well as amenities for visitors such as ticketing, restrooms, and a gym, which would only be used by hotel guests and users of the marina. The retail options could include restaurants, cafés, coffee shops, and other visitor-serving uses.

3.4.12.1 Operating Equipment

The proposed project would include operating equipment for the proposed project components. The proposed market-rate hotel tower and associated functional rooms, amenities, meeting rooms, and ballrooms would be served by a central plant, which would include a conventional emergency generator, central chiller, a cooling tower, a boiler plant, dedicated outside air-handling systems, air-handling units, fans, and a domestic hot water plant. The lower-cost, visitor-serving hotel would be served by self-contained air units, air-handling units, exhaust and building fans, and a domestic hot water plant. The parking structure would have openings in the façade and walkway to allow fresh air to be drawn into the structure, and exhaust fans would be provided to discharge vehicle exhaust. The visitor-serving retail storefronts would be served by self-contained air units. In addition, the WTC would be served by dedicated air units. Finally, all buildings, including the parking structure, would include fire sprinklers.

3.4.12.2 Utilities

Detailed utility demand and supply is provided in Chapter 4, Section 4.14, *Utilities and Energy*, of the Draft EIR. As discussed further in Section 4.14 of the Draft EIR, the proposed project includes the following offsite infrastructure improvements.

- Removal of the sewer main on the project site and relocation to Convention Way (approximately 550 linear feet of new 12-inch sewer pipeline)
- Upgrade of the existing 10-inch sewer pipeline within Convention Way to a 12-inch main pipeline all the way to West Harbor Drive (approximately 1,500 linear feet)
- Relocation of a portion of the storm drain from the project site to Marina Park Way (approximately 250 linear feet)
- Upsizing of the existing 15-inch West Harbor Drive trunk sewer at the intersection of West Harbor Drive and Park Boulevard to a 30-inch sewer main is planned to be completed by the Ballpark Village project. However, in the event that this is not completed prior to the occupancy of the hotels, the proposed project would be required to complete the upsize.
- The existing electrical circuit on Convention Way does not have sufficient capacity; therefore, the proposed project would be required to tie into the Sampson Street Substation for electrical power. This would require trenching from the project site, out along Convention Way to Harbor Drive, and along Harbor Drive to the Sampson Street Substation, for a total trenching distance of approximately 1.4 miles. It may also be necessary to add a new switch and/or transformer at the Sampson Street Substation to accommodate the proposed project's energy demand.

3.4.12.3 Projected Workforce

The proposed project would result in the employment of approximately 610 total permanent individuals. The market-rate hotel tower would be a full-service hotel with a high employee to guest and guest room ratio. It is estimated to provide approximately 600 jobs, including maintenance staff, hotel management, facilities, and cleaning crews. The lower-cost, visitor-serving hotel is estimated to provide approximately nine jobs and the marina will continue to provide one job.

3.5 **Project Review and Approvals**

The District is the lead agency under CEQA and responsible for permitting and carrying out the proposed project. The following permits and approvals would be required to implement the proposed project.

3.5.1 San Diego Unified Port District

- Certification of the EIR.
- Adoption of the mitigation monitoring and reporting program.
- Adoption of the Findings of Fact.
- Adoption of the Statement of Overriding Considerations.
- Approval and adoption of the PMPA.
- Concept approval of the proposed project.
- Approval of new lease agreements.
- Authorization for issuance of a coastal development permit.
- Amendment to the Management Agreement for the Pedestrian Bridge and, if they become available in the future, use of the 110 parking spaces located within the SDCC.

3.5.2 California Coastal Commission

• Certification of, and final action on, the PMPA.

3.5.3 Resource Agencies

A review and issuance of permits may be required for the implementation of the proposed project from the following resource agencies.

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- California Regional Water Quality Control Board
- California Department of Fish and Wildlife
- National Marine Fisheries Service

3.5.4 Federal Aviation Administration

• Issuance of a determination under Federal Aviation Regulations, Part 77.

3.5.5 San Diego County Regional Airport Authority, Airport Land Use Commission

• Issuance of a consistency determination.

3.5.6 City of San Diego

- Amendment of the existing Management Agreement for the optional pedestrian bridge and, if they become available in the future, use of the 110 parking spaces located within the SDCC.
- Issuance of ministerial permits (e.g., grading, building, electrical).

4.1 Introduction

This chapter provides analysis of the changes to the proposed project (project changes or revised project) to determine whether any modifications to the analysis and conclusions in the Draft EIR are required. The project changes, as proposed by the project proponent, are as follows:

- Market-Rate Hotel Tower (44-stories, 498 feet high)
 - 911,736 gross square feet (not including public plaza, park areas, and public promenade) (increase from 796,000 gross square feet). The increase in square footage is due to a minor change in the project design, which includes the removal of the curve in the building façade. This design change allowed for slightly larger hotel rooms throughout the entirety of the 44-story hotel tower and more meeting space, which increased the overall gross square footage of the building. There are no changes to the building footprint or height as a result of this design modification.
 - 843 rooms (reduced from 850 rooms)
 - 69,627 square feet of meeting space (increase from 55,583 square feet)
 - 30,196-square-foot ballroom (increase from 15,991 square feet)
 - 18,720 square feet of junior ballrooms (increase from 8,675 square feet)
 - 20,711 square feet of additional meeting rooms (decrease from 30,917 square feet)
 - 40,705 square feet of pre-function space (increase from 30,188 square feet)
 - 95,258-square-foot rooftop public plaza and park area. Includes a multifunctional plaza and lawn, public park plaza, and public park plaza and public observation terrace (increase from 82,300 square feet)
 - 3,190-square-foot at-grade public promenade (no change)
 - Feature Staircase and Grand Staircase from rooftop public plaza and park area (no change)
- Lower-Cost Visitor-Serving Hotel with Water Transportation Center (WTC) (5 stories, 82 feet high)
 - Hotel: 60,000 gross square feet (decreased from 80,000 square feet)
 - 220 rooms (decreased from 565 beds). The decrease in beds/rooms is based on recent guidance by the California Coastal Commission recommending at least 25% of new overnight accommodations be lower cost.
 - 3,903-square-foot at-grade public pedestrian walkway (no change)
 - WTC: 2,000 square feet (decreased from 6,127 square feet)
- Optional Connection Bridge to the San Diego Convention Center (SDCC) (no change)

- Hotel Exterior Space
 - 98,538 gross square feet (2.26 acres) (increased from 85,490 gross square feet [1.96 acres] and optional 1,882-square-foot bridge [no change])
- Visitor-Serving Retail Storefronts
 - 7,749 square feet (increased from 6,000 square feet)
- Marina Expansion
 - 57,696 square feet (phasing details added consisting of 31,564 square feet in Phase 1 and 26,132 square feet in Phase 2) (no change)
- Parking Structure
 - 79,780 square feet (decrease from 85,340 square feet)
 - 260 parking spaces (decrease from 263 spaces)
 - Ground-level parking structure (no change)
- Landscaping
 - 19,640 gross square feet of landscaped area (decrease from 131,324 square feet)

This chapter provides an analysis of any changes to the environmental impacts and mitigation measures described and evaluated in the Draft EIR based on the revised project. The revised project does not result in any new or more severe significant environmental impacts than are discussed in the Draft EIR. The District's determination that there are no new or more severe significant impacts than are identified in the Draft EIR as a result of changes to the proposed project is supported by the analysis in this chapter.

4.2 Effects Not Found to be Significant

Early in the environmental scoping process it was determined that effects related to agriculture and forestry resources, mineral resources, and population and housing would not be significant. A brief explanation indicating the reasons that the significance of impacts on these resources would not change as a result of the revised project is provided under each subheading below.

4.2.1 Agriculture and Forestry Resources

The project site is in an urbanized area classified as "urban and built-up land," that does not support any agricultural or forestry uses. The Draft EIR determined that there are no agricultural or forestry resources, including farmlands or forestry resources, Williamson Act contract lands, or areas zoned for agricultural uses or forestry uses, within the District's jurisdiction. As a result, the Draft EIR concluded the proposed project would result in no impacts on agricultural and forestry resources. The project location would not change and would be located in an urbanized area. The revised project would not change the no impact determination identified in the Draft EIR.

4.2.2 Mineral Resources

The project site does not contain any known mineral resources. The landside area of the proposed project site is underlain by two surficial soil units overlying the marine terrace deposits (Appendix G-1 of the Draft EIR). No commercial mining operations exist on the project site or in the immediate vicinity. The mineral resource zone (MRZ) designation for the project site is MRZ-1. The MRZ-1 designation is applied to "areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence." The certified Port Master Plan (PMP) does not identify any mineral resources in the area or designated plans for mineral resource extraction. The project site and the surrounding area do not contain locally important mineral resources. Therefore, the Draft EIR did not identify significant impacts related to mineral resources. The revised project would occur within the same project boundaries and therefore would not result in any impacts related to mineral resources. The no

4.2.3 Population and Housing

The proposed project would not construct any homes or businesses or extend roads to expand an urban area into a rural one. Additional employees and construction workers are anticipated to work at the project site as a result of construction of the proposed project. Although implementation of the proposed project would require new employees and temporarily increase the number of construction workers in the area, the additional jobs are expected to be filled primarily by existing local and regional residents and would not induce substantial population growth. The jobs would not result in the relocation of any significant number of people. Therefore, the proposed project would not directly or indirectly induce substantial population growth in the San Diego region. As such, impacts were determined to be less than significant in the Draft EIR. The revised project would not result in the construction of any residences or businesses that would induce population growth. Therefore, the no impact determination identified in the Draft EIR would not change as a result of the revised project.

The project site is mostly paved and developed with commercial-serving public uses, and no existing onsite housing units or persons are located on the project site. The Draft EIR concluded that the proposed project would not directly induce substantial growth, or displace substantial numbers of existing housing or people, otherwise necessitating the construction of new or replacement housing elsewhere. Consequently, the proposed project would not induce a substantial increase in population. Therefore, no impacts on population and housing were identified in the Draft EIR. Changes to the proposed project would occur within the same project boundaries where no existing onsite housing units or persons are located, and therefore would not induce substantial growth or displace substantial numbers of existing housing or people. As such, the revised project would not change the no impact determination identified in the Draft EIR.

4.3 EIR Chapter/Section Analysis

4.3.1 Aesthetics and Visual Resources

4.3.1.1 Project Impact Analysis

Section 4.1, Aesthetics and Visual Resources, of the Draft EIR concluded that the proposed project would have a substantial adverse effect on a scenic vista, including but not limited to the vista areas designated by the District in the certified PMP. As described in Section 4.1 of the Draft EIR, construction activities associated with the proposed project, including construction activities associated with replacement of utilities from the project site to Convention Way, would result in significant temporary impacts on vista areas from Key Observation Point (KOP) 2. The Draft EIR concluded implementation of MM-AES-1 would reduce impacts on existing views associated with construction activities and equipment, but views of the construction site would still be available from the elevated viewshed of the existing SDCC plaza. As such, although temporary during the construction phase, impacts would remain significant and unavoidable. The Draft EIR also identified operation of the proposed project would substantially interfere with existing expansive views of the San Diego Bay from the existing SDCC plaza and the SDCC grand staircase. Operation of the proposed project would displace five vista areas that are designated in the certified PMP. Section 4.1 of the Draft EIR concluded implementation of MM-AES-2 and MM-AES-3 would reduce impacts on the vista area at the SDCC plaza, but the proposed project would still result in substantial obstruction of existing panoramic views of the Bay. In addition, there is no mitigation measure to minimize impacts on the panoramic views from the SDCC's grand staircase, and impacts on these vista areas would be significant and unavoidable. The Draft EIR concluded impacts related to displacement of the existing vistas would be reduced to less than significant by implementation of MM-AES-4. Although the overall gross square footage of the proposed project would increase as a result of the project changes, the height and mass of the hotels would remain the same. Project components would be constructed within the same project boundaries using the same construction equipment, which would temporarily result in impacts on existing views. However, the revised project would not increase the severity of this impact. Although the proposed hotel tower would be the tallest tower along the waterfront, the intensity of development at the project site would also be consistent with the intensity of the surrounding uses and would not change as a result of the revised project. Because operation of the proposed project would not change as a result of the project changes, five vista areas would be displaced as shown in the visual simulations in Section 4.1 of the Draft EIR. Implementation of the same mitigation measures would reduce impacts, but not to a level below significant.

As identified in Section 4.1 of the Draft EIR, implementation of the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a state scenic highway. The Draft EIR determined that the project site does not contain any historic resources; however, there is a historic structure adjacent to the project site. Section 4.1 of the Draft EIR noted that the expanded marina would interfere with views of the portion of the project area where the historic resource is located. However, as noted in Section 4.1 of the Draft EIR, the historic structure is not visible from State Route (SR-) 75 due to the project area's distance from SR-75, the speed at which motorists travel along that roadway, and the fact that stopping on the bridge is prohibited, and is therefore not a contributing feature to the viewshed of the scenic highway. The revised project does not include any change in the project location or details

of the marina expansion analyzed in the Draft EIR. As such, the revised project would not substantially damage scenic resources, and impacts would remain less than significant.

In addition, the Draft EIR concluded that implementation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The revised project would occur within the same project boundary identified in Section 4.1 of the Draft EIR. The visual character of the project area is defined by this highly diverse mix of uses, exhibiting a high degree of variation from one property to the next. Although the gross square footage increased as a result of the project changes, this would not result in degradation of character at the project site and surrounding area because the proposed project would be consistent with the context of downtown San Diego.

As identified in Section 4.1 of the Draft EIR, construction lighting associated with the proposed project would be a new source of temporary lighting at the project site that would potentially be visible to adjacent uses, which was determined to result in a significant impact. The Draft EIR concluded implementation of **MM-AES-5** would reduce impacts to less-than-significant levels by ensuring that all temporary overnight security lighting at the project site is down-shielded to prevent any offsite light spillover consistent with City of San Diego regulations on glare and outdoor lighting. The revised project would result in the same level of construction lighting and would therefore result in the same impacts. With implementation of MM-AES-5, lighting impacts associated with the revised project would be reduced to less than significant, consistent with the conclusions in the Draft EIR. Furthermore, the moderate increase in the amount of glare produced by operation of the market-rate hotel tower would represent a significant new source of substantial glare at the project site compared to existing conditions, which would potentially affect daytime views in the area and was considered a significant impact. Section 4.1 of the Draft EIR identified that implementation of MM-AES-6 would require the project proponent to incorporate reduced glare building materials into the final project design, such as non-reflective building materials and glass that is of low reflectivity or accompanied by a non-glare coating. Therefore, the Draft EIR concluded that operational impacts related to glare would be reduced to less-than-significant levels. The revised project would not result in the use of different building materials. As such, impacts would remain the same as those described in Section 4.1 of the Draft EIR, and implementation of MM-AES-6 would reduce impacts to less than significant.

Therefore, no revisions to the analysis and conclusions in Section 4.1 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.1.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, while the project would affect viewsheds from two specific Key Observation Points, most of the areas surrounding the project site would retain the existing expansive views of the Bay. In addition, the proposed project would also increase public access space to the waterfront, which would provide new opportunities to experience expansive views of the Bay from new rooftop public plaza and park areas that would replace the existing ground-level parking lot. Finally, the Draft EIR concluded that because other past, present, and reasonably foreseeable future projects have not resulted in a significant aesthetic and visual resources impact and a cumulatively significant impact does not currently exist, the project-level impacts of the proposed project would not result in a cumulatively significant impact, and the proposed project's contribution to aesthetics and visual resources impacts would be less than cumulatively considerable. As discussed above, the revised project would not result in any

changes to the significance of project-level impacts or the effectiveness of mitigation measures identified in Section 4.1 of the Draft EIR. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.2 Air Quality and Health Risk

Section 4.2, *Air Quality and Health Risk*, and Section 5.3.2 of Chapter 5, *Cumulative Impacts*, of the Draft EIR have been revised to address changes to the project. See Chapter 5, *Errata and Revisions*, of the Final EIR.

4.3.3 Biological Resources

4.3.3.1 Project Impact Analysis

Section 4.3, *Biological Resources*, of the Draft EIR identified the potential for the proposed project to result in direct and indirect impacts on sensitive species and habitats. In addition, the Draft EIR identified that implementation of some features of the proposed project would have the potential to result in direct and indirect impacts on riparian habitat and other sensitive natural communities. With implementation of **MM-BIO-1** through **MM-BIO-8**, and **MM-HWQ-1** and **MM-HWQ-2**, the Draft EIR concluded all biological resources impacts would be reduced to a less-than-significant level. Although the gross square footage would increase as a result of the project changes, construction and operation of the proposed project would occur within the same project boundaries analyzed in the Draft EIR. As such, impacts on biological resources would not change as a result of the revised project, and the same mitigation measures would be implemented to reduce impacts to a less-than-significant level.

Section 4.3 of the Draft EIR identified that the project site does not contain federally protected wetlands and determined that impacts would be less than significant. Native wildlife movement corridors have not been identified within the project site, and no substantial impediment to nursery sites or wildlife movement, or impacts associated with wildlife movement corridors, would occur with project construction and operation. The Draft EIR also concluded that implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources, Habitat Conservation Plans (HCPs), or Natural Community Conservation Plans (NCCPs). As described above, the revised project would occur within the same project boundaries. As such, impacts related to federally protected wetlands, native wildlife movement corridors, and conflicts with any local policies or ordinances protecting biological resources would remain less than significant despite changes to the proposed project.

Therefore, no revisions to the analysis and conclusions in Section 4.3 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.3.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, when considered together with the other past, present, and reasonably foreseeable future projects, the proposed project could result in cumulatively considerable impacts on sensitive species due to the magnitude of combined impacts. However, the Draft EIR noted that proposed project requires the implementation of mitigation

measures to reduce project-level impacts to less-than-significant levels, and that other present and reasonably foreseeable future projects would also be required to implement similar mitigation measures. The Draft EIR concluded that the contribution of the proposed project to cumulative biological resources impacts when combined with past, present, and reasonably foreseeable future projects would be less than cumulatively considerable. As discussed above, construction and operation of the proposed project would occur within the same project boundaries analyzed in the Draft EIR. As such, the revised project would not result in any changes to the significance of project-level impacts on biological resources, and the same mitigation measures would be implemented to reduce impacts to a less-than-significant level. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.4 Cultural Resources

4.3.4.1 Project Impact Analysis

Section 4.4, Cultural Resources, of the Draft EIR determined that potential significant impacts on archaeological resources, including portions of CA-SDI-15118H, a large historic period dump under the SDCC, could occur as a result of ground-disturbing activities (e.g., grading, trenching, excavation) associated with project construction. However, the Draft EIR determined that implementation of **MM-CUL-1** would reduce impacts on archaeological resources to less than significant. In addition, Section 4.4 of the Draft EIR determined that implementation of the proposed project would include ground-disturbing activities, such as grading and pile driving, which would extend deeper than 10 feet and result in more than 1,000 cubic yards of earthwork and excavation. As a result, the proposed project would have the potential to significantly impact paleontological resources. As identified in Section 4.4 of the Draft EIR, implementation of MM-CUL-2, would reduce this impact to a less-than-significant level. The revised project would occur within the same project boundaries identified in the Draft EIR and would not change the depth or amount of ground-disturbing activities. Ground-disturbing activities associated with the revised project would potentially impact archeological and paleontological resources, consistent with the conclusions of the Draft EIR. However, implementation of **MM-CUL-1** and **MM-CUL-2**, identified in Section 4.4 of the Draft EIR, would reduce impacts to a less-than-significant level. The revised project would not involve the demolition of any structures not previously identified in the Draft EIR; therefore, no impacts on historical resources would occur with the changes to the project.

Section 4.4 of the Draft EIR determined that the potential for human remains to be present at the project site is extremely low and that impacts would be less than significant. As described above, the revised project would occur within the same project boundaries identified in the Draft EIR; therefore, the potential for encountering human remains at the project site would remain low, and impacts would be less than significant, consistent with the conclusions in the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.4 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.4.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, the proposed project would mitigate any potential project-level impacts on archaeological resources and paleontological resources to a

level less than significant. The Draft EIR concluded that, because a cumulatively significant impact is not present and because the proposed project's impact on cultural resources would be less than significant after mitigation, the proposed project's contribution to cumulative impacts would not be cumulatively considerable. As discussed above, the revised project would occur within the same project boundaries identified in the Draft EIR and would not change the depth or amount of grounddisturbing activities. As such, the revised project would not result in any changes to the significance of project-level impacts on cultural resources, and the same mitigation measures would be implemented to reduce project-level impacts to a less-than-significant level. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.5 Geology and Soils

4.3.5.1 Project Impact Analysis

Section 4.5, *Geology and Soils*, of the Draft EIR determined that the proposed project would not exacerbate the potential of a rupture of a known earthquake fault, strong seismic ground shaking, or landslides. However, the Draft EIR determined that proposed project would exacerbate the potential for liquefaction, which was considered a significant impact. The Draft EIR concluded that with implementation of **MM-GEO-1**, impacts would be less than significant. Section 4.5 of the Draft EIR determined that ground-disturbing activities associated with construction would expose soils to the erosional forces of wind and water during storm events, potentially resulting in erosion and sedimentation on and off the project site and into the Bay. However, the proposed project would comply with the San Diego Municipal Code Section 142.0146 and Statewide Construction General Permit, which requires implementation of a Storm Water Pollution Prevention Plan to address erosion and sedimentation at the project site during construction activities. Therefore, potential impacts would be less than significant. Section 4.5 of the Draft EIR also identified potentially significant impacts associated with geologic formation/soil instability that would exacerbate the potential for lateral spreading or soil collapse to occur. However, with implementation of MM-GEO-1 and compliance with regulations such as the California Building Code (CBC) and City of San Diego's Municipal Code, impacts were concluded to be less than significant. The revised project would not change the level of ground-disturbing activities, and construction activities would occur within the same project boundaries. No changes are proposed to the depths of excavation that could worsen the severity of impacts related to liquefaction, lateral spreading, and soil collapse. The severity of impacts identified in Section 4.5 of the Draft EIR would not increase, and the implementation of **MM**-**GEO-1** and compliance with regulations would reduce impacts to a less-than-significant level.

The Draft EIR determined implementation of the proposed project would not exacerbate the potential for impacts associated with expansive soils. The revised project would not result in modifications to construction activities that would have the potential to exacerbate conditions that would result in expansive soil impacts. Therefore, impacts would remain less than significant with the changes to the project. The Draft EIR did not identify any impacts related to soils being incapable of supporting septic tanks or alternative wastewater disposal systems. The revised project would not alter the no impact determination identified in the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.5 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.5.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, mitigation required at the project level requires compliance with the CBC and City of San Diego Municipal Code, which would ensure that the proposed project's potential to exacerbate geologic hazard conditions would be less than significant. When combined with the cumulative projects, which would also be required to implement geology mitigation in areas of potential exacerbation of a geological hazard condition pursuant to the CBC and City of San Diego Municipal Code, cumulative impacts would be less than significant, and the proposed project's contribution to cumulative geologic impacts would not be cumulatively considerable. As discussed above, the revised project would not change the level of ground-disturbing activities and construction activities would occur within the same project boundaries. The severity of impacts identified in Section 4.5 of the Draft EIR would not increase, and implementation of mitigation and compliance with regulations would reduce project-level impacts to a less-than-significant level. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.6 Greenhouse Gas Emissions and Climate Change

Section 4.6, *Greenhouse Gas Emissions and Climate Change*, and Section 5.3.6 of Chapter 5, *Cumulative Impacts*, of the Draft EIR have been revised to address changes to the project. See Chapter 5, *Errata and Revisions*, of the Final EIR.

4.3.7 Hazards and Hazardous Materials

4.3.7.1 Project Impact Analysis

Section 4.7, Hazards and Hazardous Materials, of the Draft EIR determined that excavation activities could extend into existing landside contaminated soils and potentially release hazardous materials into the environment, which would be considered a significant impact. Furthermore, proposed offsite utility improvements could be located within an area contaminated by the SDCC-Tidelands Dump, and construction activities could uncover contaminated soil. As discussed in Section 4.7 of the Draft EIR, the project site was identified in multiple databases due to releases of hazardous waste into the San Diego Bay. Construction activities that would be conducted in the marina have some potential to re-suspend contaminated sediments if found within the project site, which could affect the marine environment. Disruption of contaminated sediment and/or the Campbell Shipyard cap could result in a potential violation of/interfere with the goals of Order No. R9-2004-0295. If not properly handled, these contaminated soils and sediments could result in a release of hazardous materials into the environment, exacerbating the existing hazardous condition during construction of the proposed project, including the proposed utility improvements. The Draft EIR concluded that implementation of MM-HAZ-1 through MM-HAZ-4 would reduce impacts related to contaminated soils that may be encountered during construction activities to less-than-significant levels because safeguards would be taken during landside construction to ensure upset and accident conditions do not occur, and effects in the event of an unanticipated upset condition would be minimized. In regards to sediment, the Draft EIR concluded that while implementation of MM-HAZ-5 through MM-HAZ-7 would minimize potential impacts associated with waterside sediment contamination, it is still possible that in-water construction activities for the marina expansion could be located within areas with contaminated sediment. Additionally, approval of the methods for in-water construction

are within the jurisdiction of the Regional Water Quality Control Board (RWQCB) and/or other federal and state agencies, and not the District. As such, while the District has required measures to minimize impacts associated with contaminated sediment, the RWQCB and/or other federal and state agencies have final regulatory authority to approve specific methods for in-water construction. Consequently, the Draft EIR determined impacts related to waterside sediment hazards would be significant and unavoidable. Operational impacts were determined to be less than significant because regular operations of a hotel, lower-cost visitor-serving hotel, and retail would generate a minimal amount of hazardous materials and because of the existing regulations and regulatory agency oversight.

While project changes would increase the gross-square footage of the proposed project components, construction activities and ground-disturbing activities would remain the same. The revised project would occur within the project boundaries identified in the Draft EIR and would not change the level or location of ground disturbing or construction activities. Ground-disturbing activities associated with the revised project may disturb contaminated soils and sediments, which could result in a release of hazardous materials into the environment, exacerbating the existing hazardous condition during project construction. However, the revised project would not increase the severity of this impact. Operational impacts would be less than significant because regular operations of a hotel, lower-cost visitor-serving hotel, and retail, which would remain the same despite changes to the proposed project, would generate a minimal amount of hazardous materials, and because of the existing regulations and regulatory agency oversight. Therefore, impacts identified in Section 4.7 of the Draft EIR would not change as a result of the revised project.

Section 4.7 of the Draft EIR determined that implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities associated with revised project would remain the same as those analyzed in the Draft EIR. Although small amounts of hazardous materials would be transported, used, and disposed of during the construction phase, these materials are typically used in construction projects and would not be considered acutely hazardous materials. Because compliance with existing hazardous materials regulations is mandatory, the revised project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Consistent with the conclusions of the Draft EIR, impacts would remain less than significant.

As described in Section 4.7 of the Draft EIR, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within onequarter mile of a school. The closest school to the project site is the Monarch K–12 School, which is approximately 0.58 mile west of the proposed project. The project site is not located within the vicinity of a private airstrip and, as a result, would not exacerbate an existing safety hazard for people residing or working within the vicinity of the project area. Because the revised project would occur within the same project boundary, no impacts related to hazardous materials within one-quarter mile of a school or within the vicinity of a private airstrip would occur, consistent with the conclusions of the Draft EIR.

The Draft EIR concluded that implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The revised project would involve the same construction activities and equipment, and emergency access to the proposed project site and nearby properties would be maintained. In addition, operation of the proposed project, despite changes to the square footage of the project components, does not include characteristics (e.g., permanent road closures) that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity, and the proposed project would be in compliance with the Operational Area Emergency Plan. Impacts would remain less than significant with the revised project. Section 4.7 of the Draft EIR concluded implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands by exacerbating the existing hazardous conditions. Because the revised project would occur within the same project boundaries, no impacts related to wildland fires would occur, consistent with the conclusions of the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.5 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.7.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, project-level impacts for landside project components would be less than significant with the implementation of mitigation measures. While project-level impacts for waterside project components would remain significant and unavoidable after mitigation, the Draft EIR stated that the extent of any release would be minimized to a small area through the required mitigation, and, as such, the project's limited contribution to the less than cumulatively significant effects of past, present, and reasonably foreseeable future projects would not be cumulatively considerable. Therefore, the Draft EIR concluded that, when combined with past, present, and reasonably foreseeable future projects' hazardous material impacts, the proposed project's contribution would be less than cumulatively considerable. As discussed above, the revised project would not result in any changes to the significance of project-level impacts or the effectiveness of mitigation measures identified in Section 4.7 of the Draft EIR. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.8 Hydrology and Water Quality

4.3.8.1 Project Impact Analysis

Section 4.8, *Hydrology and Water Quality*, of the Draft EIR determined that construction activities associated with the proposed project could degrade water quality by resulting in increased polluted stormwater runoff. The Draft EIR also determined that construction of the expanded marina facilities and breakwater would result in short-term water quality impacts associated with the construction of the new piles and dock and breakwater. Compliance with existing regulatory requirements, such as implementation of erosion control, sediment control, non-stormwater management, and waste management construction best management plans (BMPs) as required by the Construction General Permit and District's Jurisdictional Runoff Management Plan (JRMP), and implementation of the appropriate regulatory permits, including the Clean Water Act (CWA) Section 401 Water Quality Standard or waste discharge requirement to less-than-significant levels. However, as discussed in Section 4.8 of the Draft EIR, if the Campbell Shipyard cap is disturbed and/or contaminated sediments are present outside of the cap, construction of the marina could result in a release of hazardous materials and create a potentially significant hazard by exacerbating the

existing hazardous conditions. Although **MM-HAZ-5** through **MM-HAZ-7** would minimize potential impacts associated with sediment contamination, it is still possible that in-water construction activities for the marina expansion, which would not change as a result of the revised project, could be located within areas with contaminated sediment. Because the revised project would not alter the location of in-water construction activities, no changes to the significance of impacts identified in Section 4.8 of the Draft EIR would occur.

Section 4.8 of the Draft EIR also determined that operation of the marina portion of the proposed project would violate water quality standards and/or waste discharge requirements associated with the existing copper impairment in the Bay, and would otherwise substantially degrade existing water quality. The Draft EIR concluded implementation of **MM-HWQ-1** would require marina operators to implement measures that would reduce pollutant load runoff and reduce inputs of copper from boat berthing. In addition, **MM-HWQ-2** would require ongoing monitoring of water quality to ensure that marina operations do not equal or exceed the Basin Plan water quality objectives and to identify additional BMPs if this occurs. The revised project would not result in any operational changes from what was described in the Draft EIR. Therefore, impacts identified in Section 4.8 of the Draft EIR would remain the same, and implementation of **MM-HWQ-1** and **MM-HWQ-2** would reduce operational impacts to a less-than-significant level.

As described in Section 4.8 of the Draft EIR, the proposed project does not include any wells to pump groundwater. Although short-term dewatering may be necessary during construction, compliance with the applicable dewatering permit would ensure impacts would be less than significant. Therefore, the Draft EIR concluded impacts related to substantial depletion of groundwater supplies and recharge would be less than significant. The revised project would occur within the same project boundaries and would not result in any modifications to construction activities from what was described in the Draft EIR. Therefore, no changes to the significance of impacts identified in the Draft EIR would occur.

Section 4.8 of the Draft EIR determined that implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in: (1) substantial erosion or siltation on or off site; or (2) flooding on or off site. Although changes to the proposed project would increase the overall square footage, which would potentially increase impervious surfaces compared to the existing condition, any increases in peak flows for storm events would be managed through the use of low-impact development (LID) features and stormwater pollutant control BMPs that are designed to retain (i.e., intercept, store, infiltrate, evaporate, and evapotranspire) stormwater runoff generated on the project site, consistent with what was described in the Draft EIR. The revised project would not include changes to the existing storm drain system that would result in substantial erosion or siltation or flooding on or off site. As such, less-than-significant impacts identified in the Draft EIR would remain the same.

The Draft EIR concluded implementation of the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff for the landside portion of the proposed project. However, the proposed marina expansion and breakwater have the potential to significantly impair water quality in the long term. The proposed marina expansion and breakwater could reduce tidal flushing and prevent pollutants or excess nutrients from being carried out to sea. The revised project would not involve any changes to the marina project component. As such, impacts would remain the same as disclosed in the Draft EIR. Implementation of **MM-HWQ-3** requires the design of

the marina to promote water circulation within the basin, which would promote tidal flushing and reduce impacts related to concentrated pollutants and debris that would result from operation of the marina, and thus would reduce impacts to a less-than-significant level consistent with the conclusions of the Draft EIR.

Section 4.8 of the Draft EIR determined that the proposed project would not place housing within a 100-year flood hazard area such that the existing environment is substantially affected; would not place within a 100-year flood hazard area structures that would impede or redirect flood flows; would not expose people or structures to a significant risk of loss, injury, or death involving flooding; and would not contribute to inundation by seiche, tsunami, or mudflow. The revised project would occur within the same project boundaries, and while structures would be located within areas prone to flooding, changes to the project would not exacerbate the flooding potential of the project site or the effects of flooding on the existing environment. Therefore, the revised project would result in the same less-than-significant impacts identified in the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.5 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.8.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, project-level hydrology and water quality impacts would be reduced to less than significant with the implementation of mitigation measures and compliance with existing regulatory requirements. The Draft EIR concluded that the proposed project's incremental contribution to significant cumulative water quality impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable. As discussed above, the revised project would not result in any changes to the significance of project-level impacts or effectiveness of mitigation measures identified in Section 4.8 of the Draft EIR. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.9 Land Use and Planning

4.3.9.1 Project Impact Analysis

Section 4.9, *Land Use and Planning*, of the Draft EIR determined that implementation of the proposed project would conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect, including designated vista areas identified in the certified PMP, the California Coastal Act's (CCA's) requirements to provide public access and minimize coastal hazards through planning and development standards, and inconsistency with the Airport Land Use Compatibility Plan (ALUCP). As described in Section 4.9 of the Draft EIR, implementation of **MM-AES-4**, **MM-PS-1**, and **MM-AES-2** would reduce impacts to less-than-significant levels because these measures would ensure that the proposed project would be consistent with the certified PMP, and the public plaza and park areas would be available to the public for the proposed percentages, and, thus, would be consistent with the applicable land use plans and policies. Furthermore, with implementation of **MM-LU-1**, impacts related to sea level rise would be reduced to a less-than-significant level because the smart design decisions, future adaptation strategies, and operational strategies would reduce

future building vulnerability, reduce the need for future structural alterations, allow for future structural additions to be constructed as necessary, and reduce the risk of damage to the buildings and its occupants. These steps would ensure consistency with Executive Order (EO) S-13-08 and the CCA by demonstrating consistency with the California Coastal Commission's (CCC's) 2015 Sea Level Rise Policy Guidance. Finally, with the implementation of **MM-HAZ-8**, impacts identified in Section 4.9 of the Draft EIR would be reduced to a less-than-significant level because the proposed project would be required to obtain necessary determinations and approvals from the Federal Aviation Administration (FAA) and Airport Land Use Commission (ALUC) to ensure that the proposed project is consistent with the ALUCP. Because the revised project would occur within the same project boundaries, the same land use plans, policies, and regulations would apply. As such, the revised project would conflict with designated vista areas identified in the certified PMP, the CCA's requirements to provide public access and to minimize coastal hazards through planning and development standards, and the ALUCP. However, implementation of the same mitigation measures identified in Section 4.9 of the Draft EIR would reduce these impacts to less-than-significant levels.

Section 4.9 of the Draft EIR concluded that implementation of the proposed project would not physically divide an established community. The revised project would occur within the same project boundaries and no changes to construction activities or operation of the project would occur. Therefore, the Draft EIR's impact determination would not change as a result of the revised project.

The Draft EIR determined that although the project site is within the boundaries of the Multiple Species Conservation Program (MSCP), the City MSCP Subarea Plan does not identify the Convention Way Basin as being within the Multi-Habitat Planning Area, and no biological resources conservation is planned for the Convention Way Basin as part of the certified PMP. Furthermore, as described in Section 4.9 of the Draft EIR, the proposed project would be consistent with the goals and policies of the San Diego Bay Integrated Natural Resources Management Plan to protect the natural resources of the Bay, including the water quality, marine wildlife, birds, and habitats. Therefore, the Draft EIR concluded implementation of the proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. The revised project would occur within the same project boundaries and therefore would be within the boundaries of the MSCP and subject to the goals and policies of the San Diego Bay Integrated Natural Resources Management Plan. Consequently, the revised project would result in the same less-thansignificant impact determination identified in the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.9 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.9.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, all project-level land use impacts would be reduced to less than significant with the implementation of mitigation measures. The Draft EIR noted that a cumulatively significant land use impact does not exist, and the proposed project would not result in an impact such that a cumulatively significant impact would be created. Therefore, the Draft EIR concluded that the proposed project's contribution to inconsistencies with land use and planning policies would be less than cumulatively considerable. As discussed above, the revised project would occur within the same project boundaries identified in the Draft EIR. As such, the revised project would not result in any changes to the significance of project-level land use impacts, and the same mitigation measures would be implemented to reduce impacts to a less-than-

significant level. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.10 Noise and Vibration

4.3.10.1 Project Impact Analysis

Section 4.10, Noise and Vibration, of the Draft EIR identified that construction and operation of the proposed project would expose persons to or generate noise levels in excess of standards established in City of San Diego's CEQA Significance Determination Thresholds, the City's Noise Ordinance, and/or the Noise Element of the City's General Plan. Furthermore, the Draft EIR identified that construction of the proposed project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed project, and that operation of the proposed project would potentially result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed project. Section 4.10 of the Draft EIR concluded that implementation of MM-NOI-1, MM-NOI-2, and MM-NOI-3 would reduce noise impacts due to project construction. However, as described in Section 4.10 of the Draft EIR, if impact pile driving cannot be avoided, the use of an acoustical shroud—as described in **MM-NOI-1**—would noticeably reduce noise levels, but not to less-than-significant levels. In addition, due to the proximity of the project site, significant impacts would likely still occur at Fifth Avenue Landing Park even at times when pile driving is not occurring. Consequently, the Draft EIR concluded that, after mitigation, construction-related noise impacts would remain significant and unavoidable. As described in Section 4.10 of the Draft EIR, with implementation of MM-NOI-4 and MM-NOI-5, operation-related noise impacts would be reduced to a less-than-significant level. The revised project would not require the use of any new or different construction equipment beyond what was analyzed in the Draft EIR. In addition, operational noise sources would remain consistent with those analyzed in the Draft EIR. As such, the impact determinations and mitigation measures identified in the Draft EIR would remain the same.

Section 4.10 of the Draft EIR concluded implementation of the proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant. Given that the revised project would not change the type of construction equipment used at the project site, construction-generated groundborne vibration impacts would remain the same as those disclosed in the Draft EIR. Furthermore, no changes are proposed at the project site that would generate substantial groundborne vibration associated with operational activities that would be perceptible at any surrounding land uses. The impact determination identified in the Draft EIR would not be changed as a result of the project revised.

Section 4.10 of the Draft EIR concluded implementation of the proposed project would not exacerbate the existing exposure of people residing or working in the project area within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, to excessive noise levels. In addition, the Draft EIR concluded implementation of the proposed project would not exacerbate the existing exposure of people residing or working in the project area within the vicinity of a private airstrip to excessive noise levels. The revised project would occur within the same project boundaries and, as such, aircraft noise levels at the site would be the same as discussed in the Draft EIR. In addition, the revised project would not alter daily

operations at the San Diego International Airport or Naval Air Station North Island. Consequently, no changes to the impact determinations identified in the Draft EIR are required.

Therefore, no revisions to the analysis and conclusions in Section 4.10 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.10.2 Cumulative Impact Analysis

As discussed in Chapter 5, Cumulative Impacts, of the Draft EIR, if construction for nearby related projects were to occur simultaneously with proposed project construction, cumulative construction noise levels would likely be exacerbated and the proposed project's contribution would be cumulatively considerable. The Draft EIR concluded that implementation of mitigation measures would reduce the project's contribution to cumulative construction noise impacts, but not to a level less than significant if construction activities for related projects within 1,500 feet of the proposed project site were to overlap with proposed project construction. For operations, the Draft EIR determined that the proposed project's contribution to increased traffic noise would be inaudible, and therefore would be less than cumulatively considerable. In addition, the Draft EIR determined that there would be no significant cumulative noise impacts related to onsite operations and the proposed project would not generate any periodic noise similar to that anticipated from the related Bayside Performance Park project. As such, the Draft EIR concluded that the proposed project's contribution to these potential cumulative noise impacts would be less than cumulatively considerable. As discussed above, the revised project would not require the use of any new or different construction equipment beyond what was analyzed in the Draft EIR. In addition, operational noise sources would remain consistent with those analyzed in the Draft EIR. As such, the project-level impact determinations and mitigation measures identified in the Draft EIR would remain the same. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.11 Public Services and Recreation

4.3.11.1 Project Impact Analysis

Section 4.11, *Public Services and Recreation*, of the Draft EIR determined that implementation of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services or police protection. The revised project would result in the same construction and operational activities analyzed in Section 4.11 of the Draft EIR. As such, the revised project would result in the same less-than-significant impact determination identified in the Draft EIR.

The Draft EIR identified that implementation of the proposed project would not include a residential component and would not require school facilities. As such, the Draft EIR concluded that no impact would occur. The revised project does not include a residential component that would require the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools. Therefore, the no impact determination identified in the Draft EIR would remain the same.

Section 4.11 of the Draft EIR discussed that significant construction-related impacts, while not specifically associated with the construction of the public plaza and park areas, would be more severe with the addition of the public plaza and park areas construction than without. Furthermore, the Draft EIR identified that operation of the rooftop public plaza and park areas would contribute to significant impacts related to aesthetics; noise and vibration; and transportation, circulation, and parking. Section 4.11 of the Draft EIR identified significant impacts associated with the public plaza and park areas analyzed throughout the EIR that would occur as a result the construction and operation of approximately 1.96 acres (85,490 square feet) of public plaza and park areas throughout the project site. The Draft EIR concluded that the implementation of mitigation measures (MM-AES-4, MM-AES-5, MM-CUL-1, MM-CUL-2, MM-GEO-1, MM-HAZ-1 through MM-HAZ-4, MM-HAZ-8, and MM-NOI-5) would reduce impacts as they relate to aesthetics, cultural resources, geology and soils, hazards and hazardous materials, and noise to less-than-significant levels. However, even with the implementation of mitigation measures identified in Section 4.11 of the Draft EIR, impacts as they relate to aesthetics; noise; and transportation, circulation, and parking would remain significant and unavoidable for the reasons described in Section 4.1, Aesthetics and Visual Resources; Section 4.10, Noise and Vibration; and Section 4.12, Transportation, Circulation, and *Parking*. In addition, Section 4.11 of the Draft EIR determined that because the rooftop public plaza and park area and public observation terrace are raised from ground level, the public may not readily know that these recreational areas are available for public use. As such, without wayfinding signage to indicate their existence and availability to the general public, a significant impact related to public awareness of park space would occur. The Draft EIR concluded that implementation of **MM-PS-1** and **MM-AES-2** would reduce this impact to a less-than-significant level because the public would be aware of the public plaza and park areas, know that they are open to the public, and know how to access them. Changes to the proposed project would include an increase of public plaza and park space to 2.26 acres (98,448 square feet) throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel. Although the acreage of public plaza and park area would increase, construction and operational activities would remain the same as what was described in the Draft EIR. As such, impacts identified in Section 4.11 of the Draft EIR would not change as a result of the revised project and the same mitigation measures would be implemented.

As discussed in Section 4.11 of the Draft EIR, the project's proposed enhancements and expansion of the marina would potentially improve accessibility to marina slips. However, the marina would not offer lower-cost or no-cost public slips. Consequently, the Draft EIR determined that a significant impact related to public access to the water may occur. However, the Draft EIR concluded that implementation of **MM-PS-2** would reduce this impact to a less-than-significant level because the public would have water access via a low-cost or no-cost slip within the proposed marina where currently no such slip exists. The changes to the project do not include any modifications to the number, type, or mix of slips for the proposed marina expansion. As such, impacts identified in Section 4.11 of the Draft EIR would not change as a result of the revised project, and the same mitigation measures would be implemented.

The Draft EIR concluded that the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Changes to the proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.7 acre) existing to approximately 98,448 square feet (2.26 acres). The original area of the public plaza and park areas analyzed in the Draft EIR was approximately 85,490 square feet (1.96 acres). These

recreational components would further offset any potential demand on local neighborhood parks. As such, the revised project would result in the same less-than-significant impact determination identified in the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.11 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.11.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, the proposed project's contribution to cumulative police and fire protection impacts would be less than cumulatively considerable. In addition, the proposed project would create more public plaza and park space than what is currently available, and the project's contribution would not cause a cumulatively considerable addition to the effects on park and recreational facilities from past, present, and reasonably foreseeable future projects. Overall, the Draft EIR concluded that the proposed project's incremental contribution to cumulative park and recreational impacts would be less than cumulatively considerable. As discussed above, the revised project would result in the same construction and operational activities analyzed in Section 4.11 of the Draft EIR. As a result, the revised project would result in the same less-than-significant impact determination identified in the Draft EIR related to police protection, fire protection, and schools. In addition, project-level impacts on park and recreational facilities identified in Section 4.11 of the Draft EIR would not change as a result of the project changes, and the same mitigation measures would be implemented. As such, the project-level impact determinations and mitigation measures identified in the Draft EIR would remain the same. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.12 Transportation, Circulation, and Parking

4.3.12.1 Project Impact Analysis

Section 4.12, Transportation, of the Draft EIR determined that construction and operation of the proposed project would have the potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of a circulation system, mainly by creating delays that would impact level of service (LOS) and the volume to capacity (V/C) ratio. As described in Section 4.12 of the Draft EIR, MM-TRA-1 would help reduce potential significant impacts associated with construction traffic; however, because the extent to which construction traffic impacts will be reduced by the Traffic Demand Management (TDM) plan cannot be quantified, it cannot be stated with certainty that the mitigation would reduce impacts to less-than-significant levels. In addition, MM-TRA-2 through MM-TRA-4 would reduce project-related impacts on the intersections of 15th and F Streets, 17th and G Streets, and 19th and J Streets to less-than-significant levels; however, because the timing and implementation of the necessary improvements at these intersections are within the exclusive jurisdiction of the City of San Diego and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. Finally, MM-TRA-5 requires compliance with San Diego Forward: The Regional Plan, which includes a series of operational improvements along Interstate (I-) 5 between I-15 and I-8. However, because the timing and installation of the recommended improvements are within the exclusive jurisdiction of the California Department of Transportation (Caltrans) and not the District,

the District cannot state with certainty that the improvements will be completed prior to an impact occurring. Therefore, impacts identified in Section 4.12 of the Draft EIR would remain significant and unavoidable. The revised project would not result in any changes to construction or operational activities that would cause additional delays beyond what was disclosed in the Draft EIR and conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of a circulation system. Moreover, the operational trip generation associated with the revised project would decrease compared to the trip generation analyzed in the Draft EIR (see Attachment 3 of the Final EIR). As such, impact determinations identified in the Draft EIR would remain the same with the project changes.

Section 4.12 of the Draft EIR identifies *San Diego Forward: The Regional Plan*, as the region's regional transportation plan (RTP) and sustainable communities strategy (SCS). The Draft EIR reviewed the proposed project for consistency with the Regional Plan, which is a land use and transportation planning document that discusses land use policy at a very general level. Impacts in Section 4.12 of the Draft EIR were determined to be less than significant. The proposed project, including the project changes, proposes minor changes in the land use designations of the project site; however, these changes would not result in any conflicts with any land use policies. The revised project would not result in any modifications to the existing transportation infrastructure and would not interfere with the policies or projects identified in the Regional Plan. Therefore, the revised project would not conflict with an applicable congestion management program, and impacts would remain less than significant, consistent with the conclusions of the Draft EIR.

Section 4.12 of the Draft EIR concluded that implementation of the proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The revised project would occur within the same project boundaries. Furthermore, construction activities and operation of the proposed project would not change as a result of the revised project. As such, the impact determination related to air traffic patterns identified in the Draft EIR would remain the same. In addition, the Draft EIR concluded that implementation of the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and impacts would be less than significant. Changes to the proposed project would increase the gross-square footage of some project components but would not alter the design in a way that would increase hazards. As such, the less-than-significant impact determination related to hazardous design features identified in the Draft EIR would remain the same. Section 4.12 of the Draft EIR concluded that implementation of the proposed project would not result in inadequate emergency access. The same construction and operational activities would occur under the revised project, and emergency access to the project site and nearby properties would be maintained. Therefore, the impact determination identified in the Draft EIR would not be changed as a result of the revised project.

As described in Section 4.12 of the Draft EIR, during construction of the proposed project pedestrian traffic would be re-routed along Convention Way, which would result in a temporary significant impact on public access along the Embarcadero Promenade, and decrease the performance of this existing pedestrian and bicycle facility. The Draft EIR concluded that implementation of **MM-TRA-6** would reduce this impact to a less-than-significant level because it will ensure that public access is maintained within the project site during construction, and the performance of the existing facility would not be decreased. The revised project would not result in any changes to construction activities that would increase the severity of this impact. As such, the impact determination and

mitigation measure that would reduce this impact to a less-than-significant level would remain the same.

Section 4.12 of the Draft EIR determined that implementation of the proposed project would result in inadequate parking supply during construction and operation. As described in Section 4.12 of the Draft EIR, implementation of **MM-TRA-7** would reduce impacts related to the loss of parking during construction, and implementation of **MM-TRA-8** would reduce impacts on permanent parking supply, but not to a level considered less than significant. As described above, the revised project would not result in any changes to construction activities from what was described in the Draft EIR. Although the revised project would reduce the number of parking spaces that would be provided from 263 spaces to 260 spaces, the parking space deficit created by the proposed project would be reduced from 209 parking spaces as analyzed in the Draft EIR to 189 parking spaces due to a reduction in the number of hotel rooms (see Attachment 3 of the Final EIR). As such, the impact determination and mitigation measures identified in the Draft EIR would remain the same.

Therefore, no revisions to the analysis and conclusions in Section 4.12 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.12.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, the proposed project would result in a cumulatively considerable impact on roadways, intersections, and freeway segments under near-term and future year conditions during project construction and operation. In addition, the Draft EIR determined that the proposed project's contribution to significant impacts on parking supply from past, present, and reasonably foreseeable future projects would be cumulatively considerable due to the parking shortfall created by the project. Despite the implementation of mitigation measures, the Draft EIR concluded that these cumulative impacts would remain significant and unavoidable. As discussed above, the revised project would not result in any changes to construction or operational activities that would cause additional delays or result in a greater parking deficit beyond what was disclosed in the Draft EIR. As such, the project-level impact determinations and mitigation measures identified in the Draft EIR would remain the same. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to Chapter 5 of the Draft EIR are required.

4.3.13 Tribal Cultural Resources

4.3.13.1 Project Impact Analysis

Section 4.13, *Tribal Cultural Resources*, of the Draft EIR noted that a records search was conducted for the proposed project at the South Coastal Information Center and a Sacred Lands File Search was obtained from the Native American Heritage Commission (NAHC). The Draft EIR indicated that no tribal cultural resources that are listed in or eligible for listing in the California Register of Historical Resources (CRHR) or Sacred Lands File were identified on or within proximity to the project site. The project site and its immediate surroundings consist of harbor waters or fill land that has been entirely developed with buildings, paving, or park landscape. As such, due to the nature of the project site, the absence of recorded tribal cultural resources within or near the project site, and the lack of requested notification by tribes under AB 52, the Draft EIR concluded that it is unlikely that significant tribal cultural resources would be encountered during construction of the proposed

project. Therefore, impacts on tribal cultural resource were determined to be less than significant. The revised project would occur within the same project boundaries, would result in the same level of ground-disturbing activities during construction, and would be subject to the same regulations. As such, the revised project would not change the less-than-significant impact determination identified in the Draft EIR.

Therefore, no revisions to the analysis and conclusions in Section 4.12 of the Draft EIR are required as a result of the changes to the proposed project.

4.3.13.2 Cumulative Impact Analysis

As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, due to the nature of the project site, the absence of recorded tribal cultural resources within or near the project site, and the lack of requested notification by Tribes under AB 52, it is unlikely that significant tribal cultural resources would be encountered during construction of the proposed project. As a result, the Draft EIR concluded that the proposed project's incremental contribution to cumulative tribal cultural resources impacts would be less than cumulatively considerable. As discussed above, the revised project would occur within the same project boundaries, result in the same level of ground-disturbing activities during construction, and would be subject to the same regulations. As such, the revised project would not change the less-than-significant project-level impact determination identified in the Draft EIR. Because the revised project would not affect the project-level conclusions in the Draft EIR, there would be no changes to the cumulative impact determinations as a result of the revised project. Therefore, no revisions to Chapter 5 of the Draft EIR are required.

4.3.14 Utilities and Energy Use

Section 4.14, *Utilities and Service Systems*, and Section 5.3.14 of Chapter 5, *Cumulative Impacts*, of the Draft EIR have been revised to address changes to the project. See Chapter 5, *Errata and Revisions*, of the Final EIR.

5.1 Introduction

This chapter reflects the modifications to the Draft EIR that may have resulted from comments received during the 49-day public review of the Draft EIR, were required for purposes of clarification, or were a result of the project proponent's changes to the project. These modifications do not alter the conclusions of the environmental analysis nor do they constitute significant new information. The modifications are provided by chapter/section and indicated with the page number from the Draft EIR. This chapter is intended to be used in conjunction with the analysis contained within the Draft EIR.

Additional text is shown as <u>underlined</u> and deleted text is shown in strikethrough.

Volumes 2 and 3 of this Final EIR include the Draft EIR and appendices, respectively.

5.2 EIR Chapter/Section Changes

5.2.1 Changes to *Executive Summary*

Pages S-30 through S-122

Table ES-2. Project Impacts and Mitigation Measures

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.2 Air Quality ar	-	0	6 (7	0
Project Impacts				
Project Impacts Violate an Air Quality Standard	Impact-AQ-2: Emissions in Excess of Criteria Pollutant Thresholds During Proposed Project Construction. Project emissions during construction, before mitigation, would exceed the San Diego County SLTs for VOC. The contribution of project-related emissions is considered significant because the project would exceed thresholds that have been set by SDAPCD to attain the NAAQS and CAAQS, the purpose of which is to provide for the protection of public health.	PS	MM-AQ-2: Use Low-VOC Interior and Exterior Coatings During Construction. During construction, the project proponent shall use low-VOC coatings for all surfaces that go beyond the requirements of San Diego Air Pollution Control District Rule 67.0, and have a VOC content of 75 grams per liter or less. Prior to the commencement of construction activities, the project proponent shall submit a list of coatings to be used and their respective VOC content to the District's Development Services Department and shall submit a report verifying the use of said low-VOC coatings. The District may conduct inspections during construction to verify the use of low-VOC coatings.	LS
			MM-AQ-3: Limit Soil Hauling Truck Counts during Excavation to Reduce Daily Construction-Related Emissions. During construction, the project proponent shall ensure that daily heavy-duty truck counts during soil hauling do not exceed 85 trucks per day. During excavation work (Phase 2.1), the project proponent shall submit record of daily truck counts to the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			District's Development Services Department. The District may conduct inspections during construction to verify the number of trucks do <u>es</u> not exceed 85 on a given day.	
4.3 Biological Res	sources			
Project Impacts				
Substantial Adverse Effect on any Candidate, Sensitive, or Special-Status Species in Local or Regional Plans, Policies or Regulations	Impact-BIO-2: Potential Disruption or Injury of California Least Tern, Green Sea Turtle, and Marine Mammals During Pile Driving Activities. Pile driving activities would potentially generate a noise disturbance to California least tern from in air pile driving noise. Pile driving could also generate enough underwater noise to injure (Level A Harassment) or alter behavior (Level B Harassment) of both green sea turtle and marine mammals.	PS	 Implement MM-BIO-1, as described above. MM-BIO-2: Implement a Marine Mammal and Green Sea Turtle Monitoring Program During Pile Driving Activities. Prior to construction activities involving inwater pile driving, the project proponent shall prepare and implement a marine mammal and green sea turtle monitoring program. This monitoring program shall be approved by the District and shall include the following requirements: For a period of 15 minutes prior to the start of inwater construction, a qualified biologist, retained by the project proponent and approved by the District's Director of Real Estate Development or designee of the District, shall monitor a 384-foot surface radius around the active pile driving areas to ensure that special-status species are not present. The construction contractor shall not start work if any observations of special-status species are made prior to starting pile driving. In-water pile driving within the marina shall begin with soft starts, gradually increasing the force of the pile driving. Level B harassment of marine mammals and green sea turtles (harassment level leading to behavior modification) from pile driving shall be avoided at a distance of 384 feet. 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Monitoring by a qualified biologist for marine mammals and green sea turtles within 384 feet shall be implemented during all pile driving activities to prevent impacts on these species by identifying when they are approaching or within 384 feet, and by coordinating with construction crews to halt pile driving until the species have left this area. In addition, hydroacoustic monitoring shall be conducted during all pile driving activities and the qualified biologist shall work directly with construction contractor to ensure that noise levels remain at levels that would not affect any marine species, including fish. All monitors must meet the minimum requirements as defined by the National Oceanic Atmospheric Administration's <i>Guidance for Developing a Marine Mammal Monitoring Plan</i> (NOAA 2017). 	
	Impact-BIO-3: Potential Disturbance or Destruction of Nests Protected by the Migratory Bird Treaty Act and California Fish and Game Code. Removal of mature trees during construction, as well as noise from construction activity, could impede the use of bird breeding sites during the nesting season (February 15 through August 31). The destruction of an occupied nest would be considered a significant impact if it were a violation of the MBTA or California Fish and Game Code. Therefore, this impact would be potentially significant.	PS	 MM-BIO-3: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all vegetation removal (e.g., ornamental trees) during the non-breeding season between September 1 and February 14 or shall implement the following: If construction activities are scheduled between February 15 and August 31, the project proponent shall retain a qualified ornithologist (with knowledge of the species to be surveyed) who shall conduct a focused nesting bird survey within potential nesting habitat prior to the start of vegetation removal. The survey shall be submitted to the District for review and approval of the survey and the buffer area, defined below, if any, 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 prior to the commencement of vegetation removal on the project site. The nesting bird survey area shall include the entire limits of disturbance plus a 300-foot buffer for non-raptors and a 500-foot buffer for raptors to ensure indirect impacts would be avoided. The nesting surveys shall be conducted within 1 week prior to initiation of construction activities and shall consist of a thorough inspection of the project area by a qualified ornithologist(s). The survey shall occur between sunrise and 12:00 p.m., when birds are most active. If no active nests are detected during these surveys, only a letter report documenting the results shall be prepared. If the survey confirms nesting within 300 feet of the disturbance footprint for non-raptors or within 500 feet for raptors, a no-disturbance buffer shall be established around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints of the no-disturbance buffer shall be determined by the qualified biologist, in consultation with the California Department of Fish and Wildlife, at the time of discovery, but shall not be greater than 300 feet for non-raptors and 500 feet for raptors. If here is a delay of more than 7 days between when the nesting bird survey is performed and vegetation removal begins, the qualified biologist shall resurvey to confirm that no new nests have been established. In addition, if any subsequent reports are prepared, the reports shall be sent to the District and California Department of Fish and Wildlife. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Impact-BIO-4: Reflective Materials and Increased Bird Strikes (market- rate hotel tower, lower-cost visitor- serving hotel, and retail development). Use of reflective building and glass finishes may confuse birds in flight, leading to an increase in strikes. This impact would be potentially significant.	PS	 MM-BIO-4: Implement Bird Strike Reduction Measures on New Structures. Prior to issuance of any building permits, building plans shall be reviewed by an ornithologist familiar with local species, retained by the developer and approved by the District, to verify that the proposed building has incorporated specific design strategies that qualify for Leadership in Energy and Environmental Design (LEED) credits, as described in the American Bird Conservancy's <i>Bird-Friendly Building Design</i> (Sheppard and Phillips 2015) or an equivalent guide to avoid or reduce the potential for bird strikes. Final building design must demonstrate to the satisfaction of the ornithologist and the District that design strategies will be in accordance with the <i>Bird-Friendly Building Design</i>, and confirmed with USFWS and/or CDFW by incorporating strategies to minimize the threat to avian species, including but not limited to the following: Building Façade and Site Structures Develop a building façade and site design that are visible as physical barriers to birds Incorporate materials that have a low threat potential based on the Bird Collision Threat Rating and the Bird Collision Threat Rating Calculation Spreadsheet to achieve a maximum total building Bird Collision Threat Rating of 15 or less. High Threat Potential: Glass: Highly reflective and/or completely transparent surface Least Threat Potential: Opaque Surface 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Fixtures not necessary for safety, entrances, and circulation shall be automatically shut off from midnight until 6:00 a.m. 	
			 Exterior luminaires must meet these requirements for all exterior luminaires located inside project boundary based on the following: 	
			 Photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and 	
			 The lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide (2011). 	
			Performance Monitoring Plan	
			 Develop a 3-year post-construction monitoring plan to routinely monitor the effectiveness of the building and site design in preventing bird collisions. Include methods to identify and document locations where repeated bird strikes occur, the number of collisions, the date, the approximate time, and features that may be contributing to collisions. List potential design solutions and provide a process for voluntary corrective action. 	
			 Provide a performance monitoring report demonstrating which design strategies have been incorporated and results of performance monitoring for <u>review and approval by the</u> <u>District, USFWS and/or CDFW</u>District review. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	• •		A full list and explanation of these design strategies can be found in Appendix E-4.	U
	Impact-BIO-5: Loss of Open Water Habitat from Marina Operations. The California least tern has the potential to utilize open water habitat within and adjacent to the project site for foraging opportunities. The increase in overwater coverage resulting from the marina expansion is approximately 58,319 square feet or 1.34 acres, and would reduce the available open water habitat that is used for foraging by fish-eating avian species. In addition to the impact on avian species, NMFS acknowledges that overwater coverage can have a cumulative impact on nearshore marine environments, although the impacts are often project specific and difficult to quantify. While the proposed configuration of overwater structures would not generate shade over eelgrass, overwater structures have the potential to affect nearshore habitat through a number of mechanisms including reduced primary production, altered wave and tidal energy, increased substrate disturbances, and increased nutrient loading (Nightingale and Simenstad 2001). This impact would be potentially significant.	PS	 MM-BIO-5: Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC</u>, and the District to Compensate for Loss of Open Water Habitat and Function. The project proponent shall implement the following: Prior to issuance of a Coastal Development Permit, the project proponent shall request and participate in stakeholder meetings with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC</u>, and the District to identify locations within San Diego Bay or the San Diego region to mitigate impacts on both sensitive avian species and nearshore habitat associated with loss of beneficial uses associated with overwater coverage and loss of open water habitat function as a result of increased structural fill within the Bay. Prior to the commencement of construction activities of the marina expansion, the project proponent shall implement one of the following mitigation options, or a combination thereof, that are listed below in order of preference; however, selection of 2.A, 2.B, 2.C and 2.D, or an equivalent combination thereof, would successfully reduce Impact-BIO-5 to a level below significance. A. Remove 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill within San Diego Bay or San Diego region, which would replace the area affected by the proposed project at a 1:1 mitigation ratio, subject to the District's review and approval. If evidence is presented that demonstrates that all or a portion of the 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			required removal of overwater coverage or structural fill is infeasible, the project proponent shall implement 2.B. B. Restore 71,942 square feet of eelgrass habitat at the South Bay Power Plant cooling water intake channel at a 1:1 ratio, which would offset 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill impacts. The project proponent may identify an alternative mitigation site of equivalent size and value within San Diego Bay, subject to the District's review and approval. Prior to the commencement of construction activities for the marina expansion, the project proponent shall submit a mitigation plan for review and approval by the <u>Development</u> Services <u>and Planning and Green Port (P&GP)</u> Department <u>s</u> of the District. The mitigation plan at a minimum shall include a description of the transplant site, eelgrass mitigation requirements, eelgrass planting plan (e.g., transplant sites, donor sites, reference site), restoration methods (e.g., plant collection, transplant units, planning eelgrass units), timing of the restoration work, and a monitoring program (e.g., establishment of monitoring and mitigation success criteria). The project proponent shall secure all applicable permits for the mitigation site prior to commencement of waterside construction. Additionally, the project proponent shall ensure that all fill materials proposed for discharge into San Diego Bay for the development of the mitigation site shall meet the requirements of the U.S. Army Corps of Engineers' <i>Evaluation of</i> <i>Dredged Material Proposed for Discharge in</i>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Waters of the U.S Testing Manual (Inland Testing Manual). If evidence is presented that demonstrates that restoration of all or a portion of the required 71,942 square feet of eelgrass habitat is infeasible, the project proponent shall implement 2.C. C. If a suitable in lieu fee program or mitigation bank within the Coastal Zone that is not yet available becomes available in the future, prior to construction of the proposed marina, the project proponent shall purchase credits to offset 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill, or the remaining square footage of the impacts if a combination of other above options are selected. If evidence is presented that demonstrates that purchase of credits toward an in lieu fee program or mitigation bank is infeasible, the project proponent shall implement 2.D. D. Subject to the Board of Port Commissioners' approval and findings, the proposed project may purchase credits from the District's shading credit program established pursuant to board Policy 735 at a fair market value equivalent to that of the proposed project's final shading total (i.e., less any reductions achieved by design modifications to the satisfaction of NMFS, USFWS, RWQCB, CDFW, and-USACE, and 	
			 <u>CCC</u>). E. Any combination of the above that sufficiently offsets 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.21 a cres) of atmostrate fill improve. 	
			(0.31 acre) of structural fill impacts.F. This shall be the minimum mitigation for overwater coverage and structural fill impacts.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 One or more of the aforementioned state and federal agencies may require additional or greater mitigation. This mitigation measure in no way supersedes mitigation measures that may be required by state and federal agencies. Should the project proponent only construct Phase 1 of the marina expansion, the mitigation requirement shall be reduced proportionate to the overwater coverage and structural fill impacts of the Phase I only expansion, consistent with a 1:1 mitigation ratio. 3. The project proponent shall secure all applicable permits for the mitigation of overwater coverage and structural fill explanation of overwater coverage and structural fill prior to commencement of waterside construction. 	
Substantial Adverse Effect on any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations or by CDFW, NMFS, or USFWS	Impact-BIO-7: Potential Reduction in Eelgrass Habitat and Productivity During Construction. In-water construction activities have the potential to affect eelgrass beds adjacent to the marina expansion portion of the project. Impacts may include direct physical disturbance to the beds from anchoring and staging of equipment, through shading from construction-related equipment, and from elevated turbidity levels from construction-related activities such as pile driving. The potential reduction in eelgrass habitat would be significant.	PS	 MM-BIO-6: Develop an Eelgrass Mitigation and Monitoring Plan in Compliance with the California Eelgrass Mitigation Policy. Prior to the start of any in- water construction, the project proponent shall retain a qualified marine biologist to develop an eelgrass mitigation plan in compliance with the California Eelgrass Mitigation Policy (Appendix E-5). The mitigation plan shall be submitted to the District and resource agencies for approval and shall be implemented to compensate for losses to eelgrass in the event that the surveys described below indicate the project has impacts on eelgrass. The specific eelgrass mitigation plan elements shall include: Prior to the commencement of any in-water construction activities, a qualified marine biologist retained by the project proponent and approved by the District shall conduct a preconstruction eelgrass survey. Surveys for eelgrass shall be conducted during the active eelgrass growing season (March-October), and results will be valid 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 for 60 days, unless completed in September or October; if completed in September or October, results will be valid until resumption of the next growing season. The qualified marine biologist shall submit the results of the preconstruction survey to the District and resource agencies within 30 days. Within 30 days of completion of in-water construction activities, a qualified marine biologist retained by the project proponent and approved by the District shall conduct a post-construction eelgrass survey during the active eelgrass growing season. The post-construction survey shall evaluate potential eelgrass impacts associated with construction. Upon completion of the post- construction survey, the qualified marine biologist shall submit the survey report to District and resource agencies within 30 days. 	
			 At least 2 years of annual pPost-construction eelgrass surveys shall be conducted during the active eelgrass growing season to evaluate the potential for operational impacts on eelgrass. The additional annual surveys. The survey monitoring shall follow the following monitoring schedule: Annual monitoring for years 1 through 5 Bi-annual monitoring for years 5 through 10 Monitoring every 5 years for years 10 to 30 The additional annual surveys shall evaluate the potential for operational impacts on eelgrass. Specifically, the surveys shall be designed to evaluate potential shading, vessels associated, and water circulation impacts noted in the project's marine biological assessment (Appendix E-1). As noted above, the Eelgrass Mitigation and 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 agencies and the District for review. During this review and consultation, under the California Eelgrass Mitigation Policy (Section II.G.), agencies will determine the appropriate number of years of post-construction eelgrass monitoring. In the event that impacts on eelgrass are detected, the project proponent shall implement the following: A qualified marine biologist retained by the project proponent and approved by the District shall develop a mitigation plan for in-kind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and resource agencies within 60 days following the post-construction survey. Mitigation for eelgrass impacts shall be at a ratio of 1.2:1 at the proposed mitigation site identified at the decommissioned South Bay Power Plant cooling water intake channel. Mitigation shall commence within 135 days of any noted impacts on eelgrass, such that mitigation commences within the same eelgrass growing season that impacts occur. Upon completing mitigation, the qualified biologist shall conduct all mitigation monitoring during the active eelgrass growing season (November-February). Performance standards shall be in accordance with those prescribed in the California Eelgrass Mitigation Policy (Appendix E-5). 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 The qualified biologist shall submit the monitoring reports and spatial data to the District and resource agencies within 30 days after the completion of each monitoring period. The monitoring reports shall include all of the specific requirements identified in the California Eelgrass Mitigation Policy (Appendix E-5). 	
4.6 Greenhouse	Gas Emissions and Climate Change			
Project Impacts				
Consistent with Plans, Policies and Regulatory Programs	Impact-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 2024 <u>5</u> . Project GHG emissions during combined project construction and operational activities would be inconsistent with the CAP because the project would not meet the performance benchmark for recreational boating (i.e., 42 <u>53</u> % reduction) and would only partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by ARB for the purpose of reducing the emissions of GHGs.	PS	 MM-GHG-1: Implement Diesel Emission-Reduction Measures During Project Construction. The project proponent shall implement the following measures during project construction and, where specified below, shall submit reports to the District's Development Services Department for its review and approval, evidencing compliance. i. The project proponent shall limit all equipment and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the District. This measure shall be enforced by the hotel and marina supervisors, and repeat violators shall be subject to penalties pursuant to California airborne toxics control measure 13 California Code of Regulations Section 2485. The project proponent shall submit evidence of the use of diesel reduction 	LS

Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		first report due 1 year from the date of project completion.	
		 ii. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, using diesel-powered vehicles or equipment, the project proponent shall verify that all vehicles and equipment have been checked by a certified mechanic and determined to be running in proper condition prior to admittance into the delivery driveway and loading areas. The project proponent shall submit a report by the certified mechanic of the condition of the construction and operations vehicles and equipment to the District's Development Services Department prior to commencement of their use. 	
		MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. Effective opening day, the project proponent shall implement the following measures.	
		 No commercial drive-through shall be implemented. 	
		1992 fixture performance requirements) through use of low-flow fixtures in all hotel room and common area bathrooms.Compliance with Assembly Bill 939 and the City of	
	Impact		ImpactMitigationMitigation Measure(s)first report due 1 year from the date of project completion.first report due 1 year from the date of project completion.ii.The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, using diesel-powered vehicles or equipment, the project proponent shall verify that all vehicles and equipment have been checked by a certified mechanic and determined to be running in proper condition prior to admittance into the delivery driveway and loading areas. The project proponent shall submit a report by the certified mechanic of the condition of the construction and operations vehicles and equipment to the District's Development Services Department prior to commencement of their use.MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. Effective opening day, the project proponent shall be implemented.•No commercial drive-through shall be implemented.•No commercial drive-through shall be indrive through shall be

mandatory and shall include recycling at least 50% of solid waste; compliance with the City of San Diego's Construction and Demolition Debris Deposit Ordinance shall be mandatory and shall include recycling at least 65% of all construction and demolition debris. This measure shall be applied during construction and operation of the proposed project.

- Use only fluorescent, Light-Emitting Diodes (LEDs), Compact Fluorescent Lights (CFLs), or the most energy-efficient lighting that meets required lighting standards and is commercially available. This measure also requires replacement of existing lighting on the project site if not already highly energy efficient.
- Implement a parking management plan that incentivizes transit, provides bike racks and a bike share station, and provides shuttle programs to reduce worker trips and parking demand, as described in **MM-TRA-8**.

By December 31, 2029, the project proponent shall implement and have operational the following measure.

• Install 29 electric car charging stations in the parking garage.

MM-GHG-3: Implement Sustainability Features

during Project Operations. Prior to approval of the final design plans, the project proponent shall list all GHG-reducing measures and shall demonstrate in the plans where these measures will be located. The following shall be implemented by the project proponent. A report shall be submitted to the District's Development Services Department evidencing compliance. The project has registered its intent to achieve certification under the Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems with the Green Building Certification Institute.

The project proponent has proposed various sustainable design features equivalent to LEED v.3.0 Silver level. The following is a list of proposed sustainability measures that will be required and incorporated into the Coastal Development Permit for the project.

- Incorporate indoor water-reduction measures, including high-efficiency toilets, high-efficiency urinals, low-flow faucets, and low-flow showers (as applicable) into the design of all hotel room and common area bathrooms. The project shall achieve a minimum 20% water reduction compared to baseline buildings (defined by LEED as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements).
- Install Energy Star rated appliances.
- Install a high-efficiency lighting system that takes advantage of natural daylighting, augmented by daylighting controls and occupancy sensors that turn off the lights in unoccupied spaces.
- Install high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination.
- Install a "Cool Roof" with an R value of 30 or better.
- Install sun shading devices as appropriate.
- Install a stormwater retention and filtration system.
- Install low-water plantings and drip irrigation, and minimize domestic water demand from the City system for landscaping purposes.
- Implement onsite recycling.
- Install a high-performance chiller/heating plant.
- Work with San Diego Gas & Electric's "Savings by Design" program during the design and construction process and incorporate recommended suggestions where feasible.

- Utilize low-volatile organic compound materials to improve indoor air quality.
- Provide bicycle parking for 24 bicycles.
- Integrate light-colored paving at the rooftop plaza and park area to minimize the heat island effect.
- Provide education for hotel and marina guests and visitors on sustainability and Bay conservation using various media.
- Divert construction and demolition debris from disposal in landfills and incineration facilities by 65%.
- Use recycled, regional, and/or rapidly renewable materials where feasible.
- Provide preferential carpool spaces within the proposed parking structure.

MM-GHG-4: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program.

A. Options for Reducing GHG Emissions.

To reach the waterside performance standard for 20212025, the project proponent shall, in order of preference, considering availability of structures and feasibility, <u>implement the following, which may be</u> <u>combined with consideration to the preference</u> <u>described below:</u>

- 1. <u>iIncorporate renewable energy</u>
 - 1)a) on the project site;
 - 2)b) within the District's jurisdiction; or
 - 3)c) within the adjacent community or member city outside of the District's jurisdiction.

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			2. <u>Undertake other verifiable actions or activities on</u> <u>Tidelands, approved by the District, such as</u> <u>electrification of equipment including vehicles and</u> <u>trucks, financial contribution to a future local or</u> <u>District GHG emission reduction program on</u> <u>Tidelands (locally approved equivalent program),</u> <u>or similar activities or actions that reduce</u> <u>operational GHG emissions;</u>	
			3. Purchase GHG emission offset credits that (1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in California Health and Safety Code § 38562(d)(1) and (2) and as these terms are further defined in California Code of Regulations, Title 17, § 95802 (see below); (2) use a protocol consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and (3) are issued by an ARB-approved offset registry. ¹ Offset credits from projects outside California must be located in states within the United States of America that have laws equivalent to or stricter than California's laws and regulations ensuring the validity of offset credits.	
			B. <u>Required Annual GHG Emissions Reductions:</u>	
			These three options may be combined with consideration to the preference described above. If construction of renewable energy projects does not	

¹ Currently approved offset registries include the American Carbon Registry (ACR). Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm.

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significanc After Mitigation
			satisfy the waterside performance standards, the	
			project proponent shall purchase greenhouse gas	
			reduction credits to achieve requisite reductions to	
			meet the 2021 waterside reduction target. This	
			requirement may include a micro-grid or similar type	
			of energy management system to help distribute the	
			loads and/or assist in energy storage. To meet the	
			202 <u>54</u> waterside reduction target, the <u>GHG</u> reductions	
			<u>must be equal to renewable energy project must offset</u>	
			1,382<u>1,411</u> MTCO2e per year<u>or 6,321 megawatt-hours</u>	
			<u>per year (MWh/year), which would amount to 6,321</u>	
			<u>MTCO2e over 5 years (between 2025 and 2030). or</u>	
			5,698 megawatt-hours per year (MWh/year). The	
			renewable energy project shall be constructed and	
			operational prior to certificate of occupancy or the	
			opening day for the waterside improvements.	
			C. Implementation of GHG Emissions Reduction	
			Options.	
			Prior to becoming operational, the project applicant	
			shall notify the District with plans to achieve the annual	
			<u>GHG emissions reduction in the order of priority</u>	
			specified above:	
			1. <u>Develop a renewable energy project(s) or take</u>	
			other verifiable actions or activities identified by	
			<u>the District to meet or partially meet the required</u>	
			<u>amount of MTCO₂e or MWh reductions specified</u>	
			<u>above.</u>	
			a. <u>If the project applicant develops a renewable</u>	
			<u>energy project(s), or takes other verifiable</u>	
			actions or activities to reduce GHG emissions,	
			the project applicant shall submit to the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			District's Energy Department/Team, for its review and approval, a report specifying the annual amount of MTCO2e or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable energy project, actions, or activities are not being used to offset GHG emissions for any other project or entity; and submit any other information requested by the District's Energy Department/Team to verify the amount of GHG emissions reduction achieved by the project, actions or activities (collectively, "GHG Emission Reduction Report").	
			b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the District's Energy Department/Team, and the reduction of offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count towards the required GHG reduction for the proposed project ("GHG Reduction").	
			2. Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount sufficient to achieve the required reduction of MTCO ₂ e or MWh specified above, which may be decreased by the amount of annual MTCO ₂ e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO ₂ e or MWh shall occur as follows:	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			a. <u>Purchase offsets for the first 5 years of</u> <u>operation;</u>	
			 b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emission offset credits set forth in paragraph A(3) above, to the District's Energy Department/Team. 	
			D. <u>Adjustments to Required GHG Emissions</u> <u>Reductions.</u>	
			If the project applicant complies with paragraphs A(1) or A(2) above, in an amount that meets the total amount of MTCO ₂ e or MWh reductions specified above to meet the 2025 reduction target, or complies with paragraph A(3) above and purchases the requisite offsets for 5 years, through 2030, or does a combination of paragraphs A(1), (2), and (3) to meet the 2025 reduction target, then nothing further shall be required under this mitigation measure.	
			1. <u>Reduction of Emissions through Development of a</u> <u>Renewable Energy Project Requirement: Although</u> <u>none are identified at this time, the project</u> <u>applicant may be required by the District to</u> <u>develop a renewable energy project at any time</u> <u>during the life of the project (subject to future</u> <u>approvals and the priorities listed above) and may</u>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the development of a renewable energy project(s). the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1) above and required offsets shall be determined by the District and reduced.	
			2. <u>Reduction of Emissions through Verifiable Actions</u> or Activities on Tidelands Requirement: Although none are identified at this time, the project applicant may be required by the District to take other verifiable actions or activities at any time during the life of the project (subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the other verifiable actions or activities on tidelands, the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1), and required offsets shall be determined by the District and reduced.	
			In the event greenhouse gas offsets are purchased, these offsets must be from sources listed on the	
			American Carbon Registry and/or the Climate Action	
			Reserve (or any other such registry approved by the ARB). The selected option or a combination must	
			achieve a total annual reduction of 1,382 MTCO2e,	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			which would amount to 12,435 MTCO2e over 9 years (between 2021 and 2030).	
Parallel the State's Overall Reduction Targets Identified in SB 32 and EO S-03- 05 and Compliance with Plans, Policies, and Regulatory Programs Adopted by ARB or Other California Agencies for Post-2020.	Impact-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating. Project GHG emissions during combined project construction and operational activities would not meet the landside efficiency target in 2030 and 2050, and would not meet the performance standard for recreational boating in both 2030 and 2050. Additionally, the proposed project would not comply with plans, policies, and regulatory programs outlined in the Draft 2017 Scoping Plan Update because emissions are not sufficiently reduced to meet statewide targets.	PS	 Implement MM-GHG-1 through MM-GHG-4, as described above. MM-GHG-5: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program. A. Options for Reducing GHG Emissions To reach the landside and waterside reduction target for 2030 and 2050, the project proponent shall, in order of preference, considering availability of structures and feasibility, implement the following, which may be combined with consideration to the preference described below: 1. iIncorporate renewable energy 1)a) on the project site; 2)b) within the District's jurisdiction; or 3)c) within the adjacent community or member city outside of the District's jurisdiction. 2. Undertake other verifiable actions or activities on Tidelands, approved by the District, such as electrification of equipment including vehicles and trucks, financial contribution to a future local or 	SU
			 city outside of the District's jurisdiction. 2. <u>Undertake other verifiable actions or activities on</u> <u>Tidelands, approved by the District, such as</u> <u>electrification of equipment including vehicles and</u> 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			3. Purchase GHG emission offset credits that (1) are	
			real, additional, permanent, quantifiable, verifiable,	
			and enforceable as specified in California Health	
			and Safety Code § 38562(d)(1) and (2) and as these	
			terms are further defined in California Code of	
			<u>Regulations, Title 17, § 95802 (see below); (2) use</u>	
			a protocol consistent with or as stringent as ARB	
			<u>protocol requirements under California Code of</u>	
			<u>Regulations, Title 17, § 95972(a); and (3) are</u>	
			<u>issued by an ARB-approved offset registry.² Offset</u>	
			<u>credits from projects outside California must be</u>	
			located in states within the United States of	
			America that have laws equivalent to or stricter	
			than California's laws and regulations ensuring the	
			validity of offset credits.	
			B. <u>Required Annual GHG Emissions Reductions:</u>	
			These three options may be combined with	
			consideration to the preference described above. If	
			construction of renewable energy projects does not	
			satisfy the waterside performance standards, the	
			project proponent shall purchase greenhouse gas	
			reduction credits to achieve requisite reductions to	
			meet the 2030 waterside reduction target. This	
			requirement may include a micro-grid or similar type	
			of energy management system to help distribute the	
			loads and/or assist in energy storage. The option(s)	
			implemented pursuant to paragraph A above shall	
			achieve the following required GHG reductions for the	
			activities of the Proposed Project for years 2030 and	
			<u>2050:</u>	

² Currently approved offset registries include the American Carbon Registry (ACR). Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 To meet the 2030 landside and waterside reduction target, <u>GHG reductions must be equal to</u> the renewable energy project must offset an additional 3,4183,851 MTCO₂e per year or 17,258 <u>MWh/year</u>, which would amount to 77,021 <u>MTCO₂e over 20 years (between 2030 and 2050)</u>. <u>To meet the 2050 landside and waterside</u> reduction target, GHG reductions must be equal to 5,703 MTCO₂e per year 25,556 MWh/year, which would amount to 211,004 MTCO₂e over 37 years (between 2050 and the end of the lease, 2087). Implementation of GHG Emissions Reduction Options. 	
			Prior to becoming operational, the project applicant	
			shall notify the District with plans to achieve the annual	
			<u>GHG emissions reduction in the order of priority</u>	
			specified above:	
			 Develop a renewable energy project(s) or take other verifiable actions or activities identified by the District to meet or partially meet the required amount of MTCO₂e or MWh reductions specified above. 	
			a. <u>If the project applicant develops a renewable</u>	
			<u>energy project(s), or takes other verifiable</u> <u>actions or activities to reduce GHG emissions,</u> <u>the project applicant shall submit to the</u>	
			District's Energy Department/Team, for its review and approval, a report specifying the annual amount of MTCO ₂ e or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable	
			<u>energy project, actions, or activities are not</u> <u>being used to offset GHG emissions for any</u> <u>other project or entity; and submit any other</u>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 information requested by the District's Energy Department/Team to verify the amount of GHG emissions reduction achieved by the project, actions or activities (collectively, "GHG Emission Reduction Report"). b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the District's Energy Department/Team, and the reduction of offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count towards the required GHG reduction for the Proposed Project ("GHG Reduction"). Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount sufficient to achieve the required reduction of MTCO2e or MWh specified above, which may be decreased by the amount of annual MTCO2e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO2e or MWh shall occur as follows: a. Purchase offsets for the 20 year period from 2030 to 2050 prior to 2030, then for the 37 year period from 2050 to 2087 prior to 2050; b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	*		set forth in paragraph A(3) above, to the	0
			District's Energy Department/Team.	
			D. Adjustments to Required GHG Emissions	
			Reductions.	
			If the project applicant complies with paragraphs A(1)	
			<u>or A(2) above, in an amount that meets the total</u>	
			<u>amount of MTCO2e or MWh reductions specified above</u>	
			<u>to meet the 2030 and 2050 reduction target, or</u>	
			complies with paragraph A(3) above and purchases the	
			requisite offsets, or does a combination of paragraphs	
			<u>A(1), (2), and (3) to meet the 2030 and 2050 reduction</u>	
			targets, then nothing further shall be required under	
			this mitigation measure.	
			1. <u>Reduction of Emissions through Development of a</u> <u>Renewable Energy Project Requirement: Although</u>	
			none are identified at this time, the project	
			applicant may be required by the District to	
			<u>develop a renewable energy project at any time</u> <u>during the life of the project (subject to future</u>	
			approvals and the priorities listed above) and may	
			request a reduction of required offsets. If any	
			reduction in offsets is requested by the project	
			applicant because of the development of a	
			renewable energy project(s), the project applicant	
			shall submit a GHG Emission Reduction Report for	
			the District Energy Department's review pursuant	
			to the process specified above in paragraph C(1)	
			above and required offsets shall be determined by	
			the District and reduced.	
			<u>Reduction of Emissions through Verifiable Actions or</u> Activities on Tidelands Requirement: Although none	
			<u>Activities on Fidelands Requirement: Although none</u> are identified at this time, the project applicant may be	
			required by the District to take other verifiable actions	
			or activities at any time during the life of the project	

(subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the other verifiable actions or activities on tidelands, the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1), and required offsets shall be determined by the District and reduced. The renewable energy project shall be submitted to the District's Development Services Department no later than January 1, 2028, shall consider the latest advancements in energy technology and future regulatory requirements, and must be operational by January 1, 2030. In the event greenhouse gas offsets are purchased, these offsets must be from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination must achieve a total annual reduction of 3,418 MTCO2e per year or 15,317 megawatt-hours per year (MWh/year), which would amount to 68,367 MTCO2e over 20 years (between 2030 and 2050). To meet the 2050 landside and waterside reduction targets, the renewable energy project must offset 11,935 MTCO2e per year or 53,478 MWh/year. The renewable energy project may be submitted to the **District's Development Services Department as late as** January 1, 2048 (but no later) in order to consider the latest advancements in energy technology and future regulatory requirements, but may be submitted sooner and must be operational by January 1, 2050. In the event greenhouse gas offsets are purchased, these offsets must be from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination must achieve a total annual reduction of

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			4,447 MTCO2e for waterside uses and 7,489 MTCO2e for landside uses, which would amount to 441,604 MTCO2e over 37 years (between 2050 and the end of the lease, 2087).	
Cumulative Impa	icts			
Consistent with Plans, Policies and Regulatory Programs	Impact-C-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 202 <u>51</u> . Project GHG emissions during combined project construction and operational activities would be inconsistent with the CAP because the project would not meet the performance benchmark for recreational boating (i.e., 42 <u>53</u> % reduction) and would only partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by ARB for the purpose of reducing the emissions of GHGs.	PS	Implement MM-GHG-1, MM-GHG-2, MM-GHG-3, and MM-GHG-4, as described above.	LS
Parallel the State's Overall Reduction Targets Identified in SB 32 and EO S-03- 05 and Compliance with Plans, Policies, and Regulatory	Impact-C-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating. Project GHG emissions during combined project construction and operational activities would not meet the landside efficiency target in 2030 and 2050, and would not meet the performance benchmark for recreational boating in both 2030 and	PS	Implement MM-GHG-1, MM-GHG-2, MM-GHG-3, MM-GHG-4, and MM-GHG-5, as described above.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Programs Adopted by ARB or Other California Agencies for Post-2020	2050. Additionally, the proposed project would not comply with plans, policies, and regulatory programs outlined in the Draft 2017 Scoping Plan Update because emissions are not sufficiently reduced to meet statewide targets.			
4.7 Hazards and H	lazardous Materials			
Project Impacts				
Release of Hazardous Materials into the Environment	Impact-HAZ-1: Landside Soil Contamination. The historical information reviewed for this analysis indicates that the project site has a history of handling, disposal, and releases of hazardous materials. Therefore, contaminated soils may be encountered during construction activities, which could potentially result in a release of hazardous materials and exacerbate the existing hazardous conditions; impacts would be significant.	PS	 MM-HAZ-1: Prepare and Implement a Soil and Groundwater Management Plan. Prior to the District's approval of the project's landside working drawings, the project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with experience in contaminated site redevelopment and restoration, to prepare and submit a Soil and Groundwater Management Plan to the District's Development Services Department for review and approval. After the District's review and approval, the project proponent shall implement the Soil and Groundwater Management Plan. The Soil and Groundwater Management Plan. The Soil and Groundwater Management Plan shall include the following: A Landside Site Contamination Characterization Report (Landside Characterization Report) delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured gas plant waste disposal area. The Landside Characterization Report shall include compilation of data based on historical records review and from prior reports and investigations and, where data 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			gaps are found, include new soil and groundwater	
			sampling to characterize the existing vertical and	
			lateral extent and concentration of landside	
			residual contamination. <u>A complete soil vapor</u>	
			analysis will also be conducted during preparation	
			of the Landside Characterization Report and will	
			<u>include soil gas sampling and an indoor air quality</u>	
			<u>risk assessment.</u> The project applicant also shall	
			enroll in the Voluntary Assistance Program with	
			the County of San Diego Department of	
			Environmental Health and shall submit the results	
			of the Landside Characterization Report to	
			Department of Environmental Health staff for	
			regulatory concurrence of results.	
			If the Landside Characterization Report identifies	
			residual contamination that would be disturbed by	
			the proposed project and potentially cause harm to	
			<u>human health or the environment, additional</u>	
			remedial actions shall be taken, in accordance with	
			<u>Department of Environmental Health oversight.</u>	
			These remedial actions shall be coordinated with	
			the Department of Environmental Health and shall	
			<u>include, but not be limited to, the removal of</u>	
			<u>contaminated soils that pose a vapor intrusion risk</u>	
			and/or the incorporation of project design features	
			that prevent vapor intrusion into the proposed new	
			<u>buildings and structures. In addition, a soil vapor</u>	
			<u>analysis and an indoor air quality risk assessment</u>	
			shall be conducted after the remedial action is	
			<u>complete to confirm that no residual VOC</u>	
			contamination remains or that it is below	
			applicable and relevant state guidelines.	
			• A Soil and Groundwater Testing and Profiling Plan	
			(Testing and Profiling Plan) for those materials that	
			will be imported to the project site and disposed of	
			during construction. Testing shall occur for all	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact	Mitigation	 Mitigation Measure(s) potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22-compliant offsite disposal facility. All excavation activities shall be actively monitored by a Registered Environmental Assessor for the potential presence of contaminated soils and for compliance with the Soil and Groundwater Sediment Testing and Profiling Plan. A Soil and Groundwater Disposal Plan (Disposal Plan), which shall describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. This plan shall be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27), and current industry best practices for the prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring. In the event contaminated soil or groundwater is encountered, it shall be removed and disposed of in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27 and under the oversight of the County of San Diego Department of 	Mitigation
			Environmental Health, which serves as the local regulatory agency responsible for oversight of	
			hazardous materials issues in San Diego County.	
			<u>Hazardous waste shall be disposed of at three types</u> of facilities, depending on the kind of waste, which	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 will be identified in the Testing and Profiling Plan. Non-hazardous waste can be disposed of at a Class III landfill, such as the Otay Landfill. Waste that is considered hazardous in California but not in other states can be disposed of outside of California. including at the South Yuma County Landfill or the Republic Services Copper Mountain Landfill in Arizona. RCRA hazardous waste must be disposed of at a Class I landfill. such as US Ecology in Nevada. A Site Worker Health and Safety Plan (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan shall be based on the Landside Characterization Report and the planned site construction activity to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist. 	
	Impact-HAZ-2: Waterside Sediment Contamination and Damage to the Cap. Historical information and monitoring reports compiled from previous site assessments and database searches indicate that it is reasonably foreseeable that	PS	MM-HAZ-5: Avoidance of the Engineered Cap. During construction of the marina expansion, the project proponent shall avoid disturbance of the engineered cap and installation of all piles for the marina expansion shall occur outside of the engineered cap.	SU

Issue Impa	act	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
enco activ the p activ woul haza pote the e relea cont floor haza cont insta coul cons if pil were cont the p cont insta coul cons if pil	aminated sediments may be untered during construction rities within the marina portion of project site. As such, construction rities that disturb the sediment ld potentially result in a release of rdous materials and create a ntially significant hazard within environment by bringing and asing subsurface sediment aminants to the surface of the Bay or exacerbating the existing rdous conditions by spreading aminated sediment. In addition, illation of piles for the marina d damage the existing cap during truction of the marina expansion es or construction equipment e placed on the cap. Disruption of aminated sediment and/or the would also violatecould result in a ntial violation of/interfere with goals of Order No. R9-2004-0295 would be considered a significant act.		MM-HAZ-6: Conduct Sediment Sampling and Implement Measures to Mitigate Potential Cross- Contamination of Marine Sediment from Pile Driving and In-Water Construction. Prior to the District's approval of the project's in-water working drawings, the project proponent shall retain a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment contamination, sediment sampling, and contamination remediation to perform all sediment sampling and analysis required by the Sampling and Analysis Plan (SAP) and Marine Sediment Contamination Characterization Report (Sediment Characterization Report)—both of which are discussed in detail within this mitigation measure. The results of all sediment sampling shall be documented in a report and submitted to the District prior to any project development-related marine-side sediment-disturbing activities. If remediation is required, the remediation shall be conducted with oversight from the appropriate local, State, or federal regulatory agency. In addition, documentation evidencing the remediation work and completion thereof shall be submitted to the District. The project proponent shall monitor the remediation for its effectiveness for a period of time consistent with guidance from the regulatory agency with jurisdiction, but for no less than 1 year. A monitoring report shall be submitted to the District and the RWQCB for their review on a monthly basis, or at a frequency determined appropriate by relevant agencies having jurisdiction over the remediation. Additional details of this mitigation measure are provided below. The project proponent and the professionally licensed Professional Engineer retained by the project proponent shall complete the following requirements, which shall be reviewed and approved by the District's	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Development Services Department, the RWQCB, and any other appropriate regulatory agencies. Develop a SAP and perform sediment sampling in area(s) of potential disturbance for in-water construction activities that are located outside of the engineered cap. Sampling shall be conducted in accordance with the <i>Water Quality Control Plan for Enclosed Bays and Estuaries Plan</i> (August 2009). Specifically, the samples shall include analysis of (1) grain size analysis, (2) physical parameters, (3) total organic carbon, (4) Target Analyte List metals, (5) pesticides, (6) PAHs, (7) total PCBs (all 209 individual PCB congeners), as analyzed and reported by EPA Method 1668, and-(8) total polychlorinated terphenyls, (9) TPHs, and (10) TBT. The sampling area shall encompass the waterside project footprint and sample locations shall be representative of areas of potential project disturbance. Areas of potential disturbance include, but are not limited to, proposed pile locations for the marina expansion; the locations of construction equipment, including without limitation to the location of any proposed spudding or other anchoring systems that will be utilized during construction of the marina expansion; potential deposition areas within the proposed silt curtain footprint; and any other areas where the Bay floor will be disturbed. Prepare a Sediment Characterization Report delineating the vertical and lateral extent and concentration of the project site's sediment Characterization Report shall be based on the sediment sampling results and shall rely on the Effects Range – Low (ER-L) and Effects Range – 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 Median (ER-M) guideline values of the National Oceanic and Atmospheric Administration's <i>Sediment Quality Guidelines</i> (1999) as the basis for characterizing the sediment. The project proponent shall disclose the results of the Sediment Characterization Report to the RWQCB and the District (and any other appropriate regulatory agencies), and consult with the RWQCB on the contamination characterization of the sediment. If contaminated sediment is identified in the Sediment Characterization Report, the project proponent shall prepare a Contaminated Sediment Management Plan (Sediment Management Plan) for the District's, RWQCB's, and any other appropriate regulatory agencies' review and approval, if applicable. Once approved, the Sediment Management Plan shall be implemented by the project proponent subject to oversight by the District, RWQCB, and any other appropriate regulatory agencies, if applicable. The Sediment Management Plan shall describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the contaminated sediment outside the engineered cap as identified in the Sediment Characterization Report and the monitoring that will occur post-construction, including, at a minimum: Pile Construction Options. Piles shall be constructed using: (1) Impact Hammer Pile Driving. At the conclusion of the pile driving, the project applicant shall conduct sediment sampling of representative areas of potential disturbance near the location of piles consistent with the sampling approach set forth in the SAP, above. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	<u>^</u>	5	If the sediment samples show concentrations of	
			sediment contamination above the Sediment	
			Characterization, the project proponent shall	
			delineate the extent of cross-contamination	
			and propose remediation approaches (subject	
			to approval by the District and any other	
			agencies with jurisdiction over site	
			contamination) that may include, but are not	
			limited to, dredging, placement of sand cover,	
			or Enhanced Monitored Natural Recovery	
			(EMNR) sand containing active carbon. The	
			results of the sampling and remediation	
			approaches shall be documented in a report to	
			be reviewed and approved by the District,	
			RWQCB, and any other appropriate regulatory	
			agencies.	
			OR	
			(2) <u>Internal Jetting</u> . This method includes a jet	
			pipe running the length of the pile where the	
			water exits at a small-diameter port at the	
			bottom of the pile and a high-pressure water	
			line is attached near the top tip of the pile. The	
			high-pressure water shall reduce the skin	
			friction between the pile and the marine	
			sediments and avoid the creation of a large hole	
			and a significant amount of turbidity. Turbidity	
			curtains shall completely surround each pile	
			from the top of the pile to the Bay floor and be	
			placed no more than 2 feet from the pile. At the	
			conclusion of the internal jetting, the project	
			proponent shall conduct sediment sampling of	
			representative areas of potential disturbance	
			near the locations of the piles, consistent with	
			the sampling approach set forth in the SAP,	
			above. If the sediment samples show	
			concentrations of sediment contamination	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact		 Mitigation Measure(s) above the Sediment Characterization, the project proponent shall delineate the extent of cross-contamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, or EMNR sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies. Spudding. If spuds are used, then when lifted during in-water construction, they shall be lifted slowly at least a quarter of the speed they are lifted during normal operation of spuds. Before the spud reaches the subsurface of the Bay floor during deployment, the operator shall pause the spud lift for 1- to 2-minute intervals to reduce the disturbance of Bay sediment. At the conclusion of the marina construction, the project proponent shall conduct sediment sampling of representative areas of potential disturbance from spudding and other construction activities that may have disturbed the Bay floor within the project footprint, consistent with the sampling 	
			approach set forth in the SAP, above. If the sediment samples show concentrations of sediment contamination above the Sediment Characterization, the project proponent shall delineate the extent of cross-contamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	·		contamination) that may include, but are not limited to, dredging, placement of sand cover, or EMNR sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies.	
			MM-HAZ-7: Compliance with Federal and State Permits: No Impedance of Investigative Order No. R9-2017-0081. Prior to in-water construction, the project proponent shall obtain all federal and state permits required for in-water construction activities and demonstrate to the District compliance with all permit conditions during in-water construction. In addition, the project proponent shall not impede the District's compliance with Investigative Order No. R9- 2017-0081 as it pertains to the project site.	
Be Located within an Airport Land Use Plan or, Where Such a Plan Has Not Been Adopted, Be Within Two Miles of a Public Airport or Public Use Airport	Impact-HAZ-3: Exacerbate an Existing Safety Hazard for People Residing or Working within the Vicinity of the Project Site. Because the project site is located within an airport land use plan, the proposed project could affect the safe and efficient utilization of the navigable airspace by aircraft or the operation of air navigation facilities due to the height of construction and operational equipment and structures. This could result in a safety hazard for people residing or working within the vicinity of the project site.	PS	MM-HAZ-8: Obtain <u>FAA Approval and ALUC and FAA</u> Formal Review and Determination. Prior to <u>initiationthe Board</u> of project construction,Port <u>Commissioners taking final action to adopt the PMPA in</u> <u>accordance with 14 California Code of Regulations</u> <u>Section 13632(e)</u> , the project proponent shall obtain FAA approval and ALUC review and determination for construction equipment and operational structures.	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
4.8 Hydrology a	nd Water Quality			
Project Impacts				
Violate any Water Quality Standards	Impact-HWQ-1: Potential to Violate Water Quality Standards or Waste Discharge Requirements for the Waterside Improvements. Expanded marina operations and boater activities have the potential to significantly impair water quality in the long term.	PS	 MM-HWQ-1: Marina Best Management Practice Plan and Copper Reduction Measures. To reduce potential impacts on water quality, the project proponent shall prepare a Marina Best Management Practice Plan that shall be reviewed and approved by the District specifically identifying best management practices that will be used within the Marina to (1) minimize the pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively protect water quality of the Bay and (2) reduce inputs of total and dissolved copper resulting from increased berthing of boats. The Marina Best Management Practice Plan and Copper Reduction Measures shall be reviewed and approved by the District prior to the opening of marina operations. The Marina Operator shall be responsible for implementation and maintenance of the Marina Best Management Practice Plan and Copper Reduction Measures. At a minimum, the Marina Best Management Practice Plan shall include, but not be limited to, the following: Use of educational materials to be provided to boat owners and their crews that specify types of activities that shall be avoided or types of BMPs that shall be implemented in order to protect water quality, such as emptying of septic tanks and refueling only at approved locations, respectively. Recommendations to reduce oil leaks, include conducting periodic maintenance of all fuel lines, hoses, and gaskets; putting an oil-absorbent pad in the bilge; and installing a filtration system to remove oil from bilge water. Docking agreements containing specific use restrictions to prevent degradation of water 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			quality, such as restricting boat repairs and cleaning operations within the marina. These specific use restrictions shall be similar to the recommendations from the <i>San Diego Bay Boaters</i> <i>Guide</i> (District 2006) and the California State Parks Division of Boating and Waterways and the California Coastal Commission Boating Clean and Green Program (California DBW 2017), both of which promote environmentally sound boating practices to marine business and boaters in California.	
			 Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats. Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina. 	
			 Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, and no overwater repairs would be allowed. 	
			 Implementation and monitoring of the District- adopted in-water hull cleaning regulations. Ordinance No. 2681 requires the use of BMPs for businesses doing in-water hull cleaning. The In- Water Hull Cleaning Permit is a Bay-wide permit to reduce or eliminate copper pollution caused by in- water hull cleaning activities. 	
			• Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year).	
			 No fueling on site. MM-HWQ-2: Water Quality Sampling for Total and 	
			Dissolved Copper . Prior to the commencement of marina development, the project proponent shall	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			conduct water quality sampling to develop an updated	
			baseline for total and dissolved copper as follows:	
			• Develop a sampling and analysis plan that will be reviewed and approved by the District prior to	
			sampling. The plan shall identify a minimum of	
			three points, denoting edges and midpoint of	
			marina footprint.	
			• Sample for total and dissolved copper. The project	
			proponent shall use an Environmental Laboratory	
			Accreditation Program (ELAP)-certified laboratory	
			for all analytical testing.	
			Compare dissolved copper levels to Basin Plan	
			water quality objectives.	
			• The project proponent shall submit the baseline	
			monitoring report to the District for its review and	
			approval.	
			The project proponent shall conduct ongoing water quality monitoring and testing for total and dissolved	
			copper, following the process outlined above for the	
			updated baseline sampling, over the course of marina	
			development/occupancy at the following frequency for	
			each phase of marina development:	
			After 50% occupancy,	
			• After 75% occupancy, and	
			• After full occupancy (95% slips under rental	
			agreements).	
			Reports of all monitoring and testing results shall be	
			prepared and paid for by the project proponent <u>(i.e.,</u>	
			tenant) and submitted to the District's Development	
			Services Department for review and approval within 30	
			days after the occupancy milestones identified above.	
			If at any time during monitoring the water quality	
			equals or exceeds or the Basin Plan water quality objectives and comparison with the updated baseline	
			indicates that the exceedance is a result of the proposed	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact		 project, the project proponent shall immediately notify the District's Development Services Department and shall immediately cease further development and/or occupancy until additional BMPs addressing the issue are employed and reduce the copper levels. Water quality testing shall occur every year following full occupancy of the marina or until the marina is fully occupied by non-copper hulled boats. The project proponent shall prepare written reports of the water quality testing results annually and submit the reports to the District's Development Services Department for review and approval within 30 days after the end of each calendar year. Any exceedance attributed to the proposed project (based on a comparison with the updated baseline assessment) shall require additional BMPs if determined necessary to reduce total and dissolved copper to below the Basin Plan water quality objectives. BMPs that must be considered include, but are not limited to: Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats. Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina. Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, 	
			 and no overwater repairs would be allowed. Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year). 	
			If the project proponent (i.e., tenant) finds that one or more are infeasible, the tenant must provide written proof of infeasibility, which shall be subject to District	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			review and concurrence. BMPs that are implemented must reduce total and dissolved copper to levels below the Basin Plan water quality objectives.	
4.9 Land Use and	Planning			
Project Impact				
Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction Over the Project (Including but not Limited to, the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	Impact-LU-3: Potential Inconsistency with the California Coastal Act's Requirement to Minimize Coastal Hazards through Planning and Development, Resulting in a Physical Impact on the Environment. Based on the best available science, the proposed project would place people or structures at risk due to SLR effects over the latter portion of the project's life, which would not minimize coastal hazards (i.e., SLR) and the effect on future amenities and facilities within the Coastal Zone. Therefore, if not mitigated, the proposed project would be inconsistent with the CCA.	PS	 MM-LU-1: Smart Design Decisions, Future Adaptation Strategies, and Operational Strategies. To reduce potential impacts related to bulkhead overtopping in mid-century during extreme storms, the project proponent shall implement the following into building design and construction, and during operation. Prior to the issuance of building permits for the project, the project applicant shall submit design plans and operational strategies to the District's Development Services Department for its review and approval. Smart Design Decisions - to be incorporated into building design and as part of construction: Place mechanical and electrical equipment at least 2 feet above the design flood elevation to reduce risk of flood damage. If equipment must be placed in lower areas, elevate base or ensure assets are composed of flood damage-resistant materials. Design water supply, sanitary sewage, and stormwater systems to minimize or eliminate infiltration of flood waters into systems and vice versa. For example, this may include installing backwater valves at building connections or at outfalls, increasing outfall elevations when replacing them, installing forced mains, or increasing pump capacity. Ensure that all building exterior walls are composed of materials that have an impermeable and waterproof membrane. Contribute a "fair share" payment in an amount to be determined by the District based on an analysis 	LS

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact	Mitigation	 for the cost of construction of future bulkhead improvements that would offer direct flood mitigation benefits to the project site. Future Adaptation Strategies - to be incorporated into building design and as part of construction: Ensure that building foundations are capable of supporting future flood walls or temporary flood barriers. Design building openings (e.g., doors, windows, utility penetrations) to be capable of future retrofitting to make them watertight and resistant to flood loads. If replacing or constructing additional bulkheads, design key structural elements to allow future increases in the elevation of the bulkhead crest. Upon receipt of the operational strategies report (see below), the District's Development Services Department shall determine, if given the most up- 	Mitigation
			to-date sea level rise projections, the current coastal protection features (e.g., the existing bulkheads) would be overtopped if a 100-year storm surge were to occur in the next 10 years. If so, within the next 5 years, the project proponent, in consultation with and approved by the District's Development Services, must either install onsite protections (e.g., flood walls and flood-proof openings) to protect the buildings from a high sea level rise scenario and a 100-year storm surge through the end of the Port lease (2082) or, as mentioned above, contribute a "fair share" to future bulkhead improvements that would offer the same or a greater level of protection.	
			 ← Contribute a "fair share" payment in an amount to be determined by the District for the cost of construction of future bulkhead improvements that 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact		 Mitigation Measure(s) would offer direct flood mitigation benefits to the project site. Operational Strategies - to be implemented during operation and updated every 5 years using the best available science: Establish an early warning system to monitor the risk of flooding. An early warning system should consist of: Protocols for obtaining information on local weather alerts, and established levels at which additional action (e.g., sandbagging) will be taken. Protocols for monitoring water levels at nearby storm gauges prior to the storm arrival, and regularly checking the water levels along the project bulkhead as the storm progresses. Establish emergency evacuation procedures for people to relocate to higher ground on short notice. Obtain or execute on-call contracts for backup power generators for critical functions, such as the operation of one elevator and emergency lighting systems. Also obtain or execute on-call contracts for portable pumps, and ensure that there is sufficient fuel to operate these. Establish protocols for operating said generators and pumps during storm events or other such events. Before a storm that is forecasted to overtop the bulkheads, deploy sandbags or inflatable barriers. Over time, monitor and track the rainfall amounts and storm projections that result in localized flooding and update the deployment protocol to account for this experience. 	
			localized flooding, test emergency power sources and pumps and ensure that there is sufficient fuel	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 to run these, and inspect building exterior to ensure that there are no penetrations that lack flood proofing. If cracks or leaks are identified, seal them or temporarily cover with a flood-proof material, to the extent feasible, prior to the storm. Over time, monitor and track the rainfall amounts and storm projections that result in localized flooding and update the deployment protocol to account for this experience. Restrict public access during storms or flooding events if water levels are forecasted to rise to unsafe levels. 	
4.11 Public Servi	ces and Recreation			
Project Impacts				
Parks	Impact-PS-3: Potential for Insufficient Wayfinding and Accessibility Signage to Inform Public that Public Plaza and Park Areas Are Available for Public Use and Enjoyment. Limited public access for long periods of time due to hotel programming could result in the perception that the entire 1.962.26- acre public plaza and park area is not open to the public while private events are in session. Additionally, because the rooftop public plaza and park area and terraces are raised from ground level, the public may not readily know that these recreational areas are available for public use. As such, without sufficient wayfinding signage, the general public may be unaware of their existence and availability. These	PS	 Implement MM-AES-2 as described in Aesthetics and Visual Resources, above. MM-PS-1: Operation Requirements for the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace Areas. Under no circumstances shall the closure of the public plaza and park areas for private hotel events be more than the following percentages. Multifunctional Plaza and Lawn (35,94040,414 square feet): 50% private access (50% public access). This area would be available for private events 50% of the year, which is defined as the equivalent of 182.5 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 50% of the year (182.5 days). For clarification purposes, if a private event occupies the Multifunctional Plaza and Lawn for part of a day, it shall count as occupying the 	LS

impacts would be considered significant.	 Multifunctional Plaza and Lawn for an entire day when calculating the 182.5-day private event limit. Public Park Plaza (39,66045,062 square feet): 15% private access (85% public access). This area would be available for private events 15% of the year, which is defined as the equivalent of 55 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 85% of the year (310 days). For clarification purposes, if a private event occupies the Public Park Plaza for part of a day, it shall count as occupying the Public Park Plaza for an entire day when calculating the 55-day private event limit. Public Park Plaza and Public Observation Terrace (6,5009,782 square feet): 0% private access (100% public access). This area would be open to the public at no cost 100% of the year. Public Promenade (3.190 square feet): shall be an approximate 10-foot-wide walkway along the southeast portion of the market-rate hotel tower and shall be 0% private access (100% public access). This promenade would not be available for private event area is blocked off from the public usable area, such barriers shall not be solid materials but shall be a material like ropes. To ensure the private event area is restored for the public use, all trash and debris shall be immediately picked up and disposed of appropriately during and after the private event. During times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during times when the multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during times when the multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during
	area or Public Park Plaza area is open to the public (i.e.,
	during non-private event times), the hours of operation shall be the same as the District's park hours of operation.
	During all private events, clear signage shall be placed in publicly visible locations (i.e., not posted inside the

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			hotel) at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge (if developed), and two locations along the existing Embarcadero Promenade, that indicate the Multifunctional Plaza and Lawn area and/or the Public Park Plaza areas, if applicable, are open to the public. Clear signage shall be placed at the Public Park Plaza and Public Observation Terrace that indicates it is open to the public.	
			After project construction is complete, on January 31 of each year, the project proponent shall submit an annual public access usage report to the District's Development Services Department that demonstrates, for the preceding year, that the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private access (for private events) as follows and consistent with this MM-PS-1 :	
			 Multifunctional Plaza and Lawn (50% public access/50% private access) Public Park Plaza (85% public access/15% private access) 	
			• Public Park Plaza and Public Observation Terrace (100% public access)	
			The report shall be broken down by the Multifunctional Plaza and Lawn and Public Park Plaza areas and shall list the date, private event, start and end times, duration of each event, setup and breakdown time, and total number of days and percentage of private use for that year. Furthermore, the report shall contain confirmation, such as photographs or a signature by the hotel manager, that for each private event, signage indicating public use of the remaining area (if applicable) was placed consistent with this MM-PS-1 . For the Public Park Plaza and Public Observation	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Terrace area, the report shall confirm that this area was accessible to the public 100% of the year and contained signage indicating such. MM-AES-2: Install Wayfinding and Public Accessibility Signage	
4 10 Transportat	tion, Circulation, and Parking		Implement MM-AES-2, as described above.	
Project Impacts	tion, Ch culation, and Farking			
Conflict with an Applicable Plan, Ordinance, or Policy	Impact-TRA-1: Construction- Related Impacts along the 28th Street Roadway Segment Between National Avenue and Boston Avenue Under Existing Plus Project Construction. Construction of the proposed project would worsen the existing LOS along 28th Street between National Avenue and Boston Avenue from an already unacceptable LOS E to LOS F. Therefore, impacts would be significant.	PS	 MM-TRA-1: Transportation Demand Management Plan. Prior to commencing any construction or demolition activities, the project proponent shall provide a Transportation Demand Management (TDM) Plan to the San Diego Unified Port District, and City of San Diego, and Caltrans for approval that shall limit the number of construction worker trips that travel through the affected intersections during peak periods to 50 trips. The TDM plan shall incorporate TDM strategies to be implemented during construction, including, but not limited to: Implementation of a ride-sharing program to encourage carpooling among the workers. Adjustment of work schedules (e.g., arrive before 7 a.m. or after 9 a.m.; leave before 4 p.m. or after 6 p.m.) so that workers do not access the site during peak hours. Provision of offsite parking locations for workers outside of the area with shuttle services to bring them on site, as identified in MM-TRA-7. Provision of subsidized transit passes for construction workers. In addition, for impacts on the I-5 southbound/Boston Avenue intersection during construction, prior to commencing construction or demolition activities, the project proponent shall provide a Traffic Control Plan 	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			in accordance with Caltrans policies to the San Diego Unified Port District and Caltrans for approval.	
	Impact-TRA-3: Impact-TRA-3: Operation-Related Impacts on Study Area Intersections Under Existing Plus Project Conditions: 15th Street/F Street (PM Peak Hour); 17th Street/G Street (PM Peak Hour); 19th Street/J Street (PM Peak Hour). Operation of the proposed project would worsen the existing delay experienced during the peak hours at three study area intersections: 15th and Grape Streets by 15.8 seconds (LOS F) during the PM peak hour, 17th and G Streets by 28.0 seconds (LOS F) during the PM peak hour, and 19th and J Streets by 18.6 seconds (LOS F) during the PM peak hour, where a threshold of 1.0 second of additional delay applies to LOS F. Therefore, impacts would be significant.	PS	 MM-TRA-2: Signalization of the 15th Street/F Street Intersection. Prior to issuance of occupancy permits, the project proponent shall pay for or directly install a traffic signal at the intersection of 15th Street and F Street. Installation of the traffic signal will require approval from the City of San Diego. After installation is complete, the project proponent shall provide proof of signalization to the District for verification before issuance of the occupancy permits may occur. MM-TRA-3: Signalization of the 17th Street/G Street Intersection. Prior to issuance of occupancy permits, the project proponent shall pay for or directly install a traffic signal at the intersection of 17th Street and G Street. Installation of the traffic signal will require approval from the City of San Diego. After the required payment or installation is complete, the project proponent shall pay for or directly install a traffic signal at the intersection of 17th Street and G Street. Installation of the traffic signal will require approval from the City of San Diego. After the required payment or installation is complete, the project proponent shall provide proof of completion to the District for verification before issuance of the occupancy permits may occur. 	SU
			MM-TRA-4: Restriping of Northbound Left-Turn Lane at 19 th Street/J Street Intersection. Prior to the issuance of occupancy permits, the project proponent shall pay for or directly implement restriping the northbound left-turn lane into a northbound left-turn and through-share lane at the intersection of 19 th Street and J Street. Restriping lanes will require approval from the City of San Diego <u>and coordination with Caltrans</u> . The project proponent shall provide proof of payment or completion to the District for verification before issuance of the occupancy permits may occur.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Impact-TRA-4: Operation-Related		MM-TRA-5: Compliance with San Diego Forward:	_
	Impacts on a Study Area Freeway		The Regional Plan, I-5 Operational Improvements.	
	Segment Under Existing Plus		Prior to the issuance of occupancy permits, <u>the project</u>	
	Project Conditions: NB I-5 Between		proponent shall enter into a Traffic Mitigation	
	Grape Street and First Avenue (AM		Agreement with Caltrans for I-5 operational	
	Peak Hour). Operation of the		improvements for the segment of northbound I-5	
	proposed project would worsen the		between Grape Street and First Avenue, in compliance	
	V/C ratio by 0.012 along the segment		with San Diego Forward: The Regional Plan prepared by	
	of NB I-5 between Grape Street and		SANDAG (SANDAG 2015) and proof of this agreement	
	First Avenue (currently operating at		shall be provided to the District. Caltrans shall install	
	LOS E) during the AM peak hour,		The installation of the following I-5 operational	
	which would exceed the threshold of		improvements for the segment of northbound I-5	
	0.010 for a segment operating at LOS		between Grape Street and First Avenue, in compliance	
	E. This impact would be significant.		with San Diego Forward: The Regional Plan prepared by	
			SANDAG (SANDAG 2015) is under Caltrans jurisdiction.	
Result in	Impact-TRA-7: Insufficient Parking	PS	MM-TRA-8: Implement a Parking Management Plan	SU
Inadequate	Supply During Operation. As		that Provides Parking Management Strategies. Prior	
Parking Supply	proposed, the project would provide		to the issuance of the certificate of occupancy for	
	263-<u>260</u> onsite parking spaces through		market-rate hotel operations, the project proponent	
	a combination of valet and striped		shall submit a Parking Management Plan to the District	
	spaces. Per the Tideland Parking		for approval. Upon approval and during project	
	Guidelines, the proposed project is		operations, the project proponent shall provide a	
	required to provide an adjusted rate of		quarterly report on the Parking Management Plan to	
	4 72 449 parking spaces. Therefore, the		the District's Development Services Department, which	
	proposed project would result in a		shall be subject to verification by District staff. The	
	parking deficit of 209<u>189</u> spaces		project proponent shall implement the following	
	during its highest demand period. A		parking management strategies and any other	
	significant impact on parking supply		strategies identified in the Parking Management Plan to	
	would occur.		mitigate the projected parking deficiency:	
			 Valet Parking – Secure 209189 parking spaces 	
			(Secured Parking) at one or more offsite parking	
			lots and provide a valet service that allows guests	
			to utilize the secured spots, in order to avoid	
			overflow in the immediate surrounding parking	
			areas. Prior to commencement of hotel operations,	
			the project proponent will enter into a contract or	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Issue	Impact		 Mitigation Measure(s) agreement with a parking operator or equivalent entity securing the Secured Parking and provide the agreement to the District's Development Services Department. The agreement shall be updated and submitted to the District's Development Services Department on an annual basis to provide proof of maintaining said agreement. Until a long-term parking solution is identified for the area, after project construction is complete, on January 15 of each year the project proponent shall submit an annual parking implementation report to the District's Development Services Department for its review, which shall include the following components: A specific peak parking implementation program, broken down into morning, afternoon, and evening timeframes, in its annual submittal. Evidence in the form of parking utilization counts that show that sufficient valet spaces are available to meet the project's overflow parking demand from the parking lot or valet vendor. The parking counts shall be conducted at times throughout the day on both weekdays and weekends, during both the summer and winter, and shall be compared to projected and actual valet use at the project site. The location of the lots available for valet use and the number of spaces available in each lot based upon recent parking utilization counts. 	Mitigation
			 The dates, times, and duration of any period the valet was closed due to no available parking spaces. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 In the event that the District establishes a longterm parking program for the area, the project proponent shall contribute a fair share to the analysis, design, and construction and operating costs associated with the program. <i>Transportation Network Companies</i> – The project proponent shall coordinate with transportation companies (such as Lyft and Uber) and shall provide designated pick-up/drop-off locations to encourage hotel patrons to utilize this mode of transportation as an alternative to driving their personal vehicles. <i>Water Taxi</i> – The project proponent shall provide a direct path and wayfinding signage from the Water Taxi Landing to the hotel facilities, and provide brochures and other materials in the hotel lobbies to inform hotel guests of the water taxi service and the destinations that can be reached. <i>Bike Racks</i> – The project proponent shall provide bike racks to accommodate a minimum of 24 bicycle parking spaces on the project site or adjacent thereto on the Embarcadero Promenade to encourage employees/patrons to bike to the proposed project. <i>Bike Share Stations</i> – The project proponent shall coordinate with companies like DECOBIKE to ensure a bike share station is maintained within walking distance (approximately 1,000 feet) to the proposed project. If a third-party bikeshare service cannot be provided, the project proponent shall provide bikes for its guests to rent. <i>Public Transit</i> – On its website, the project proponent shall provide bikes for its guests to rent. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			 transportation as an alternative to driving their personal vehicles. <i>Public Transit Subsidies for Employees</i> – The project proponent shall provide reimbursement or subsidies for public transportation costs for all employees. The level of transit reimbursements and subsidies shall be based on the standards set forth by the California Air Pollution Control Officers Association resource document <i>Quantifying Greenhouse Gas Mitigation Measures</i> (August 2010) to achieve a reduction in project vehicle miles traveled by 20%. <i>Port of San Diego (formerly Big Bay) Shuttle</i> – The project proponent shall participate in the Port of San Diego Shuttle system as a condition precedent to issuance of a certificate of occupancy for the market-rate hotel or lower-cost visitor-serving hotel, whichever hotel is completed first. Participation may include: collection of fares, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for District tenant projects within the South Embarcadero, and other forms of participation as identified by the District. <i>Airport Shuttle</i> – The project proponent shall provide a shuttle to and from the airport for hotel guests. <i>SANDAG-operated iCommute Program</i> – The project proponent shall participate in SANDAG's iCommute Program. <i>Employee Carpool and Vanpool Parking Spaces</i> – The project proponent shall provide designated parking spaces for employee carpool and vanpool parking spaces onsite. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			Onsite Employee Alternative Commute Options Coordinator – The project proponent shall designate an onsite employee coordinator to provide inform employees of alternative commute options.	
Cumulative	Impacts Impact-C-TRA-4: Failing	PS		SU
	 Intersections in AM Peak Hour in Near-Term Cumulative Conditions: 16th Street/F Street; Logan Avenue/I-5 Southbound Off-Ramp; and Logan Avenue/I-5 Southbound On-Ramp. Operation of the proposed project would worsen existing delays at failing study area intersections during the AM peak hour under near- term conditions as follows. 16th and F Streets - 5.3 seconds Logan Avenue and I-5 southbound off-ramp - 5.6 seconds Logan Avenue and I-5 southbound on-ramp - 5.5 seconds 		 16th Street/F Street: no feasible mitigation identified to improve operations. MM-C-TRA-1: Signalization of Logan Avenue/I-5 Southbound Off-Ramp. Prior to issuance of occupancy permits, the project proponent shall <u>enter into a Traffic Mitigation Agreement with California Department of Transportation (Caltrans) for theprovide proof to the District of payment of a fair-share contribution of 22 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 off-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from the California Department of Transportation (Caltrans).</u> MM-C-TRA-2: Signalization of Logan Avenue/I-5 Southbound On-Ramp. Prior to issuance of occupancy permits, the project proponent shall <u>enter into a Traffic Mitigation Agreement with the California Department of Transportation (Caltrans) for theprovide proof to the District of payment of a fair-share contribution of 6 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 on-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from theprovide proof to the District of payment of a fair-share contribution of 6 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 on-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from Caltrans.</u> 	
	Impact-C-TRA-5: Failing Intersections in PM Peak Hour in Near-Term Cumulative Conditions:	PS	First Avenue/Beech Street: no feasible mitigation identified to improve operations.	SU

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	 First Avenue/Beech Street; 14th Street/G Street; 15th Street/F Street; 16th Street/G Street; 16th Street/Island Avenue; 16th Street/K Street; 17th Street/G Street; 19th Street/J Street; Logan Avenue/I-5 Southbound On-Ramp. Operation of the proposed project would worsen existing delays at failing study area intersections during the PM peak hour under near-term conditions as follows. First Avenue and Beech Street – 9 seconds 14th and G Streets – 4.4 seconds 15th and F Streets – 19.9 seconds 16th Street and Island Avenue – 4.3 seconds 	Thigation	Implement MM-C-TRA-2, as described above. MM-C-TRA-3: New Travel Lane on G Street (3 Percent Fair-Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 3 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of 14 th and G Streets, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Tinguion
	 16th and K Streets – 15 seconds 17th and G Streets – by more than 2.0 seconds (delay exceeds calculation capacity of the traffic analysis software) 19th and J Streets – 20.6 seconds Logan Avenue and I-5 southbound on-ramp – by more than 2.0 seconds (delay exceeds calculation capacity of the traffic analysis software) 		MM-C-TRA-4: Signalization of the Intersection of 15 th Street and F Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 4 percent of the improvement costs to install a traffic signal at the intersection of 15 th Street and F Street, per the recommendations in the <u>Downtown Community PlanDowntown Mobility Plan</u> <u>Supplemental EIR</u> . Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to	

occupancy.

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM-C-TRA-5: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
			MM-C-TRA-6: Signalization of the Intersection of 16 th Street and Island Avenue. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 18 percent of the improvement costs to install a traffic signal at the intersection of 16 th Street and Island Avenue, per the recommendations in the <u>Downtown Community PlanDowntown Mobility Plan</u> <u>Supplemental EIR</u> . Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			MM-C-TRA-7: Signalization of the Intersection of 16 th Street and K Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 9 percent of the improvement costs to install a traffic signal at the intersection of 16 th Street and K Street , per the recommendations on the Downtown Community Plan. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
			MM-C-TRA-8: Signalization of 17 th Street and G Street Intersection. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to install a traffic signal at the intersection of 17 th Street and G Street, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR . Installation of the traffic signal will require approval from the City of San Diego.	
			MM-C-TRA-9: Restriping Left-Turn Lane on J Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 20 percent of the improvement costs to restripe the northbound left- turn lane along J Street at its intersection with 19 th Street into a northbound left-turn and through-shared lane, per the recommendations in the Downtown <u>Community PlanDowntown Mobility Plan Supplemental</u> <u>EIR</u> . Restriping of J Street will require approval from	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
	Impact-C-TRA-9: Failing Intersections in PM Peak Hour in Future Year Cumulative Conditions: Front Street and Broadway; First Avenue and Broadway; 11 th Avenue and Broadway; 11 th Avenue and G Street; 11 th Avenue and Market Street; Park Boulevard and G Street; 13 th Street and G Street; 14 th Street and G Street; 15 th Street and F Street; 16 th Street and G Street; 16 th Street and K Street; Imperial Avenue and 16 th Street; and 17 th and G Streets. Operation of the proposed project would worsen	PS	Front Street/Broadway: no feasible mitigation identified to improve operations First Avenue/Broadway: no feasible mitigation identified to improve operations 11 th Avenue/Broadway: no feasible mitigation identified to improve operations 11 th Avenue/Market Street: no feasible mitigation identified to improve operations 16 th Street and K Street: no feasible mitigation identified to improve operations Implement MM-C-TRA-4, MM-C-TRA-5, MM-C-TRA-7, and MM-C-TRA-8, as described above.	SU
	 existing delays at failing study area intersections during the PM peak hour under Future Year conditions as follows. Front Street and Broadway – 4.1 seconds First Avenue and Broadway – 2.2 seconds 11th Avenue and Broadway – 4.4 seconds 11th Avenue and G Street – 5.0 seconds 11th Avenue and Market Street – 11.4 seconds 		MM-C-TRA-10: New Travel Lane on G Street (1 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 1 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of 11 th Avenue and G Streets, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	 Park Boulevard and G Street - 4.0 seconds 13th Street and G Street - 4.4 seconds 14th Street and G Street - 4.6 seconds 15th Street and F Street - 51.8 seconds 16th and G Street - 3.6 seconds 16th Street and K Street - 15.7 seconds Imperial Avenue and 16th Street - 46.2 seconds 17th and G Streets - more than 2.0 seconds (delay exceeds calculation capacity of the traffic analysis software) 		District's satisfaction to allow the project to proceed to occupancy. MM-C-TRA-11: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the onstreet parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	
			MM-C-TRA-12: New Travel Lane on G Street (1 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 1 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the <u>Downtown Community PlanDowntown Mobility Plan</u> <u>Supplemental EIR</u> . Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			District's satisfaction to allow the project to proceed to occupancy.	
			MM-C-TRA-13: New Travel Lane on G Street (3 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 3 percent of the improvement costs to convert the on- street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	

5.2.2 Changes to Chapter 2, Environmental Setting

Section 2.3.2, Page 2-3

2.3.2 Existing Land and Water Use Designations

The project site occupies land and water that is under the jurisdiction of the District within the City. The District's PMP governs the uses on Tidelands that the State Legislature has granted to the District, as trustee, and for which the District has regulatory duties and proprietary responsibilities. The PMP establishes ten planning districts covering approximately 5,500 acres of District jurisdiction. The project site is in the Centre City Embarcadero Planning District (Planning District 3), within the Marina Zone and Convention Way Basin Subareas of the PMP (Subareas 35 and 36, respectively). The planning district encompasses approximately 434 acres and contains a balanced distribution of commercial, industrial, public recreation, and public facility uses. The landside portion of the project site is currently designated in the PMP for commercial recreation, park/plaza, and promenade uses, while the waterside portion of the site is designated for recreational boat berthing, specialized berthing, and ship navigation corridor, as shown on Figure 2-3.

Project staging and construction laydown would be provided at the project site. Construction parking would occur off site at Tailgate Park located at 1299 Imperial Avenue and/or the Economy Lot at the San Diego International Airport, located at 3365 Admiral Borland Way. Shuttles would be used to transport the construction workers to the project site. All proposed staging areas are paved or heavily disturbed with no existing vegetation.

Section 2.5, Page 2-8

The waterside portion of the project site is part of the Bay and includes an existing 12-slip marina for yacht and sailboat docking, ferry landing, and on-call water transportation services. <u>The existing slip mix consists of three 170-foot slips, four 125-foot slips, two 115-foot slips, one 233-foot slip, and two 130-foot slips.</u> As discussed in Section 4.3, *Biological Resources*, the marine habitat types include unvegetated soft bottom, vegetated soft bottom, docks and piles, armored rocky bottom, intertidal rip-rap and seawall, and open water.

5.2.3 Changes to Chapter 3, Project Description

Please see Attachment 4 of the Final EIR for the revisions to Chapter 3, *Project Description*, of the Draft EIR.

5.2.4 Changes to Section 4.1, Aesthetics and Visual Resources

Section 4.1.4.3

Pages 4.1-23 and 4.1-24

KOP 2

Existing views from KOP 2 consist of the project site in the foreground and expansive views of the Bay and of Coronado in the middleground and background. The temporary use of large construction equipment and construction-related activity at the project site would dominate the viewshed of KOP 2 for a period of 24 to 30 months. Construction activities would introduce an electric tower crane (approximately 548 feet high) that would increase in height for approximately 24 to 30 months during the construction of the proposed market-rate hotel tower and another electric tower crane for approximately 7 months during the construction of the lower-cost visitor-serving hotel. In addition, man-lifts, scaffolding, and the steel framing of the two hotels and the other landside project elements would be visible during construction immediately in front of KOP 2. Given the short distance between KOP 2 and the project site as well as the intensity of construction activities (i.e., construction of more than 900,000 square feet of new building area on a site that currently contains parking lots), the presence of construction activities within the viewshed of KOP 2 would substantially interfere with, if not entirely block, the existing views of the Bay and Coronado for most of the duration of the construction period. Therefore, construction activities associated with the proposed project, including construction activities associated with replacement of utilities from the project site to Convention Way, would result in significant temporary impacts on vista areas from KOP 2 (Impact-AES-1). Implementation of MM-AES-1 would be required.

The proposed project includes the construction of an optional connecting pedestrian bridge that would provide a direct connection from the SDCC to the rooftop public access plaza and park area. Although the bridge may provide some additional view angles between the proposed project and the SDCC, the construction of the bridge would not reduce the significant impact from the proposed project related to the obstruction of views within a vista area (i.e., **Impact-AES-2**), as the hotel tower would continue to dominate views from the SDCC viewing deck to the southwest whether or not the bridge is constructed. Therefore, the proposed optional pedestrian bridge would not result in additional impacts on vista areas, nor would it reduce impacts.

Pages 4.1-25 and 4.1-26

KOP 1

KOP 1 is located at Centennial Park in Coronado, approximately 0.6 mile west of the project site across the San Diego Bay, and existing views include expansive foreground views of the Bay with views of the SDCC in the middleground and downtown San Diego in the background. From the vantage point of KOP 1, the market-rate hotel tower would become one of the most visually prominent elements of the downtown San Diego skyline (see Figure 4.1-8). Within the KOP 1 viewshed, the proposed building would be <u>the tallest hotel tower along the waterfront but it is</u> comparable in height and massing to the Hilton San Diego Bayfront Hotel, the Manchester Grand Hyatt, and the two towers of the Harbor Club Condominiums. In general, the proposed market-rate hotel tower would blend with and become part of the skyline views of downtown San Diego that are visible from KOP 1 and would not detract from the scenic vista, interfere with the open-water views of the Bay, or block any unique visual elements within the viewshed. In addition, the other elements of the proposed project, including the five-story lower-cost visitor-serving hotel and the marina expansion, would not be prominently visible from KOP 1, would be obscured by trees at EMPS, and would blend in with the overall structure of the SDCC. Therefore, impacts on scenic vistas from KOP 1 would be less than significant.

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Although the proposed hotel tower would be the tallest tower along the waterfront, Ithe intensity of development that the proposed project would bring to the site would also be consistent with the intensity of the surrounding uses. Other nearby bayfront hotels, including the Hilton San Diego Bayfront, the Marriott Marquis San Diego Marina, and the Manchester Grand Hyatt, all contain highrise towers that are situated near the waterfront with other lower-rise components, including parking structures and ballroom/meeting areas, spread across the other portions of their respective sites. In addition, the design of the proposed marina expansion would involve features that are standard to recreational marinas (e.g., similar construction materials, width of walkways and slips, height above water), and this project element would correspond to the existing marina as well as other nearby marinas that provide slips for large and small vessels.

Changes to Section 4.2, Air Quality and Health Risk 5.2.5

Section 4.2.2.2

Pages 4.2.-4 and 4.2-5

Criteria Pollutant	Federal Designation	State Designation
Ozone (O ₃) (8-hour)	Nonattainment – Marginal<u>Moderate</u>	Nonattainment
Carbon Monoxide (CO)	Attainment /Maintenance	Attainment
Respirable Particulate Matter (PM10)	Unclassifiable /Attainment¹	Nonattainment
Fine Particulate Matter (PM2.5)	Attainment	Nonattainment
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified 1
Visibility	(No federal standard)	Unclassified

Table 4.2-2. Federal and State Attainment Status for San Diego County

¹ At the time of designation, if the available data do not support a designation of attainment or

nonattainment, the area is designated as unclassifiable.

Table 4.2-3. Ambient Background Concentrations from the San Diego–Beardsley Street Monitoring Station

Pollutant Standards	2012	2013	2014	2015	<u>2016</u>
1-Hour Ozone (O ₃)					
Maximum Concentration (ppm)	0.071	0.063	0.093	0.089	<u>0.072</u>
Number of Days Standard Exceeded					
CAAQS 1-hour (>0.09 ppm)	0	0	0	0	<u>0</u>

Pollutant Standards	2012	2013	2014	2015	<u>2016</u>
8-Hour Ozone (O3)					
State Maximum Concentration (ppm)	0.065	0.053	0.073	0.067	0.061
National Maximum Concentration (ppm)	0.065	0.053	0.072	0.067	<u>0.061</u>
National 4 th Highest Concentration (ppm)	0.052	0.052	0.068	0.061	<u>0.058</u>
Number of days standard exceeded					
CAAQS 8-hour (>0.070 ppm)	0	0	2	0	<u>0</u>
NAAQS 8-hour (> 0.075 ppm)	0	0	0	0	<u>0</u>
Carbon Monoxide (CO)					
Maximum Concentration 8-hour Period (ppm)	1.9	2.1	1.9	1.9	<u>1.7</u>
Maximum Concentration 1-hour Period (ppm)	2.6	3.0	2.7	2.6	<u>2.2</u>
Number of days standard exceeded					
NAAQS 8-hour (≥9 ppm)	0	0	0	0	<u>0</u>
CAAQS 8-hour (≥9.0 ppm)	0	0	0	0	<u>0</u>
NAAQS 1-hour (≥35 ppm)	0	0	0	0	<u>0</u>
CAAQS 1-hour (≥20 ppm)	0	0	0	0	<u>0</u>
Nitrogen Dioxide (NO ₂)					
Maximum 1-hour Concentration	65.0	72.0	75.0	62.0	<u>73.0</u>
Annual Average Concentration	13	14	13	14	*
Number of Days Standard Exceeded					
CAAQS 1-Hour (0.18 ppm)	0	0	0	0	<u>0</u>
NAAQS 1-Hour (0.100 ppm)	0	0	0	0	<u>0</u>
Suspended Particulates (PM10)					
State Maximum 24-hour Concentration	47.0	92.0	41.0	54.0	<u>51.0</u>
National Maximum 24-hour Concentration	45.0	90.0	40.0	53.0	<u>49.0</u>
State Annual Average Concentration (CAAQS = 20 $\mu g/m^3$)	22.2	25.4	23.8	23.0	*
Number of Days Standard Exceeded					
CAAQS 24-hour (>50 μg/m ³)	0	1	0	0	*
NAAQS 24-hour (>150 μg/m³) - Expected Days	0	0	0	0	<u>0</u>
Suspended Particulates (PM2.5)					
National Maximum 24-hour Concentration (µg/m ³)	39.8	37.4	36.7	44.9	<u>34.4</u>
24-hour Standard 98 th Percentile (µg/m ³)	24.1	19.6	24.8	19.6	*
National Annual Average Concentration (NAAQS = 12.0 µg/m³)	11.0	10.3	10.1	9.3	*
State Annual Average Concentration (CAAQS = 12 $\mu g/m^3$)		10.4	10.2	10.2	*
Number of Days Standard Exceeded					
NAAQS 24-Hour (>35 μg/m³)	1	1	1	0	0

Section 4.2.2.3

Pages 4.2-6 through 4.2-8

Criteria Pollutants

As discussed above, the federal and state governments have established NAAQS and CAAQS, respectively, for six criteria pollutants: O₃, lead, CO, NO₂, sulfur dioxide (SO₂), and PM10 and PM2.5. Ozone and NO₂ are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as PM10, PM2.5, CO, SO₂, and lead are considered local pollutants that tend to accumulate in the air locally.

All criteria pollutants can have human health and environmental effects at certain concentrations. The ambient air quality standards for these pollutants (Table 4.2-7) are set to protect public health and the environment within an adequate margin of safety (CAA Section 109). Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants, and form the scientific basis for new and revised ambient air quality standards.

The primary pollutants of concern in the project area are O_3 (including NO_X and reactive organic gases [ROGs]), CO, and PM. Principal characteristics surrounding these pollutants are discussed below.

• **Ozone**, or smog, is a photochemical oxidant that is formed when ROG and NO_X (both by-products of the internal combustion engine) react with sunlight. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Additionally, O₃ has been tied to crop damage, typically in the form of stunted growth and premature death. O₃ can also act as a corrosive, resulting in property damage such as the degradation of rubber products. Meteorology and terrain play major roles in O₃ formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O₃ is considered a regional pollutant; high levels often occur downwind of the emission source because of the length of time between when the ROG form and when they react with light to change to O₃.

Ozone poses a higher risk to those who already suffer from respiratory diseases (e.g., asthma), children, older adults, and people who are active outdoors. Exposure to O_3 at certain concentrations can make breathing more difficult, cause shortness of breath and coughing, inflame and damage the airways, aggregate lung diseases, increase the frequency of asthma attacks, and cause chronic obstructive pulmonary disease. Studies show associations between short-term O_3 exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O_3 may increase the risk of respiratory-related deaths (EPA 2020b). The concentration of O_3 at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies

show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion (ppb) of O_3 and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O_3 concentration reaches 80 ppb (EPA 2016a).

In addition to human health effect, O_3 has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. Ozone can also act as a corrosive and oxidant, resulting in property damage, such as the degradation of rubber products and other materials.

• **Organic Gases—Precursors to Ozone** include ROGs and volatile organic compounds (VOCs). HC are organic gases that are formed solely of hydrogen and carbon. ROGs include all HC except those exempted by ARB. Therefore, ROGs are a set of organic gases based on state rules and regulations. VOCs are similar to ROGs in that they include all organic gases except those exempted by federal law. Both VOCs and ROGs are emitted from incomplete combustion of HC or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of HC. Another source of HC is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint. Generally speaking, and in this analysis, ROGs and VOCs are used interchangeably to refer to the HC that are a precursor to O₃ formation.

The primary health effects of HC result from the formation of O_3 and its related health effects. High levels of HC in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. There are no separate ambient air quality standards for ROGs. Carcinogenic forms of ROG are considered to be toxic air contaminants (TACs), which are described below. An example is benzene, which is a carcinogen.

- Nitrogen Oxides serve as integral participants in the process of photochemical smog production. The two major forms of NO_x are nitric oxide (NO) and NO₂. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO₂ is a reddish-brown irritating gas formed by the combination of NO and oxygen. NO_x acts as an acute respiratory irritant and increases susceptibility to respiratory pathogens. NO_x is a precursor to O₃ formation. Long-term exposure to NO₂ can aggravate respiratory diseases, such as asthma, leading to increased hospital admissions (EPA 2016b). Controlled studies demonstrate effects (airway reactivity) among asthmatics at a short-term (less than 3 hours) exposure to 0.3 part per million NO₂. Effects among healthy individuals occurred at high levels of exposure (1.5 to 2 ppm) (McConnell et al. 2002). For reference, the 1-hour CAAQS for NO₂ is 0.18 ppm (see Table 4.2-7). In addition to human health effects, NO₂ can also reduce visibility and react with water, oxygen, and other chemicals to contribute to acid rain, which can harm sensitive ecosystems (EPA 2016b).
- **Carbon Monoxide** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation. Exposure to CO at concentrations above the CAAQS or NAAQS (see Table 4.2-3) can also cause fatigue. headaches, confusion, dizziness, and chest pain. Ambient CO has no ecological or environmental effects (ARB 2020).

Particulate Matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized—inhalable course particles, or PM10, and inhalable fine particles, or PM2.5. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind on arid landscapes also contributes substantially to local particulate loading. Additionally, secondary formation of PM, primarily in the form of fine particulate, occurs through the chemical transformation of precursors such as NO_X, SO₂, ammonia, and ROGs. Both PM10 and PM2.5 may adversely affect the human respiratory system, especially in those people who are naturally sensitive or susceptible to breathing problems.

Particulate pollution can be transported over long distances and may adversely affect people, especially those who are naturally sensitive or susceptible to breathing problems. Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease. Other symptoms of exposure may include nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Exposure to concentrations of PM above the current ambient air quality standards may result in these health effects (ARB 2016). Similar to ozone, the elderly and those with preexisting heart and lung diseases are at greater risk to the harmful effects of PM exposure. Children are also at increased risk because they breathe faster than adults, and therefore inhale more air per pound of body weight and tend to spend more time outdoors. The CAAQS and NAAQS for PM are set to protect these sensitive populations and define the number of particles that can be present in outdoor air without threatening the health of infants, children, or the elderly (ARB 2016). The CAAQS and NAAQS for PM are shown in Table 4.2-7.

Depending on its composition, both PM10 and PM2.5 can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (EPA 2020c).

Section 4.2.2.4

Page 4.2-11, Note to Table 4.2-5

Notes: Totals may not add exactly due to rounding. -2020 is assumed to be future year for discussion purposes.

Section 4.2.3.1

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Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy Standards (CAFE) were first enacted in 1975 to improve the average fuel economy of cars and light-duty trucks. However, on August 2, 2018, the National Highway Traffic Safety Administration (NHTSA) and USEPA proposed to amend the fuel efficiency standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026 by maintaining the current model year 2020 standards through 2026 (Safer Affordable Fuel-Efficient [SAFE] Vehicles Rule). On September 19, 2019, EPA and NHTSA issued a final action on the One National Program Rule, which is consider Part One of the SAFE Vehicles Rule and a precursor to the proposed fuel efficiency standards. The One National Program Rule enables EPA/NHTSA to provide nationwide uniform fuel economy and greenhouse gas (GHG) vehicle standards, specifically by: (1) clarifying that federal law preempts state and local tailpipe GHG

standards, (2) affirming NHTSA's statutory authority to set nationally applicable fuel economy standards, and (3) withdrawing California's CAA preemption waiver to set state-specific standards.

EPA and NHTSA published their decisions to withdraw California's waiver and finalize regulatory text related to the preemption on September 27, 2019 (84 *Federal Register* [FR] 51310). California, 22 other states, the District of Columbia, and two cities filed suit against Part One of the SAFE Vehicles Rule on September 20, 2019 (*California et al. v. United States Department of Transportation et al.*, 1:19-cv-02826, U.S. District Court for the District of Columbia). On October 28, 2019, the Union of Concerned Scientists, Environmental Defense Fund, and other groups filed a protective petition for review after the federal government sought to transfer the suit to the D.C. Circuit (*Union of Concerned Scientists v. National Highway Traffic Safety Administration*). Opening briefs for the petition are currently scheduled to be completed on November 23, 2020. -The lawsuit filed by *California and others is stayed pending resolution of the petition*.

<u>EPA and NHTSA published final rules to amend and establish national carbon dioxide and fuel</u> economy standards on April 30, 2020 (Part Two of the SAFE Vehicles Rule) (85 FR 24174). The revised rule changes the national fuel economy standards for light-duty vehicles from 46.7 miles per gallon to 40.4 miles per gallon in future years.- California, 22 other states, and the District of Columbia filed a petition for review of the final rule on May 27, 2020. The fate of the SAFE Vehicles Rule remains uncertain in the face of pending legal deliberations.

Section 4.2.3.2

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Assembly Bill 617

AB 617 established the Community Air Protection Program (CAPP), which requires new community focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants. Communities identified for monitoring include Portside Environmental Justice Neighborhoods of Barrio Logan as well as portions of National City, Sherman Heights, and Logan Heights. The SDAPCD will implement the CAPP in San Diego County, which will eventually lead to additional pollution monitoring and additional requirements through the following: accelerated installation of pollution controls on industrial sources like oil refineries, cement plants, and glass manufacturers; expanded air quality monitoring within communities; increased penalties for violations of emissions control limits: and greater transparency and improved public access to air quality and emissions data through enhanced online web tools. The AB 617 Steering Committee includes local stakeholders. technical and scientific experts, and members of local industry. The draft Community Emissions Reduction Plan (CERP) was released in August 2020, and contains detailed strategies for reducing both air pollution emissions and the community's exposure to air pollution emissions in the San Diego Portside Community. The ARB, SDAPCD, and Steering Committee will be monitoring the progress of CERP implementation, accompanied by on-going community engagement and plan evaluation and refinement (SDAPCD 2020b).

Section 4.2.3.3

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ARB is currently working on an update to the SIP and recently released arecently adopted the Revised Proposed 2016 State Strategy for the State Implementation Plan (2016 SIP Update). for the SIP. This strategy describes proposed State measures to achieve the reductions necessary from the mobile sector and consumer products to meet O₃ and PM2.5 NAAQS over the next 15 years. The 2016 SIP update will incorporate regional SIPs (to be developed) as well as the Scoping Plan Update, California's Sustainable Freight Action Plan, the Short-Lived Climate Pollutant Strategy, and implementation of Senate Bill 375. ARB notes that while existing programs have achieved tremendous success in reducing NO_X emissions, further reductions are required.

Section 4.2.4.1

Pages 4.2-20 through 4.2-22

It is projected that landside construction would occur in four phases between <u>the 2021 and 2024</u> <u>timeframe2018 and 2021</u>. Each sub-phase of construction would be composed of several activities, such as demolition of existing uses, foundations, and structural frame. Phasing information, including the projected construction schedule, construction equipment, material quantities, and truck trip quantities, was obtained from the project proponent and is contained within Appendix D...

....

• Fugitive VOC emissions associated with architectural coatings were calculated using emissions factors and calculation methodologies contained in the CalEEMod User's Guide. The architectural coatings emissions estimates are based on 796,000911,736 gross square feet of new construction associated with the market-rate hotel tower, <u>68</u>0,000 gross square feet associated with the lower-cost, visitor-serving hotel, <u>102</u>,000 square feet associated with the water transportation center, and <u>131,4159109,676</u> gross square feet associated with other surfaces, including the optional bridge connection (1,900-882 square feet), public plaza and park areas (<u>95,25885,490</u> square feet), retail storefronts (<u>6,0257,749</u> square feet), and parking structure (<u>5,120-4,787</u> square feet painted). Note that the assumption regarding the parking structure is based on the CalEEMod default assumption that 6% of parking areas is painted (e.g., for striping). Emissions calculations assume a CalEEMod default VOC content of 250 grams per liter for both interior and exterior coatings.

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Waterside Components

Construction of Phase I marina expansion is expected to begin when the hotel is nearly complete and take 6 to 9 months to complete. Based on the landside construction schedule, it was assumed that Phase I marina construction would begin in fall <u>2020-2023</u> and last through early summer <u>20212024</u>, when the hotel is expected to be complete. The marina includes two phases: Phase I, which includes 23 new slips and the WTC, is expected to overlap with hotel construction and be ready for opening day of the project, while Phase II, which includes 27 additional slips, is expected to be built at a later date based on market conditions, which is anticipated to be approximately 5 years after the hotel is operational. Both phases of marina construction would include the use of barge-based equipment to install docks, tugs to bring barges to and from the staging area, skiffs to push docks around, and a push boat....

Operation

Operation of the proposed project would generate emissions of ROG, NO_X, CO, SO_X, PM10, and PM2.5 that could result in long-term impacts on ambient air quality in the study area. The proposed project would include both landside and waterside elements. Emissions would result from motor vehicle trip generation, onsite combustion of natural gas for space and water heating, consumer products (cleaning supplies, kitchen aerosols, cosmetics, and toiletries), the re-application of architectural coatings, and recreational boating, including continuation of ferry services and additional slips that would expand recreational boating opportunities. Mass daily emissions were estimated using a combination of emission methods and emission factors from published best available documentation. In particular, emissions from landside activities are based on the methods, assumptions, and data sources within CalEEMod using emission factors from ARB's EMFAC2014 model, ARB's commercial harbor craft emissions model (ARB 2010), and EPA's AP-42 Compilation of Air Pollutant Emission Factors. Emissions from waterside activities were estimated based on methodologies and guidance published by ARB for estimating emissions from commercial and personal watercraft and activity information provided by the project proponent, including ferry activity and yacht duration at berth. While Phase II of the marina expansion is not expected to be operational at the project's opening day of 20212025, this analysis assumes that the proposed project, including Phase II of the marina expansion, would be operational in 20212025.

Note that GHG emissions from increased use of electricity from building and yacht cold ironing, water use, and waste generation at the project site is discussed solely in Section 4.6, *Greenhouse Gas Emissions and Climate Change.*

Landside Components

Mass daily criteria pollutant emissions associated with the landside components (market-rate hotel tower, lower-cost visitor-serving hotel, WTC, retail, and public plaza and park areas) were estimated based on a combination of input from the project proponent and emission calculation defaults within the above emission calculation models. Below is a description of the various sources and the methods used to estimate mass daily emissions.

 Emissions from motor vehicle travel were estimated using trip generation provided by Chen Ryan (Appendix K-1), CalEEMod default trip lengths and mode and destination splits for commercial uses, exhaust emission rates from ARB's EMFAC2014 web tool, and re-entrained paved road dust emission factors developed using EPA (2011) and ARB (2014) methods.
 Emissions were estimated based on the average vehicle fleet operating in San Diego County in 202<u>51</u>, the year the project is estimated to open, using the same methodology used in CalEEMod.
 Exhaust emissions include running emissions for all pollutants, running ROG losses, and PM10 and PM2.5 emissions from tire wear, brake wear, and paved road dust....

Page 4.2-28

Health-Based Thresholds for Project-Generated Pollutants of Human Health Concern

The thresholds presented in Table 4.2-8 consider existing air quality concentrations and attainment or nonattainment designations under the NAAOS and CAAOS. The NAAOS and CAAOS are informed by a wide range of scientific evidence that demonstrates there are known safe concentrations of criteria pollutants. While recognizing that air quality is a cumulative problem, SDAPCD considers projects that generate criteria pollutant and O₃ precursor emissions below these thresholds to be minor in nature and would not adversely affect air quality because the health-protective NAAOS or CAAQS would not be exceeded. Regional emissions generated by the proposed project could increase photochemical reactions and the formation of tropospheric O_3 and secondary PM, which, at certain concentrations, could lead to increased incidence of specific health consequences. Although these health effects are associated with O_3 and particulate pollution, the effects are a result of cumulative and regional emissions. As such, for a project with relatively small emissions contributions (i.e., emissions below the regional air district thresholds), that project's incremental contribution cannot be traced to specific health outcomes on a regional scale, and a quantitative correlation of project-generated regional criteria pollutant emissions to specific human health impacts is not technically feasible. Similarly, there are no publicly available models that can precisely correlate localized CO, PM, and SO₂ emissions to health consequences at specific locations. Refer to Appendix C for additional information.

As discussed above, all criteria pollutants are associated with some form of health risk (e.g., asthma, asphyxiation). Adverse health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). Moreover, O3 precursors (ROG and NOX) affect air quality on a regional scale. Health effects related to O3 are therefore the product of emissions generated by numerous sources throughout a region. As part of the setting and updating of the NAAQS, EPA periodically develops and considers quantitative characterizations of exposures and associated risks to human health or the environment, known as a Health Risk and Exposure Assessment (HREA), with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2016b). The HREA estimates mortality (e.g., incidents of death) and morbidity (e.g., incidents of reduced lung function) effects associated with a full range of observed pollutant concentrations as part of the analysis (EPA 2014). However, existing models have limited sensitivity to small changes in criteria pollutant concentrations and, as such, translating project-generated criteria pollutants to specific health effects using the regional ozone models would not produce meaningful information, as the project's emissions are unlikely to even show up in the model results. In other words, minor increases in regional air pollution from project generated ROG and NOX would have nominal or negligible impacts on human health.

As such, an analysis of impacts on human health associated with project-generated regional emissions is not included in the project-level analysis. Increased emissions of O3 precursors (ROG and NOX) generated by the project could increase photochemical reactions and the formation of tropospheric O3, which, at certain concentrations, could lead to respiratory symptoms (e.g., coughing), decreased lung function, and inflammation of airways. Although these health effects are associated with O3, the impacts are a result of cumulative and regional ROG and NOX emissions, and the incremental contribution of the project to specific health outcomes from criteria pollutant emissions would be limited and cannot be solely traced to the project.

Because localized pollutants generated by a project can directly affect adjacent sensitive receptors, the analysis of project-related impacts on human health focuses only on those localized pollutants with the greatest potential to result in a significant, material impact on human health. This is consistent with the current state of practice and published guidance by the California Air Pollution Control Officers Association (CAPCOA 2009), OEHHA (2015), SDAPCD (2006), and ARB (2000). These localized pollutants are (1) localized CO concentrations, (2) toxic air contaminants, including DPM, and (3) asbestos.Locally adopted thresholds of significance for each pollutant are identified below. Note that a qualitative health-based analysis of criteria pollutants is briefly discussed under Threshold 4, but the health-based analysis focuses primarily on CO and DPM, which are most often associated with adverse health outcomes (i.e., acute, chronic, and cancer risks) as opposed to the respiratory irritability outcomes typically seen from exposure to elevated concentrations of the criteria pollutants discussed above.

Table 4.2-9. Estimate of Construction Emissions Prior to Mitigation (pounds per day)

Construction Phase	VOC	NOx	CO	SOx	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total
Phase 1: Mobilization and Site Preparation										
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas										
Excavation and Foundation	5	83	31	2	2	16	18	2	6	7
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	69<u>79</u>	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	10 7	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	<u>4337</u>	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	128<u>129</u>	123	163	<1	3	29	32	3	9	12
San Diego County SLTs	75	250	550	150			100			55
Exceed Significant Threshold?	Yes	No	No	No			No			No
Source: ICF Emissions Modeling (Appendix D) <u>and Attac</u> Notes: Maximum daily emissions for each pollutant varie				ie to rou	nding.					

Element	Source	VOC	NOx	CO	SOx	PM10	PM2.5
Market-Rate Hotel Tower	Visitors (Vehicles)	<u>13</u> 17	<u>36</u> 49	<u>99127</u>	<1	35	10
	Natural Gas	1	9<u>11</u>	7 9	<1	1	1
	Consumer Products	<u>1720</u>	0	0	<1	<1	<1
	Architectural Coatings	3	0	0	<1	<1	<1
	Subtotal	37	58<u>47</u>	134<u>108</u>	<1	35 36	10
Lower-Cost Visitor- Serving Hotel	Visitors (Vehicles)	1	4 <u>3</u>	9 7	<1	<u>33</u>	1
	Natural Gas	0	<u>31</u>	2 1	<1	<1	<1
	Architectural Coatings	<u>21</u>	<1	<1	<1	<1	<1
	Consumer Products	<1	<1	<1	<1	<1	<1
	Subtotal	4 <u>3</u>	<u>63</u>	<u>128</u>	<1	<u>33</u>	1
Marina	Visitors (Vehicles)	<1	1	4 <u>3</u>	<1	1	<1
	Natural Gas	<1	3	2	<1	<1	<1
	Consumer Products	1	<1	<1	<1	<1	<1
	Architectural Coatings	<1	<1	<1	<1	<1	<1
	Ferry Service	2	13	12	<1	<1	<1
	Recreational Boating	9	125	34	<1	<u>86</u>	7 <u>6</u>
	Subtotal	14	14 <u>23</u>	53<u>52</u>	<1	8	7
Public Open Space	Visitors (Vehicles)	<1	<1	1	<1	<1	<1
	Subtotal	<1	<1	1	<1	<1	<1
Existing Plus Project Daily		55 <u>53</u>	207<u>192</u>	199<u>164</u>	1	46 <u>44</u>	18 17
Existing Daily ¹		6	44	19	<1	3	2
Net New Over I	Existing	4 <u>947</u>	163<u>148</u>	180<u>145</u>	1	44 <u>42</u>	15
Significance Th	reshold	75	250	550	150	100	55
Exceed Significa	ant Threshold?	No	No	No	No	No	No

Table 4.2-10. Estimate of Operational Emissions Prior to Mitigation (pounds per day)

Source: ICF Emissions Modeling (Appendix D) and Attachment 2 of the Final EIR.

¹ Existing daily emissions shown in Table 4.2-6.

Notes: Totals may not add exactly due to rounding.

Mitigation Measures

Construction

For Impact-AQ-2:

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MM-AQ-3: Limit Soil Hauling Truck Counts during Excavation to Reduce Daily Construction-Related Emissions. During construction, the project proponent shall ensure that daily heavy-duty truck counts during soil hauling do not exceed 85 trucks per day. During excavation work (Phase 2.1), the project proponent shall submit record of daily truck counts to the District's Development Services Department. The District may conduct inspections during construction to verify the number of trucks do<u>es</u> not exceed 85 on a given day.

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Table 4.2-11. Estimate of Construction Emissions after Mitigation (pounds per day)

					PM10	PM10	PM10	PM2.5	PM2.5	PM2.5
Construction Phase	VOC	NOx	CO	SOx	Exhaust	Dust	Total	Exhaust	Dust	Total
Phase 1: Mobilization and Site Preparation										
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas										
Excavation and Foundation	5	83	31	2	2	16	18	2	6	7
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	<u>2124</u>	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	<u>32</u>	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	15 13	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	<u>46</u> 45	123	163	1<1	3	29	32	3	9	12
San Diego County SLTs	75	250	550	150	-	-	100	-	-	55
Exceed Significant Threshold?	No	No	No	No	-	-	No	-	-	No
Source: ICF Emissions Modeling (<u>Appendix D</u>) and Attachme Notes: Maximum daily emissions for each pollutant varies.			ctly due	to round	ling.					

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The projects identified by the District within a 0.25-mile radius of the project site include the following: Ballpark Village Parcel C (cumulative project #4), Ballpark Village Parcel D (cumulative project #5), Tenth Avenue Marine Terminal Redevelopment Plan and Demolition and Initial Rail Component Project (cumulative project #17), San Diego Convention Center Phase III Expansion and Hotel (cumulative project #89), and the Mitsubishi Cement corporation (cumulative project #93). Construction of one or more of these projects would potentially overlap with the construction of the proposed project, which is scheduled to occur between 2018 and 2021.

Pages 4.2-44 through 4.2-46

Criteria Air Pollutants

<u>High levels of criteria pollutants are associated with some form of health risk (e.g., asthma, asphyxiation).</u> Adverse health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). Moreover, O₃ precursors (ROG and NO_X) affect air quality on a regional scale. Health effects related to O₃ are therefore the product of emissions generated by numerous sources throughout a region.

As part of the setting and updating of the NAAQS, EPA develops and considers quantitative characterizations of exposures and associated risks to human health or the environment associated, known as an Health Risk and Exposure Assessment (HREA), with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2020d). The HREA estimates population exposure to and resulting mortality and morbidity health risks associated with the full range of observed pollutant concentrations, as well as incremental changes in exposures and risks associated with ambient air quality adjusted to just meeting the existing NAAQS and just meeting potential alternative NAAQS under consideration (EPA 2014).

In terms of analyzing project-related emission, the air quality thresholds applied to the proposed project (see Table 4.2-8) are based on EPA's NSR program, which sets standards consistent with the NAAQS. However, existing models have limited sensitivity to small changes in criteria pollutant concentrations and, as such, translating project-generated criteria pollutants to specific health effects would not produce meaningful information, as project-related emissions are unlikely to show up in any regional model. In other words, increases in regional air pollution from project-generated VOC and NO_X would have no effect on specific human health outcomes that could be attributed to specific project emissions. Other criteria pollutant emissions, including CO, PM10, and PM2.5, generally affect air quality on a localized scale.

<u>Health effects related to localized pollutants are the product of localized sources and emissions</u> <u>generated by numerous sources throughout a region. Certain air quality models, particularly</u> <u>dispersion models, could translate project-generated localized pollutants to specific localized health</u> <u>effects, such as nearby exposure to DPM, but these models have limited ability to translate</u> <u>project -generated pollutants to specific regional health effects.</u> As shown in Tables 4.2-9 and 4.1-11, construction of the proposed project would significantly increase emissions of ozone precursors (VOC) prior to mitigation, but mitigation would reduce emissions of ozone (VOC) to below thresholds. Furthermore, as shown in Table 4.2-10, operation of the proposed project would not significantly increase emissions of ozone precursors (VOC and NO_X). Because thresholds (see Table 4.1-8) serve as health-based thresholds, with implementation of mitigation during construction, the proposed project would not result in adverse health effects associated with criteria pollutant emissions during construction or operation. Moreover, construction and operation of the proposed project would not result in adverse health effects on the nearby populations associated with localized PM exhaust and CO, as implementation of the proposed project would result in emissions of localized pollutants (CO, PM10, and PM2.5) far below thresholds. Consequently, the health-related impacts of the proposed project's localized criteria air pollutant emissions are considered less than significant.

High levels of criteria pollutants are associated with some form of health risk (e.g., asthma, asphyxiation). Adverse health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). Moreover, ozone precursors (VOC and NOX) affect air quality on a regional scale. Health effects related to ozone are therefore the product of emissions generated by numerous sources throughout a region. As part of the setting and updating of the NAAQS, EPA develops and considers quantitative characterizations of exposures and associated risks to human health or the environment associated, known as an HREA, with recent air quality conditions and with air quality estimated to just meet the current or alternative standard(s) under consideration (EPA 2016b). The HREA estimates population exposure to and resulting mortality and morbidity health risks associated with the full range of observed pollutant concentrations, as well as incremental changes in exposures and risks associated with ambient air quality adjusted to just meeting the existing NAAQS and just meeting potential alternative NAAQS under consideration (EPA 2014). In terms of analyzing project-related emission, the air quality thresholds utilized herein (see Table 4.2-8) are based on EPA's NSR program, which sets standards consistent with the NAAOS. However, existing models have limited sensitivity to small changes in criteria pollutant concentrations and, as such, translating project-generated criteria pollutants to specific health effects would not produce meaningful information, as project-related emissions are unlikely show up in any regional model. In other words, increases in regional air pollution from project-generated VOC and NOX would have no effect on specific human health outcomes that could be attributed to specific project emissions. Other criteria pollutant emissions, including CO, PM10, and PM2.5, generally affect air quality on a localized scale. Health effects related to localized pollutants are the product of localized sources and emissions generated by numerous sources throughout a region. Certain air quality models, particularly dispersion models, have the ability to translate project-generated localized pollutants to specific localized health effects, such as nearby exposure to DPM, but these models have limited to no ability to translate project-generated pollutants to specific regional health effects.

As shown in Tables 4.2–9 and 4.2–11, construction of the proposed project would significantly increase emissions of ozone precursors (VOC) prior to mitigation, but mitigation would reduce emissions of ozone (VOC) to below thresholds. Furthermore, as shown in Table 4.2–10, operation of the proposed project would not significantly increase emissions of ozone precursors (VOC and NOX). Project-generated ozone precursors could increase photochemical reactions and the formation of tropospheric ozone, which, at certain concentrations, could lead to respiratory symptoms (e.g., coughing), decreased lung function, and inflammation of airways. Although these

health effects are associated with ozone, the impacts are a result of cumulative and regional VOC and NOX emissions. However, the incremental contribution of the project to specific health outcomes related to criteria pollutant emissions would be limited and any effects thereof would be below any health-based significance threshold (e.g., NAAQS and CAAQS). However, because the project would result in emissions below health-based thresholds (SDAPCD Trigger Levels and County SLTs; see Table 4.2-8) for VOC and NOX, operation of the proposed project would not result in adverse health effects associated with criteria pollutant emissions.

Moreover, operation of the proposed project would not result in adverse health effects on the nearby populations associated with localized PM exhaust and CO NAAQS and CAAQS. Operation of the proposed project would result in emissions of localized pollutants (CO, PM10, and PM2.5) far below thresholds. Consequently, the health-related impacts of the proposed project's localized criteria air pollutant emissions are considered less than significant.

5.2.6 Changes to Section 4.3, Biological Resources

Section 4.3.1, Pages 4.3-1 through 4.3-3

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-5: Loss of Open Water Habitat from Marina Operations	MM-BIO-5 : Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC</u> , and the District to Compensate for Loss of Open Water Habitat and Function	Less than Significant	Mitigation would adequately compensate for loss of open water habitat as a result of marina operations by providing a 1:1 ratio mitigation action in coordination with resource agencies.
Impact-BIO-6: Loss of Open Water Function from Structural Fill	MM-BIO-5: Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC,</u> and the District to Compensate for Loss of Open Water Habitat and Function	Less than Significant	Mitigation would adequately compensate for the increase in structural fill by providing a 1:1 ratio mitigation action in coordination with resource agencies.

Table 4.3-1. Summary of Significant Biological Resources Impacts and Mitigation Measures

Section 4.3.4.3

Pages 4.3-32 through 4.3-35

MM-HWQ-1: Marina Best Management Practice Plan and Copper Reduction Measures. To reduce potential impacts on water quality, the project proponent shall prepare a Marina Best

Management Practice Plan that shall be reviewed and approved by the District specifically identifying best management practices that will be used within the Marina to (1) minimize the pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively protect water quality of the Bay and (2) reduce inputs of total and dissolved copper resulting from increased berthing of boats. The Marina Best Management Practice Plan and Copper Reduction Measures shall be reviewed and approved by the District prior to the opening of marina operations. The Marina Operator shall be responsible for implementation and maintenance of the Marina Best Management Practice Plan and Copper Reduction Measures. At a minimum, the Marina Best Management Practice Plan shall include, but not be limited to, the following:

- Use of educational materials to be provided to boat owners and their crews that specify types of activities that shall be avoided or types of BMPs that shall be implemented in order to protect water quality, such as emptying of septic tanks and refueling only at approved locations, respectively. Recommendations to reduce oil leaks include conducting periodic maintenance of all fuel lines, hoses, and gaskets; putting an oil-absorbent pad in the bilge; and installing a filtration system to remove oil from bilge water.
- Docking agreements containing specific use restrictions to prevent degradation of water quality, such as restricting boat repairs and cleaning operations within the marina. These specific use restrictions shall be similar to the recommendations from the *San Diego Bay Boaters Guide* (District 2006) and the California State Parks Division of Boating and Waterways and the California Coastal Commission Boating Clean and Green Program (California DBW 2017), both of which promote environmentally sound boating practices to marine business and boaters in California.
- Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats.
- Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina.
- Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, and no overwater repairs would be allowed.
- Implementation and monitoring of the District-adopted in-water hull cleaning regulations. Ordinance No. 2681 requires the use of BMPs for businesses doing in-water hull cleaning. The In-Water Hull Cleaning Permit is a Bay-wide permit to reduce or eliminate copper pollution caused by in-water hull cleaning activities.
- Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year).
- No fueling on site.

MM-HWQ-2: Water Quality Sampling for Total and Dissolved Copper. Prior to the commencement of marina development, the project proponent shall conduct water quality sampling to develop an updated baseline for total and dissolved copper as follows:

• Develop a sampling and analysis plan that will be reviewed and approved by the District prior to sampling. The plan shall identify a minimum of three points, denoting edges and midpoint of marina footprint.

- Sample for total and dissolved copper. The project proponent shall use an Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for all analytical testing.
- Compare dissolved copper levels to Basin Plan water quality objectives.
- The project proponent shall submit the baseline monitoring report to the District for its review and approval.

The project proponent shall conduct ongoing water quality monitoring and testing for total and dissolved copper, following the process outlined above for the updated baseline sampling, over the course of marina development/occupancy at the following frequency for each phase of marina development:

- After 50% occupancy,
- After 75% occupancy, and
- After full occupancy (95% slips under rental agreements).

Reports of all monitoring and testing results shall be prepared and paid for by the project proponent <u>(i.e., tenant)</u> and submitted to the District's Development Services Department for review and approval within 30 days after the occupancy milestones identified above.

If at any time during monitoring the water quality equals or exceeds or the Basin Plan water quality objectives and comparison with the updated baseline indicates that the exceedance is a result of the proposed project, the project proponent shall immediately notify the District's Development Services Department and shall immediately cease further development and/or occupancy until additional BMPs addressing the issue are employed and reduce the copper levels.

Water quality testing shall occur every year following full occupancy of the marina or until the marina is fully occupied by non-copper hulled boats. The project proponent shall prepare written reports of the water quality testing results annually and submit the reports to the District's Development Services Department for review and approval within 30 days after the end of each calendar year. Any exceedance attributed to the proposed project (based on a comparison with the updated baseline assessment) shall require additional BMPs if determined necessary to reduce total and dissolved copper to below the Basin Plan water quality objectives.

BMPs that must be considered include, but are not limited to:

- Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats.
- Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina.
- Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, and no overwater repairs would be allowed.
- <u>Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year).</u>

If the project proponent (i.e. tenant) finds that one or more are infeasible, the tenant must provide written proof of infeasibility, which shall be subject to District review and concurrence. BMPs that are implemented must reduce total and dissolved copper to levels below the Basin Plan water quality objectives.

For Impact-BIO-2:

MM-BIO-2: Implement a Marine Mammal and Green Sea Turtle Monitoring Program During Pile Driving Activities. Prior to construction activities involving in-water pile driving, the project proponent shall prepare and implement a marine mammal and green sea turtle monitoring program. This monitoring program shall be approved by the District and shall include the following requirements:

- For a period of 15 minutes prior to the start of in-water construction, a qualified biologist, retained by the project proponent and approved by the District's Director of Real Estate Development or designee of the District, shall monitor a 384-foot surface radius around the active pile driving areas to ensure that special-status species are not present.
- The construction contractor shall not start work if any observations of special-status species are made prior to starting pile driving.
- In-water pile driving within the marina shall begin with soft starts, gradually increasing the force of the pile driving.
- Level B harassment of marine mammals and green sea turtles (harassment level leading to behavior modification) from pile driving shall be avoided at a distance of 384 feet.
- Monitoring by a qualified biologist for marine mammals and green sea turtles within 384
 feet shall be implemented during all pile driving activities to prevent impacts on these
 species by identifying when they are approaching or within 384 feet, and by coordinating
 with construction crews to halt pile driving until the species have left this area. In addition,
 hydroacoustic monitoring shall be conducted during all pile driving activities and the
 qualified biologist shall work directly with construction contractor to ensure that noise
 levels remain at levels that would not affect any marine species, including fish.
- All monitors must meet the minimum requirements as defined by the National Oceanic Atmospheric Administration's *Guidance for Developing a Marine Mammal Monitoring Plan* (NOAA 2017).

Implement MM-BIO-1: Avoid California Least Tern Breeding Season or Implement Construction Measures to Eliminate Impacts on California Least Tern Breeding, as described above.

For Impact-BIO-3:

MM-BIO-3: Avoid Nesting Season for Birds or Conduct Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the California Fish and Game Code, the project proponent shall conduct all vegetation removal (e.g., ornamental trees) during the non-breeding season between September 1 and February 14 or shall implement the following:

• If construction activities are scheduled between February 15 and August 31, the project proponent shall retain a qualified ornithologist (with knowledge of the species to be surveyed) who shall conduct a focused nesting bird survey within potential nesting habitat prior to the start of vegetation removal. The survey shall be submitted to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of vegetation removal on the project site.

- The nesting bird survey area shall include the entire limits of disturbance plus a 300-foot buffer for non-raptors and a 500-foot buffer for raptors to ensure indirect impacts would be avoided. The nesting surveys shall be conducted within 1 week prior to initiation of construction activities and shall consist of a thorough inspection of the project area by a qualified ornithologist(s). The survey shall occur between sunrise and 12:00 p.m., when birds are most active. If no active nests are detected during these surveys, only a letter report documenting the results shall be prepared.
- If the survey confirms nesting within 300 feet of the disturbance footprint for non-raptors or within 500 feet for raptors, a no-disturbance buffer shall be established around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints of the no-disturbance buffer shall be determined by the qualified biologist, in consultation with the California Department of Fish and Wildlife, at the time of discovery, but shall not be greater than 300 feet for non-raptors and 500 feet for raptors. If there is a delay of more than 7 days between when the nesting bird survey is performed and vegetation removal begins, the qualified biologist shall resurvey to confirm that no new nests have been established. In addition, if any subsequent reports are prepared, the reports shall be sent to the District and California Department of Fish and Wildlife.

Pages 4.3-35 through 4.3-38

For Impact-BIO-4:

MM-BIO-4: Implement Bird Strike Reduction Measures on New Structures. Prior to issuance of any building permits, building plans shall be reviewed by an ornithologist familiar with local species, retained by the developer and approved by the District, to verify that the proposed building has incorporated specific design strategies that qualify for Leadership in Energy and Environmental Design (LEED) credits, as described in the American Bird Conservancy's *Bird-Friendly Building Design* (Sheppard and Phillips 2015) or an equivalent guide to avoid or reduce the potential for bird strikes. Final building design must demonstrate to the satisfaction of the ornithologist and the District that design strategies will be in accordance with the *Bird-Friendly Building Design*, and confirmed with USFWS and/or CDFW by incorporating strategies to minimize the threat to avian species, including but not limited to the following:

- Building Façade and Site Structures
 - Develop a building façade and site design that are visible as physical barriers to birds
- Incorporate elements like netting, screens, grilles, shutters, and exterior shades to preclude collisions
 - Incorporate materials that have a low threat potential based on the Bird Collision Threat Rating and the Bird Collision Threat Rating Calculation Spreadsheet to achieve a maximum total building Bird Collision Threat Rating of 15 or less.
 - High Threat Potential: Glass: Highly reflective and/or completely transparent surface
 - Least Threat Potential: Opaque Surface

- Exterior Lighting
 - Fixtures not necessary for safety, entrances, and circulation shall be automatically shut off from midnight until 6:00 a.m.
 - Exterior luminaires must meet these requirements for all exterior luminaires located inside project boundary based on the following:
 - Photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and
 - The lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the *Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide* (2011).
- Performance Monitoring Plan
 - Develop a 3-year post-construction monitoring plan to routinely monitor the effectiveness of the building and site design in preventing bird collisions. Include methods to identify and document locations where repeated bird strikes occur, the number of collisions, the date, the approximate time, and features that may be contributing to collisions. List potential design solutions and provide a process for voluntary corrective action.
 - Provide a performance monitoring report demonstrating which design strategies have been incorporated and results of performance monitoring for District review.review and approval by the District, USFWS, and/or CDFW.

A full list and explanation of these design strategies can be found in Appendix E-4.

For Impact-BIO-5 and Impact-BIO-6:

MM-BIO-5: Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC.</u> and the District to Compensate for Loss of **Open Water Habitat and Function**. The project proponent shall implement the following:

- 1. Prior to issuance of a Coastal Development Permit, the project proponent shall request and participate in stakeholder meetings with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC</u>, and the District to identify locations within San Diego Bay or the San Diego region to mitigate impacts on both sensitive avian species and nearshore habitat associated with loss of beneficial uses associated with overwater coverage and loss of open water habitat function as a result of increased structural fill within the Bay.
- 2. Prior to the commencement of construction activities of the marina expansion, the project proponent shall implement one of the following mitigation options, or a combination thereof, that are listed below in order of preference; however, selection of 2.A, 2.B, 2.C and 2.D, or an equivalent combination thereof, would successfully reduce **Impact-BIO-5** to a level below significance.
 - A. Remove 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill within San Diego Bay or San Diego region, which would replace the area affected by the proposed project at a 1:1 mitigation ratio, subject to the District's review and approval. If evidence is presented that demonstrates that all or a

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portion of the required removal of overwater coverage or structural fill is infeasible, the project proponent shall implement 2.B.

- B. Restore 71,942 square feet of eelgrass habitat at the South Bay Power Plant cooling water intake channel at a 1:1 ratio, which would offset 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill impacts. The project proponent may identify an alternative mitigation site of equivalent size and value within San Diego Bay, subject to the District's review and approval. Prior to the commencement of construction activities for the marina expansion, the project proponent shall submit a mitigation plan for review and approval by the Development Services and Planning and Green Port (P&GP) Departments of the District. The mitigation plan at a minimum shall include a description of the transplant site, eelgrass mitigation requirements, eelgrass planting plan (e.g., transplant sites, donor sites, reference site), restoration methods (e.g., plant collection, transplant units, planning eelgrass units), timing of the restoration work, and a monitoring program (e.g., establishment of monitoring and mitigation success criteria). The project proponent shall secure all applicable permits for the mitigation site prior to commencement of waterside construction. Additionally, the project proponent shall ensure that all fill materials proposed for discharge into San Diego Bay for the development of the mitigation site shall meet the requirements of the U.S. Army Corps of Engineers' Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (Inland Testing Manual). If evidence is presented that demonstrates that restoration of all or a portion of the required 71,942 square feet of eelgrass habitat is infeasible, the project proponent shall implement 2.C.
- C. If a suitable in lieu fee program or mitigation bank within the Coastal Zone that is not yet available becomes available in the future, prior to construction of the proposed marina, the project proponent shall purchase credits to offset 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill, or the remaining square footage of the impacts if a combination of other above options are selected. If evidence is presented that demonstrates that purchase of credits toward an in lieu fee program or mitigation bank is infeasible, the project proponent shall implement 2.D.
- D. Subject to the Board of Port Commissioners' approval and findings, the proposed project may purchase credits from the District's shading credit program established pursuant to board Policy 735 at a fair market value equivalent to that of the proposed project's final shading total (i.e., less any reductions achieved by design modifications to the satisfaction of NMFS, USFWS, RWQCB, CDFW, and USACE, and CCC).
- E. Any combination of the above that sufficiently offsets 58,319 square feet (1.34 acres) of overwater coverage and 13,623 square feet (0.31 acre) of structural fill impacts.
- F. This shall be the minimum mitigation for overwater coverage and structural fill impacts. One or more of the aforementioned state and federal agencies may require additional or greater mitigation. This mitigation measure in no way supersedes mitigation measures that may be required by state and federal agencies.

Should the project proponent only construct Phase 1 of the marina expansion, the mitigation requirement shall be reduced proportionate to the overwater coverage and structural fill impacts of the Phase I only expansion, consistent with a 1:1 mitigation ratio.

3. The project proponent shall secure all applicable permits for the mitigation of overwater coverage and structural fill prior to commencement of waterside construction.

Pages 4.3-43 and 4.3-44

For Impact-BIO-5:

Implement MM-BIO-5: Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, <u>CCC.</u> and the District to Compensate for Loss of Open Water Habitat and Function, as described above.

For Impact-BIO-7:

MM-BIO-6: Develop an Eelgrass Mitigation and Monitoring Plan in Compliance with the California Eelgrass Mitigation Policy. Prior to the start of any in-water construction, the project proponent shall retain a qualified marine biologist to develop an eelgrass mitigation plan in compliance with the California Eelgrass Mitigation Policy (Appendix E-5). The mitigation plan shall be submitted to the District and resource agencies for approval and shall be implemented to compensate for losses to eelgrass in the event that the surveys described below indicate the project has impacts on eelgrass. The specific eelgrass mitigation plan elements shall include:

- Prior to the commencement of any in-water construction activities, a qualified marine biologist retained by the project proponent and approved by the District shall conduct a preconstruction eelgrass survey. Surveys for eelgrass shall be conducted during the active eelgrass growing season (March–October), and results will be valid for 60 days, unless completed in September or October; if completed in September or October, results will be valid until resumption of the next growing season. The qualified marine biologist shall submit the results of the preconstruction survey to the District and resource agencies within 30 days.
- Within 30 days of completion of in-water construction activities, a qualified marine biologist retained by the project proponent and approved by the District shall conduct a post-construction eelgrass survey during the active eelgrass growing season. The post-construction survey shall evaluate potential eelgrass impacts associated with construction. Upon completion of the post-construction survey, the qualified marine biologist shall submit the survey report to District and resource agencies within 30 days.
- At least 2 years of annual pPost-construction eelgrass surveys shall be conducted during the active eelgrass growing season to evaluate the potential for operational impacts on eelgrass. The additional annual surveys The survey monitoring shall follow the following monitoring schedule:
 - <u>Annual monitoring for years 1 through 5</u>
 - <u>Bi-annual monitoring for years 5 through 10</u>
 - Monitoring every 5 years for years 10 to 30

shall evaluate the potential for operational impacts on eelgrass. Specifically, the surveys shall be designed to evaluate potential shading, vessels associated, and water circulation impacts noted in the project's marine biological assessment (Appendix E-1). As noted above, the Eelgrass Mitigation and Monitoring Plan will be submitted to the resource agencies and the District for review. During this review and consultation, under the California Eelgrass

<u>Mitigation Policy (Section II.G.), agencies will determine the appropriate number of years of post-construction eelgrass monitoring.</u>

- In the event that impacts on eelgrass are detected, the project proponent shall implement the following:
 - A qualified marine biologist retained by the project proponent and approved by the District shall develop a mitigation plan for in-kind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and resource agencies within 60 days following the post-construction survey.
 - Mitigation for eelgrass impacts shall be at a ratio of 1.2:1 at the proposed mitigation site identified at the decommissioned South Bay Power Plant cooling water intake channel.
 - Mitigation shall commence within 135 days of any noted impacts on eelgrass, such that mitigation commences within the same eelgrass growing season that impacts occur.
 - Upon completing mitigation, the qualified biologist shall conduct mitigation performance monitoring at performance milestones of 0, 12, 24, 36, 48, and 60 months. The qualified biologist shall conduct all mitigation monitoring during the active eelgrass growing season and shall avoid the low growth season (November–February). Performance standards shall be in accordance with those prescribed in the California Eelgrass Mitigation Policy (Appendix E-5).
 - The qualified biologist shall submit the monitoring reports and spatial data to the District and resource agencies within 30 days after the completion of each monitoring period. The monitoring reports shall include all of the specific requirements identified in the California Eelgrass Mitigation Policy (Appendix E-5).

5.2.7 Changes to Section 4.4, Cultural Resources

Section 4.4.3, Pages 4.4-5 and 4.4-6

4.4.3 Existing Historical Resources

In addition to the general prehistoric, ethnographic, and historic setting discussion provided above, records searches, Native American <u>due diligence outreachconsultation</u>, and a site visit were conducted to identify specific existing historical resources within 0.5 mile of the project site. The discussion below outlines the methodology for these activities and the results.

4.4.3.1 Methodology

The effort to identify historical resources in the project site included records searches of previous cultural resource investigations and recorded sites, and background research and a review of literature and maps, including Sanborn Map Company fire insurance maps, historical aerial photographs, and historic U.S. Geological Survey topographic maps, with relevance to the prehistory, ethnography, and history of the terminal site and proposed project vicinity; consultation due diligence outreach with the Native American Heritage Commission (NAHC) and Native Americans; and a site visit. The site visit was conducted on October 24, 2016, to confirm that the historic SDRC

remains present adjacent to the project site and to assess the building's historical integrity. These studies were conducted in compliance with CEQA (Public Resources Code [PRC] Section 21000 et seq.), pursuant to the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.), and are described below.

Records Search

ICF obtained a records search from the South Coastal Information Center (SCIC) at San Diego State University. The records search and literature review provides for identification of previously documented archaeological and historic-era built environment resources within the project area and within a 0.5-mile radius of the project area. The search included the following elements of the California Historical Resources Information System (CHRIS): previously recorded sites, previously recorded studies, California Points of Historical Interest, California Historical Landmarks, the NRHP, the California Register of Historical Resources (CRHR), California Inventory of Historic Resources, the Office of Historic Preservation's Historic Properties Directory, and San Diego area historic maps.

The project site overlaps with the easterly portions of the District's SDCC Phase III Expansion and Expansion Hotel Project & Port Master Plan Amendment EIR (SDCC Phase III Expansion Project). The only portion of the current Fifth Avenue Landing project site not within the SDCC Phase III Expansion Project area extends into San Diego Harbor waters. Therefore, the results of a record search conducted at the SCIC in 2011 for the SDCC Phase III Expansion Project, incorporated herein by reference, were used as a baseline for identifying previously recorded archaeological sites and historic buildings within 0.5 mile of the project area. On September 21, 2016, an ICF archaeologist conducted a supplemental records search for archaeological sites and historic buildings not identified in the 2011 record search that are located within 0.5 mile of the project area.

Native American Consultation Due Diligence Outreach

On September 27, 2016, ICF requested a review of the sacred lands files from the NAHC. The NAHC responded on September 29, 2016, stating that the sacred lands files failed to indicate the presence of Native American cultural resources in the study area. The NAHC also provided a list of 20 Native American individuals and organizations that may have knowledge of cultural resources in the project area. On October 4, 2016, outreach letters were sent to all 20 individuals and organizations identified by the NAHC (see Appendix F-1). As of the date of circulation, no responses have been received. Formal consultation processes are discussed in Section 4.13, *Tribal Cultural Resources*.

Section 4.4.5, Page 4.4-20

The proposed project would introduce multiple buildings to the setting of the SDRC, which alter the visual landscape of the area (see Section 4.1, *Aesthetics and Visual Resources*, for more information on the general visual landscape). The proposed 850843-room market-rate hotel tower would be constructed approximately 80 feet north of the SDRC at the location of the current paved parking lot situated immediately adjacent to the promenade. As identified in Table 3-1, the 44-story building would rise to a height of 498 feet. An open-air pedestrian archway built to a height of 40 feet would span the promenade to connect the hotel to its ballroom and meeting facilities. Across the marina to the northeast of the SDRC, in the area currently consisting of paved parking, the proposed project would line the Embarcadero Promenade with retail storefronts and create a new public park/plaza at the northwest side of the retail storefronts. Immediately southeast of the storefronts and plaza,

the project would construct a five-story, L-shaped, lower-cost hotel that would rise to a height of 82 feet.

5.2.8 Changes to Section 4.6, Greenhouse Gas Emissions and Climate Change

Section 4.6.1, Page 4.6-1

This section describes the existing conditions and applicable laws and regulations for greenhouse gas (GHG) emissions and climate change and analyzes the proposed project's (1) consistency with the District's Climate Action Plan (CAP) reduction targets and with regulatory programs outlined in the Scoping Plan and adopted by the California Air Resources Board (ARB) or other California agencies to reduce GHG emissions in 2020; its-(2) consistency with the post-2020 reduction targets set forth through California Executive Order (EO) S-03-05, EO B-55-18, and Senate Bill (SB) 32, and with plans, policies, and regulations promulgated to reduce GHG emissions post-2020; and whether the project would (3) exacerbate any existing and/or projected damage to the environment, including existing structures and sensitive resources, due to predicted climate change effects, particularly sea level rise.

Table 4.6-1 summarizes the significant impacts and mitigation measures discussed in this section.

Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 202 <u>45</u>	 MM-GHG-1: Implement Diesel- Reduction Measures During Project Operations MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures MM-GHG-3: Implement Sustainability Features during Project Operations MM-GHG-4: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program 	Less than Significant	With mitigation, project- related GHG emissions would achieve the CAP's efficiency targets for lodging/landside projects (12.919.54 MTCO2e/room) and recreational boating (4253%), and the project would comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB.
Impact-GHG-2: GHG Emissions in Excess of Post-2020 Targets for	MM-GHG-1 through MM-GHG-4 MM-GHG-5: Implement a Renewable Energy Project <u>on Site, on Tidelands,</u> <u>or Within Offsite Tidelands Adjacent</u> to Community or Member City, or	Significant and Unavoidable	With mitigation, project- related GHG emissions would achieve the CAP's efficiency targets for lodging/landside projects for

Table 4.6-1. Summary of Significant Impacts and Mitigation Measures

Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Landside Uses and Recreational Boating	Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program		2030 (6.3 MTCO ₂ e/ room) and 2050 (1.4 MTCO ₂ e/room) and the post- 2020 reduction targets for recreational boating (66% for 2030, 90% for 2050), but because there are no known post-2020 reduction targets and plans to meet the statewide targets, specific reduction targets remain unknown.

Section 4.6.2.3, Pages 4.6-4 and 4.6-10

Local Emissions at the Project Site

Activity at the project site generates GHG emissions. Specifically, GHG emissions resulting from activity associated with existing marina operations are broken into landside and waterside components. Landside sources are those sources that occur on land, and include vehicle trips; building electricity, natural gas, and water consumption; and waste generation. Waterside sources are those sources that occur in the water, and include the existing ferry service and recreational boating associated with the existing 12 slips. A description of each of these sources and associated emissions modeling are provided in Section 4.6.4.1 below. Emissions associated with existing activity at the annual time scale (metric tons of CO₂e per year) are presented in Table 4.6-4.

Emission Source	CO ₂ e
Existing Landside	
Motor Vehicles	50
Electricity	346
Natural Gas	129
Water	6
Wastewater	<1
Solid Waste	93
Subtotal	<u>625</u> 624
Existing Waterside	
Ferry Service	539
Recreational Boating	540
Subtotal	1,079
Total Existing Annual	1,703

Table 4.6-4. Estimate of Existing GHG Emissions at the Project Site (metric tons per year)

Emission Source

Note: Totals may not add exactly due to rounding. Source: Appendix D<u>and Attachment 2 of the Final EIR</u>.

Section 4.6.3.1, Pages 4.6-9 and 4.6-10

Update to-Corporate Average Fuel Economy Standards (2009, 2019)

CO₂e

The Corporate Average Fuel Economy (CAFE) standards incorporate stricter fuel economy standards promulgated by the State of California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25% by 2016.

EPA, the National Highway Traffic Safety Administration (NHTSA), and ARB issued joint Final Rules for CAFE standards and GHG emissions regulations for 2017 to 2025 model year passenger vehicles, which require an industry-wide average of 54.5 miles per gallon (mpg) in 2025.

On August 2, 2018, the National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (EPA) proposed to amend the fuel efficiency standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026 by maintaining the current model year 2020 standards through 2026 (Safer Affordable Fuel-Efficient [SAFE] Vehicles Rule). On September 19, 2019, EPA and NHTSA issued a final action on the One National Program Rule, which is consider part 1 of the SAFE Vehicles Rule and a precursor to the proposed fuel efficiency standards. The One National Program Rule enables EPA/NHTSA to provide nationwide uniform fuel economy and GHG vehicle standards, specifically by (1) clarifying that federal law preempts state and local tailpipe GHG standards, (2) affirming NHTSA's statutory authority to set nationally applicable fuel economy standards, and (3) withdrawing California's Clean Air Act preemption waiver to set state-specific standards.

EPA and NHTSA published their decisions to withdraw California's waiver and finalize regulatory text related to the preemption on September 27, 2019 (84 *Federal Register* 51310). The agencies also announced that they will publish the second part of the SAFE Vehicles Rule (i.e., the standards). California, 22 other states, the District of Columbia, and two cities filed suit against the proposed One National Program Rule on September 20, 2019 (*California et al. v. United States Department of Transportation et al.*, 1:19-cv-02826, U.S. District Court for the District of Columbia). The lawsuit requests a "permanent injunction prohibiting Defendants from implementing or relying on the Preemption Regulation." The fate of the One National Program Rule and SAFE Vehicles Rule remains uncertain in the face of pending legal deliberations.

The Corporate Average Fuel Economy (CAFETC "Corporate Average Fuel Economy (CAFE) standards incorporate stricter fuel economy standards promulgated by the State of California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25% by 2016.

EPA, the National Highway Traffic Safety Administration (NHTSA) and ARB issued joint Final Rules for CAFE standards and GHG emissions regulations for 2017 to 2025 model year passenger vehicles, which require an industry wide average of 54.5 miles per gallon (mpg) in 2025.

Section 4.6.3.2, Page 4.6-12

ARB <u>adopted recently released its the Draft-</u>2017 Scoping Plan Update <u>in December 2017</u>, which builds on the programs set in place as part of the previous Scoping Plan that was drafted to meet the 2020 reduction targets per AB 32. The Draft 2017 Scoping Plan Update propose<u>sd</u> meeting the 2030 goal by accelerating the focus on zero and near-zero technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels including electricity and hydrogen, stronger efforts to reduce emissions of short-lived climate pollutants (CH₄, black carbon, and fluorinated gases), further efforts to create walkable communities with expanded mass transit and other alternatives to traveling by car, continuing the cap-and-trade program, and ensuring that natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target. The Scoping Plan also recommends that local governments aim to achieve community-wide efficiency of 6 MTCO₂e per capita by 2030 and 2 MTCO₂e per capita by 2050 to be used in local climate action planning. These efficiency targets would replace the "15% from 2008 levels by 2020" approach recommended in the initial Scoping Plan, which would allow for local governments to grow in a sustainable manner (ARB 2017b). The Draft 2017 Scoping Plan Update is currently out for public review and ARB will hold various public meetings as part of the process.

California Energy Efficiency Standards for Non-Residential Buildings—Title 24 (2008)

The Green Building Standards Code (CALGreen) applies to the planning, design, operation, construction, use, and occupancy of newly constructed buildings and requires the installation of energy- and water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. CALGreen also requires newly constructed buildings to develop a waste management plan and divert at least 50% of the construction materials generated during project construction.

The most recent update was the 2019 Building Energy Efficiency Standards, which were adopted in May 2018 and took effect on January 1, 2020. Non-residential buildings will be 30 percent more energy efficient due to the update in HVAC, ventilation, and lighting standards. Future standards are expected to result in zero net energy for newly constructed commercial buildings (CEC 2018).

....

Senate Bill 100 (2018)

<u>SB 100 (De León, also known as the California Renewables Portfolio Standard Program: Emissions of</u> <u>Greenhouse Gases) was approved by the California legislature and signed by Governor Brown in</u> <u>September 2018. The bill increases the RPS in 2030 from 50 to 60 percent and establishes an RPS</u> <u>goal of 100 percent by 2045.</u>

Executive Order B-55-18 (2018)

<u>EO B-55-18 was approved by the California legislature and signed by Governor Brown in September</u> 2018. The order establishes a statewide goal that calls for achieving carbon neutrality by no later than 2045 as well as achieving and maintaining net negative emissions thereafter. Although this EO has not been codified in law, it directs ARB to ensure that future climate change scoping plans identify and recommend measures for achieving the carbon neutrality goal.

Page 4.6-16

State CEQA Guidelines (20102018)

The State CEQA Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. Moreover, the State CEQA Guidelines emphasize the necessity to determine potential climate change effects of a project and propose mitigation as necessary. They do not prescribe or recommend a specific analysis methodology or provide quantitative criteria for determining the significance of GHG emissions. However, the State CEQA Guidelines do confirm the discretion of lead agencies to determine appropriate significance thresholds, but require the preparation of an EIR if "there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with adopted regulations or requirements" (Section 15064.4). Additionally, the agency's analysis should consider a timeframe that is appropriate for the project, must reasonably reflect evolving scientific knowledge and state regulatory schemes, and may consider a project's consistency with the State's long-term climate goals or strategies if supported by substantial evidence.

Section 4.6.4.1, Pages 4.6-20 and 4.6-21

• It is projected that landside construction would occur in four phases <u>over approximately 24 to</u> <u>30 monthsbetween 2018 and 2021</u>. Each sub-phase of construction would be composed of several activities, such as demolition of existing uses, foundations, and structural frame. Phasing information, including the projected construction schedule, construction equipment, material quantities, and truck trip quantities, was obtained from the project proponent and is contained within <u>Appendix DAttachment 2</u>. The particular proposed construction phasing would be a condition of a future Coastal Development Permit for the project.

....

- Demolition debris that is not recycled on site is expected to be hauled to either a recycling facility or a landfill. For purposes of this analysis, it was assumed that the recycling facility would be Hanson Aggregates in Miramar, which is 12.6 miles from the project site. It was assumed that the landfill facility would be the Otay Landfill, which is 15.0 miles from the project site. Emissions associated with truck travel to haul demolition debris were estimated based on the weighted average of these two disposal locations (which comes out to 13.0 miles per one-way trip) assuming a CalEEMod default 20-ton (16 cubic yards) truck capacity. Emissions associated with demolition material truck trips were estimated using truck haul information provided by the project proponent and exhaust emission factors for each construction year (2018–2021).
- The majority of excavated materials (36,500 cubic yards) would be taken to an offsite recycling facility, while the remaining materials (1,500 cubic yards) are expected to be taken to the nearest landfill. Similar to the hauling of demolition debris above, it was assumed that the recycling facility would be Hanson Aggregates in Miramar and the landfill facility would be the Otay Landfill. However, as noted in Section 4.7, *Hazards and Hazardous Materials*, contaminated soils may be encountered during construction activities. If contaminated soils are encountered, they must be disposed of at an appropriate facility, the closest of which is in Arizona. While it is currently unknown if soils are contaminated, this analysis conservatively assumes that all soils are contaminated and would need to be hauled to an appropriate facility in Arizona. Emissions

associated with truck travel to haul excavated materials were estimated based on the distance from the project site to the eastern boundary of the air basin (75.6 miles oneway)¹ assuming a CalEEMod default 20-ton (16 cubic yards) truck capacity. Emissions associated with excavated material truck trips were estimated using truck haul information provided by the project proponent and exhaust emission factors from ARB's EMFAC model (ARB 2014b), based on heavy duty tractor trailer (T7 Single Construction) annual average emission factors for each construction year-(2018–2021).

• Dump trucks would be active on site to move dirt and materials around and water trucks would be active on site for watering of exposed surfaces to provide fugitive dust control. Emissions associated with dump and water truck activity on site were estimated using truck quantity estimates provided by the project proponent, exhaust emission factors from ARB's EMFAC model assuming a 5-mile-per-hour travel speed for water trucks (T6 Instate Heavy) and Dump Trucks (T7 Single Construction), based on annual average emission factors for each construction year (2018–2021) (ARB 2014b). It was assumed onsite dump and water trucks would be active for 8 hours per day.

Waterside Components

• Construction of the marina is expected to begin when the hotel is nearly complete and take 6 to 9 months to complete. Based on the landside construction schedule, it was assumed that Phase I of the marina construction would begin in fall 2020 and last through early summer 2021, when the hotel is expected to be complete and Phase I would be ready for opening day of the project. Phase II is expected to be built at a later date based on market conditions, which is anticipated to be approximately 5 years after the hotel is operational. Both phases of the marina construction would include the use of barge-based equipment to install docks, tugs to bring barges to and from the staging area, skiffs to push docks around, and a push boat. Emission calculations are provided in <u>Appendix DAttachment 2</u>. Tugs would be used to bring the barges from the staging area to the project site at the beginning of construction of each phase. The Derek barge would held in place by spuds or an anchor and is expected to contain the crane and jet pump, which are described below. The Derek barge is expected to remain on site for the entire marina construction period for each phase of the marina expansion, while the deck barge is expected to remain on site for 1 month during each phase to unload the gangways. The barges have no engines.

Pages 4.6-22 and 4.6-23

Operation

Operation of the proposed project would generate GHG emissions in the form of CO₂, CH₄, and N₂O. Activity associated with project conditions is broken into landside and waterside components. Landside sources are those sources that occur on land, and include GHG emissions from motor vehicle trip generation, electricity consumption, combustion of natural gas for space and water heating, water consumption, and wastewater and waste generation. Waterside sources are those sources that occur in the water, and include continuation of ferry services and additional slips that would expand recreational boating opportunities, including yacht cold ironing. Annual GHG

¹ As the CEQA thresholds used in the impact analysis are regional and relate to the attainment status of air quality standards within San Diego County, haul truck trip emissions were confined to those occurring within the county.

emissions were estimated using a combination of emission methods and emission factors from published best available documentation. In particular, emissions from landside activities are based on the methods, assumptions, and data sources within CalEEMod using emission factors from ARB's EMFAC2014 model, and other published sources. Emissions from waterside activities were estimated based on methodologies and guidance published by ARB for estimating emissions from commercial and personal watercraft and activity information provided by the project proponent. While Phase II of the marina expansion is not expected to be operational at the project's opening day of 2024<u>5</u>, this analysis assumes that the proposed project, including Phase II of the marina expansion, would be operational in 2024<u>5</u>.

Section 4.6.4.2, Page 4.6-27

Applicability of Available Thresholds

In light of the recent Newhall Ranch decision, the following section discusses each applicable approach and analyzes its specific applicability to the project.

Page 4.6-30

The CAP is not a no-growth plan; it includes growth and emission projections for 2020 and reduction targets (1990 levels) for each activity based on the growth projections specific to each tenant and activity type. For lodging, the CAP includes growth associated with anticipated land use development projects that were projected to be built by 2020. For recreational boating, the CAP includes growth in boating activity in the ARB's OFFROAD2007 model. The District's CAP includes an inventory of baseline and future year emissions, square footage, occupied rooms, and lodging emissions for baseline (2006) and 2020 conditions based on District-specific growth assumptions. The CAP also identifies the 2020 GHG reduction target (1990 levels, or 10% below base case) (see Table 4.6-6). Based on the estimated BAU emissions for lodging uses, the hotel sector will need to increase efficiency to 13.89 MTCO₂e/room to reach the 2020 target of 1990 emissions levels while accounting for activity growth by 2020. Comparison of the hotel emissions to the CAP efficiency metric is used, in part, for the proposed project's GHG emission analysis. Note that the 2020 CAP target is used to help derive or extrapolate District-specific future year efficiency targets in Opening Year 2024<u>5</u>, 2030, and 2050.

Page 4.6-31

Post-2020 Thresholds

While the Newhall Ranch holding did not rule on whether a post-2020 climate change analysis is required for CEQA documents, the decision mentioned that consistency with 2020 goals will become a less definitive guide over time and consistency with long-term emission reduction targets may be needed in the near future. The project has an opening (or horizon) year of 20212025. Recent expert guidance from the Association of Environmental Professionals (AEP) (2016) recommends that projects should be evaluated against the next statewide milestone target after the project opening (or buildout). SB 32 statutorily established the 2030 target, which is the next statewide milestone target by which project-related emissions are compared.

While there is currently no adopted statewide GHG reduction plan or framework thereof that extends beyond 2020, ARB has recently released its Draft 2017 Scoping Plan Update, which outlines the State's proposed framework for meeting the 2030 target set by SB 32. The Draft 2017 Scoping

Plan Update, along with other statewide plans that aim to reduce emission from various sectors for the economy (e.g., the Sustainable Freight Action Plan), have shown the State's interest in adopting regulatory programs and frameworks to support meeting statewide post-2020 reduction goals. Meeting the ambitious targets in SB 32, as well as the 2050 target in EO S-03-05, will require substantial effort at the state, regional, and local levels. Lacking a formally adopted post-2020 plan, AEP (2015, 2016) recommends that CEQA GHG analyses evaluate project emissions in light of the trajectory of State climate change legislation and assess their "substantial progress" toward achieving longer-term reduction targets identified in available plans (e.g., CAPs), legislation, or executive orders. The best measure is thus progress toward long-range targets, and not necessarily meeting milestone targets many years in the future, such as for 2050, along with consistency with the overall framework of draft reductions plans, including the Draft 2017 Scoping Plan Update. Moreover, while there are currently no adopted significance thresholds for analyzing post-2020 emissions for development projects in California, the updated Scoping Plan does recommend that local governments aim to achieve a community-wide goal of no more than 6 MTCO₂e per capita by 2030 and no more than 2 MTCO₂e per capita by 2050. While these thresholds are neither adopted nor explicitly relevant to the proposed project, particularly because these recommendations apply to communities with a mixture of residential and commercial uses, this does indicate ARB's overall intent of highlighting and promoting efficiency.

Pages 4.6-32 through 4.6-34

The project has an opening year of 2024<u>5</u>.² Recent expert guidance from AEP (2016) recommends that a project's conditions in its opening or horizon year be evaluated against thresholds to determine significance. AEP also recommends that projects should be evaluated against the next statewide milestone target after the project horizon, which in this case would be 2030 and which is set by both EO B-30-15 and SB 32. Moreover, SB 32 statutorily establishes the 2030 target and, as such, year 2030 marks the next statutory statewide milestone target to which project-related emissions are to be compared. Consequently, the recommended approach described below is to analyze the proposed project's GHG emissions for both the Opening Year 2021-<u>2025</u> and 2030 timeframes. The analysis also considers emissions under 2050 conditions, consistent with the trajectory of statewide climate change planning. While the State's 2050 GHG target outlined under EO S-3-05 has not been legislatively adopted, it is used as in indicator for long-term emissions reduction progress and is evaluated as it relates to the project's impacts for the 2050 time horizon. Moreover, EO B-55-18 established a statewide goal for carbon neutrality by 2045. The more aggressive 2045 goal of EO B-55-18 indicates the state's intent (and thus, state of the science) to move toward carbon neutrality.

Based on the available threshold concepts recommended by air districts or other lead agencies and recent case law, the thresholds of significance that will be applied to the proposed project's GHG emissions for both the 2020 and post-2020 periods are as follows.

- For **2021**<u>5</u>, impacts from the project's GHG emissions would be considered less than significant if the project is found to:
 - (1) achieve a 5342% recreational boating-specific GHG emissions reduction target and 6654% lodging-specific GHG emissions reduction target (equivalent to a GHG emissions efficiency of 9.5412.91 MTCO₂e per room), and

² AEP uses the term "horizon year" rather than "buildout year" or "opening year"; however, these terms are synonymous.

(2) comply with regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies.

The analysis for 2024<u>5</u> is both quantitative with respect to the CAP and AB 32 consistency and qualitative with respect to compliance with the CAP's measures and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies. The analysis for compliance with regulatory programs only applies to the individual area addressed by the regulatory program. Project emissions are compared to unmitigated levels in determining consistency with CAP reduction targets. If the project (1) results in a <u>5342</u>% recreational boating-specific GHG emissions reduction target and <u>66</u>54% lodging-specific GHG emissions reduction target, which have been extrapolated from the 2020 percentage reductions for each sector pursuant to the District's CAP, and (2) will implement regulatory programs adopted by ARB or other agencies to reduce GHG emissions, then the project's cumulative contribution of GHG emissions would be considered less than significant for the reduction targets or will not implement regulatory programs adopted by ARB or other State agencies to reduce GHG emissions, then the project to reduce GHG emissions, then the project so the considered significant and feasible mitigation measures are required.

- For **2030** and **2050**, impacts from the project on GHG emissions would be less than significant if the project is found to be:
 - (1) consistent with the State's overall reduction targets (including SB 32, and EO S-03-05, and EO B-55-18) for 2030 and 2050, and
 - (2) compliant with regulatory programs adopted by ARB or other California agencies for 2030 and 2050.

Based on the available threshold concepts recommended by expert agencies and the "substantial progress" approach, the analysis for the post-2020 time period is both quantitative with respect to consistency with long-term reduction targets, which are District specific and were estimated by calculating the downward GHG emission percentage reduction needed to meet 2030 (SB 32), 2045 (EO B-55-18), and 2050 (EO S-03-05) goals using the CAP's 2020 GHG emission target for each sector, and qualitative with respect to compliance with the measures and regulatory programs outlined, adopted, or proposed by ARB or other California agencies. Project emissions are compared to levels without mitigation in determining consistency with the State's overall reduction targets for the post-2020 period.

Pursuant to SB 32 and EO S-3-05, the statewide targets for the reduction of GHG emissions are the 2030 (40% below 1990 levels) and 2050 (80% below 1990 levels) reduction targets. To reach the 2030 target of 40% below 1990 emissions levels while accounting for lodging growth by 2030, the District's hotel sector will need to increase efficiency to 6.3 MTCO₂e/room on Tidelands (74,402 MTCO₂e/11,880 rooms). This translates to a 77% improvement District-wide over 2030 projections. With respect to the District, recreational boating emissions would need to be reduced by 66% below 2030 projections to achieve the requisite statewide reductions outlined under SB 32. Achieving the 2050 EO S-3-05 target while accounting for activity growth by 2050 would require the hotel sector to increase efficiency to 1.4 MTCO₂e/room on Tidelands (24,801 MTCO₂e/17,786 rooms). This translates to a 95% District-wide improvement over 2050 BAU. Specific to the District, recreational boating emissions would need to be reduced by 90% relative 2050 BAU. Table 4.6-7 summarizes the 2020 and post-2020 reduction targets used in the quantitative analysis. <u>Note that the project's consistency with the 2045 carbon neutrality goal is analyzed qualitatively.</u>

Emission Sector	202 <u>5</u> 1–2030 Target	2030 Target	2050 Target		
Lodging Uses	6654% below 2020 BAU of 28 MTCO ₂ e per room or a GHG emission efficiency of 12.9 9.54 MTCO ₂ e per room ¹	77% below 2030 BAU of 28 MTCO ₂ e per room or a GHG emission efficiency of 6.3 MTCO ₂ e per room ²	95% below 2050 BAU of 28 MTCO ₂ e per room or a GHG emission efficiency of 1.4 MTCO ₂ e per room ³		
Recreational Boating	4 <u>253</u> % below 2020 BAU ⁴	66% below 2030 BAU ⁵	90% below 2050 BAU ⁶		
Source: See tech	Source: See technical threshold memorandum in Appendix DAttachment 2 of the Final EIR.				

Table 4.6-7. GHG Reduction Targets by Emission Sector

Notes:

The reduction from BAU is based on information within the District's CAP, which takes into consideration location and the type of development.

 1 202<u>5</u>¹ BAU emissions for the lodging sector are <u>257,882 290,003 MTCO_2e</u>.

 2 2030 BAU emissions for the lodging sector are 330,154 MTCO_2e.

³ 2050 BAU emissions for the lodging sector are 490,758 MTCO₂e.

 4 20251 BAU emissions for the recreational boating sector are $\frac{119,18799,203}{99,203}$ MTCO2e.

 5 2030 BAU emissions for the recreational boating sector are 127,598 MTCO_2e.

 $^{\rm 6}$ 2050 BAU emissions for the recreational boating sector are 145,477 MTCO_2e.

Feasible mitigation measures have been identified for 2024<u>5</u>, 2030, and 2050 timeframes. For each timeframe, mitigation measures include implementation of appropriate measures presented in the CAP, as well as independent mitigation measures.

Section 4.6.4.3, Page 4.6-36 and 4.6-37

Threshold 1: For 20254, the project (1) <u>would not</u> be consistent with the District CAP, including the 12.99.54 MTCO₂e per room and 534% recreational boating-specific GHG emissions reduction target and (2) <u>would not</u> be in compliance with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs of GHGs.

Impact Discussion

Construction and operation of the proposed project have the potential to create significant impacts associated with the emission of GHGs. A discussion of project-related impacts is presented below. As noted in Section 4.6.4.1, *Methodology*, landside emissions include motor vehicle trip generation, electricity consumption, combustion of natural gas for space and water heating, water consumption, and wastewater and waste generation, while waterside emissions include the existing ferry services and additional slips that would expand recreational boating opportunities, including yacht cold ironing.

Construction

Construction of the proposed project would result in GHG emissions through the use of heavy-duty construction equipment, construction workers' vehicle trips, and truck haul and material delivery

trips. Table 4.6-8 shows that project construction would generate approximately 4,170 MTCO₂e over the projected 2.5-year construction period. This is equivalent to the emissions of 893 passenger vehicles for a single year (EPA 2015). As described above, total construction emissions are amortized over a 20-year duration and would equate to approximately 208 MTCO₂e per year. Consistent with industry best practices, amortized emissions are added to operational landside emissions before mitigation in Table 4.6-9 and operational landside emissions after mitigation in Table 4.6-<u>1413</u>.

Emission Source	CO ₂ e
Phase 1- Mobilization and Site Preparation	
Mobilization/Demolition	26
Dewatering/Shoring	22
Phase 2 – Market-Rate Hotel Tower, Meeting Areas, and Parl	king Structure
Excavation and Foundation	946
Structural Frame	601
Exterior Closure and Roofing	403
Interior Rough-In (Elev./MEP/Framing)	145
Interior Construction/Finishes	261
MEP Systems	289
Phase Completion Work	60
Phase 3 – Lower-Cost Visitor-Serving Hotel	
Foundations	39
Structural Frame	80
Exterior Closure	109
Interior Construction/Finishes	137
Phase Completion Work	14
Phase 4 - Site Work	
Offsite Demolition/Grading/Utilities	191
Site Improvements	218
Phase 5 – Waterside Work	
Marina Construction (Phases I and II)	630
Total Construction	4,170
Annual Total (Amortized over 20 years)	208
Note: Totals may not add exactly due to rounding. Source: Appendix D Attachment 2 of the Final EIR.	

Table 4.6-8.	Estimate of	Construction	GHG Emissions	(total metric tons)
	Estimate of	construction		

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Landside

Estimates of landside GHG emissions associated with Opening Year 202<u>51</u> conditions as well as landside activity in 2030 and 2050 are presented in Table 4.6-9. The results include emission

benefits achieved by statewide legislation designed to reduce GHG emissions (e.g., Pavley, RPS). Furthermore, the project's location in a downtown setting that is highly accessible for alternative forms of transportation, including mass transit and walking, would result in fewer and shorter vehicle trips than a "typical" land use project. The California Air Pollution Control Officers Association's (CAPCOA's) *Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA 2010) document discusses the fact that projects in urban and infill settings intrinsically facilitate fewer and shorter trip lengths. In terms of reductions, mobile source VMT is reduced approximately 29.7% based on a combination of mobile source, water, and waste reduction calculation methodologies in *Quantifying Greenhouse Gas Mitigation Measures*. Table 4.6-9 presents emissions inclusive of these sustainability features, in addition to site location (VMT reductions). As shown in Table 4.6-9, the project's landside components would meet the efficiency target (MT per room) for 202<u>51</u>.

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Element	Source	202 1 5	2030	2050
	Visitors (Vehicles)	<u>6,305</u> 6,967	<u>5,592</u> 5,395	<u>5,225</u> 5,042
	Electricity	<u>2,006</u> 2,091	<u>1,738</u> 1,927	<u>01,927</u>
	Natural Gas	<u>2,253</u> 1,756	<u>2,253</u> 1,756	<u>2,253</u> 1,756
Market-Rate Hotel Tower	Water	<u>104122</u>	<u>90112</u>	<u>0</u> 112
Hotel Towel	Wastewater	1	1	1
	Solid Waste	<u>209</u> 207	<u>209207</u>	<u>209</u> 207
	Subtotal	<u>10,878</u> 11,144	<u>9,883</u> 9,398	<u>7,689</u> 9,044
	Visitors (Vehicles)	<u>514189</u>	398<u>168</u>	<u>372157</u>
	Electricity	<u>139</u> 700	<u>121</u> 645	<u>0</u> 645
	Natural Gas	<u>154</u> 561	<u>154</u> 561	<u>154</u> 561
Lower-Cost	Water	<u>923</u>	<u>821</u>	<u>0</u> 21
Visitor-Serving Hotel	Wastewater	<1	<1	<1
	Solid Waste	<u>2462</u>	<u>2462</u>	<u>24</u> 62
	Subtotal	1,860<u>517</u>	1,687<u>475</u>	1,661<u>335</u>
	Visitors (Vehicles)	225 214	174<u>190</u>	162 177
	Electricity	<u>3</u> 14	<u>313</u>	<u>0</u> 13
	Natural Gas	<u>562</u> 568	<u>562</u> 568	<u>562</u> 568
Marina (Buildings Only) ²	Water	<1	<1	<1
(Buildings Only) ²	Wastewater	<1	<1	<1
	Solid Waste	93	93	93
	Subtotal	901<u>873</u>	848	<u>836832</u>

Table 4.6-9. Estimate of Hotel-Related GHG Emissions with State Measures (metric tons per year)

Source	202 1 5	2030	2050
Visitors (Vehicles)	62 84	4 <u>874</u>	44 <u>69</u>
Subtotal	62<u>84</u>	4 <u>874</u>	44 <u>69</u>
	13,996<u>12,351</u>	11,981<u>11,281</u>	11,587<u>8,926</u>
	208	208	208
VMT Reductions from Site Location and Other			
Project Features	<u>-1,825-2,098</u>	<u>-1,610-1,608</u>	<u>-1,484-1,482</u>
	12,076<u>10,735</u>	10,582<u>9,879</u>	<u>7.650</u> 10,313
l^1	625	625	625
	<u>11,45210,110</u>	9,957<u>9,255</u>	9,688<u>7,025</u>
Service Population (rooms)		<u>1,071</u> 1,415	<u>1,071</u> 1,415
Project Efficiency (MT/room)		7.0<u>8.6</u>	<u>6.6</u> 6.8
Significance Threshold (MT/room)		6.3	1.4
Exceed Target?		Yes	Yes
	Visitors (Vehicles) Subtotal VMT Reductions from Site Location and Other Project Features [1 ms) poom)	Visitors (Vehicles) 6284 Subtotal 6284 Subtotal 6284 13,99612.351 208 VMT Reductions from Site Location and Other Project Features -1,825-2,098 12,07610,735 12,07610,735 1 625 11,45210,110 1,4151,071 ns) 1,4151,071 pom) 8.19.44	Visitors (Vehicles) 6284 4874 Subtotal 6284 4874 Subtotal 6284 4874 13,99612.351 $11,98111.281$ 208208208208VMT Reductions from Site Location and Other Project Features $-1.825-2,098$ $-1.610-1,608$ 12,07610,735 $10,5829.879$ 11 625 625 11,45210,110 $9,9579.255$ ns) $1,4151.071$ $1.0711,415$ pom) $8.19.44$ $7.08.6$ MT/room) $12.99.54$ 6.3

Source: ICF Emissions Modeling (Appendix D) Attachment 2 of the Final EIR.

¹ Existing GHG emissions shown in Table 4.6-6.

² Marina electricity consumption associated with recreating boating cold ironing is included in the waterside calculations in Table 4.6-10.

Notes: Totals may not add exactly due to rounding.

Waterside

Waterside GHG emissions associated with the entire marina expansion in Opening Year 2024<u>5</u> as well as 2030 and 2050 are presented in Table 4.6-10. As shown in Table 4.6-10, the project would not meet the percentage reductions for 202<u>51</u> and this would be a significant impact (**Impact-GHG-1**). The results include emission benefits achieved by replacing the ferry engine prior to opening day (due to scheduled replacement per the ARB's Harbor Craft Regulation in 2018) and the effects of statewide legislation designed to reduce GHG emissions (e.g., LCFS, RPS). Unlike the landside portion discussed above, which can take credit for emissions benefits associated with the project location in a downtown setting, there are no similar reductions associated with recreational boating, nor has there been much action at the state level to reduce emissions from recreational boating. The emissions shown in Table 4.6-10 thus only include those available and relevant reductions (e.g., ferry engine upgrade, low carbon fuels, and RPS), and no further reductions associated with project design and state actions are available. Note that this analysis assumes Phase I and Phase II marina expansion are both operational in 202<u>51</u>.

Element	Source	202 <u>5</u> 1	2030	2050
	Ferry Service	539	539	539
Business as Usual ¹	Recreational Boating	7,315	7,315	7,315
	Waterside BAU Total	7,854	7,854	7,854
	Ferry Service	287	287	287
Project Conditions ²	Recreational Boating	5,686<u>4,</u>833	4 ,943<u>3,968</u>	4 ,943<u>919</u>
	Waterside Project Total	<u>5,120</u> 5,973	5,230<u>4,</u>256	5,230<u>1,206</u>
Percentage Reduction with Project Design		24<u>35</u>%	33<u>46</u>%	33<u>85</u>%
Reduction Target		4 <u>253</u> %	66%	90%
Exceed Significant Threshold?		Yes	Yes	Yes

Table 4.6-10. Estimate of Project-Related Waterside GHG Emissions at the Project Site with Design Features and State Measures (metric tons per year)

¹ BAU includes the larger existing ferry, the same BAU electricity emission factor assumed in the CAP, and no LCFS reductions. BAU is specific to the site and geographic location of the Port.

² Project conditions are specific to the site and geographic location of the Port, and include the smaller new ferry, estimated SDG&E emission factor in 202<u>54</u>, estimated SDG&E emission factor in 2030 <u>(60 percent RPS)</u> and 2050 <u>(100% carbon free)</u> per SB <u>350100</u>, and LCFS adjustments (similar to the 2020 CAP).

202<u>45</u> – Project Consistency with CAP

Project consistency with applicable CAP measures is discussed in Table 4.6-11. Before mitigation, the proposed project would not be consistent with the CAP because it would not implement all of the applicable reduction measures. Moreover, while the landside portion would meet the efficiency target, waterside activities would result in emissions that do not meet the prescribed recreational boating-related reduction target prior to mitigation.

Consequently, the proposed project would be required to implement mitigation measures to ensure consistency with the CAP. These measures include diesel reduction measures enforced through **MM-GHG-1**; project features, which would be enforced through **MM-GHG-2**; specific CAP measures, which would be enforced through **MM-GHG-3**; and renewable energy and/or offsets, which would be enforced through **MM-GHG-4**. Moreover, all of the project's mitigation measures and its features will be conditions of approval in the proposed Coastal Development Permit.

With implementation of **MM-GHG-1** through **MM-GHG-4**, the proposed project would meet the reduction targets required by the CAP, as shown in Tables 4.6-13 and 4.6-14. Therefore, the proposed project would be consistent with the CAP.

202<u>45</u> – Project Consistency with Regulations and Regulatory Programs Adopted by ARB or Other State Agencies

As shown in Table 4.2-1<u>2</u>, the proposed project would implement several applicable measures from the <u>AB 32 and 2017</u> Scoping Plan, as well as other measures being implemented by ARB. However, without mitigation, the project would ultimately be inconsistent with some state measures (**Impact-GHG-1**). When coupled with project design and mitigation measures (**MM-GHG-1** through **MM-GHG-4**), each of which are proposed to be incorporated as conditions of approval in the Coastal Development Permit for the project to ensure implementation, the project would be consistent with <u>AB 32's the S</u>coping Plan and other ARB measures.

Table 4.6-11. Project Consistency with Applicable Port CAP Measures for 2021

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No.	Measure Description	Project Consistency Analysis
<u>AB 32 </u> Scop	oing Plan Measures	
T-1	Advanced Clean Cars	Consistent Prior to Mitigation . State program that requires no action at the local or project level. Benefits to project-related employee and visitor car travel will be realized.
T-2	Low Carbon Fuel Standard	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits will be realized.
T-4	Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low Friction Oil 4. Solar Reflective Automotive Paint and Window Glazing	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related car and delivery truck travel will be realized.
T-7	Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	Consistent Prior to Mitigation. State and federal programs that require no action at the local or project level. Benefits to project-related delivery truck travel will be realized.
E-3	33 Percent Renewable Portfolio Standard	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related electricity consumption will be realized.
W-1	Water Use Efficiency	Consistent Prior to Mitigation. The project proposes only minimal water use associated with new employees. State program that requires no action at the local or project level. Benefits will be realized at the project level.
2017 Scop	ing Plan Measures	
-	<u>RPS 50% and Doubling of Energy</u> <u>Efficiency Requirements per SB</u> <u>350</u>	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related electricity and water consumption will be realized.
2	Low Carbon Fuel Standard	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related visitation, delivery truck travel, and recreational boating will be realized independently.

No.	Measure Description	Project Consistency Analysis
-	<u>Mobile Source Strategy (Cleaner</u> <u>Technology and Fuels [CTF])</u> <u>Scenario</u>	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related visitation and delivery truck travel will be realized independently.
-	<u>Short-lived climate pollutants per</u> <u>AB 1383</u>	This policy is not applicable.
-	<u>California Sustainable Freight</u> <u>Action Plan</u>	This policy is not applicable.
-	<u>Post-2020 Cap-and-Trade</u> <u>Program</u>	This policy is not applicable.
Other ARB	Measures	
-	Pavley (AB 1493)	Consistent Prior to Mitigation. See T-1 and T-2. State program that requires no action at the local or project level. Benefits to project-related employee and visitor car travel will be realized.
-	Heavy Duty (Tractor-Trailer) GHG Regulation	Consistent Prior to Mitigation. See T-7. State and federal programs that require no action at the local or project level. Benefits to project-related delivery truck travel will be realized.
Notes	3 2008; ARB 2014a <u>. ARB 2017</u> . ortation Measures; E = Electricity Measures; W	/ = Water Measures

Consistency with Other Regulations

The District's Clean Air Program, one of six key areas addressed by the District's Green Port Program, focuses on initiatives to reduce air pollution from Port operations and includes various strategies that the District is employing to reduce GHG emissions from its largest sources. The District, through its Green Port Program, will continue to implement actions to reduce GHG emissions in the future and the project would implement the relevant Green Port Program and Clean Air Program control measures, including electrifying marinas and ensuring building are designed to include energy and water efficiency design features, as well as through implementation of the CAP. The project is consistent with the District's Green Port and Clean Air programs because it would comply with current and potential future ARB regulations developed and included as part of the Green Port Program and Clean Air Program and assumed in the CAP, including building resource efficiency and marina electrification. Therefore, the project is consistent with both the overarching Green Port Program and the more specific Clean Air Program.

Level of Significance Prior to Mitigation

For Opening Year 2024<u>5</u>, the project would not be consistent with the District CAP, specifically the recreational boating GHG emissions reduction target and reduction measures specified therein, and would only partially comply with plans, policies, and regulatory programs outlined in the Scoping Plan and adopted by ARB or other California agencies for the purpose of reducing the emissions of GHGs. Potentially significant impact(s) include:

Impact-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs

through 20245. Project GHG emissions during combined project construction and operational activities would be inconsistent with the CAP because the project would not meet the performance benchmark for recreational boating (i.e., 4253% reduction) and would only partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by ARB for the purpose of reducing the emissions of GHGs.

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MM-GHG-4: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program.

A. Options for Reducing GHG Emissions.

To reach the waterside performance standard for 20212025, the project proponent shall, in order of preference, considering availability of structures and feasibility, <u>implement the</u> <u>following</u>, which may be combined with consideration to the preference described below:

- 1. <u>I</u>incorporate renewable energy
 - a) on the project site;
 - b) within the District's jurisdiction; or
 - c) within the adjacent community or member city outside of the District's jurisdiction.
- Undertake other verifiable actions or activities on Tidelands, approved by the District, such as electrification of equipment including vehicles and trucks, financial contribution to a future local or District GHG emission reduction program on Tidelands (locally approved equivalent program), or similar activities or actions that reduce operational GHG emissions;
- 3. Purchase GHG emission offset credits that (1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in California Health and Safety Code § 38562(d)(1) and (2) and as these terms are further defined in California Code of Regulations, Title 17, § 95802 (see below); (2) use a protocol consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and (3) are issued by an ARB-approved offset registry.³ -Offset credits from projects outside California must be located in states within the United States of America that have laws equivalent to or stricter than California's laws and regulations ensuring the validity of offset credits.
- B. <u>Required Annual GHG Emissions Reductions:</u>

These three options may be combined with consideration to the preference described above. If construction of renewable energy projects does not satisfy the waterside performance standards, the project proponent shall purchase greenhouse gas reduction credits to achieve requisite reductions to meet the 2021 waterside reduction target. This requirement may include

³ Currently approved offset registries include the American Carbon Registry (ACR), Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See:

https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm.

a micro-grid or similar type of energy management system to help distribute the loads and/or assist in energy storage. To meet the 202<u>5</u>1 waterside reduction target, the <u>GHG reductions</u> <u>must be equal to renewable energy project must offset 1,3821,411</u> MTCO₂e per year <u>or 6,321</u> megawatt-hours per year (MWh/year), which would amount to 6,321 MTCO₂e over 5 years <u>(between 2025 and 2030)</u>. or 5,698 megawatt-hours per year (MWh/year). The renewable energy project shall be constructed and operational prior to certificate of occupancy or the opening day for the waterside improvements.

C. Implementation of GHG Emissions Reduction Options.

<u>Prior to becoming operational, the project applicant shall notify the District with plans to achieve the annual GHG emissions reduction in the order of priority specified above:</u>

- 1. <u>Develop a renewable energy project(s) or take other verifiable actions or activities</u> <u>identified by the District to meet or partially meet the required amount of MTCO₂e or MWh reductions specified above.</u>
 - a. If the project applicant develops a renewable energy project(s), or takes other verifiable actions or activities to reduce GHG emissions, the project applicant shall submit to the District's Energy Department/Team, for its review and approval, a report specifying the annual amount of MTCO₂e or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable energy project, actions, or activities are not being used to offset GHG emissions for any other project or entity; and submit any other information requested by the District's Energy Department/Team to verify the amount of GHG emissions reduction achieved by the project, actions or activities (collectively, "GHG Emission Reduction Report").
 - b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the District's Energy Department/Team, and the reduction of offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count towards the required GHG reduction for the proposed project ("GHG Reduction").
- 2. Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount sufficient to achieve the required reduction of MTCO₂e or MWh specified above, which may be decreased by the amount of annual MTCO₂e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO₂e or MWh shall occur as follows:
 - a. <u>Purchase offsets for the first 5 years of operation;</u>
 - b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emission offset credits set forth in paragraph A(3) above, to the District's Energy Department/Team.
- D. Adjustments to Required GHG Emissions Reductions.

If the project applicant complies with paragraphs A(1) or A(2) above, in an amount that meets the total amount of MTCO₂e or MWh reductions specified above to meet the 2025 reduction target, or complies with paragraph A(3) above and purchases the requisite offsets for 5 years, through 2030, or does a combination of paragraphs A(1), (2), and (3) to meet the 2025 reduction target, then nothing further shall be required under this mitigation measure.

- <u>Reduction of Emissions through Development of a Renewable Energy Project Requirement:</u> <u>Although none are identified at this time, the project applicant may be required by the</u> <u>District to develop a renewable energy project at any time during the life of the project</u> <u>(subject to future approvals and the priorities listed above) and may request a reduction of</u> <u>required offsets. If any reduction in offsets is requested by the project applicant because of</u> <u>the development of a renewable energy project(s), the project applicant shall submit a GHG</u> <u>Emission Reduction Report for the District Energy Department's review pursuant to the</u> <u>process specified above in paragraph C(1) above and required offsets shall be determined</u> <u>by the District and reduced.</u>
- 2. <u>Reduction of Emissions through Verifiable Actions or Activities on Tidelands Requirement:</u> <u>Although none are identified at this time, the project applicant may be required by the</u> <u>District to take other verifiable actions or activities at any time during the life of the project</u> <u>(subject to future approvals and the priorities listed above) and may request a reduction of</u> <u>required offsets. If any reduction in offsets is requested by the project applicant because of</u> <u>the other verifiable actions or activities on tidelands, the project applicant shall submit a</u> <u>GHG Emission Reduction Report for the District Energy Department's review pursuant to</u> <u>the process specified above in paragraph C(1), and required offsets shall be determined by</u> <u>the District and reduced.</u>

In the event greenhouse gas offsets are purchased, these offsets must be from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the ARB). The selected option or a combination must achieve a total annual reduction of 1,382 MTCO2e, which would amount to 12,435 MTCO2e over 9 years (between 2021 and 2030).

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Element	Source	202 <u>51</u>	2030	2050
	Visitors (Vehicles)	<u>6,305</u> 6,967	<u>5,592</u> 5,395	<u>5,225</u> 5,042
	Electricity	<u>2,006</u> 2,091	<u>1,738</u> 1,927	<u>01,927</u>
	Natural Gas	<u>2,253</u> 1,756	<u>2,253</u> 1,756	<u>2,253</u> 1,756
Market-Rate Hotel Tower	Water	<u>104</u> 122	<u>90112</u>	<u>0112</u>
lioter rower	Wastewater	1	1	1
	Solid Waste	<u>209</u> 207	<u>209207</u>	<u>209</u> 207
	Subtotal	<u>10,87811,144</u>	<u>9,883</u> 9,398	<u>7,689</u> 9,044
	Visitors (Vehicles)	<u>189</u> 514	<u>168</u> 398	<u>157</u> 372
Lower-Cost	Electricity	<u>139</u> 700	<u>121</u> 645	<u>0</u> 645
Visitor-Serving Hotel	Natural Gas	<u>154</u> 561	<u>154</u> 561	<u>154</u> 561
	Water	<u>9</u> 23	<u>8</u> 21	<u>0</u> 21

 Table 4.6-13. Estimate of Project-Related Landside GHG Emissions after Mitigation (metric tons per year)

Element	Source	202 <u>51</u>	2030	2050
	Wastewater	<1	<1	<1
	Solid Waste	<u>24</u> 62	<u>2462</u>	<u>24</u> 62
	Subtotal	<u>517</u> 1,860	<u>475</u> 1,687	<u>335</u> 1,661
	Visitors (Vehicles)	<u>214</u> 225	<u>190174</u>	<u>177162</u>
	Electricity	<u>3</u> 14	<u>3</u> 13	<u>0</u> 13
	Natural Gas	<u>562</u> 568	<u>562</u> 568	<u>562</u> 568
Marina (Buildings Only) ¹	Water	<1	<1	<1
Omyj	Wastewater	<1	<1	<1
	Solid Waste	93	93	93
	Subtotal	<u>873</u> 901	848	<u>832</u> 836
Dublic On an Grand	Visitors (Vehicles)	<u>84</u> 62	<u>74</u> 48	<u>69</u> 44
Public Open Space	Subtotal	<u>84</u> 62	<u>74</u> 48	<u>69</u> 44
Total Operations		<u>12,351</u> 13,996	<u>11,281</u> 11,981	<u>8,926</u> 11,587
Amortized Construction	1	208	208	208
	VMT Reductions from Design	-2,098 -1,825	-1,608<u>-</u>1,610	-1,482-1,484
Reductions ²	MM-GHG-2/3 CAP and Sustainability Measures	_	<u>-227-271</u>	-227 -252
	MM-GHG-4 PV/Offsets		-869 -2,276	-7,489<u>-5,280</u>
Total Project Landside		12,076<u>10,735</u>	9,487<u>7,332</u>	<u>2,5982,118</u>
Existing Landside Annu	ıal ³	625	625	625
Net New Over Existing		<u>11,45210,110</u>	8,862<u>6,</u>708	<u>1,9731,493</u>
Service Population (roo	oms)	<u>1,071</u> 1,415	<u>1,071</u> 1,415	<u>1,071</u> 1,415
Project Efficiency (MT/	/room)	8.1	6.3	1.4
Significance Threshold	(MT/room)	12.9 9.54	6.3	1.4

Source: ICF Emissions Modeling (Appendix D) Attachment 2 of the Final EIR.

¹ Marina electricity consumption associated with recreating boating cold ironing is included in the waterside calculations in Table 4.6-14.

² VMT Reductions from Design are the same as shown in Table 4.6-9.

³ Existing GHG emissions <u>a</u>re shown in Table 4.6-6.

Note:

Totals may not add exactly due to rounding.

Element	Source	202 <u>5</u> 4	2030	2050
	Ferry Service	539	539	539
Business as Usual 1	Recreational Boating	7,315	7,315	7,315
	Waterside BAU Total	7,854	7,854	7,854
	Ferry Service	287	287	287
Project Conditions ²	Recreational Boating	<u>4,833</u> 5,686	<u>3,968</u> 4,943	<u>919</u> 4,943
	Waterside Project Subtotal	<u>5,120</u> 5,973	<u>4,256</u> 5,230	<u>1,206</u> 5,230
Reductions	MM-GHG-3 PV/Offsets	-1,382<u>-1,</u>411	-2,550<u>-1,</u>575	<u>-4,447-423</u>
	Waterside Project Total	4,591 <u>3,710</u>	2,680	784
Percentage Reduction with Project Design and Mitigation		42 <u>53</u> %	66%	90%
Reduction Target		4 <u>253</u> %	66%	90%
Exceed Target?		No	No	No

Table 4.6-14. Estimate of Project-Related Waterside GHG Emissions at the Project Site after Mitigation (metric tons per year)

¹ BAU includes the larger existing ferry, the same BAU electricity emission factor in the CAP, and no LCFS reductions. BAU is specific to the site and geographic location of the Port.

² Project conditions are specific to the site and geographic location of the Port, and include the smaller new ferry, projected SDG&E emission factor in 20212025, estimated SDG&E emission factor in 2030 (60 percent RPS) and 2050 (100% carbon free) per SB 350100, and LCFS adjustments (similar to the 2020 CAP).

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Note that while the project Opening Year is 202<u>54</u>, the term "post-2020" refers to the 2030 and 2050 time frames. Furthermore, for purposes of analysis, it is assumed that construction would be finished prior to 2030. Emissions from construction are presented in Table 4.6-8 and are not discussed under this threshold.

Consistency with Post-2020 Reduction Targets and "Substantial Progress"

Although t The District's current CAP and ARB's adopted Scoping Plan mentions some potential post-2020 strategies, but implementation does not extend beyond 2020. The District intends to update the CAP with GHG emission reduction measures and methodologies that will comply with regulatory state programs designed to address state GHG emission reductions post-2020. Many of the measures in the existing CAP will continue to be implemented and result in emission benefits well beyond the 2020 timeframe. At the time of this analysis, however, there is no schedule to complete the update of the District's CAP.as of the date this analysis was prepared, emission savings from these post-2020 strategies are not quantified. Moreover, ARB's 2017 Scoping Plan (for the 2030 target) builds on the programs set in place as part of the previous AB 32 Scoping Plan that was drafted to meet the 2020 reduction targets per AB 32. although there has been activity at the legislative, executive, and judicial levels, including the recently released Draft 2017 Scoping Plan Update from ARB, there are currently no adopted plans or measures that specifically prescribe how the ambitious post-2020 targets will be met. The State recently adopted SB 32, which adopts interim 2030 GHG targets consistent with EO B 30 15; AB 197, which supports its implementation; and AB 1383, which aims to reduce short-lived climate pollutants. Regardless, no plan to achieve these 2030 targets has been adopted by ARB or the District.

Various guidance and white paper documents are in circulation that discuss potential near- and

long term strategies to reduce emissions from all sources, including sources associated with the proposed project (e.g., electricity and recreational boats), and most recently ARB released the Draft 2017 Scoping Plan Update, which details the State's proposed strategy for achieving the 2030 target adopted with SB 32. The updated 2017 Scoping Plan includes various elements, including doubling energy efficiency savings, increasing LCFS from 10% to 18%, adding 4.2 million zero-emission vehicles on the road, implementing the Sustainable Freight Strategy, implementing a post-2020 Capand-Trade Program, reducing emission from refineries, and developing an Integrated Natural and Working Lands Action Plan to protect land-based carbon sink. However, because the Draft 2017 Scoping Plan Update has not been adopted as of this writing, the District's CAP, ARB's Scoping Plan First Update, ARB's 2030 Scoping Plan, and other State programs (e.g., ARB's Sustainable Freight Strategy) are some recent examples that include proposed, recommended, or adopted actions that will reduce emissions over the long term.

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In qualitatively evaluating the project's emissions for consistency with SB 32, <u>EO B-55-18</u>, and EO S-03-05, it is important to note that some of these broad-scale shifts in how energy is produced and used are outside of the control of the project. The changes necessitated by the State's long-term climate policy will require additional policy and regulatory changes, which are unknown at this time. As a consequence, the extent to which the project's emissions and resulting impacts would be mitigated through implementation of such changes is not known and cannot be known at this time.

••••

As discussed above, in order to demonstrate "substantial progress" toward long-term targets, the project would need to demonstrate that emissions would be consistent with the District-specific benchmarks in 2030 (6.3 MTCO₂e/room for landside; 66% below 2030 unmitigated levels for waterside) and 2050 (1.4 MTCO₂e/room for landside; 90% below 2050 unmitigated levels for waterside). <u>While the framework to achieve the 2030 target is detailed in the 2017 Scoping Plan</u> However, the framework to achieve post-2020-2030 targets (e.g., 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050, and carbon neutrality by 2045 and beyond) at the State level is unknown until ARB adopts such a framework. The project and District as a whole cannot meet these long-term targets by themselves without statewide efforts. Further implementation of adopted statewide measures, particularly the RPS of 5060% by 2030 and zero-carbon electricity by 2045 per SB 350100, would reduce project-related electricity. Recently adopted regulations and measures, including Phase 2 truck standards, will further reduce emissions in the post-2020 timeframe.

Moreover, the District has not yet adopted a framework or plan to meet long-term (i.e., post-2020) reduction targets. As such, it is possible that the proposed project's needed reductions would have to be even greater (or less) than the statewide targets in order to achieve the SB 32 and EO S-03-05 reduction targets. Consequently, the impact would be significant and unavoidable.

2020 to 2050 – Consistency with Regulations and Regulatory Programs Adopted by ARB or Other State Agencies

Specifically, at the State level, ARB's Draft 2017 Scoping Plan Update provides insight into outlines the strategies that will likely be included and adopted into long-term planning documents in the near future.

Draft-2017 Scoping Plan Update Strategies

The Draft 2017 Scoping Plan Update builds on the programs set in place as part of the previous Scoping Plan that was drafted to meet the 2020 reduction targets per AB 32. The Draft 2017 Scoping Plan Update proposesd meeting the 2030 goal by accelerating the focus on zero and near-zero technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels including electricity and hydrogen, stronger efforts to reduce emissions of short-lived climate pollutants (CH₄, black carbon, and fluorinated gases), further efforts to create walkable communities with expanded mass transit and other alternatives to traveling by car, continuing the cap-and-trade program, and ensuring that natural lands become carbon sinks to provide additional emissions reductions and flexibility in meeting the target (ARB 2017b).

Project consistency with anticipated programs, policies, and regulations within the draft post-2020 2017 Scoping Plan strategies is discussed in Table 4.2-1612. For purposes of discussing post-2020 GHG emissions, the quantified emissions presented in Table 4.6-9, Table 4.6-10, Table 4.6-13, and Table 4.6-14 only include the project features, adopted State measures, and proposed mitigation measures, and do not include reduction from any anticipated State measures.

For the consistency analysis, adopted measures (like SB 350) are reviewed in order to disclose the project's consistency with such regulations. For informational purposes only, the project's consistency with strategies proposed in the Draft-2017 Scoping Plan Update is also provided, but is not relied on in determining whether the project would have significant GHG emission impacts. Consistency with these strategies is discussed in Table 4.6-16.

••••

Policy	Project Consistency Analysis
RPS 50% and Doubling of Energy Efficiency Requirements per SB 350	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related electricity and water consumption will be realized.
Low Carbon Fuel Standard	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project- related visitation, delivery truck travel, and recreational boating will be realized independently.
Mobile Source Strategy (Cleaner Technology and Fuels [CTF]) Scenario	Consistent Prior to Mitigation. State program that requires no action at the local or project level. Benefits to project-related visitation and delivery truck travel will be realized independently.
Short-lived climate pollutants per AB 1383	This policy is not applicable.
California Sustainable Freight Action Plan	This policy is not applicable.
20% Refinery Sector	This policy is not applicable.
Post-2020 Cap-and-Trade Program	This policy is not applicable.
Source: ARB 2017b	

Table 4.6-16. Project Consistency with 2017 Draft-Scoping Plan Update for 2030

Level of Significance Prior to Mitigation

For the post-2020 period, the proposed project (1) would not parallel the State's overall reduction targets identified in SB 32 and EO S-03-05, and (2) would not be in compliance with plans, policies,

and regulatory programs adopted by ARB or other California agencies for post-2020 for the purpose of reducing the emissions of GHGs. Potentially significant impact(s) include:

Impact-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating. Project GHG emissions during combined project construction and operational activities would not meet the landside efficiency target in 2030 and 2050, and would not meet the performance standard for recreational boating in both 2030 and 2050. Additionally, the proposed project would not comply with plans, policies, and regulatory programs outlined in the Draft 2017 Scoping Plan Update because emissions are not sufficiently reduced to meet statewide targets.

Mitigation Measures

For Impact-GHG-2:

Implement MM-GHG-1 through MM-GHG-4.

MM-GHG-5: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program.

A. Options for Reducing GHG Emissions

To reach the landside and waterside reduction target for 2030 <u>and 2050</u>, the project proponent shall, in order of preference, considering availability of structures and feasibility, <u>implement the following</u>, which may be combined with consideration to the preference described below:

- 1. <u>I</u>incorporate renewable energy
 - a) on the project site;
 - b) within the District's jurisdiction; or
 - c) within the adjacent community or member city outside of the District's jurisdiction
- Undertake other verifiable actions or activities on Tidelands, approved by the District, such as electrification of equipment including vehicles and trucks, financial contribution to a future local or District GHG emission reduction program on Tidelands (locally approved equivalent program), or similar activities or actions that reduce operational GHG emissions;
- 3. Purchase GHG emission offset credits which 1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in California Health and Safety Code § 38562(d)(1) and (2) and as these terms are further defined in California Code of Regulations, Title 17, § 95802 (see below); 2) use a protocol consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and 3) are issued by a ARB-approved offset registry.⁴ -Offset credits from projects outside California must be located in states within the United States of America that have laws equivalent to or stricter than California's laws and regulations ensuring the validity of offset credits.

⁴ Currently approved offset registries include the American Carbon Registry (ACR), Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: <u>https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm</u>

B. <u>Required Annual GHG Emissions Reductions:</u>

These three options may be combined with consideration to the preference described above. If construction of renewable energy projects does not satisfy the waterside performance standards, the project proponent shall purchase greenhouse gas reduction credits to achieve requisite reductions to meet the 2030 waterside reduction target. This requirement may include a micro-grid or similar type of energy management system to help distribute the loads and/or assist in energy storage. The option(s) implemented pursuant to paragraph A above shall achieve the following required GHG reductions for the activities of the Proposed Project for years 2030 and 2050:

- To meet the 2030 landside and waterside reduction target, <u>GHG reductions must be equal to</u> the renewable energy project must offset an additional 3,418 <u>3,851</u>MTCO₂e per year or <u>17,258 MWh/year, which would amount to 77,021 MTCO₂e over 20 years (between 2030 and 2050).
 </u>
- To meet the 2050 landside and waterside reduction target, GHG reductions must be equal to 5,703 MTCO₂e per year 25,556 MWh/year, which would amount to 211,004 MTCO₂e over 37 years (between 2050 and the end of the lease, 2087).
- C. Implementation of GHG Emissions Reduction Options.

<u>Prior to becoming operational, the project applicant shall notify the District with plans to achieve the annual GHG emissions reduction in the order of priority specified above:</u>

- 1. <u>Develop a renewable energy project(s) or take other verifiable actions or activities</u> <u>identified by the District to meet or partially meet the required amount of MTCO₂e or MWh reductions specified above.</u>
 - a. If the project applicant develops a renewable energy project(s), or takes other verifiable actions or activities to reduce GHG emissions, the project applicant shall submit to the District's Energy Department/Team, for its review and approval, a report specifying the annual amount of MTCO₂e or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable energy project, actions, or activities are not being used to offset GHG emissions for any other project or entity; and submit any other information requested by the District's Energy Department/Team to verify the amount of GHG emissions reduction achieved by the project, actions or activities (collectively, "GHG Emission Reduction Report").
 - b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the District's Energy Department/Team, and the reduction of offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count towards the required GHG reduction for the Proposed Project ("GHG Reduction").
- 2. Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount sufficient to achieve the required reduction of MTCO₂e or MWh specified above, which may be decreased by the amount of annual MTCO₂e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO₂e or MWh shall occur as follows:

- a. <u>Purchase offsets for the 20 year period from 2030 to 2050 prior to 2030, then for the 37 year period from 2050 to 2087 prior to 2050;</u>
- b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emission offset credits set forth in paragraph A(3) above, to the District's Energy Department/Team.
- D. Adjustments to Required GHG Emissions Reductions.

If the project applicant complies with paragraphs A(1) or A(2) above, in an amount that meets the total amount of MTCO₂e or MWh reductions specified above to meet the 2030 and 2050 reduction target, or complies with paragraph A(3) above and purchases the requisite offsets, or does a combination of paragraphs A(1), (2), and (3) to meet the 2030 and 2050 reduction targets, then nothing further shall be required under this mitigation measure.

- <u>Reduction of Emissions through Development of a Renewable Energy Project Requirement:</u> <u>Although none are identified at this time, the project applicant may be required by the</u> <u>District to develop a renewable energy project at any time during the life of the project</u> <u>(subject to future approvals and the priorities listed above) and may request a reduction of</u> <u>required offsets. If any reduction in offsets is requested by the project applicant because of</u> <u>the development of a renewable energy project(s), the project applicant shall submit a GHG</u> <u>Emission Reduction Report for the District Energy Department's review pursuant to the</u> <u>process specified above in paragraph C(1) above and required offsets shall be determined</u> <u>by the District and reduced.</u>
- 2. Reduction of Emissions through Verifiable Actions or Activities on Tidelands Requirement: Although none are identified at this time, the project applicant may be required by the District to take other verifiable actions or activities at any time during the life of the project (subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the other verifiable actions or activities on tidelands, the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1), and required offsets shall be determined by the District and reduced. The renewable energy project shall be submitted to the District's Development Services Department no later than January 1, 2028, shall consider the latest advancements in energy technology and future regulatory requirements, and must be operational by January 1, 2030. In the event greenhouse gas offsets are purchased, these offsets must be from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination must achieve a total annual reduction of 3.418 MTCO2e per year or 15,317 megawatt-hours per year (MWh/year), which would amount to 68,367 MTCO2e over 20 years (between 2030 and 2050).

To meet the 2050 landside and waterside reduction targets, the renewable energy project must offset 11,935 MTCO2e per year or 53,478 MWh/year. The renewable energy project may be submitted to the District's Development Services Department as late as January 1, 2048 (but no later) in order to consider the latest advancements in energy technology and future regulatory requirements, but may be submitted sooner and must be operational by January 1, 2050. In the event greenhouse gas offsets are purchased, these offsets must be from sources listed on the American Carbon Registry and/or the Climate Action Reserve (or any other such registry approved by the California Air Resources Board). The selected option or a combination must achieve a total annual reduction of 4,447 MTCO2e for waterside uses and 7,489 MTCO2e for landside uses, which would amount to 441,604 MTCO2e over 37 years (between 2050 and the end of the lease, 2087).

Level of Significance after Mitigation

<u>Even aA</u>fter implementation of **MM-GHG-1** through **MM-GHG-5**, <u>Impact-GHG-2</u> would remain significant due to the lack of <u>plans</u>, <u>policies</u>, <u>and regulatory programs have been adopted to achieve</u> <u>post-2030 long term reduction targets</u>. <u>a known reduction target that considers the location and</u> type of project; <u>t</u> herefore, it cannot be stated with certainty that the project would result in emissions that would represent a fair share of the requisite reductions to achieve post-2020 targets and **Impact-GHG-2** would remain significant and unavoidable.

5.2.9 Changes to Section 4.7, Hazards and Hazardous Materials

Section 4.7.1, Pages 4.7-2 and 4.7-3

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-HAZ-3: Exacerbate an Existing Safety Hazard for People Residing or Working within the Vicinity of the Project Site	MM-HAZ-8: Obtain <u>FAA</u> <u>Approval and ALUC and FAA-Formal Review and Determination</u>	Less than significant	FAA and ALUC formal review and determination would ensure that construction and operation of the proposed project would not affect the safe and efficient utilization of the navigable airspace by aircraft or the operation of air navigation facilities.

 Table 4.7-1. Summary of Significant Hazards and Hazardous Materials Impacts and Mitigation

 Measures

Section 4.7.2.2, Pages 4.7-9 and 4.7-10

Table 4.7-2. Onsite Contamination Sites Listed on a Hazardous Materials Database

Number	Site Name	Address	Database Listings	Site Summary	Status
1.	5th Avenue Landing	600 Convention Way	CHMIRS	Yacht diesel fuel release of unknown quantity into the San Diego Harbor reported in 2011. Cleanup details not reported. The San Diego Harbor Police responded and oversight was provided by the San Diego County Health Services Department.	Case Closed
2.	600 Convention Way (5th Avenue Landing)	600 Convention Way	CHMIRS, ERNS	Five gallons of diesel fuel release into the San Diego Bay reported in 2013. Release was discovered in water near storm drain outlet; source was unknown. No containment or cleanup was possible. The San Diego Harbor Police responded and oversight was provided by San Diego County Health Services Department.	Case Closed
3.	Campbell Shipyard Bay Sediment Cleanup & Capping ¹	San Diego Bay	LDS, WDS	Sediment in the San Diego Bay was contaminated with PCBs, copper, zinc, lead, tributyltin, PAHs, and TPH (Kleinfelder 2016) due to previous activities conducted by the Campbell Industries Marine Construction and Design Company and General Petroleum (Ninyo & Moore 2006). Cleanup activities have been conducted since 1995, including constructing an engineered and habitat cap over the contaminated sediments. These chemicals of concern were identified over the cap in an October 2015 monitoring event. <u>RWQCB issued case closure for this site and is currently providing</u> <u>regulatory oversight for the ongoing monitoring efforts.</u>	Case Closed with Environmental Monitoring – District preparing to implement a study to identify the sources of contamination
4.	Campbell Shipyard Area Wide Contamination	Landside Area Adjacent to San Diego Bay between Harbor Drive and Marina Way	RWQCB	Soil and groundwater were contaminated at four main areas in association with the former Campbell Shipyard: landside TPH- impacted soils (which includes four smaller areas), landside PAH zone, landside TPH- and PAH-contaminated groundwater, and east parking lot area (Kleinfelder 2000; Ninyo & Moore 2006). A portion of the landside TPH-impacted soils area and the landside PAH zone are located within the project site. As a result of remediation efforts, the four main soil and groundwater contamination areas were remediated to below cleanup levels and, therefore, RWQCB agreed to the closure of these sites (GeoTracker 2016; RWQCB 2010). However, residual soil contamination remains at the landside TPH- impacted soils area and the landside PAH zone (Kleinfelder 2000).	Case Closed contingent on no changes in land use

			Database		
Number	Site Name	Address	Listings	Site Summary	Status
	eport includes more closed with ongoing		-	nipyard, most of which are closed and/or duplic	ates. The site included here is currently
CHMIRS = C	California Hazardous	Material Inventory	Reporting Syste	m	
ERNS = Em	ergency Response No	tification System			
LDS = Land	Disposal Sites				
LUST = Leaking Underground Storage Tank					
PAHs = poly	yaromatic hydrocarb	ons			
PCBs = poly	chlorinated bipheny	ls			
RWQCB = R	legional Water Qualit	y Control Board			
TPH = total	petroleum hydrocar	bons			
WDS = Was	te Disposal Sites				

Section 4.7.4.3

Pages 4.7-26 and 4.7-27

Existing Contamination

If contaminated soil, groundwater, or sediments are present within the project site, excavation and other ground-disturbing activities during construction could expose the contamination, which could create a hazard to the public or the environment.

Onsite

As detailed in Section 4.7.2, *Existing Conditions*, contaminated soil and groundwater from prior activities at the former shipyard and waste disposal activities associated with SDG&E and the City were identified within and adjacent to the project site. Multiple remediation efforts were conducted to clean up the soil and groundwater contamination at four main areas associated with the former Campbell Shipyard, two of which are partially located within the project site. These include a portion of the landside TPH-impacted soils area and the landside PAH zone. The multiple cleanup efforts resulted in remediation of the four main soil and groundwater contamination areas to below cleanup levels. However, residual soil contamination remains at the landside TPH-impacted soils area and the landside TPH-impacted soils area and the landside approximately 12 to 17 feet below ground surface. Moreover, previous soil studies and remediation reports indicate that, while portions of the project site have been cleaned up, there is still a possibility that soils contaminated with heavy metals are present on site (District 2012). In the event excavation activities extend into any existing contaminated soils, there is a potential that hazardous materials could be released into the environment, which would be considered a significant impact (**Impact-HAZ-1**).

As mentioned under Section 4.7.2.3, *Onsite Hazardous Materials*, the proposed project site was identified in multiple databases due to releases of hazardous waste into the San Diego Bay in 2011 and 2013. Five gallons of diesel fuel were released in 2013 and an undisclosed quantity was released in 2011. Because response oversight was conducted by the San Diego County Health Services Department, residual material would have dissipated into the Bay from the time the release occurred to now, and the case is closed, construction of the marina is not expected to release hazardous materials into the environment due to these two releases.

However, the Campbell Shipyard cap extends into the project site, and the integrity of the cap could be compromised by the installation of piles for the marina, which would violate the conditions of Order R9-2004-0295. As discussed above, sediment in the Bay was contaminated with PCBs, copper, zinc, lead, TBT, PAHs, and TPH (Kleinfelder 2016) due to previous activities conducted by Campbell (Ninyo & Moore 2006). The cap was constructed over the contaminated sediment to protect the Bay from potential water quality impairments that could occur if the contaminated sediment is disturbed. Therefore, if the cap is disturbed and/or contaminated sediments are present outside of the cap, construction of the marina could result in a release of hazardous materials and create a potentially significant hazard within the environment by exacerbating the existing hazardous conditions. In addition, installation of piles for the marina could damage the existing cap. Disruption of contaminated sediment and/or the cap would also violate<u>could</u> result in a potential violation of/interfere with the goals of</u> Order No. R9-2004-0295 and would be considered a significant impact (**Impact-HAZ-2**).

Pages 4.7-28 through 4.7-30

Level of Significance Prior to Mitigation

Implementation of the proposed project potentially would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Potentially significant impact(s) include:

Impact-HAZ-1: Landside Soil Contamination. The historical information reviewed for this analysis indicates that the project site has a history of handling, disposal, and releases of hazardous materials. Therefore, contaminated soils may be encountered during construction activities, which could potentially result in a release of hazardous materials and exacerbate the existing hazardous conditions; impacts would be significant.

Impact-HAZ-2: Waterside Sediment Contamination and Damage to the Cap. Historical information and monitoring reports compiled from previous site assessments and database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during construction activities within the marina portion of the project site. As such, construction activities that disturb the sediment would potentially result in a release of hazardous materials and create a potentially significant hazard within the environment by bringing and releasing subsurface sediment contaminants to the surface of the Bay floor or exacerbating the existing hazardous conditions by spreading contaminated sediment. In addition, installation of piles for the marina could damage the existing cap during construction of the marina expansion if piles or construction equipment were placed on the cap. Disruption of contaminated sediment and/or the cap would also violate could result in a potential violation of/interfere with the goals of Order No. R9-2004-0295 and would be considered a significant impact.

Mitigation Measures

For Impact-HAZ-1:

MM-HAZ-1: Prepare and Implement a Soil and Groundwater Management Plan. Prior to the District's approval of the project's landside working drawings, the project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with experience in contaminated site redevelopment and restoration, to prepare and submit a Soil and Groundwater Management Plan to the District's Development Services Department for review and approval. After the District's review and approval, the project proponent shall implement the Soil and Groundwater Management Plan. The Soil and Groundwater Management Plan shall include the following:

• A Landside Site Contamination Characterization Report (Landside Characterization Report) delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured gas plant waste disposal area. The Landside Characterization Report shall include compilation of data based on historical records review and from prior reports and investigations and, where data gaps are found, include new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of landside residual

contamination. <u>A complete soil vapor analysis will also be conducted during preparation of the Landside Characterization Report and will include soil gas sampling and an indoor air quality risk assessment.</u> The project applicant also shall enroll in the Voluntary Assistance Program with the County of San Diego Department of Environmental Health and shall submit the results of the Landside Characterization Report to Department of Environmental Health staff for regulatory concurrence of results.

If the Landside Characterization Report identifies residual contamination that would be disturbed by the proposed project and potentially cause harm to human health or the environment, additional remedial actions shall be taken, in accordance with Department of Environmental Health oversight. These remedial actions shall be coordinated with the Department of Environmental Health and shall include, but not be limited to, the removal of contaminated soils that pose a vapor intrusion risk and/or the incorporation of project design features that prevent vapor intrusion into the proposed new buildings and structures. In addition, a soil vapor analysis and an indoor air quality risk assessment shall be conducted after the remedial action is complete to confirm that no residual VOC contamination remains or that it is below applicable and relevant state guidelines.

- A *Soil and Groundwater Testing and Profiling Plan* (Testing and Profiling Plan) for those materials that will be <u>imported to the project site and</u> disposed of during construction. Testing shall occur for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22–compliant offsite disposal facility. All excavation activities shall be actively monitored by a Registered Environmental Assessor for the potential presence of contaminated soils and for compliance with the Soil and Groundwater Sediment Testing and Profiling Plan.
- A *Soil and Groundwater Disposal Plan* (Disposal Plan), which shall describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. This plan shall be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27), and current industry best practices for the prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring.

In the event contaminated soil or groundwater is encountered, it shall be removed and disposed of in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27 and under the oversight of the County of San Diego Department of Environmental Health, which serves as the local regulatory agency responsible for oversight of hazardous materials issues in San Diego County. Hazardous waste shall be disposed of at three types of facilities. depending on the kind of waste, which will be identified in the Testing and Profiling Plan. Non-hazardous waste can be disposed of at a Class III landfill, such as the Otay Landfill. Waste that is considered hazardous in California but not in other states can be disposed of outside of California, including at the South Yuma County Landfill or the Republic Services Copper Mountain Landfill in Arizona. RCRA hazardous waste must be disposed of at a Class I landfill, such as US Ecology in Nevada. • A *Site Worker Health and Safety Plan* (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan shall be based on the Landside Characterization Report and the planned site construction activity to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist.

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MM-HAZ-6: Conduct Sediment Sampling and Implement Measures to Mitigate Potential Cross-Contamination of Marine Sediment from Pile Driving and In-Water Construction. Prior to the District's approval of the project's in-water working drawings, the project proponent shall retain a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment contamination, sediment sampling, and contamination remediation to perform all sediment sampling and analysis required by the Sampling and Analysis Plan (SAP) and Marine Sediment Contamination Characterization Report (Sediment Characterization Report)—both of which are discussed in detail within this mitigation measure.

The results of all sediment sampling shall be documented in a report and submitted to the District prior to any project development-related marine-side sediment-disturbing activities. If remediation is required, the remediation shall be conducted with oversight from the appropriate local, State, or federal regulatory agency. In addition, documentation evidencing the remediation work and completion thereof shall be submitted to the District. The project proponent shall monitor the remediation for its effectiveness for a period of time consistent with guidance from the regulatory agency with jurisdiction, but for no less than 1 year. A monitoring report shall be submitted to the District and the RWQCB for their review on a monthly basis, or at a frequency determined appropriate by relevant agencies having jurisdiction over the remediation. Additional details of this mitigation measure are provided below.

The project proponent and the professionally licensed Professional Engineer retained by the project proponent shall complete the following requirements, which shall be reviewed and approved by the District's Development Services Department, the RWQCB, and any other appropriate regulatory agencies.

Develop a SAP and perform sediment sampling in area(s) of potential disturbance for inwater construction activities that are located outside of the engineered cap. Sampling shall be conducted in accordance with the *Water Quality Control Plan for Enclosed Bays and Estuaries Plan* (August 2009). Specifically, the samples shall include analysis of (1) grain size analysis, (2) physical parameters, (3) total organic carbon, (4) Target Analyte List metals, (5) pesticides, (6) PAHs, (7) total PCBs (all 209 individual PCB congeners), as analyzed and reported by EPA Method 1668, and-(8) total polychlorinated terphenyls, (9) TPHs, and (10) TBT. The sampling area shall encompass the waterside project footprint and sample locations shall be representative of areas of potential project disturbance. Areas of potential disturbance include, but are not limited to, proposed pile locations for the marina

expansion; the locations of construction equipment, including without limitation to the location of any proposed spudding or other anchoring systems that will be utilized during construction of the marina expansion; potential deposition areas within the proposed silt curtain footprint; and any other areas where the Bay floor will be disturbed.

- Prepare a Sediment Characterization Report delineating the vertical and lateral extent and concentration of the project site's sediment contamination outside the engineered cap (Sediment Characterization). The Sediment Characterization Report shall be based on the sediment sampling results and shall rely on the Effects Range Low (ER-L) and Effects Range Median (ER-M) guideline values of the National Oceanic and Atmospheric Administration's *Sediment Quality Guidelines* (1999) as the basis for characterizing the sediment. The project proponent shall disclose the results of the Sediment Characterization Report to the RWQCB and the District (and any other appropriate regulatory agencies), and consult with the RWQCB on the contamination characterization of the sediment.
- If contaminated sediment is identified in the Sediment Characterization Report, the project proponent shall prepare a Contaminated Sediment Management Plan (Sediment Management Plan) for the District's, RWQCB's, and any other appropriate regulatory agencies' review and approval, if applicable. Once approved, the Sediment Management Plan shall be implemented by the project proponent subject to oversight by the District, RWQCB, and any other appropriate regulatory agencies, if applicable. The Sediment Management Plan shall describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the contaminated sediment outside the engineered cap as identified in the Sediment Characterization Report and the monitoring that will occur post-construction, including, at a minimum:
 - Pile Construction Options. Piles shall be constructed using:

(1) Impact Hammer Pile Driving. At the conclusion of the pile driving, the project applicant shall conduct sediment sampling of representative areas of potential disturbance near the location of piles consistent with the sampling approach set forth in the SAP, above. If the sediment samples show concentrations of sediment contamination above the Sediment Characterization, the project proponent shall delineate the extent of cross-contamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, or Enhanced Monitored Natural Recovery (EMNR) sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies.

OR

(2) <u>Internal Jetting</u>. This method includes a jet pipe running the length of the pile where the water exits at a small-diameter port at the bottom of the pile and a high-pressure water line is attached near the top tip of the pile. The high-pressure water shall reduce the skin friction between the pile and the marine sediments and avoid the creation of a large hole and a significant amount of turbidity. Turbidity curtains shall completely surround each pile from the top of the pile to the Bay floor and be placed no more than 2 feet from the pile. At the conclusion of the internal jetting, the project proponent shall conduct sediment sampling of representative areas of potential disturbance near the locations of the piles, consistent with the sampling approach set forth in the SAP, above.

If the sediment samples show concentrations of sediment contamination above the Sediment Characterization, the project proponent shall delineate the extent of crosscontamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, or EMNR sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies.

Spudding. If spuds are used, then when lifted during in-water construction, they shall be 0 lifted slowly at least a quarter of the speed they are lifted during normal operation of spuds. Before the spud reaches the subsurface of the Bay floor during deployment, the operator shall pause the spud lift for 1- to 2-minute intervals to reduce the disturbance of Bay sediment. At the conclusion of the marina construction, the project proponent shall conduct sediment sampling of representative areas of potential disturbance from spudding and other construction activities that may have disturbed the Bay floor within the project footprint, consistent with the sampling approach set forth in the SAP, above. If the sediment samples show concentrations of sediment contamination above the Sediment Characterization, the project proponent shall delineate the extent of crosscontamination and propose remediation approaches (subject to approval by the District and any other agencies with jurisdiction over site contamination) that may include, but are not limited to, dredging, placement of sand cover, or EMNR sand containing active carbon. The results of the sampling and remediation approaches shall be documented in a report to be reviewed and approved by the District, RWQCB, and any other appropriate regulatory agencies.

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MM-HAZ-8: Obtain <u>FAA Approval and ALUC</u> and FAA Formal Review and Determination. Prior to <u>initiation the Board</u> of <u>project construction,Port Commissioners taking final action to</u> <u>adopt the PMPA in accordance with 14 California Code of Regulations Section 13632(e)</u>, the project proponent shall obtain FAA approval and ALUC review and determination for construction equipment and operational structures.

5.2.10 Changes to Section 4.8, Hydrology and Water Quality

Section 4.8.1, Pages 4.8-1 and 4.8-2

4.8.1 Overview

This section describes the existing conditions and applicable laws and regulations for hydrology and water quality, followed by an analysis of the proposed project's potential to: (1) violate water quality standards or waste discharge requirements or otherwise degrade water quality, (2) substantially deplete groundwater supplies or interfere substantially with groundwater recharge, (3) substantially alter the existing drainage pattern of the site resulting in flooding or erosion; (4) contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, (5) place housing within a 100-year flood hazard area, (6) place

structures within a 100-year flood hazard area that would impede or redirect floodflows, (7) expose people or structures to a significant risk of loss, injury, or death involving flooding, and (8) contribute to inundation by seiche, tsunami, or mudflow. The environmental setting information and analysis in this section are partly based on the information from the Stormwater Quality Management Plan prepared for the proposed project, dated December 22, 2016, and the Preliminary Drainage Report prepared for the proposed project, dated December 22, 2016. These technical reports are hereby incorporated by reference and included as Appendices I-1 and I-2, respectively, of this Draft EIR. In addition, there is a well-documented contamination site created by the Campbell Shipyard, which operated from approximately 1915 to the 1990s, that is located mainly adjacent to the project site to the east; however, there is known contamination in the eastern portions of the project site from this historical shipyard activity. Because this is a known contaminated site, the Campbell Shipyard and the proposed project's potential to exacerbate existing hazardous materials condition is discussed in significant detail in Section 4.7, *Hazards and Hazardous Materials*, and the impact analysis, mitigation, and impact determinations are summarized in this section.

Pursuant to the recent Supreme Court case decision in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369, Case No. S213478, CEQA does not require an analysis of how the existing environmental conditions will affect a project's residents or users unless the project would exacerbate those conditions. Therefore, when discussing impacts of the environment on the project, such as how an area prone to flooding may affect a project, the analysis will first determine if there is a potential for the project to exacerbate the issue. If evidence indicates it would not, then the analysis will conclude by stating such. If it would potentially exacerbate the issue, then evidence is provided to determine if the exacerbation would or would not be significant.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-HAZ-2: Waterside Sediment Contamination and Damage to the Cap	MM-HAZ-5: Avoidance of the Engineered Cap MM-HAZ-6: Conduct Sediment Sampling and Implement Measures to Mitigate Potential Cross- Contamination of Marine Sediment from Pile Driving	<u>Significant and</u> <u>unavoidable</u>	Avoidance of the engineered cap would ensure that the project proponent avoids disturbing the engineered cap during in-water construction of the marina expansion (MM-HAZ-5). Conducting sediment sampling and implementing measures to minimize potential marine sediment cross- contamination during construction, as well as compliance with federal and state permits. In addition, measures are included to sample and characterize sediments and dispose of contaminants to ensure the proper handling and disposal of contaminated sediments. In addition, the project proponent shall not impede the District's compliance with Investigative Order No. R9-2017-0081 (MM-HAZ-6 and MM-HAZ-7). However, because RWQCB and/or other federal and state agencies have final regulatory authority to approve specific methods for in-

Table 4.8-1. Summary of Significant Hydrology and Water Quality Impacts and Mitigation Measures

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
	and In-Water Construction <u>MM-HAZ-7:</u> Compliance with Federal and State Permits: No Impedance of Investigative Order No. R9- 2017-0081		water construction, this impact would be significant and unavoidable.

Section 4.8.2.2, Page 4.8-3

San Diego Bay is the receiving water body for the project site. Water quality in San Diego Bay is influenced by processes and activities that take place within the Pueblo San Diego watershed. The creeks in the watershed are highly affected by urban runoff, such as contaminants from roadways, industry, and other urban sources. Stormwater runoff, urban runoff, and sewer spills have led to high concentrations of coliform bacteria, resulting in beach advisories in the Pueblo San Diego HU (Project Clean Water 2015). The most significant sources of pollutants affecting the beneficial uses of <u>the</u> San Diego Bay <u>Watershed Management Area</u> are urban and agricultural runoff, resource extraction, septic systems, and marinas and boating activities (Project Clean Water 2017).

Section 4.8.4.3

Page 4.8-28

With adherence to regulatory permit requirements associated with Rivers and Harbors Act Section 10 and CWA Section 401, which would be required from USACE and RWQCB, respectively, project construction would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade existing water quality. Beyond the regulatory requirements and the measures needed to ensure compliance, no mitigation under CEQA would be required.

Finally, a detailed discussion on the project's potential to exacerbate the existing contamination condition associated with the historical operation of the Campbell Shipyard is provided in Section 4.7, *Hazards and Hazardous Materials*. As discussed, the Campbell Shipyard cap extends into the project site, and the integrity of the cap could be compromised by the installation of piles for the marina, which would violate the conditions of Order R9-2004-0295. Sediment in the Bay was contaminated with PCBs, copper, zinc, lead, TBT, PAHs, and TPH (Kleinfelder 2016) due to previous activities conducted by Campbell (Ninyo & Moore 2006). The cap was constructed over the contaminated sediment to protect the Bay from potential water quality impairments that could occur if the contaminated sediment is disturbed. Therefore, if the cap is disturbed and/or contaminated sediments are present outside of the cap, construction of the marina could result in a release of hazardous materials and create a potentially significant hazard within the environment by exacerbating the existing hazardous conditions. In addition, installation of piles for the marina could damage the existing cap. Disruption of contaminated sediment and/or the cap could result in a potential violation of/interfere with the goals of Order No. R9-2004-0295 and would be considered a significant impact (**Impact-HAZ-2**).

Pages 4.8-31 through 4.8-33

Impact-HWQ-1: Potential to Violate Water Quality Standards or Waste Discharge Requirements for the Waterside Improvements. Expanded marina operations and boater activities have the potential to significantly impair water quality in the long term.

Impact-HAZ-2: Waterside Sediment Contamination and Damage to the Cap. Historical information and monitoring reports compiled from previous site assessments and database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during construction activities within the marina portion of the project site. As such, construction activities that disturb the sediment would potentially result in a release of hazardous materials and create a potentially significant hazard within the environment by bringing and releasing subsurface sediment contaminants to the surface of the Bay floor or exacerbating the existing hazardous conditions by spreading contaminated sediment. In addition, installation of piles for the marina could damage the existing cap during construction of the marina expansion if piles or construction equipment were placed on the cap. Disruption of contaminated sediment and/or the cap could result in a potential violation of/interfere with the goals of Order No. R9-2004-0295 and would be considered a significant impact.

Mitigation Measures

For Impact-HWQ-1:

MM-HWQ-1: Marina Best Management Practice Plan and Copper Reduction Measures. To reduce potential impacts on water quality, the project proponent shall prepare a Marina Best Management Practice Plan that shall be reviewed and approved by the District specifically identifying best management practices that will be used within the Marina to (1) minimize the pollutant load of runoff, including measures to prevent, eliminate, and/or otherwise effectively protect water quality of the Bay and (2) reduce inputs of total and dissolved copper resulting from increased berthing of boats. The Marina Best Management Practice Plan and Copper Reduction Measures shall be reviewed and approved by the District prior to the opening of marina operations. The Marina Operator shall be responsible for implementation and maintenance of the Marina Best Management Practice Plan and Copper Reduction Measures. At a minimum, the Marina Best Management Practice Plan shall include, but not be limited to, the following:

- Use of educational materials to be provided to boat owners and their crews that specify types of activities that shall be avoided or types of BMPs that shall be implemented in order to protect water quality, such as emptying of septic tanks and refueling only at approved locations, respectively. Recommendations to reduce oil leaks include conducting periodic maintenance of all fuel lines, hoses, and gaskets; putting an oil-absorbent pad in the bilge; and installing a filtration system to remove oil from bilge water.
- Docking agreements containing specific use restrictions to prevent degradation of water quality, such as restricting boat repairs and cleaning operations within the marina. These specific use restrictions shall be similar to the recommendations from the *San Diego Bay*

Boaters Guide (District 2006) and the California State Parks Division of Boating and Waterways and the California Coastal Commission Boating Clean and Green Program (California DBW 2017), both of which promote environmentally sound boating practices to marine business and boaters in California.

- Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats.
- Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina.
- Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, and no overwater repairs would be allowed.
- Implementation and monitoring of the District-adopted in-water hull cleaning regulations. Ordinance No. 2681 requires the use of BMPs for businesses doing in-water hull cleaning. The In-Water Hull Cleaning Permit is a Bay-wide permit to reduce or eliminate copper pollution caused by in-water hull cleaning activities.
- Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year).
- No fueling on site.

MM-HWQ-2: Water Quality Sampling for Total and Dissolved Copper. Prior to the commencement of marina development, the project proponent shall conduct water quality sampling to develop an updated baseline for total and dissolved copper as follows:

- Develop a sampling and analysis plan that will be reviewed and approved by the District prior to sampling. The plan shall identify a minimum of three points, denoting edges and midpoint of marina footprint.
- Sample for total and dissolved copper. The project proponent shall use an Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for all analytical testing.
- Compare dissolved copper levels to Basin Plan water quality objectives.
- The project proponent shall submit the baseline monitoring report to the District for its review and approval.

The project proponent shall conduct ongoing water quality monitoring and testing for total and dissolved copper, following the process outlined above for the updated baseline sampling, over the course of marina development/occupancy at the following frequency for each phase of marina development:

- After 50% occupancy,
- After 75% occupancy, and
- After full occupancy (95% slips under rental agreements).

Reports of all monitoring and testing results shall be prepared and paid for by the project proponent <u>(i.e., tenant)</u> and submitted to the District's Development Services Department for review and approval within 30 days after the occupancy milestones identified above.

If at any time during monitoring the water quality equals or exceeds or the Basin Plan water quality objectives and comparison with the updated baseline indicated that the exceedance is a

result of the proposed project, the project proponent shall immediately notify the District's Development Services Department and shall immediately cease further development and/or occupancy until additional BMPs addressing the issue are employed and reduce the copper levels.

Water quality testing shall occur every year following full occupancy of the marina or until the marina is fully occupied by non-copper hulled boats. The project proponent shall prepare written reports of the water quality testing results annually and submit the reports to the District's Development Services Department for review and approval within 30 days after the end of each calendar year. Any exceedance attributed to the proposed project (based on a comparison with the updated baseline assessment) shall require additional BMPs if determined necessary to reduce total and dissolved copper to below the Basin Plan water quality objectives.

BMPs that must be considered include, but are not limited to:

- Implementation of an incentive structure within the docking agreements' rent rates for occupants with non-copper hull paint boats.
- Identification of copper-free zones within the innermost portions of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina.
- Hull bottom scraping and the use of toxic detergents to clean vessels would be prohibited, and no overwater repairs would be allowed.
- Limitations on in-slip hull cleaning (restrict or limit number of cleanings per year).

If the project proponent (i.e., tenant) finds that one or more are infeasible, the tenant must provide written proof of infeasibility, which shall be subject to District review and concurrence. BMPs that are implemented must reduce total and dissolved copper to levels below the Basin Plan water quality objectives.

For Impact-HAZ-2:

Implement MM-HAZ-5: Avoidance of the Engineered Cap: MM-HAZ-6: Conduct Sediment Sampling and Implement Measures to Mitigate Potential Cross-Contamination of Marine Sediment from Pile Driving and In-Water Construction: MM-HAZ-7: Compliance with Federal and State Permits: No Impedance of Investigative Order No. R9-2017-0081.

Level of Significance after Mitigation

Implementation of **MM-HWQ-1** would require marina operators to implement measures that would reduce pollutant load runoff and reduce inputs of copper from boat berthing. In addition, **MM-HWQ-2** would require ongoing monitoring of water quality to ensure that marina operations do not equal or exceed the Basin Plan water quality objectives and to identify additional BMPs if this occurs. With these mitigation measures, impacts would be less than significant.

<u>Although implementation of mitigation measures MM-HAZ-5 through MM-HAZ-7 would minimize</u> potential impacts associated with sediment contamination (**Impact-HAZ-2**), it is still possible that in-water construction activities for the marina expansion could be located within areas with contaminated sediment. Additionally, approval of the methods for in-water construction are within the jurisdiction of the RWQCB and/or other federal and state agencies, and not the District. As such, while the District has required measures to minimize impacts associated with contaminated

sediment, the RWQCB and/or other federal and state agencies have final regulatory authority to approve specific methods for in-water construction. Consequently, **Impact-HAZ-2** would be significant and unavoidable.

5.2.11 Changes to Section 4.9, Land Use and Planning

Section 4.9.1, Pages 4.9-1 and 4.9-2

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-LU-3: Potential Inconsistency with the California Coastal Act's Requirement to Minimize Coastal Hazards through Planning and Development, Resulting in a Physical Impact on the Environment	MM-LU-1: Smart Design Decisions, Future Adaptation Strategies, and Operational Strategies	Less than significant ¹	The smart design decisions, future adaptation strategies, and operational strategies would reduce future building vulnerability, reduce the need for future structural alterations, <u>allow forrequire</u> future structural additions to be constructed as necessary, and reduce the risk of damage to the buildings and its occupants.
Impact-LU-4: Potential Inconsistency with the ALUCP	Implement MM-HAZ-8 , Obtain <u>FAA Approval</u> <u>and </u> ALUC and FAA Formal Review and Determination	Less than significant	Obtainment of the FAA and ALUC consistency determinations will ensure that the proposed project is consistent with the ALUCP.

Table 4.9-1. Summary of Significant Land Use Impacts and Mitigation Measures

¹ Less than significant with mitigation measures means that the proposed project is consistent with the applicable land use plan, policy, or law including the CCA with implementation of the mitigation measure.

Section 4.9.2, Page 4.9-4

Surrounding Community

The project site is along the waterfront in downtown San Diego. The area supports commercial, industrial, recreational, residential, civic, and marine-related land uses. As identified on Figure 2-3 in Chapter 2, *Environmental Setting*, land use designations include commercial recreation, street, recreational boat berthing, specialized berthing, park/plaza, boat navigation corridors, and ship navigation corridors. <u>Multi-familyMultiple use</u> land use designations are located inland to the north/northwest in the City's jurisdiction.

Section 4.9.4.3

Pages 4.9-15 through 4.9-17

Furthermore, limited public access for long periods of time due to hotel programming could result in the perception that the entire <u>1.962.26</u>-acre public plaza and park area is not open to the public

while private events are in session. Additionally, because the rooftop public plaza and park area is raised from ground level, the public may not readily know that these recreational areas are available for public use, which would conflict with CCA policies related to public accessibility to the coastline. As such, without sufficient wayfinding signage, the general public may be unaware of their existence and availability. These impacts would be considered significant (**Impact LU-2**).

If the proposed optional connecting pedestrian bridge is constructed, it would provide a direct connection for convention goers coming from the SDCC to access the rooftop public plaza and park area and would allow another path of travel from the waterfront to the City's Gaslamp Quarter. However, if the bridge is not constructed, convention goers would continue to have access to the project area in the same manner as under the current condition. This includes stair and elevator access between the Phase I and Phase II SDCC sections or walking around the Phase II expansion, through or around the Convention Center Park to access the adjacent parcel and waterfront at the ground level. Once at the existing promenade (ground level), pedestrians would be able to safely climb one flight of stairs, use the ramp, or take an elevator to the second-level public plaza and park area. As such, the optional bridge would not result in any public access impacts regardless of whether or not it is constructed.

In general, CEQA currently does not require an analysis of how existing environmental conditions will affect a project's future users or residents (see *California Building Industry Assoc. v. Bay Area Air Quality Management District [Dec. 17, 2015] Cal.4th*). However, the project site is within the Coastal Zone and there are several CCA policies that are relevant to SLR. Therefore, the extent to which existing environmental conditions will affect a project's future users and infrastructure, particularly in terms of SLR, is addressed in Section 4.6, *Greenhouse Gas Emissions and Climate Change.* However, an analysis of the proposed project's consistency with the CCA, including the CCC's Sea Level Rise Policy Guidance, is provided herein.

As discussed in Section 4.6, *Greenhouse Gas Emissions and Climate Change*, projected SLR, as an effect of climate change, is expected to increase the number of areas that experience coastal flooding along San Diego Bay. Based on the projections shown in Table 4.6-5, there is the potential for daily bulkhead overtopping at the end of the proposed project's useful life (i.e., 2082, or 66 years) if SLR keeps pace with the "high" projections (see Figures 4.6-1 and 4.6-2 for a graphic depiction). However, after mid-century, projections of SLR become more uncertain. The range of future SLR projections is due in part to modeling uncertainties, but primarily due to uncertainties about future global GHG emissions and uncertainties associated with the modeling of land ice melting rates. Therefore, for projects with timeframes beyond 2050, it is especially important to consider adaptive capacity, impacts, and risk tolerance to guide decisions about whether to use the low or high end of the ranges presented.

In the foreseeable future, the bulkheads would be sufficiently above sea level to prevent any adverse effects from SLR on the landside portions of the project, as shown on Figure 4.6-1. However, future storm surge levels will be more likely to overtop the surrounding bulkheads toward the end of the lease, as shown on Figure 4.6-2. The bulkheads around the project site vary in height from approximately 7–9 feet above existing mean sea level. These bulkheads are the first line of defense against SLR and storm surge. If the bulkheads are breached then water may would infiltrate the project site, which could place people or structures at substantial risk of harm. A breach caused by lack of planning based on the best known science would be inconsistent with the guideline to minimize coastal hazards through planning and development standards. (Impact-LU-3).

Table 4.6-5 and Figures 4.6-1 and 4.6-2 depict the minimum bulkhead elevation compared to SLR and storm surge projections for the 2030, 2050, and 2082 timeframes. As shown in Table 4.6-5 and Figure 4.6-1, the bulkheads should remain sufficiently above the upper end of the daily SLR projections until the very end of the proposed project's useful life (2082). As shown in Figure 4.6-2, when accounting for <u>a 100-year</u> storm surge events (temporary inundation), the bulkheads would remain sufficiently above SLR and storm surge projections until mid-century, but inundation during storm surges will become more likely as the proposed project moves toward the end of its useful life, which would, again, be inconsistent with the CCA's requirement to minimize coastal hazards through planning and development standards (**Impact-LU-3**).

The waterside portions of the proposed project are designed to accommodate large fluctuations in water levels. In particular, the marina guide piles and gangways are designed to accommodate fluctuations of up to 13 feet over mean lower low water elevations. As shown in Table 4.<u>6</u>9-<u>17</u>2, this design should sufficiently accommodate the SLR and storm surge projected over the useful life of the waterside facilities.

Marina Guide Piles Top Elevation Above Mean Higher High Water ¹	High Sea Level Rise Projection at the End of Useful Life (2082) ²	100-Year Storm Elevation ³	Remaining Marina Guide Pile Elevation above SLR and Storm Surge
7.36 Feet	4.22 Feet	2.4 Feet	0.74 Feet

Table 4.9-2. Sea Level Rise Projections for Marina Expansion

⁺Based on a stated marina guide pile elevation of 13 feet above mean lower low water and the mean higher high water elevation obtained from: https://www.portofsandiego.org/maritime/check_port_and_harbor-conditions/424_tides_and_currents.html (District 2016).

² Based on the linear extrapolation of projections for south of Cape Mendocino. Obtained from:

http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013_SLR_Guidance_Update_FINAL1.pdf (Ocean Protection Council 2013).

³The 100-year (1% return probability) surge events obtained from:

http://tidesandcurrents.noaa.gov/est/curves.shtml?stnid=9410170 (NOAA 2016).

A comprehensive analysis of the project's consistency with applicable regulations, plans, and policies is provided in Table 4.9-<u>32</u>. As discussed above, there are some aspects of the project that would not be consistent with the PMP and the CCA. However, implementation of the mitigation measures detailed below would ensure consistency with the goals of the PMP, as well as the policies of other land use plans and policies that are applicable to the project site, including the CCA, the CCC's Sea Level Rise Policy Guidance, the South Embarcadero Urban Design and Signage Guidelines, and the South Embarcadero Public Access Program. In addition, as discussed above, the proposed project will be reviewed by the ALUC and FAA and is required to obtain all necessary determinations prior to construction (**MM-HAZ-8** in Section 4.7, *Hazards and Hazardous Materials*); with the obtainment of these determinations, the proposed project would be consistent with the ALUCP. However, if these determinations are not obtained the proposed project would be inconsistent with the ALUCP (**Impact-LU-4**). Therefore, impacts related to consistency with an applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect would be less than significant with the implementation of mitigation.

Pages 4.9-18 through 4.9-21

For Impact-LU-2:

MM-PS-1: Operation Requirements for the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace Areas. Under no circumstances shall the closure of the public plaza and park areas for private hotel events be more than the following percentages.

- Multifunctional Plaza and Lawn (35,94040,414 square feet): 50% private access (50% public access). This area would be available for private events 50% of the year, which is defined as the equivalent of 182.5 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 50% of the year (182.5 days). For clarification purposes, if a private event occupies the Multifunctional Plaza and Lawn for part of a day, it shall count as occupying the Multifunctional Plaza and Lawn for an entire day when calculating the 182.5-day private event limit.
- Public Park Plaza (39,86045,062 square feet): 15% private access (85% public access). This area would be available for private events 15% of the year, which is defined as the equivalent of 55 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 85% of the year (310 days). For clarification purposes, if a private event occupies the Public Park Plaza for part of a day, it shall count as occupying the Public Park Plaza for an entire day when calculating the 55-day private event limit.
- Public Park Plaza and Public Observation Terrace (6,5009,782 square feet): 0% private access (100% public access). This area would be not be available for private events, and would be open to the public at no cost 100% of the year.
- Public Promenade (3,190 square feet): shall be an approximate 10-foot-wide walkway along the southeast portion of the market-rate hotel tower and shall be 0% private access (100% public access). This promenade would not be available for private events, and would be open to the public at no cost 100% of the year.

If the private event area is blocked off from the public usable area, such barriers shall not be solid materials but shall be a material like ropes. To ensure the private event area is restored for the public use, all trash and debris shall be immediately picked up and disposed of appropriately during and after the private event.

During times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during non-private event times), the hours of operation shall be the same as the District's park hours of operation.

During all private events, clear signage shall be placed in publicly visible locations (i.e., not posted inside the hotel) at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge (if developed), and two locations along the existing Embarcadero Promenade, that indicate the Multifunctional Plaza and Lawn area and/or the Public Park Plaza areas, if applicable, are open to the public. Clear signage shall be placed at the Public Park Plaza and Public Observation Terrace that indicates it is open to the public.

After project construction is complete, on January 31 of each year, the project proponent shall submit an annual public access usage report to the District's Development Services Department that demonstrates, for the preceding year, that the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private access (for private events) as follows and consistent with this **MM-PS-1**:

- Multifunctional Plaza and Lawn (50% public access/50% private access)
- Public Park Plaza (85% public access/15% private access)
- Public Park Plaza and Public Observation Terrace (100% public access)

The report shall be broken down by the Multifunctional Plaza and Lawn and Public Park Plaza areas and shall list the date, private event, start and end times, duration of each event, setup and breakdown time, and total number of days and percentage of private use for that year. Furthermore, the report shall contain confirmation, such as photographs or a signature by the hotel manager, that for each private event, signage indicating public use of the remaining area (if applicable) was placed consistent with this **MM-PS-1**. For the Public Park Plaza and Public Observation Terrace area, the report shall confirm that this area was accessible to the public 100% of the year and contained signage indicating such.

For Impact-LU-3:

MM-LU-1: Smart Design Decisions, Future Adaptation Strategies, and Operational

Strategies. To reduce potential impacts related to bulkhead overtopping in mid-century during extreme storms, the project proponent shall implement the following into building design and construction, and during operation. Prior to the issuance of building permits for the project, the project applicant shall submit design plans and operational strategies to the District's Development Services Department for its review and approval.

Smart Design Decisions – the project proponent shall incorporate the following into all building design and as part of construction. All building plans shall reflect the designs.

- Place mechanical and electrical equipment at least 2 feet above the design flood elevation to reduce risk of flood damage. If equipment must be placed in lower areas, elevate base or ensure assets are composed of flood damage-resistant materials.
- Design water supply, sanitary sewage, and stormwater systems to minimize or eliminate infiltration of flood waters into systems and vice versa. For example, this may include installing backwater valves at building connections or at outfalls, increasing outfall elevations when replacing them, installing forced mains, or increasing pump capacity.
- Ensure that all building exterior walls are composed of materials that have an impermeable and waterproof membrane.
- <u>Contribute a "fair share" payment in an amount to be determined by the District based on an analysis for the cost of construction of future bulkhead improvements that would offer direct flood mitigation benefits to the project site.</u>

Future Adaptation Strategies – the project proponent shall incorporate the following into all building design and as part of construction. All building plans shall reflect the designs.

• Ensure that building foundations are capable of supporting future flood walls or temporary flood barriers.

- Design building openings (e.g., doors, windows, utility penetrations) to be capable of future retrofitting to make them watertight and resistant to flood loads.
- If replacing or constructing additional bulkheads, design key structural elements to allow future increases in the elevation of the bulkhead crest.
- <u>Upon receipt of the operational strategies report (see below), the District's Development</u> <u>Services Department shall determine, if given the most up-to-date sea level rise projections,</u> <u>the current coastal protection features (e.g., the existing bulkheads) would be overtopped if</u> <u>a 100-year storm surge were to occur in the next 10 years. If so, within the next 5 years, the</u> <u>project proponent, in consultation with and approved by the District's Development</u> <u>Services, -must either install onsite protections (e.g., flood walls and flood-proof openings)</u> <u>to protect the buildings from a high sea level rise scenario and a 100-year storm surge</u> <u>through the end of the Port lease (2082) or, as mentioned above, contribute a "fair share" to</u> <u>future bulkhead improvements that would offer the same or a greater level of protection.</u>

Contribute a "fair share" payment in an amount to be determined by the District based on an analysis for the cost of construction of future bulkhead improvements that would offer direct flood mitigation benefits to the project site.

Operational Strategies – the project proponent shall implement the following strategies during operation and update the strategies every 5 years using the best available science. A report evidencing the operational strategies shall be submitted to the District's Development Services Department upon opening of the project or first component thereof and every 5 years thereafter.

- Establish an early warning system to monitor the risk of flooding. At a minimum, the early warning system shall consist of:
 - Protocols for obtaining information on local weather alerts, and established levels at which additional action (e.g., sandbagging) will be taken.
 - Protocols for monitoring water levels at nearby storm gauges prior to the storm arrival, and regularly checking the water levels along the project bulkhead as the storm progresses.
- Establish emergency evacuation procedures for people to relocate to higher ground on short notice.
- Obtain or execute on-call contracts for backup power generators for critical functions, such as the operation of one elevator and emergency lighting systems. Also obtain or execute on-call contracts for portable pumps, and ensure that there is sufficient fuel to operate these. Establish protocols for operating said generators and pumps during storm events or other such events.
- Before a storm that is forecasted to overtop the bulkheads, deploy sandbags or inflatable barriers. Over time, monitor and track the rainfall amounts and storm projections that result in localized flooding and update the deployment protocol to account for this experience.
- Before a storm that is forecasted to result in localized flooding, test emergency power sources and pumps and ensure that there is sufficient fuel to run these, and inspect building exterior to ensure that there are no penetrations that lack flood proofing. If cracks or leaks are identified, seal them or temporarily cover with a flood-proof material, to the extent

feasible, prior to the storm. Over time, monitor and track the rainfall amounts and storm projections that result in localized flooding and update the deployment protocol to account for this experience.

• Restrict public access during storms or flooding events if water levels are forecasted to rise to unsafe levels.

For Impact-LU-4:

MM-HAZ-8: Obtain <u>FAA Approval and ALUC and FAA Formal Review and Determination.</u> Prior to <u>initiation the Board</u> of <u>project construction,Port Commissioners taking final action to</u> adopt the PMPA in accordance with 14 California Code of Regulations Section 13632(e). the project proponent shall obtain FAA approval and ALUC review and determination for construction equipment and operational structures.

Page 4.9-22

The District retains all land use and mitigation rights and decisions on areas within its jurisdiction, and the protection of biological resources within the District are guided by the PMP. However, the PMP also states that the District will cooperate with other communities and agencies in the area, including implementation of the City of San Diego's Multiple Species Conservation Program (MSCP) or Environmentally Sensitive Lands Ordinance. Although the project site is within the boundaries of the MSCP, the City MSCP Subarea Plan does not identify the Convention Way Basin as being within the Multi-Habitat Planning Area. In addition, no biological resources conservation is planned for the Convention Way Basin as part of the PMP. Furthermore, as detailed in Table 4.9-<u>2</u>3, the proposed project would be consistent with the goals and policies of the San Diego Bay Integrated Natural Resources Management Plan to protect the natural resources of the Bay, including the water quality, marine wildlife, birds, and habitats. Therefore, implementation of the proposed project would not conflict with the provisions of an approved local biological resources conservation plan.

Pages 4.9-22 through 4.9-43

Goal, Policy, Objective	Proposed Project Consistency
Port Master Plan - Section II	
Goal II. The Port District, as trustee for the people of the State of California, will administer the Tidelands so as to provide the greatest economic, social, and aesthetic benefits to present and future generations.	Consistent. The proposed project would be developed using a similar scale, bulk, and materials to the existing buildings in the area, such as the Hilton San Diego Bayfront Hotel, and would provide approximately 850843 new hotel rooms at the market-rate hotel tower and <u>220 rooms</u> 565 beds within a lower-cost visitor-serving hotel that would meet the demand from events at the SDCC as well as other events in the downtown region. The proposed project would also enhance social opportunities at the bayfront with the addition of public plaza and park areas and retail establishments along the Embarcadero Promenade. In making its decision whether to adopt the proposed PMPA, the Board of Port Commissioners

Table 4.9-23. Project Consistency with Relevant Goals, Objectives, and Policies

Goal, Policy, Objective	Proposed Project Consistency
	will exercise its discretion so as to provide the greatest economic, social, and aesthetic benefits to present and future generations.
 Goal V. The Port District will take particular interest in and exercise extra caution in those uses or modifications of the Bay and Tidelands, which constitute irreversible action of loss of control. Bay fills, dredging and the granting of longterm leases will be taken only when substantial public benefit is derived. 	Consistent. The proposed project would include expansion of the existing marina, which would require modification to the Bay and tidelands with the addition of pile-supported dock space. Expansion of the marina would result in an increase of 13,623 square feet or 0.31 acre of structural fill with the construction of 188 piles and the breakwater for the marina expansion. However, mitigation measures will be implemented to ensure the proposed project does not adversely affect open water habitat function, water quality, wildlife resources, or water circulation (see Sections 4.3, <i>Biological Resources</i> , and 4.8, <i>Hydrology and Water</i> <i>Quality</i>). In addition, the proposed project would create significant public benefit by the inclusion of an 850843 -room market-rate hotel tower, and a 525-bed220-room lower-cost visitor-serving hotel, and further activation of the Embarcadero Promenade with pedestrian-oriented retail uses.
 Goal VI. The Port District will integrate the tidelands into a functional regional transportation network. Improved automobile linkages, parking programs and facilities, so as to minimize the use of waterfront for parking purposes. Providing pedestrian linkages. Encouraging development of non-automobile linkage systems to bridge the gap between pedestrian and major mass systems. 	Consistent. The proposed project would replace two existing parking lots with two hotels, public plaza and park areas, retail, and 263260 parking spaces and would minimize use of a waterfront area for parking purposes. In addition, if the optional pedestrian bridge between the proposed project and the SDCC is approved, the project would provide additional pedestrian linkages to the bayfront as well as a direct pedestrian linkage from the project site to the trolley station on the north side of Harbor Drive.
Port Master Plan - Section III (Commercial Land	Use Objectives and Criteria)
 Each commercial area on District lands should have: convenient access from major arterials or transportation terminals and ample on-site parking for patrons. 	Consistent. The proposed project would have convenient access from Convention Way via Park Boulevard and Harbor Drive, both of which are major arterials. In addition, the project would provide 263260 onsite parking spaces in a parking structure in an area heavily served by public transportation. The implementation of a Parking Demand Management Plan would further reduce the need for parking. Consequently, as discussed in Section 4.12, <i>Transportation, Circulation, and</i> <i>Parking</i> , the proposed project would ensure continued access to the waterfront.
Port Master Plan - Section III (Public Recreation	
Parks, plazas, public access ways, vista points and recreational activities on Port lands and tidelands should:	Consistent. The proposed project would increase the amount of publicly accessible plaza and park areas (1.962.26 acres) throughout the project site, and, as discussed in this section, would include the development of a contiguous 1-acre park that is

Goal, Policy, Objective	Proposed Project Consistency
 provide a variety of public access and carefully selected active and passive recreational facilities suitable for all age groups including families with children throughout all seasons of the year. enhance the marine, natural resource, and human recreational assets of San Diego Bay and its shoreline for all members of the public. provide for clear and continuous multilingual information throughout Port lands and facilities to and about public access ways and recreational areas. 	required by mitigation to be open to the public the majority of the time, as detailed in Section 4.11, <i>Public Services and Recreation</i> . The project would also include mitigation that requires identification of five new vista areas within the project site to replace existing vista areas that would be displaced by the proposed project. The proposed project would also increase marine recreational assets of the Bay by adding additional slips to an existing large vessel marina. Finally, the proposed project would incorporate wayfinding signage and maps throughout the project site as well as informative displays illustrating the history of the San Diego Bay. The wayfinding signage is also included as mitigation in Section 4.1, <i>Aesthetics and Visual</i> <i>Resources</i> .
California Coastal Act	
Section 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	Consistent. The proposed project would maintain the existing Embarcadero Promenade and would not impede access to that resource or to the adjacent EMPS. In addition, the proposed project would add up to 85,49098,448 square feet of new public plaza and park areas to the project site that would be open to the public except for a limited number of special events. Table 3-2 in Chapter 3, <i>Project Description</i> , summarizes the proposed public plaza and park areas and the percentage the area would be available to the public.
Section 30212.5 . Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.	Consistent. The proposed project would provide 263260 parking spaces onsite. In addition, additional public parking is provided within the immediate area, including the adjacent Hilton San Diego Bayfront Hotel Parking garage and the SDCC parking garage. Additional nearby parking locations include, but are not limited to the 6 th and K Parkade, 550 J St Parking Garage, the Padres Public Parking Garage, the Autopark Public Parking Garage, and several blocks with on-street parking. All of these facilities are less than 0.5 mile from the project site. As a result, the proposed project would not contribute to overcrowding or overuse by the public of any single area.
Section 30213 . Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. The commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the	Consistent. The proposed project would include a lower-cost, visitor-serving hotel that would provide approximately 565 beds220 rooms in order to meet the demand for waterfront lodging at a more affordable price point. In addition, the proposed project would add 2.261.96 acres of new public plaza and park areas to the project site that would be free of charge and open to the public, except during a limited number of special events. Finally, as detailed in Section 4.11, <i>Public Services and</i>

Goal, Policy, Objective	Proposed Project Consistency
identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.	<i>Recreation,</i> the proposed project includes mitigation that requires at least one boat slip that is provided at low or no cost.
Section 30252. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service	Consistent. The project site is near existing public transportation services, including bus and trolley stops. The addition of two hotels, public plaza and park areas, retail space, and an expanded marina would encourage additional use of public transit by increasing the number of users of the project site, particularly out-of-town visitors who would not necessarily rent or bring a car with them.
(2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads	Consistent. Adequate access to the project would be provided via Convention Way. The proposed project would not result in increased use of coastal access roads.
(3) providing non-automobile circulation within the development	Consistent. The proposed project would increase pedestrian access to the waterfront and the existing Embarcadero Promenade with the addition of up to <u>1.962.26</u> acres of public plaza and park areas and would incorporate wayfinding signage and maps throughout the project site to facilitate pedestrian circulation. The wayfinding signage is also included as mitigation in Section 4.1, <i>Aesthetics and Visual Resources</i> .
(4) providing adequate parking facilities or providing substitute means of serving the development with public transportation	Consistent. The proposed project would provide 263260 parking spaces. In addition, the project site is located near several public transportation options, including the Green Line trolley stops at the Convention Center Station, which is 0.23 mile from the project site, and the Gaslamp Quarter Station, which is 0.17 mile from the project site. In addition, several bus routes provide service near the project site, including Routes 11, 901, and 929. The stop for these routes are approximately 0.4 mile from the project site. Moreover, water ferry and taxi services are provided to and from the project site via the Water Transportation Center. Finally, a collection of bicycle and pedestrian routes surround the project site. Details for each of these public transportation options are provided in Section 4.12, <i>Transportation, Circulation, and Parking.</i> As such, there is a substantial concentration of public transportation that serves the project site.

5.2.12 Changes to Section 4.11, Public Services and Recreation

Section 4.11.4.3

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Construction

Construction of the proposed project would involve the construction of an 850843-room marketrate hotel tower; a 565-bed220-room lower-cost, visitor-serving hotel; approximately 6,0007,749 square feet of retail development along the Embarcadero Promenade; approximately 1.962.26 acres (85,49098,448 square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of at-grade commercial recreation and park/plaza located within the area proposed for the lower-cost, visitor-serving hotel; approximately $\frac{263}{260}$ onsite parking spaces; expansion of the marina including up to 50 new slips; and an optional connecting bridge from the hotel rooftop public plaza and park areas to the SDCC. In addition, the proposed project includes the construction of offsite utility improvements and the use of the R.E. Staite property (which includes an existing construction equipment staging lot) located approximately 2.2 miles from the project site for construction worker parking and construction staging. Construction of the proposed project is anticipated to occur over a 24- to 30-month period, with the exception of Phase II of the marina expansion, which is not anticipated to occur until 5 years after the hotel becomes operational. During construction, there could be a need to respond to the project site for construction-related injuries or an accidental fire. Construction of the waterside components may generate an increased need for HPD's fireboats should any waterside emergencies occur. Fire protection and emergency response would be provided by SDFD (landside components, offsite utility improvements, and staging/parking areas) and HPD (waterside components).

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Construction

As mentioned, the proposed project includes the construction of approximately <u>1.962.26</u> acres (<u>85,49098,448</u> square feet) of public plaza and park areas throughout the project site. Potential impacts associated with construction of the proposed project, including the proposed public plaza and park areas, are analyzed throughout the applicable sections of this EIR, including Sections 4.1, *Aesthetics and Visual Resources*; 4.2, *Air Quality and Health Risk*; 4.4, *Cultural Resources*; 4.5, *Geology and Soils*, 4.6, *Greenhouse Gas Emissions and Climate Change*; 4.7, *Hazards and Hazardous Materials*; 4.8, *Hydrology and Water Quality*; 4.10, *Noise and Vibration*; and 4.12, *Transportation, Circulation, and Parking*. Construction of the proposed public park and plaza areas would not result in impacts related to air quality and health risk, greenhouse gas emissions and climate change, or hydrology and water quality.

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Physical Impacts of Operation

The proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.7 acre) to approximately <u>85,49098,448</u> square feet (<u>1.962.26</u> acres). It should be noted that the existing 0.7-acre park/plaza space has a land use designation of

both commercial recreation (ground-level) and park/plaza (elevated). The proposed project would also maintain the existing 35-foot-wide Embarcadero Promenade across the site. Therefore, the proposed project complies with the acreage requirements of the PMP. See Tables 3-2 and 3-3 and Figure 3-12 in Chapter 3, *Project Description*.

Pages 4.11-19

Public Access to Waterfront

The proposed project would include the existing 35-foot-wide Embarcadero Promenade across the site, as well as an approximately 10-foot walkway that would wrap around the hotel and connect to the Embarcadero Promenade. This project feature would maintain access to the waterfront of the Bay, thereby preventing a significant impact on public access to the waterfront.

In addition, the proposed project includes an option to construct a pedestrian bridge that would provide a direct connect between the SDCC and the rooftop public access plaza and park area. If the proposed optional connecting pedestrian bridge is constructed, it would provide a direct connection for convention goers coming from the SDCC to access the rooftop public plaza and park area and would allow another path of travel from the waterfront to the City's Gaslamp Quarter. However, if the bridge is not constructed, pedestrians coming from the SDCC would continue to have access to the waterfront in the same manner as under the current condition. This includes stair and elevator access between the Phase I and Phase II SDCC sections or walking around the Phase II expansion, through or around the Convention Center Park to access the adjacent parcel and waterfront at the ground level. In addition, once at the existing promenade (ground level), pedestrians would be able to safely climb one flight of stairs, use the ramp, or take an elevator to the second-level public plaza and park area, which provides elevated views of the waterfront. As such, the optional bridge would not result in any public access impacts regardless of whether or not it is constructed.

Pages 4.11-23 and 4.11-24

MM-HAZ-1: Prepare and Implement a Soil and Groundwater Management Plan. Prior to the District's approval of the project's landside working drawings, the project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with experience in contaminated site redevelopment and restoration, to prepare and submit a Soil and Groundwater Management Plan to the District's Development Services Department for review and approval. After the District's review and approval, the project proponent shall implement the Soil and Groundwater Management Plan. The Soil and Groundwater Management Plan shall include the following:

• A *Landside Site Contamination Characterization Report* (Landside Characterization Report) delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured gas plant waste disposal area. The Landside Characterization Report shall include compilation of data based on historical records review and from prior reports and investigations and, where data gaps are found, include new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of landside residual contamination. <u>A complete soil vapor analysis will also be conducted during preparation of the Landside Characterization Report and will include soil gas sampling and an indoor air quality risk assessment. The project applicant also shall enroll in the Voluntary Assistance</u>

Program with the County of San Diego Department of Environmental Health and shall submit the results of the Landside Characterization Report to Department of Environmental Health staff for regulatory concurrence of results.

If the Landside Characterization Report identifies residual contamination that would be disturbed by the proposed project and potentially cause harm to human health or the environment, additional remedial actions shall be taken, in accordance with Department of Environmental Health oversight. These remedial actions shall be coordinated with the Department of Environmental Health and shall include, but not be limited to, the removal of contaminated soils that pose a vapor intrusion risk and/or the incorporation of project design features that prevent vapor intrusion into the proposed new buildings and structures. In addition, a soil vapor analysis and an indoor air quality risk assessment shall be conducted after the remedial action is complete to confirm that no residual VOC contamination remains or that it is below applicable and relevant state guidelines.

- A *Soil and Groundwater Testing and Profiling Plan* (Testing and Profiling Plan) for those materials that will be <u>imported to the project site and</u> disposed of during construction. Testing shall occur for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22–compliant offsite disposal facility. All excavation activities shall be actively monitored by a Registered Environmental Assessor for the potential presence of contaminated soils and for compliance with the Soil and Groundwater Sediment Testing and Profiling Plan.
- A *Soil and Groundwater Disposal Plan* (Disposal Plan), which shall describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. This plan shall be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27), and current industry best practices for the prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring.

In the event contaminated soil or groundwater is encountered, it shall be removed and disposed of in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27 and under the oversight of the County of San Diego Department of Environmental Health, which serves as the local regulatory agency responsible for oversight of hazardous materials issues in San Diego County. Hazardous waste shall be disposed of at three types of facilities, depending on the kind of waste, which will be identified in the Testing and Profiling Plan. Non-hazardous waste can be disposed of at a Class III landfill, such as the Otay Landfill. Waste that is considered hazardous in California but not in other states can be disposed of outside of California, including at the South Yuma County Landfill or the Republic Services Copper Mountain Landfill in Arizona. RCRA hazardous waste must be disposed of at a Class I landfill, such as US Ecology in Nevada.

• A *Site Worker Health and Safety Plan* (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan shall be based on the Landside Characterization Report and the planned site construction activity to ensure that site

workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist.

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MM-HAZ-8: Obtain <u>FAA Approval and ALUC and FAA Formal Review and Determination.</u> Prior to <u>initiation the Board</u> of <u>project construction, Port Commissioners taking final action to</u> <u>adopt the PMPA in accordance with 14 California Code of Regulations Section 13632(e)</u>, the project proponent shall obtain FAA approval and ALUC review and determination for construction equipment and operational structures.

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MM-TRA-1: Transportation Demand Management Plan. Prior to commencing any construction or demolition activities, the project proponent shall provide a Transportation Demand Management (TDM) Plan to the San Diego Unified Port District, and City of San Diego, and Caltrans for approval that shall limit the number of construction worker trips that travel through the affected intersections during peak periods to 50 trips. The TDM plan shall incorporate TDM strategies to be implemented during construction, including, but not limited to:

- Implementation of a ride-sharing program to encourage carpooling among the workers.
- Adjustment of work schedules (e.g., arrive before 7 a.m. or after 9 a.m.; leave before 4 p.m. or after 6 p.m.) so that workers do not access the site during peak hours.
- Provision of offsite parking locations for workers outside of the area with shuttle services to bring them on site, as identified in **MM-TRA-7**.
- Provision of subsidized transit passes for construction workers.

In addition, for impacts on the I-5 southbound/Boston Avenue intersection during construction, prior to commencing construction or demolition activities, the project proponent shall provide a Traffic Control Plan in accordance with Caltrans policies to the San Diego Unified Port District and Caltrans for approval.

Pages 4.11-29 through 4.11-32

MM-TRA-4: Restriping of Northbound Left-Turn Lane at 19th Street/J Street Intersection. Prior to the issuance of occupancy permits, the project proponent shall pay for or directly implement restriping the northbound left-turn lane into a northbound left-turn and throughshare lane at the intersection of 19th Street and J Street. Restriping lanes will require approval from the City of San Diego and coordination with Caltrans. The project proponent shall provide proof of payment or completion to the District for verification before issuance of the occupancy permits may occur.

MM-TRA-5: Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements. Prior to the issuance of occupancy permits, the project proponent shall enter

into a Traffic Mitigation Agreement with Caltrans for I-5 operational improvements for the segment of northbound I-5 between Grape Street and First Avenue, in compliance with *San Diego Forward: The Regional Plan* prepared by SANDAG (SANDAG 2015) and proof of this agreement shall be provided to the District. Caltrans shall install The installation of the following I-5 operational improvements is under Caltrans jurisdiction. for the segment of northbound I-5 between Grape Street and First Avenue, in compliance with *San Diego Forward: The Regional Plan* prepared by SANDAG (SANDAG 2015).

MM-TRA-8: Implement a Parking Management Plan that Provides Parking Management Strategies. Prior to the issuance of the certificate of occupancy for market-rate hotel operations, the project proponent shall submit a Parking Management Plan to the District for approval. Upon approval and during project operations, the project proponent shall provide a quarterly report on the Parking Management Plan to the District's Development Services Department, which shall be subject to verification by District staff. The project proponent shall implement the following parking management strategies and any other strategies identified in the Parking Management Plan to mitigate the projected parking deficiency:

• Valet Parking – Secure 209189 parking spaces (Secured Parking) at one or more offsite parking lots and provide a valet service that allows guests to utilize the secured spots, in order to avoid overflow in the immediate surrounding parking areas. Prior to commencement of hotel operations, the project proponent will enter into a contract or agreement with a parking operator or equivalent entity securing the Secured Parking and provide the agreement to the District's Development Services Department. The agreement shall be updated and submitted to the District's Development Services Department on an annual basis to provide proof of maintaining said agreement.

Until a long-term parking solution is identified for the area, after project construction is complete, on January 15 of each year the project proponent shall submit an annual parking implementation report to the District's Development Services Department for its review, which shall include the following components:

- A specific peak parking implementation program, broken down into morning, afternoon, and evening timeframes, in its annual submittal.
- Evidence in the form of parking utilization counts that show that sufficient valet spaces are available to meet the project's overflow parking demand from the parking lot or valet vendor. The parking counts shall be conducted at times throughout the day on both weekdays and weekends, during both the summer and winter, and shall be compared to projected and actual valet use at the project site.
- The location of the lots available for valet use and the number of spaces available in each lot based upon recent parking utilization counts.
- The dates, times, and duration of any period the valet was closed due to no available parking spaces.

In the event that the District establishes a long-term parking program for the area, the project proponent shall contribute a fair share to the analysis, design, and construction and operating costs associated with the program.

• *Transportation Network Companies* – The project proponent shall coordinate with transportation companies (such as Lyft and Uber) and shall provide designated pick-

up/drop-off locations to encourage hotel patrons to utilize this mode of transportation as an alternative to driving their personal vehicles.

- *Water Taxi* The project proponent shall provide a direct path and wayfinding signage from the Water Taxi Landing to the hotel facilities, and provide brochures and other materials in the hotel lobbies to inform hotel guests of the water taxi service and the destinations that can be reached.
- *Bike Racks* The project proponent shall provide bike racks to accommodate a minimum of 24 bicycle parking spaces on the project site or adjacent thereto on the Embarcadero Promenade to encourage employees/patrons to bike to the proposed project.
- *Bike Share Stations* The project proponent shall coordinate with companies like DECOBIKE to ensure a bike share station is maintained within walking distance (approximately 1,000 feet) to the proposed project. If a third-party bikeshare service cannot be provided, the project proponent shall provide bikes for its guests to rent.
- *Public Transit* On its website, the project proponent shall promote and encourage employees and patrons to utilize alternative modes of transportation as an alternative to driving their personal vehicles.
- Public Transit Subsidies for Employees The project proponent shall provide reimbursement or subsidies for public transportation costs for all employees. The level of transit reimbursements and subsidies shall be based on the standards set forth by the California Air Pollution Control Officers Association resource document *Quantifying Greenhouse Gas Mitigation Measures* (August 2010) to achieve a reduction in project vehicle miles traveled by 20%.
- *Port of San Diego (formerly Big Bay) Shuttle* The project proponent shall participate in the Port of San Diego Shuttle system as a condition precedent to issuance of a certificate of occupancy for the market-rate hotel or lower-cost visitor-serving hotel, whichever hotel is completed first. Participation may include: collection of fares, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for District tenant projects within the South Embarcadero, and other forms of participation as identified by the District.
- *Airport Shuttle* The project proponent shall provide a shuttle to and from the airport for hotel guests.
- <u>SANDAG-operated iCommute Program The project proponent shall participate in SANDAG's</u> <u>iCommute Program.</u>
- <u>Employee Carpool and Vanpool Parking Spaces The project proponent shall provide</u> designated parking spaces for employee carpool and vanpool parking spaces on site.
- <u>Onsite Employee Alternative Commute Options Coordinator</u> The project proponent shall designate an onsite employee coordinator to provide inform employees of alternative commute options.

For Impact-PS-3:

MM-PS-1: Operation Requirements for the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace Areas. Under no circumstances shall the closure of the public plaza and park areas for private hotel events be more than the following percentages.

- Multifunctional Plaza and Lawn (35,94040,414 square feet): 50% private access (50% public access). This area would be available for private events 50% of the year, which is defined as the equivalent of 182.5 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 50% of the year (182.5 days). For clarification purposes, if a private event occupies the Multifunctional Plaza and Lawn for part of a day, it shall count as occupying the Multifunctional Plaza and Lawn for an entire day when calculating the 182.5-day private event limit.
- Public Park Plaza (39,86045,062 square feet): 15% private access (85% public access). This area would be available for private events 15% of the year, which is defined as the equivalent of 55 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 85% of the year (310 days). For clarification purposes, if a private event occupies the Public Park Plaza for part of a day, it shall count as occupying the Public Park Plaza for an entire day when calculating the 55-day private event limit.
- Public Park Plaza and Public Observation Terrace (6,5009,782 square feet): 0% private access (100% public access). This area would be not be available for private events, and would be open to the public at no cost 100% of the year.
- Public Promenade (3,190 square feet): shall be an approximate 10-foot-wide walkway along the southeast portion of the market-rate hotel tower and shall be 0% private access (100% public access). This promenade would not be available for private events, and would be open to the public at no cost 100% of the year.

If the private event area is blocked off from the public usable area, such barriers shall not be solid materials but shall be a material like ropes. To ensure the private event area is restored for the public use, all trash and debris shall be immediately picked up and disposed of appropriately during and after the private event.

During times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during non-private event times), the hours of operation shall be the same as the District's park hours of operation.

During all private events, clear signage shall be placed in publicly visible locations (i.e., not posted inside the hotel) at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge (if developed), and two locations along the existing Embarcadero Promenade, that indicate the Multifunctional Plaza and Lawn area and/or the Public Park Plaza areas, if applicable, are open to the public. Clear signage shall be placed at the Public Park Plaza and Public Observation Terrace that indicates it is open to the public.

After project construction is complete, on January 31 of each year, the project proponent shall submit an annual public access usage report to the District's Development Services Department that demonstrates, for the preceding year, that the Multifunctional Plaza and Lawn, Public Park

Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private access (for private events) as follows and consistent with this **MM-PS-1**:

- Multifunctional Plaza and Lawn (50% public access/50% private access)
- Public Park Plaza (85% public access/15% private access)
- Public Park Plaza and Public Observation Terrace (100% public access)

The report shall be broken down by the Multifunctional Plaza and Lawn and Public Park Plaza areas and shall list the date, private event, start and end times, duration of each event, setup and breakdown time, and total number of days and percentage of private use for that year. Furthermore, the report shall contain confirmation, such as photographs or a signature by the hotel manager, that for each private event, signage indicating public use of the remaining area (if applicable) was placed consistent with this **MM-PS-1**. For the Public Park Plaza and Public Observation Terrace area, the report shall confirm that this area was accessible to the public 100% of the year and contained signage indicating such.

Implement **MM-AES-2: Install Wayfinding and Public Accessibility Signage**, as described above.

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Impact Discussion

The proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.7 acre) to approximately 85,49098,448 square feet (1.962.26 acres). Proposed public plaza and park areas include 82,30095,258 square feet of plaza and park area (includes public observation terrace) on the roof of the market-rate hotel tower ballrooms, meeting rooms and a parking structure, 3,190 square feet of at-grade public promenade adjacent to the southeast corner of the market-rate hotel tower, and an observation terrace viewing point on the southwest corner of the second floor of the market-rate hotel tower.

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Operation

The proposed project would not develop any residential uses and would not substantially increase the permanent local residential population through employment, as it is anticipated that existing San Diego residents would work at the proposed new hotels. The proposed project would result in increased visitors to the project site and surrounding areas. Project site users would consist mainly of temporary hotel guests, retail visitors, and waterfront recreational visitors. The proposed project would maintain public plaza and park areas for these temporary visitors.

Hotel guests, retail visitors, and waterfront visitors would be present on the project site during operation. These project site users would have low motivation and limited opportunities to utilize neighborhood parks within downtown San Diego. However, some users, particularly hotel guests on vacation, may visit larger regional recreational areas such as the Embarcadero Marina Park North and South, Seaport Village, North Embarcadero, and Balboa Park. These larger parks would be able to accommodate the relatively small addition of visitors from the proposed project, and the expected light use from these users would not lead to the substantial deterioration of existing parks.

Moreover, the proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.7 acre) to approximately 85,49098,448 square feet (1.962.26 acres), maintain existing access to the bayfront across the site, and implement a new walkway around the market-rate hotel tower to maintain public access to views along the San Diego Bay. These recreational components would further offset any potential demand on local neighborhood parks. As a result, although operation of the proposed project could increase the use of existing neighborhood and regional parks or other recreational facilities, the proposed project would not increase their use in such a way that substantial physical deterioration of these facilities would occur or be accelerated. Therefore, impacts would be less than significant.

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Impact Discussion

As described under Threshold 5, as a result of the proposed project, the total area of public plaza and park areas would be increased from approximately 30,300 square feet (0.7 acre) to approximately 85,49098,448 square feet (1.962.26 acres). The proposed public plaza and park areas would be designed with a combination of hardscape, drought-tolerant landscape, grass lawns, and artificial turf. The proposed project marina expansion would allow for 50 additional slips to accommodate both small and large vessels. The proposed public terraces and promenades would include landscape and hardscape features and would serve as resting and viewing areas for visitors and include interpretive signage and public art, as described in Chapter 3, *Project Description*.

5.2.13 Changes to Section 4.12, Transportation, Circulation, and Parking

Section 4.12.1, Pages 4.12-1 through 4.12-3

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-TRA-4: Operation-Related Impacts Under Existing Plus Project Conditions: NB I-5 Between Grape Street and First Avenue (AM Peak Hour)	MM-TRA-5 : Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements	Significant and unavoidable	SANDAG's RTP includes a series of operational improvements along I-5, including the segment of northbound I-5 between Grape Street and First Avenue. However, these improvements are within the jurisdiction and control of Caltrans, not the District. Moreover, they are not scheduled until Year 2050 and there is no fair-share fund established at this time. Therefore, because there is no mechanism available for the project to

 Table 4.12-1. Summary of Significant Transportation Impacts and Mitigation Measures

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
			pay its contribution for
			improvements
			and<u>However, the</u>
			mitigation measure
			requires the project
			<u>proponent to enter into a</u>
			Traffic Mitigation
			Agreement with Caltrans
			for these improvements.
			Because the improvements
			are outside the District's
			control, impacts along I-5
			would remain significant
			and unavoidable.

Pages 4.12-41 and 4.12-42

Mitigation Measures

For Impact-TRA-1 and Impact-TRA-2:

MM-TRA-1: Transportation Demand Management Plan. Prior to commencing any construction or demolition activities, the project proponent shall provide a Transportation Demand Management (TDM) Plan to the San Diego Unified Port District, and City of San Diego, and Caltrans for approval that shall limit the number of construction worker trips that travel through the affected intersections during peak periods to 50 trips. The TDM plan shall incorporate TDM strategies to be implemented during construction, including, but not limited to:

- Implementation of a ride-sharing program to encourage carpooling among the workers.
- Adjustment of work schedules (e.g., arrive before 7 a.m. or after 9 a.m.; leave before 4 p.m. or after 6 p.m.) so that workers do not access the site during peak hours.
- Provision of offsite parking locations for workers outside of the area with shuttle services to bring them on site, as identified in **MM-TRA-7**.
- Provision of subsidized transit passes for construction workers.

In addition, for impacts on the I-5 southbound/Boston Avenue intersection during construction, prior to commencing construction or demolition activities, the project proponent shall provide a Traffic Control Plan in accordance with Caltrans policies to the San Diego Unified Port District and Caltrans for approval.

Pages 4.12-42 and 4.12-43

MM-TRA-4: Restriping of Northbound Left-Turn Lane at 19th Street/J Street Intersection. Prior to the issuance of occupancy permits, the project proponent shall pay for or directly implement restriping the northbound left-turn lane into a northbound left-turn and throughshare lane at the intersection of 19th Street and J Street. Restriping lanes will require approval from the City of San Diego <u>and coordination with Caltrans</u>. The project proponent shall provide proof of payment or completion to the District for verification before issuance of the occupancy permits may occur.

For Impact-TRA-4:

MM-TRA-5: Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements. Prior to the issuance of occupancy permits, <u>the project proponent shall enter</u> into a Traffic Mitigation Agreement with Caltrans for I-5 operational improvements for the segment of northbound I-5 between Grape Street and First Avenue, in compliance with San Diego Forward: The Regional Plan prepared by SANDAG (SANDAG 2015) and proof of this agreement shall be provided to the District. Caltrans shall install The installation of the following I-5 operational improvements is under Caltrans jurisdiction. for the segment of northbound I-5 between Grape Street and First Avenue, in compliance with San Diego Forward: The Regional Plan prepared by SANDAG (SANDAG 2015).

Level of Significance After Mitigation

Mitigation measure **MM-TRA-1** would help reduce potential significant impacts associated with construction traffic; however, because the extent to which construction traffic impacts will be reduced by the TDM plan cannot be quantified, it cannot be stated with certainty that the mitigation would reduce impacts to less-than-significant levels. Therefore, **Impact-TRA-1** and **Impact-TRA-2** would remain significant and unavoidable.

Mitigation measures **MM-TRA-2** through **MM-TRA-4** would reduce project-related impacts on the intersections of 15th and F Streets, 17th and G Streets, and 19th and J Streets to less-than-significant levels; however, because the timing and implementation of the necessary improvements at these intersections are within the exclusive jurisdiction of the City of San Diego and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. As such, **Impact-TRA-3** would remain significant and unavoidable.

Mitigation measure **MM-TRA-5** requires compliance with *San Diego Forward: The Regional Plan*, which includes a series of operational improvements along I-5 between I-15 and I-8, which would encompass the segment of NB I-5 between Grape Street and First Avenue (SANDAG 2015). However, these improvements are not scheduled until Year 2050 and are subject to budget availability and the discretion of Caltrans. At the moment, there is no program in place into which the project proponent could pay a fair share contribution toward the cost of such improvements-, but the mitigation measure does require the project proponent to enter into a Traffic Mitigation Agreement with Caltrans for these improvements in the event an opportunity to pay a fair share contribution is identified in the future. Therefore, because the timing and installation of the recommended improvements are within the exclusive jurisdiction of Caltrans and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. As such, the impact along NB I-5 between Grape Street and First Avenue (**Impact-TRA-4**) would remain significant and unavoidable.

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Impact-TRA-7: Insufficient Parking Supply During Operation. As proposed, the project would provide 263260 onsite parking spaces through a combination of valet and striped spaces. Per the *Tideland Parking Guidelines*, the proposed project is required to provide an adjusted rate of 472449 parking spaces. Therefore, the proposed project would result in a parking deficit of 209189 spaces during its highest demand period. A significant impact on parking supply would occur.

For Impact-TRA-7:

MM-TRA-8: Implement a Parking Management Plan that Provides Parking Management Strategies. Prior to the issuance of the certificate of occupancy for market-rate hotel operations, the project proponent shall submit a Parking Management Plan to the District for approval. Upon approval and during project operations, the project proponent shall provide a quarterly report on the Parking Management Plan to the District's Development Services Department, which shall be subject to verification by District staff. The project proponent shall implement the following parking management strategies and any other strategies identified in the Parking Management Plan to mitigate the projected parking deficiency:

• Valet Parking – Secure 209189 parking spaces (Secured Parking) at one or more offsite parking lots and provide a valet service that allows guests to utilize the secured spots, in order to avoid overflow in the immediate surrounding parking areas. Prior to commencement of hotel operations, the project proponent will enter into a contract or agreement with a parking operator or equivalent entity securing the Secured Parking and provide the agreement to the District's Development Services Department. The agreement shall be updated and submitted to the District's Development Services Department on an annual basis to provide proof of maintaining said agreement.

Until a long-term parking solution is identified for the area, after project construction is complete, on January 15 of each year the project proponent shall submit an annual parking implementation report to the District's Development Services Department for its review, which shall include the following components:

- A specific peak parking implementation program, broken down into morning, afternoon, and evening timeframes, in its annual submittal.
- Evidence in the form of parking utilization counts that show that sufficient valet spaces are available to meet the project's overflow parking demand from the parking lot or valet vendor. The parking counts shall be conducted at times throughout the day on both weekdays and weekends, during both the summer and winter, and shall be compared to projected and actual valet use at the project site.
- The location of the lots available for valet use and the number of spaces available in each lot based upon recent parking utilization counts.
- The dates, times, and duration of any period the valet was closed due to no available parking spaces.

In the event that the District establishes a long-term parking program for the area, the project proponent shall contribute a fair share to the analysis, design, and construction and operating costs associated with the program.

- *Transportation Network Companies* The project proponent shall coordinate with transportation companies (such as Lyft and Uber) and shall provide designated pick-up/drop-off locations to encourage hotel patrons to utilize this mode of transportation as an alternative to driving their personal vehicles.
- *Water Taxi* The project proponent shall provide a direct path and wayfinding signage from the Water Taxi Landing to the hotel facilities, and provide brochures and other materials in the hotel lobbies to inform hotel guests of the water taxi service and the destinations that can be reached.
- *Bike Racks* The project proponent shall provide bike racks to accommodate a minimum of 24 bicycle parking spaces on the project site or adjacent thereto on the Embarcadero Promenade to encourage employees/patrons to bike to the proposed project.
- *Bike Share Stations* The project proponent shall coordinate with companies like DECOBIKE to ensure a bike share station is maintained within walking distance (approximately 1,000 feet) to the proposed project. If a third-party bikeshare service cannot be provided, the project proponent shall provide bikes for its guests to rent.
- *Public Transit* On its website, the project proponent shall promote and encourage employees and patrons to utilize alternative modes of transportation as an alternative to driving their personal vehicles.
- Public Transit Subsidies for Employees The project proponent shall provide reimbursement or subsidies for public transportation costs for all employees. The level of transit reimbursements and subsidies shall be based on the standards set forth by the California Air Pollution Control Officers Association resource document *Quantifying Greenhouse Gas Mitigation Measures* (August 2010) to achieve a reduction in project vehicle miles traveled by 20%.
- *Port of San Diego (formerly Big Bay) Shuttle* The project proponent shall participate in the Port of San Diego Shuttle system as a condition precedent to issuance of a certificate of occupancy for the market-rate hotel or lower-cost visitor-serving hotel, whichever hotel is completed first. Participation may include: collection of fares, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for District tenant projects within the South Embarcadero, and other forms of participation as identified by the District.
- *Airport Shuttle* The project proponent shall provide a shuttle to and from the airport for hotel guests.
- <u>SANDAG-operated iCommute Program The project proponent shall participate in SANDAG's</u> <u>iCommute Program.</u>
- *Employee Carpool and Vanpool Parking Spaces* The project proponent shall provide designated parking spaces for employee carpool and vanpool parking spaces on site.
- <u>Onsite Employee Alternative Commute Options Coordinator The project proponent shall</u> designate an onsite employee coordinator to provide inform employees of alternative <u>commute options.</u>

Level of Significance After Mitigation

With implementation of **MM-TRA-7**, impacts related to the loss of parking during construction (**Impact-TRA-6**) would be reduced, but not to a level considered less than significant because existing parking at the project site would not be accessible by waterfront visitors.

With implementation of **MM-TRA-8**, impacts on permanent parking supply (**Impact-TRA-7**) would be reduced through the implementation of a parking management plan. However, given that a substantial deficit in the onsite parking supply would remain even with implementation of the mitigation measure <u>because the necessary agreements have not yet been reached and the project proponent has no control over those agreements, the District cannot ensure that they will be reached and, therefore, the project's parking impacts would remain significant and unavoidable. <u>Additionally, and the benefits of the parking management plan cannot be quantified and, therefore, impacts would remain significant and unavoidable even though the mitigation measure requires securing a sufficient number of parking spaces from offsite parking facilities.</u></u>

5.2.14 Changes to Section 4.14, Utilities and Energy Use

Section 4.14.1, Page 4.14-1

The information contained in this section is based on available documentation and technical studies prepared for wastewater and stormwater infrastructure. The Preliminary Sewer Study (Appendix L-1), prepared by Project Design Consultants in February 2017, analyzes the proposed project's effect on the existing sewer infrastructure and determines if there is a need to upsize the facilities. The Preliminary Drainage Report (Appendix I-2), prepared by Project Design Consultants in December 2016, identifies any critical issues during the preliminary design phase that need to be addressed as the stormwater drainage design moves forward. Also, because the proposed project is deemed a priority development project (PDP), a required Stormwater Quality Management Plan (SWQMP) was prepared in December 2016 to describe how the proposed project would minimize impacts on receiving water quality through the implementation of permanent best management practices (Appendix I-1). Project utility demand is based on a memorandum prepared by the Glumac in July 2017 (Appendix L-2) and updated in September 2020, as well as a solid waste memorandum prepared by Lerch Bates in February 2017 and updated in October 2020 (Final EIR Attachment 5).

Section 4.14.4.1, Pages 4.14-14 through 4.14-18

Wastewater

Impact assessments on wastewater systems or sewers generally include the comparison of the project-related wastewater flow generation to the existing and projected wastewater treatment capacity of the treatment plant serving the site, in this case the PLWTP, as well as the capacity of onsite or offsite wastewater infrastructure. The analysis then considers whether the construction of new or expanded wastewater facilities could cause significant environmental effects. To calculate the existing wastewater generation at the site, usage from utility bills were reviewed for the site. To be conservative, it was assumed that onsite water use would be discharged to the sanitary sewer system at a 1:1 ratio, which would not take into account evaporation or percolation for outside water use. As a result, the existing onsite wastewater generation was calculated at approximately 4,922 gpd, or 1,796,696 gallons per year. In addition to the existing onsite wastewater generation, the existing overall average daily flow entering the 15-inch Harbor Drive trunk sewer was obtained

to determine whether the proposed project would require the construction of new or expanded wastewater facilities to accommodate project-related wastewater. To determine the existing overall average daily flow, monitoring meters were installed at the downstream side of the existing 10-inch PVC sewer main in Park Boulevard (southwest of West Harbor Drive) just prior to its terminus at West Harbor Drive. Metering in this location allows the flow entering the 15-inch Harbor Drive trunk sewer from the existing 10-inch sewer main on Park Boulevard to be isolated and accurately measured. Similar to existing conditions, it was assumed that onsite water use would be discharged into the sanitary sewer system at a ratio of 1:1. The method for calculating the future water demand at the project site is provided in the water demand methodology discussion below. The Preliminary Sewer Study (Appendix L-1) evaluated whether the increase in project-related wastewater generation would require new or expanded wastewater facilities. Table 4.14-5 provides the projected <u>net</u> daily and annual wastewater generation for the proposed project.

	Waterside		Lan	dside ¹	Total		
_	Daily	Annual	Daily	Annual	Daily	Annual	
Gallons	16,452	6,005,064	124,610	4 5,482,800	141,062	51,487,864	
			<u>121,816</u>	<u>44,462,840</u>	<u>138,268</u>	<u>50,467,904</u>	

Table 4.14-5. Projected Wastewater Generation for the Proposed Project

Source: Appendix L-2 and Attachment 5 of the Final EIR.

¹ Includes wastewater generated by the proposed market-rate hotel tower, lower-cost visitor serving hotel, retail uses, and WTC.

Water

Impacts on existing water systems generally include a comparison of the project-related water demand as it relates to available supply and the sufficiency of the existing water infrastructure to support that demand. As mentioned, California Water Code Section 10910 requires city and county lead agencies to request that water purveyors prepare water supply assessments for certain projects subject to CEQA. However, because the District is not a city or county government, California Water Code Section 10910 does not apply to the proposed project, and a water supply assessment is not required.

The existing water use for the site was determined through the review of utility bills, which indicated an average daily water use of 4,922 gallons, or 1,796,696 gallons annually. Converting gallons to acre-feet, the existing annual water use for the project site is approximately 5.5 AFY. The future water demand for the landside components of the proposed project, including proposed market-rate hotel tower, lower-cost visitor serving hotel, retail uses, and WTC, was calculated based on median data from the Energy Star Portfolio Manager, which identifies indoor water consumption rates of 55 gallons per square foot per year and/or 102 gallons per room per day. Based on these values, indoor water use was calculated for each rate and the average was taken to estimate the annual volume of water use anticipated for the proposed project. Projections for the expanded marina water usage (excluding existing marina water use) were calculated based on a direct lineal relationship between existing water usage and total existing slip length to the proposed new slip length upon completion of Phase II of the proposed the marina expansion (6,470 feet proposed/1,490 feet existing = 4.34, or 434%). Regarding exterior irrigation, water consumption from municipal water averages approximately 0.222 gallons per square foot of landscaping per month (Appendix L-2). Table 4.14-6 provides the projected daily and annual water demand for the proposed project.

	Waterside		Landside ¹		Irrigation ²		Total	
	Daily	Annual	Daily	Annual	Daily	Annual	Daily	Annual ³
Gallons	16,452	6,005,064	124,610	4 5,462,840	<u>959</u>	50,008	142,021	51,837,872
			<u>121,816</u>	<u>44,462,840</u>	<u>143</u>	<u>52,345</u>	<u>138,411</u>	<u>50,520,249</u>

Source: Appendix L-2 and Attachment 5 of the Final EIR.

¹ Includes water demand for the proposed market rate hotel tower, lower-cost visitor serving hotel, retail uses, and WTC.

² Based on a total landscaped area of approximately <u>131,32419,640</u> gross square feet.

³ Converting gallons to acre-feet, the total annual projected water demand for the proposed project is approximately 159 155 AFY.

Solid Waste

Impacts associated with solid waste generally involve an estimation of construction- and operations-related solid waste generation compared to the capacity of the landfills serving the project area. The existing solid waste generation for the site (landside and waterside) was provided by the project proponent, who indicated that the existing landside and waterside operations at the site generate approximately 296 pounds per day of disposable waste and 555 pounds per day of recyclable waste. This results in an existing annual solid waste generation of approximately 108,040 pounds of disposal waste and 202,575 pounds of recyclable waste. Solid waste projections for the expanded marina (excluding existing marina solid waste generation) were calculated based on a direct lineal relationship between existing solid waste generation and total existing slip length to the proposed new slip length upon completion of Phase II of the proposed marina expansion. Solid waste projections for the proposed market-rate hotel tower, lower-cost visitor serving hotel, and other landside components of the proposed project were based on waste generation rates for various types of uses. All solid waste calculations for the proposed project are provided in Appendix L-2. Summaries of the projected daily and annual solid waste generation for the waterside and landside components of the proposed project are provided in Tables 4.14-7 and 4.14-8, respectively, below.

	Daily			Annual			
	Total	Disposable Waste	Recyclable Waste	Total	Disposable Waste	Recyclable Waste	
Pounds	2,553	895	1,658	931,845	326,675	605,170	
Tons	1.28	0.45	0.83	465.92	163.34	302.59	

Table 4.14-7. Projected Daily and Annual Solid Waste for Waterside Components

		Daily				Annual			
	Total	Disposable Waste	Recycle Waste	Compost Waste	Total	Disposable Waste	Recycle Waste	Compost Waste	
	13,631		5,074	5,074	4,975,315	2,121,015	1,852,010	1,852,010	
Pounds	<u>6,686</u>	<u>5,8112,942</u>	<u>2,207</u>	<u>2,207</u>	<u>2,440,390</u>	1,073,830	<u>805,555</u>	<u>805,555</u>	
	6.82				2,487.66	1,060.51	926.01	926.01	
Tons	<u>3.34</u>	<u>2.911.47</u>	<u>2.541.10</u>	<u>2.541.10</u>	<u>1,220.20</u>	<u>536.92</u>	<u>402.78</u>	<u>402.78</u>	

Table 4.14-8. Projected Daily and Annual Solid Waste for Landside¹ Components

Source: <u>Attachment 5 of the Final EIRAppendix L-2</u>.

¹ Includes solid waste generated by the proposed market-rate hotel tower, lower-cost visitor serving hotel, retail uses, and WTC.

Energy

Energy impacts would occur if the proposed project would result in the wasteful, inefficient, or unnecessary use of energy. Energy impacts would also occur if the proposed project would require or result in the construction of new energy system infrastructure or the expansion of existing infrastructure, the construction of which could cause significant environmental effects. The energy analysis for the proposed project evaluates the following sources of energy consumption associated with existing conditions and the proposed project.

- Short-term construction—gasoline and diesel consumed by vehicles and off-road construction equipment.
- Operational power—electricity and natural gas consumed by buildings, lighting, air conditioning, and shore power.
- Operational on-road vehicles—gasoline and diesel consumed by personal automobiles and delivery trucks.
- Operational marine vessels—diesel consumed by marine vessels.

Existing electricity usage at the project site is based on detailed consumption data (i.e., kilowatthours) from the project proponent, which was determined from existing utility bills. The existing electricity usage at the site, which includes both landside and waterside operations, is approximately 3,678 kWh per day, or 1,342,558 kWh per year. Existing natural gas usage at the project site is based on detailed consumption data (i.e., therms) from the project proponent, which was also determined from existing electricity bills. The existing natural gas usage at the site, which includes both landside and waterside operations, is approximately 66 therms per day, or 24,020 therms per year. Electricity and natural gas projections for the expanded marina (excluding existing marina energy use) were calculated based on a direct lineal relationship between existing electricity and natural gas use and total existing slip length to the proposed new slip length upon completion of Phase II of the proposed marina expansion. Electricity and natural gas projections for the landside components of the proposed project, which include the proposed market-rate hotel tower, lowercost visitor serving hotel, retail uses, and WTC, were both calculated by the Energy Star Target Finder tool (Appendix L-2). The Energy Star Target Finder tool compared input building characteristics to utility bill data from actual buildings of a similar type in similar climates. The projected daily and annual electricity and natural consumption for the proposed project is provided in Table 4.14-9 below.

	Waterside		Lan	dside ¹	Total		
_	Daily	Annual	Daily	Annual	Daily	Annual	
Electricity (kWh)	12,294	4,487,207	31,383 <u>30,167</u>	11,454,752 <u>11,010,986</u>	4 3,677 <u>42,461</u>	15,4941,959 <u>15,498,193</u>	
Natural Gas (therms)	220	80,282	1,185<u>1,229</u>	4 32,663 <u>448,607</u>	1,405<u>1,</u>449	512,945 <u>528,889</u>	

Source: Appendix L-2 and Attachment 5 of the Final EIR.

¹ Includes electricity and natural gas use for the proposed market-rate hotel tower, lower-cost visitor serving hotel, retail uses, and WTC.

Section 4.14.4.3, Pages 4.14-21 and 4.14-22

Operation of the proposed project would substantially increase wastewater generation at the site from existing conditions. As mentioned, current employment at the project site is only 1 employee per day to operate the existing WTC. Long-term employment under the proposed project is anticipated to reach a total of 610 jobs on site, including 600 FTEs to operate the proposed hotel, 9 FTEs to operate the low-cost visitor serving hotel, and 1 FTE to operate the marina. In addition, the new WTC would include six private showers and restrooms, which would also be a source of additional wastewater. To be conservative, it was assumed that the projected water demand for the proposed project (excluding water for irrigation) would be discharged as wastewater effluent at a ratio of 1:1. The projected net new water use at the project site that would become wastewater effluent totals approximately $\frac{141,062138,268}{124,610}$ gpd ($\frac{124,610}{121,816}$ gpd landside and 16,452 gpd waterside), or 1,487,86450,467,904 gallons per year. The PLWTP has a daily wastewater treatment capacity of 240 mgd and a peak wet weather capacity of 432 mgd. In 2015, the measured wastewater collected was 136.2 mgd, which leaves an available capacity of approximately 104 mgd if this trend continues. The additional generation of <u>141,063138,268</u> gpd of wastewater associated with the proposed project represents 0.134% of the PLWTP's remaining daily treatment capacity, which is an insignificant amount relative to the remaining treatment capacity. Therefore, the projected wastewater flow for the proposed project would not exceed the capacity of the PLWTP. Because wastewater generated by the proposed project would be treated within the permitted capacity of the PLWTP, new wastewater treatment facilities or the expansion of existing treatment facilities would not be required due to the implementation of the proposed project. Therefore, impacts related to this criterion would be less than significant.

Connection to the City's existing wastewater treatment system would adhere to all City requirements. As mentioned, the proposed project would require upgrades to various onsite and offsite sewer lines and other sewer infrastructure to accommodate the increased wastewater generated by the proposed project. The Preliminary Sewer Study provides the existing and future flow rates to determine the size of sewer mains that would be required to convey the total wastewater generated by the proposed project per City standards. All of the proposed project's sewage would be routed to the sewer mains under the portions of Marina Way, Convention Way, and Park Boulevard. Ultimately, all of the sewage from the project site would be discharged into the Harbor Drive trunk sewer at the intersection of West Harbor Drive and Park Boulevard.

The calculations to determine what size sewer main would be required to convey the approximately 145,985143,190 total gpd of wastewater (existing plus proposed project) from the project site into the sewer main in Marina Way, Convention Way, and Park Boulevard are provided in the Preliminary Sewer Study. The study determined that a 12-inch sewer main is required to convey the total post development peak flow from Marina Park, SDCC, and the project site to the Harbor Drive trunk sewer. The proposed new 12-inch sewer line would connect to the existing 15-inch trunk sewer main located west of the intersection of West Harbor Drive and Park Boulevard, adjacent to SDCC. The trunk sewer main transports wastewater to a large pump station (Pump Station 2), located at North Harbor Drive, and propels the wastewater to the PLWTP. No changes to the existing 4-inch force main in Marina Park Way are proposed.

Pages 4.14-25 through 4.14-26

MM-HAZ-1: Prepare and Implement a Soil and Groundwater Management Plan. Prior to the District's approval of the project's landside working drawings, the project proponent shall retain a licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer with experience in contaminated site redevelopment and restoration, to prepare and submit a Soil and Groundwater Management Plan to the District's Development Services Department for review and approval. After the District's approval, the project proponent shall implement the Soil and Groundwater Management Plan. The Soil and Groundwater Management Plan shall include the following:

• A Landside Site Contamination Characterization Report (Landside Characterization Report) delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured gas plant waste disposal area. The Landside Characterization Report shall include compilation of data based on historical records review and from prior reports and investigations and, where data gaps are found, include new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of landside residual contamination. A complete soil vapor analysis will also be conducted during preparation of the Landside Characterization Report and will include soil gas sampling and an indoor air quality risk assessment. The project applicant also shall enroll in the Voluntary Assistance Program with the County of San Diego Department of Environmental Health and shall submit the results of the Landside Characterization Report to Department of Environmental Health staff for regulatory concurrence of results.

If the Landside Characterization Report identifies residual contamination that would be disturbed by the proposed project and potentially cause harm to human health or the environment, additional remedial actions shall be taken, in accordance with Department of Environmental Health oversight. These remedial actions shall be coordinated with the Department of Environmental Health and shall include, but not be limited to, the removal of contaminated soils that pose a vapor intrusion risk and/or the incorporation of project design features that prevent vapor intrusion into the proposed new buildings and structures. In addition, a soil vapor analysis and an indoor air quality risk assessment shall be conducted after the remedial action is complete to confirm that no residual VOC contamination remains or that it is below applicable and relevant state guidelines.

- A *Soil and Groundwater Testing and Profiling Plan* (Testing and Profiling Plan) for those materials that will be <u>imported to the project site and</u> disposed of during construction. Testing shall occur for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22–compliant offsite disposal facility. All excavation activities shall be actively monitored by a Registered Environmental Assessor for the potential presence of contaminated soils and for compliance with the Soil and Groundwater Sediment Testing and Profiling Plan.
- A *Soil and Groundwater Disposal Plan* (Disposal Plan), which shall describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. This plan shall be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27), and current industry best practices for the prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring.

In the event contaminated soil or groundwater is encountered, it shall be removed and disposed of in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27 and under the oversight of the County of San Diego Department of Environmental Health, which serves as the local regulatory agency responsible for oversight of hazardous materials issues in San Diego County. Hazardous waste shall be disposed of at three types of facilities, depending on the kind of waste, which will be identified in the Testing and Profiling Plan. Non-hazardous waste can be disposed of at a Class III landfill, such as the Otay Landfill. Waste that is considered hazardous in California but not in other states can be disposed of outside of California, including at the South Yuma County Landfill or the Republic Services Copper Mountain Landfill in Arizona. RCRA hazardous waste must be disposed of at a Class I landfill, such as US Ecology in Nevada.

• A Site Worker Health and Safety Plan (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan shall be based on the Landside Characterization Report and the planned site construction activity to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist.

Pages 4.14-29 and 4.14-30

Operation

Operation of the landside and waterside components of the proposed project would require a net new total of approximately <u>51,837,87250,520,249</u> gallons per year, or <u>159155</u> AFY¹ of water. Table

¹ One acre-foot equals approximately 326,000 gallons.

4.14-10 provides a detailed breakdown of the anticipated net new water demand for both the landside and waterside components of the proposed project.

Category	Quantity	Water Use (GPD)		
Market-Rate Hotel Tower	<u>843850</u> rooms/ <u>911,736</u> 796,000 gross square feet	$\frac{104,720}{111,685}$		
Lower-Cost Visitor Serving Hotel ²	565 beds<u>220 rooms</u>/8<u>6</u>0,000 gross square feet	19,891<u>10,131</u>1		
Marina Expansion	4,980 linear feet	16,452		
Landscaping	131,324<u>19,640</u> gross square feet	959<u>143</u>3		
Total		142,021<u>138,411</u> (159<u>155</u> AFY)		

Table 4.14-10. Proposed Project Water Demand

Source: Appendix L-2 and Attachment 5 of the Final EIR.

 1 Projected water use based on an average of 55 gallons per square foot and 102 gallons per room and includes ancillary hotel uses such as hotel restaurants

² Includes visitor-serving retail uses and WTC.

³ Exterior irrigation water consumption average of approximately 0.222 gallon of water per square foot of landscaping per month.

Pages 4.14-34 through 4.14-36

Construction of the proposed project would involve demolition activities and new construction of the market-rate hotel tower and lower-cost visitor serving hotel (including the WTC), the marina expansion, installation of landscaping, and public right-of-way improvements such as pedestrian walkways. Construction is anticipated to occur during approximately 24 to 30 months and would be completed in 2021. The marina expansion would be constructed in two phases (Phase I and Phase II). The Phase I marina expansion would be constructed at the same time the market-rate hotel tower is constructed. However, the construction of the Phase II marina expansion would be constructed within approximately 5 years after the market-rate hotel tower is constructed.

During construction of the proposed project, the vast majority of construction and demolition debris would be recycled either on site or at local recycling facilities in accordance with the City's C&D Debris Deposit Ordinance. Demolition, grading, and pouring of foundations would occur first. The existing landside uses on the project site would be demolished to accommodate the construction of the proposed project. Although the existing 35-foot-wide bayfront promenade would be temporarily inaccessible along portions of the project site, alternative access to the South Embarcadero would always be provided to the general public. In total, approximately 5 acres would be graded that would require demolition of approximately 1,711 cubic yards of the asphalt parking lot, 1,407 cubic yards of the hardscape, and 38,350 cubic yards of other materials, including concrete from existing buildings. Approximately 98% of the asphalt and 25% of the hardscape would be recycled on site. Materials that are not recyclable would be taken to Miramar Landfill, which has a permitted remaining capacity of 11,600,000 tons or 13,688,000,000 cubic yards.² Assuming that at least 65%

² The conversion is based on a density of 1,180 cubic yards per ton (page 3-2 of Chapter 3 of the City of San Diego's 2008 LRMOSP [BAS Team 2008]).

of the remaining construction waste would be recycled off site per the C&D Debris Deposit Ordinance, approximately 13,804 cubic yards of construction waste would be taken to the Miramar Landfill. This would represent approximately 0.0001% of the landfills remaining capacity.

Therefore, because a substantial majority of the construction and demolition materials would be recycled or reused both on site and off site instead of being disposed of in a local landfill, and the local landfill has available capacity for the remaining solid waste, impacts on existing landfills from construction materials would be less than significant.

Operation

Solid waste generation estimates for the proposed project assume full buildout, including the proposed market-rate hotel tower, lower-cost visitor serving hotel (including the WTC), and Phases I and II of the proposed marina expansion. Once operational, the proposed project would introduce up to 610 jobs on site, including 600 FTEs to operate the proposed hotel, 9 FTEs to operate the lower-cost visitor serving hotel, and 1 FTE to operate the expanded marina. In addition to solid waste generated by the additional employees, the proposed market-rate hotel tower, lower-cost visitor serving hotel (including the WTC), and the expanded marina would generate solid waste from hotel guests, retail customers, and marina users, as well as general operational activities. Operation of the landside portion of the proposed project would generate approximately 13,6316,686 pounds per day, or 2,4881,220 tons per year, of solid waste. Additionally, operation of the waterside portion of the proposed project would generate approximately 2,553 pounds per day, or 466 tons per year, of solid waste. Accordingly, the combined total quantity of solid waste that would be generated by the proposed project would total approximately 2,9541.686 tons per year. Because the District does not currently have specific criteria for quantifying impacts related to solid waste generation and disposal, and solid waste is collected and processed by the City of San Diego franchised waste haulers, the City's threshold of 1,500 tons per year is used to determine whether the proposed project would result in an impact on solid waste facilities. While the overall solid waste generated by the proposed project would exceed this threshold, as shown in Tables 4.14-7 and 4.14-8, only 1,224700 tons of the total project-generated solid waste would be destined for the landfill on an annual basis, with the remaining 1,7371,108 tons comprising recyclable and compostable waste. This results in a diversion of approximately 5961% of the overall projectgenerated waste from local landfills. As such, the amount of solid waste that would be generated by the proposed project annually and disposed of in a landfill would be below the City's thresholds of 1,500 tons per year.

In addition, Miramar Landfill is closest to the project site, and as shown in Table 4.14-4, has a permitted remaining capacity of 11,600,000 tons.³ The proposed project's annual contribution of <u>1,224700</u> tons of solid waste per year would represent <u>0.010.00006%</u> of the landfill's remaining capacity. This represents a conservative estimate because the proposed project would be required

³ Miramar Landfill is projected to close in 2030. Once Miramar Landfill is closed, solid waste collection would be rerouted to Sycamore Canyon Landfill, Otay Annex Landfill, and/or Borrego Landfill, the latter of which is projected to close in 2046. At present, there are no active landfills in San Diego County that are projected to operate beyond 2046. Given the amount of time (30 years) from the anticipated closure of the Borrego Landfill, it is reasonably foreseeable that additional landfill space would be acquired by the City and/or County to accommodate the region's solid waste beyond 2046. The City and/or County would be responsible for ensuring that sufficient landfill space exists to accommodate the solid waste disposal needs of the region. Because of the uncertainty surrounding solid waste facilities beyond 2046, it would be speculative to analyze the proposed project's potential impacts on a future landfill.

to comply with applicable waste diversion requirements. Therefore, because the proposed project would be required to comply with federal, state, and local laws related to solid waste; disposable solid waste generated during project operations would be below the City's thresholds; and the Miramar Landfill has sufficient permitted capacity to accommodate disposable solid waste generated by the proposed project, impacts on solid waste facilities would be less than significant.

Pages 4.14-38 through 4.14-41

		No Me	asures	With M	easures
Source	Existing	Landside	Waterside	Landside	Waterside
Electricity					
Electricity Consumption	4,586	55,298	61,588	55,298	61,558
	,	<u>37,614</u>		<u>37,614</u>	- ,
Natural Gas					
Building Consumption	2,404	26,322		26,322	
Building Consumption	2,404	<u>55,328</u>	-	<u>55,328</u>	-
Diesel					
Ferry Service	6,815	-	6,815	-	3,635
	7,552	-	87,209	_	77,817
Recreational Boating	<u>6,824</u>		<u>92,496</u>		<u>61,115</u>
	14,367	_	94,025	-	81,452
Total Diesel	<u>13,639</u>		<u>99,312</u>		<u>64,750</u>
Gasoline					
	<u>664</u> 663	102,617	-	71,324	-
Visitor Trips		<u>89,871</u>		<u>65,717</u>	
Recreational Boating	<1	-	<1	-	<1
Tatal Caroling	<u>663664</u>	102,617	<1	71,324	<1
Total Gasoline		<u>89,871</u>		<u>65,717</u>	
	22,020	184,237	155,613	152,944	143,040
Total	<u>21,293</u>	<u>182,812</u>	<u>160,900</u>	158,659	<u>126,338</u>

Source: Appendix L-2 and Attachment 5 of the Final EIR.

¹ Energy is provided in million BTU for comparison purposes. However, electricity use can be converted to kWh by multiplying 1 million BTUs by 293.1 kWh.

BTUs can be converted to gallons of gasoline and diesel using the following formulas: 113,927 BTU/1 gallon of gasoline; 129,488 BTU/1 gallon of diesel; BTUs can be converted to kwh using the following formula: 3,416 BTU/kwh of electricity.

As shown in Table 4.14-12, operation of the proposed project would result in an estimated total annual energy consumption from combined landside and waterside components of 339,850 million BTUs. However, with conservation and renewable energy State measures and the mitigation measures provided to ensure consistency with the District's Climate Action Plan and related State GHG emission-reduction regulations, the proposed project would reduce the amount of fuel consumed and energy required for the net new demand by $\frac{1715}{9}$ % for the landside components and by $\frac{925}{9}$ % for the waterside components of the project, resulting in annual energy consumption from combined landside and waterside components of $\frac{295,984284,997}{9}$ million BTUs. Note that this

reduction only includes savings associated with statewide measures that would reduce the carbon intensity, and associated energy consumption, of transportation fuels and electricity in 2021; thus, carbon savings in future years <u>accounts for due to further implementation of existing measures</u>, <u>including reductions associated with</u> SB 350 and SB 100. This reduction is consistent with strategies being implemented by the District and the State via the Energy Policy Act and AB 2076 to reduce energy consumption, and the proposed project would be consistent with these strategies.

Table 4.14-13 provides a consistency analysis with questions raised in Appendix F of the State CEQA Guidelines.

Project Impact Considerations from	
Appendix F	Project Applicability and Analysis
Energy requirements and energy use efficiencies by amount and fuel type for each stage of the project.	Applies. See Tables 4.14-9 and 4.14-10, both of which break down construction and operational energy use by amount and fuel type. As indicated, the project would increase the use of electricity and the need for fossil fuels such as diesel fuel, gasoline, and natural gas compared to existing conditions.
Effects on local and regional energy supplies and the need for additional capacity	 Applies. Operation of the landside and waterside components of the proposed project would require upgrades to existing energy infrastructure to accommodate the increased energy demand of the proposed project. However, tThis would merely involve electrical trenching to the existing Sampson Street Substation, and potentially adding a new switch and/or transformer. In addition, MM-GHG-3 would require the implementation of various sustainability and energy-saving features to reduce the overall energy demand of the proposed project, such as indoor water reduction measures, a high-efficiency lighting system, and a "Cool Roof." Moreover, MM-GHG-4 would require the proposed project to incorporate renewable energy and/or the purchase of an equivalent of GHG offsets, which would further reduce the proposed project's demand on local and regional energy supplies. As such, there would be no adverse effects on local or regional energy supplies as a result of the proposed project.
Effects of the project on peak and base period demands for electricity and other forms of energy	Applies. Energy load would vary over time, but current energy supply and infrastructure would be able to accommodate the additional demand without interruption or issues to existing customers and without the need for new infrastructure. As discussed above, implementation of MM-GHG-3 would require the implementation of various sustainability and energy-saving features to reduce the overall energy demand of the proposed project. In addition, MM-GHG-4 would require the proposed project to incorporate renewable energy and/or the purchase of an equivalent of GHG offsets, which would further reduce the proposed project's overall energy demand, including during peak and base period demands. With implementation of these mitigation measures, the project does not propose demand that would affect peak and base-period demand.
Degree to which the project complies with existing energy standards	Applies. The proposed project would be fully compliant with all existing energy standards, including the Energy Policy Act and AB 2076. The proposed project would include energy-efficient lighting and building materials within the project site and would reduce the use of fossil fuels by increasing electricity use.

Project Impact Considerations from	
Appendix F	Project Applicability and Analysis
Effects of the project on energy resources	Applies. The proposed project would not result in an adverse impact on energy resources. There are sufficient energy resources to accommodate the additional project energy demand, and MM-GHG-3 would require the implementation of various sustainability and energy-saving features, such as indoor water reduction measures, a high-efficiency lighting system, and a "Cool Roof." Additionally, MM-GHG-4 would require the proposed project to incorporate renewable energy and/or the purchase of an equivalent of GHG offsets.
Projected transportation energy use requirements and overall use of efficient transportation alternatives	Applies. The proposed project would substantially increase the need for fossil fuels and electricity compared to baseline conditions because it would introduce new uses to the landside portion of the project site, which currently consists of parking lots, the WTC ticket booth, a temporary mobile trailer office, and park space. The construction of a new market-rate hotel tower, lower-cost visitor serving hotel, and visitor-serving retail uses would result in electricity consumption during operations and fossil fuel consumption from vehicle trips. However, MM-GHG-2 requires the installation of charging stations in the proposed parking garage to support electric vehicles. The proposed parking structure would also accommodate carpools, public vans, and other forms of mass transit. In addition, the waterside component of the proposed project would increase the overall number of marina slips from 12 to 62 upon completion of Phase II of the proposed marina expansion, and would also include the installation of shore power at the expanded marina. These improvements would increase the number of vessels that could dock in the marina. As a project feature, 100% of yachts docked at the expanded marina are expected to use grid-based shore power for electrical needs, similar to existing conditions. Other project design features and implementation of mitigation measures would decrease the proposed project's need for fossil fuels compared to unmitigated conditions.

In summary, the proposed project would assist with energy conservation goals because it would (1) decrease reliance on fossil fuels and (2) would increase reliance on renewable energy sources via the electrical grid, which includes RPS targets of 33% by 2020 and 50% by 2030. Implementation of various sustainability and energy-saving features would reduce the overall energy demand of the proposed project. As such, the proposed project would not result in the wasteful, inefficient, or unnecessary use of energy. Impacts would be less than significant.

Construction or Expansion of Energy Infrastructure

Operation of the landside and waterside components of the proposed project would require upgrades to existing energy infrastructure to accommodate the increased energy demand of the proposed project. The waterside components of the proposed project include the installation of shore power at the expanded marina. The use of additional shore power would help offset running auxiliary engines while vessels are docked at the marina, resulting in fewer emissions and significantly less fossil fuel use. Additionally, **MM-GHG-4** <u>and **MM-GHG-5**</u> requires the incorporation of renewable energy into the project design and/or the purchase of an equivalent of GHG offsets. Finally, **MM-GHG-3** requires the installation of future charging stations for electric vehicles in the

proposed parking garage and would have immediate access to existing electrical connections in the area. This would potentially lead to further reductions in fossil fuel use.

5.2.15 Changes to Chapter 5, Cumulative Impacts

Section 5.1, Page 5-1

5.1 Overview

This chapter considers the cumulative effects of past, present, and reasonably foreseeable future projects and the proposed project's contribution to these effects. Past projects are defined as those that were recently completed and are now operational. Present projects are defined as those that are under construction but not yet operational. Reasonably foreseeable future projects are defined as those for which a development application has been submitted or credible information is available to suggest that project development is a probable outcome at the time the Notice of Preparation (NOP) was issued (August 17, 2016).

With the incorporation of mitigation measures, the proposed project would result in less than cumulatively considerable contributions to impacts from past, present, and reasonably foreseeable future projects for the following resources.

- Air Quality and Health Risk
- Greenhouse Gas and Climate Change (up to 202<u>5</u>1)
- Utilities and Energy Use

However, even with mitigation incorporated, the proposed project would result in cumulatively considerable and unavoidable contributions to impacts for the following resources.

- Greenhouse Gas and Climate Change (post-202<u>0</u>1)
- Noise and Vibration (Construction)
- Transportation, Circulation, and Parking

The proposed project's contribution to all other cumulative impacts would not be cumulatively considerable.

Table 5-1 summarizes the significant cumulative impacts and mitigation measures discussed in Section 5.3, *Cumulative Impact Analysis*, below.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Air Quality and Health R		T	
Impact-C-AQ-1: New Land Use Designations not Accounted for in the RAQS and SIP	MM-AQ-1: Update the RAQS and SIP with New Growth Projections	Less than Cumulatively Considerable	Mitigation would reduce the project's incremental contribution to cumulative impacts related to plan consistency.
Impact-C-AQ-2 : Emissions in Excess of Cumulative Thresholds during Construction	 MM-AQ-2: Use Low-VOC Interior and Exterior Coatings during Construction MM-AQ-3: Limit Soil Hauling Truck County during Excavation to Reduce Daily Construction- Related Emissions 	Less than Cumulatively Considerable	Mitigation would reduce the project's incremental contribution to cumulative impacts related to construction emissions.
Greenhouse Gas Emissio	ns and Climate Change		
Impact-C-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 2021 2025	 MM-GHG-1: Implement Diesel Emission-Reduction Measures During Project Construction MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures MM-GHG-3: Implement Sustainability Features during Project Operations MM-GHG-4: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a Locally Approved Equivalent Program 	Less than Cumulatively Considerable	Mitigation would reduce the project's incremental contribution to cumulative impacts related to GHG emissions and reduction targets and plans through 2021 2025.

Table 5-1. Summary of Significant Cumulative Impacts and Mitigation Measures

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Section 5.3.6.3 and 5.3.6.4, Pages 5-36 and 5-37

5.3.6.3 Project Contribution

As discussed under Threshold 1 of Section 4.6, *Greenhouse Gas Emissions and Climate Change*, the proposed project would contribute GHG emissions to the cumulative condition. Equipment and vehicles used during construction (e.g., on-road motor vehicles and heavy equipment) and operations (e.g., vehicle trips, electricity consumption, waste generation, and ferry and recreational boating) would result in a net increase in GHG emissions over existing conditions. As shown in

Tables 4.6-9 and 4.6-10 in Section 4.6, landside elements associated with the proposed project would meet the CAP performance target for 202<u>5</u>⁴, but the waterside elements would exceed the performance standard. Similarly, the proposed project would not be consistent with the CAP because it would not implement all of the applicable reduction measures (**Impact-C-GHG-1**). With implementation of **MM-GHG-1** through **MM-GHG-4**, the proposed project would meet the reduction targets required by the CAP, and would be consistent with the CAP, AB 32 Scoping Plan, and other near-term (202<u>5</u>⁴) GHG reduction policies and plans (see Tables 4.6-11 through 4.6-14 in Section 4.6, *Greenhouse Gas Emissions and Climate Change*). Therefore, after mitigation, the proposed project would not result in cumulatively considerable impacts related to near-term (i.e., 202<u>5</u>⁴) GHG emissions because it would not impede achievement of near-term state reduction targets.

....

Impact-C-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 20245. Project GHG emissions during combined project construction and operational activities would be inconsistent with the CAP because the project would not meet the performance benchmark for recreational boating (i.e., 4253% reduction) and would only partially comply with plans, policies, and regulatory programs outlined in the District's CAP, the Scoping Plan, and other plans, policies, and regulatory programs adopted by ARB for the purpose of reducing the emissions of GHGs.

Impact-C-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating. Project GHG emissions during combined project construction and operational activities would not meet the landside efficiency target in 2030 and 2050, and would not meet the performance benchmark for recreational boating in both 2030 and 2050. Additionally, the proposed project would not comply with plans, policies, and regulatory programs outlined in the Draft 2017 Scoping Plan Update because emissions are not sufficiently reduced to meet statewide targets.

Section 5.3.6.6, Page 5-38

5.3.6.6 Level of Significance after Mitigation

After mitigation, the proposed project's incremental contribution to cumulative impacts related to GHG emissions and reduction targets and plans through 202<u>5</u>4 would be less than cumulatively considerable. However, the project's incremental contribution to cumulative impacts related to GHG emissions and reduction targets and plans for post-202<u>5</u>4 would be cumulatively considerable after implementation of mitigation measures **MM-GHG-1** through **MM-GHG-5** due to the lack of a known reduction target that considers the location and type of project. Therefore, it cannot be stated with certainty that the proposed project would result in emissions that would represent a fair share of the requisite reductions to achieve post-202<u>5</u>4 targets.

Sections 5.3.12.5 and 5.3.12.6

Pages 5-91 through 5-97

Mitigation Measures

For Impact-C-TRA-1 and Impact-C-TRA-2:

Implement MM-TRA-1: Transportation Demand Management Plan.

For Impact-C-TRA-3:

To reduce impacts along Harbor Drive between Laurel Street and Hawthorn Street to less-thansignificant levels, Harbor Drive would need to be widened from a six-lane major facility to an eight-lane facility. However, this improvement is not possible due to right-of-way constraints within the corridor. Therefore, there are no physical improvements available that would mitigate this impact.

For Impact-C-TRA-4:

16th Street/F Street:

This intersection was identified as failing in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR with no feasible mitigation identified to improve operations. Therefore, the Downtown Community PlanDowntown Mobility Plan Supplemental EIR identified the future impacts on this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown Community Mobility Plan no project-related improvements are recommended at this intersection.

Logan Avenue/Southbound I-5 Off-Ramp:

MM-C-TRA-1: Signalization of Logan Avenue/I-5 Southbound Off-Ramp. Prior to issuance of occupancy permits, the project proponent shall <u>enter into a Traffic Mitigation Agreement with</u> the California Department of Transportation (Caltrans) for the provide proof to the District of payment of a fair-share contribution of 22 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 off-ramp <u>and provide proof of this agreement to the District</u>. Installation of the traffic signal will require approval from the California Department of Transportation (Caltrans).

Logan Avenue/Southbound I-5 On-Ramp:

MM-C-TRA-2: Signalization of Logan Avenue/I-5 Southbound On-Ramp. Prior to issuance of occupancy permits, the project proponent shall <u>enter into a Traffic Mitigation Agreement with</u> <u>the California Department of Transportation (Caltrans) for the provide proof to the District of</u> payment of a fair-share contribution of 6 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound I-5 on-ramp<u>and provide proof of this agreement to the District</u>. Installation of the traffic signal will require approval from Caltrans.

For Impact-C-TRA-5:

First Avenue/Beech Street:

This intersection was identified as failing in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR with no feasible mitigation identified to improve operations. Therefore, the Downtown Community PlanDowntown Mobility Plan Supplemental EIR identified the future impacts to this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown <u>Community Mobility</u> Plan, no project-related improvements are recommended at this intersection. It should be noted that this impact will become less than significant with the extension of Park Boulevard to Harbor Drive, as shown under Future Year 2035 conditions. This new connection will reroute project traffic coming to/from I-5 from the First Avenue ramp to the Imperial Avenue ramps.

14th Street/G Street:

MM-C-TRA-3: New Travel Lane on G Street (3 Percent Fair-Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 3 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of 14th and G Streets, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

15th Street/F Street:

MM-C-TRA-4: Signalization of the Intersection of 15th Street and F Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 4 percent of the improvement costs to install a traffic signal at the intersection of 15th Street and F Street, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

16th Street/G Street:

MM-C-TRA-5: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the <u>Downtown Community PlanDowntown Mobility Plan Supplemental EIR</u>. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

16th Street/Island Avenue:

MM-C-TRA-6: Signalization of the Intersection of 16th Street and Island Avenue. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 18 percent of the improvement costs to install a traffic signal at the intersection of 16th Street and Island Avenue, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Installation of the

traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

16th Street/K Street:

MM-C-TRA-7: Signalization of the Intersection of 16th **Street and K Street**. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 9 percent of the improvement costs to install a traffic signal at the intersection of 16th Street and K Street, per the recommendations on the Downtown Community Plan. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

17th Street/G Street:

MM-C-TRA-8: Signalization of 17th Street and G Street Intersection. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to install a traffic signal at the intersection of 17th Street and G Street, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Installation of the traffic signal will require approval from the City of San Diego.

19th Street/J Street:

MM-C-TRA-9: Restriping Left-Turn Lane on J Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 20 percent of the improvement costs to restripe the northbound left-turn lane along J Street at its intersection with 19th Street into a northbound left-turn and through-shared lane, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental <u>EIR</u>. Restriping of J Street will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

Logan Avenue/I-5 On-Ramp:

Implement MM-C-TRA-2.

For Impact-C-TRA-6:

Implement MM-TRA-5: Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements.

For Impact-C-TRA-7:

To reduce impacts along Harbor Drive between Laurel Street and Hawthorn Street to less-thansignificant levels, Harbor Drive would need to be widened from a six-lane major facility to an eight-lane facility. However, this improvement is not feasible due to right-of-way constraints within the corridor. Therefore, there are no physical improvements available that would mitigate this impact.

For Impact-C-TRA-8:

16th Street/F Street:

This intersection was identified as failing in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR with no feasible mitigation identified to improve operations. Therefore, the Downtown Community PlanDowntown Mobility Plan Supplemental EIR identified the future impacts to this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown Community Mobility Plan no project-related improvements are recommended at this intersection.

15th Street/F Street:

Implement MM-C-TRA-4.

17th Street/G Street:

Implement MM-C-TRA-8.

For Impact-C-TRA-9:

Front Street/Broadway:

This intersection was identified as failing in the <u>Downtown Community PlanDowntown Mobility</u> <u>Plan Supplemental EIR</u> with no feasible mitigation identified to improve operations. Therefore, the <u>Downtown Community PlanDowntown Mobility Plan Supplemental</u> EIR identified the future impacts to this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown <u>Community Mobility</u> Plan no project-related improvements are recommended at this intersection.

First Avenue/Broadway:

This intersection was identified as failing in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR with no feasible mitigation identified to improve operations. Therefore, the Downtown Community PlanDowntown Mobility Plan Supplemental EIR identified the future impacts to this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown Community Mobility Plan no project-related improvements are recommended at this intersection.

11th Avenue/Broadway:

This intersection was identified as failing in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR with no feasible mitigation identified to improve operations. Therefore, the Downtown Community PlanDowntown Mobility Plan Supplemental EIR identified the future impacts to this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown Community Mobility Plan no project-related improvements are recommended at this intersection.

11th Avenue/G Street:

MM-C-TRA-10: New Travel Lane on G Street (1 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 1 percent of the improvement costs to convert the on-street parking to a

travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of 11th Avenue and G Streets, per the recommendations in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

11th Avenue/Market Street:

This intersection was identified as failing in the Downtown Community PlanDowntown Mobility Plan Supplemental EIR with no feasible mitigation identified to improve operations. Therefore, the Downtown Community PlanDowntown Mobility Plan Supplemental EIR identified the future impacts to this intersection to be significant and unavoidable. To maintain consistency with the vision of the Downtown Community Mobility Plan no project-related improvements are recommended at this intersection.

Park Boulevard/G Street:

MM-C-TRA-11: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 2 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the <u>Downtown Community PlanDowntown Mobility Plan Supplemental EIR</u>. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

13th Street/G Street:

MM-C-TRA-12: New Travel Lane on G Street (1 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 1 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the <u>Downtown Community PlanDowntown Mobility Plan Supplemental EIR</u>. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

14th Street/G Street:

MM-C-TRA-13: New Travel Lane on G Street (3 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 3 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11th Avenue and 17th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the

Downtown Community PlanDowntown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.

Imperial Avenue/16th Street

MM-C-TRA-14: Restripe Northbound and Southbound Approaches to Imperial and 16th

Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 18 percent of the improvement costs to restripe the northbound and southbound approaches to the intersection of Imperial Avenue and 16th Street to include an exclusive right-turn lane in each direction. Restriping of the intersection will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.⁴

15th Street/F Street:

Implement MM-C-TRA-4.

16th Street/G Street:

Implement MM-C-TRA-5.

For Impact-C-TRA-10:

Implement MM-TRA-5: Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements.

For Impact-C-TRA-11:

Implement MM-TRA-8: Implement a Parking Management Plan that Provides Parking Management Strategies.

Level of Significance after Mitigation

As summarized in Table 5-1 above, implementation of **MM-TRA-1** (Transportation Demand Management Plan) would help to reduce potential impacts identified under **Impact-C-TRA-1** and **Impact-C-TRA-2**; however, it cannot be determined with certainty that the impacts would be reduced to less-than-significant levels. As such, construction traffic-related impacts on study area roadway segments and intersections would be significant and unavoidable.

To remain consistent with the City of San Diego's Downtown <u>Community Mobility</u> Plan, no mitigation measures are recommended to reduce the impacts on the roadway segment of Harbor Drive between Laurel Street and Hawthorne Street; therefore, **Impact-C-TRA-3** and **Impact-C-TRA-7** would remain significant and unavoidable.

⁴ This mitigation measure was included in the Executive Summary table and the summary table in Chapter 5 of the Draft EIR but was inadvertently omitted in the *Transportation, Circulation, and Parking* section of Chapter 5. This error has been corrected.

Mitigation measures **MM-C-TRA-1** through **MM-C-TRA-14** would reduce project-related impacts on study area intersections; however, because all of these intersections are controlled by other jurisdictions, including the City of San Diego and Caltrans, and the District does not have jurisdiction to ensure that improvements are completed, it cannot be certain that the mitigation would be implemented when needed or at all. In addition, for some intersections, to remain consistent with the City of San Diego's Downtown <u>Community Mobility</u> Plan, no mitigation measures are recommended to reduce impacts. As such, **Impact-C-TRA-4**, **Impact-C-TRA-5**, **Impact-C-TRA-8**, and **Impact-C-TRA-9** would remain significant and unavoidable.

San Diego Association of Governments' (SANDAG's) The Regional Plan includes a series of operational improvements along I-5 between I-15 and I-8, which would encompass the segments of northbound and southbound I-5 that would be affected by the proposed project. However, these improvements are not scheduled until Year 2050. These improvements are also subject to budget availability and coordination with Caltrans. At the moment, there is no program in place into which the project proponent could pay its fair share toward the cost of such improvements, <u>but the mitigation measure does require the project proponent to enter into a Traffic Mitigation Agreement with Caltrans for these improvements in the event an opportunity to pay a fair share contribution is identified in the future. Therefore, because the timing and installation of the recommended improvements are within the exclusive jurisdiction of Caltrans and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. improvements are considered infeasible, and <u>As such</u>, the impacts on freeway segments along northbound and southbound I-5 under near-term and future year conditions (**Impact-C-TRA-6** and **Impact-C-TRA-10**) would remain significant and unavoidable.</u>

With implementation of **MM-TRA-7**, impacts on permanent parking supply (**Impact-C-TRA-11**) would be reduced through the implementation of a parking management plan. However, given that a substantial deficit in the onsite parking supply would remain even with implementation of the mitigation measure and the benefits of the parking management plan cannot be quantified, impacts would remain significant and unavoidable.

5.2.16 Changes to Chapter 6, Additional Consequences of Project Implementation

Section 6.2, Page 6-1

The project proposes a commercial and recreational bayside redevelopment consisting of approximately 5 acres (approximately 218,875 square feet) along the embarcadero in downtown San Diego. Components of this proposed project include an 850843-room market-rate hotel tower; 565 bcd220-room lower-cost, visitor-serving hotel; approximately 6,0007,749 square feet of retail development; approximately 85,49098,448 square feet of public plaza and park areas; approximately 263260 onsite parking spaces; an expanded marina with up to 50 new slips; an expanded Water Transportation Center; and an optional connecting bridge from the hotel public plaza and park area to the San Diego Convention Center (SDCC).

5.2.17 Changes to Chapter 7, Alternatives to the Proposed Project

Section 7.3, Page 7-3

Table 7-1. Summary of Significant Effects of the Proposed Project

Resource Impact	Significant and Unavoidable	Less than Significant with Mitigation
Section 4.6, Greenhouse Gas Emissions and Climate Change		
Impact-GHG-1: Inconsistency with District Climate Action Plan and Only Partial Consistency with Applicable GHG Reduction Plans, Policies, and Regulatory Programs through 202 <u>51</u>		Х
Impact-GHG-2: GHG Emissions in Excess of Post-2020 Targets for Landside Uses and Recreational Boating.	Х	

Section 7.4, Page 7-6

Table 7-2. Summary of Alternative Buildout Scenarios

			Project Components			
Alternative	Hotel Tower	Lower-Cost Visitor- Serving Hotel	Marina Expansion	Other Components (e.g retail, parking, ballroom, public parks and plaza)		
Alternative 1 - No Project/No Buildout Alternative	No	No	No	No		
Alternative 2 – No Project/Port Master Plan Consistency ¹	No	No	No	Expansion of SDCC to include 220,150 square feet of exhibit hall space, 101,500 square feet of meeting rooms, and 78,470 square feet of ballroom space; includes a 5-acre rooftop park/plaza		
Alternative 3 – No Net New Marina Alternative	850<u>843</u> rooms	565 beds<u>220</u> rooms	No	Same as proposed project		
Alternative 4 – Phase I Only Marina Alternative	850<u>843</u> rooms	565 beds<u>220</u> rooms	Phase I Only Marina Expansion (23 slips)	Same as proposed project		
Alternative 5 – Reduced Density Alternative	680<u>675</u> rooms	4 52 beds<u>183</u> beds (176 rooms)	Phases I and II Marina Expansion (50 slips)	Same as proposed project		

	Project Components					
Alternative	Hotel Tower	Lower-Cost Visitor- Serving Hotel	Marina Expansion	Other Components (e.g., retail, parking, ballroom, public parks and plaza)		
Alternative 6 - Below	850<u>843</u>	565 beds<u>220</u>	Phase I and II Marina	All parking demand is		
Grade Parking Alternative	rooms	<u>rooms</u>	Expansion (50 slips)	met on site; all other components same as		
				proposed project		

¹ The Hilton Bayfront Hotel Tower was approved in the same Port Master Plan Amendment as the SDCC Phase III Expansion, but is located on another site and would not be affected by the proposed project.

Section 7.5.2.4, Page 7-11

Alternative 5 – Reduced Density Alternative

Under the Reduced Density Alternative, the hotel tower would be reduced by 20%, from 850<u>843</u> rooms to 680<u>675</u> rooms, and the lower-cost, visitor-serving hotel would be reduced by 20%, from 565 beds <u>228 beds (220 rooms)</u> to 452 beds <u>183 beds (176 rooms)</u>. The height of the hotel tower would be reduced from 498 feet (<u>445</u> stories) to 428 feet (38 stories). With the reduction in hotel rooms, the number of required onsite parking spaces would be reduced by approximately 9386 spaces. All other project components of the proposed project including the retail along the Embarcadero Promenade, public plaza and park areas, ballroom, parking structure, and marina expansion would remain the same as the proposed project under Alternative 5. The Reduced Density Alternative is intended to avoid or substantially lessen proposed project–related significant impacts related to circulation and parking by reducing the number of hotel guests that would use the site. In addition, Alternative 5 would result in a 20% reduction in air quality emissions, GHG emissions, and energy consumption.

Section 7.6.1.6, Page 7-13

7.6.1.6 Greenhouse Gas Emissions and Climate Change

Alternative 1 would not include any construction and operational activities that would result in additional GHG emissions and GHG emissions would be the same as under existing conditions. Alternative 1 would be consistent with the District's Climate Action Plan (CAP) but would not include any specific GHG reduction measures (i.e., 4253% reduction for recreational boating). Therefore, GHG emissions under Alternative 1 would be substantially reduced when compared to the proposed project, but the alternative would incorporate fewer clean technology improvements.

Section 7.6.2.2, Page 7-16

7.6.2.2 Biological Resources

Alternative 2 would require removal of all trees at the project site, which has the potential to disturb Migratory Bird Treaty Act (MBTA)-protected nests. This alternative would result in reduced impacts compared to the proposed project related to a potential increase in bird strikes. While this alternative would introduce reflective materials, the structure would be substantially lower than the proposed hotel tower (approximately 4 stories as opposed to 4<u>4</u>5), and would include buttressing similar to the existing SDCC such that the total amount of area of reflective surfaces used would be significantly less than the proposed project. Alternative 2 could result in indirect impacts on eelgrass by interrupting sun exposure due to the use of a barge during construction activities to provide an additional laydown area for construction materials. However, mitigation to place the barge outside of the eelgrass area has been incorporated and the impact would be less than significant. Under Alternative 2, the marina would not be expanded and would result in less boating activity in the project vicinity, which would reduce impacts on biological resources related to boat traffic. In addition, Alternative 2 would not expand the pier and increase the number of piles in the water, which would result in reduced impacts on biological resources, including injury of green sea turtles and marine mammals, loss of open water habitat and function, and reduction in eelgrass habitat. Overall, Alternative 2 would result in slightly reduced impacts on biological resources compared to the proposed project.

Section 7.6.3.12, Page 7-21

7.6.3.12 Transportation, Circulation, and Parking

Alternative 3 would not expand the marina, but would still construct the same number of hotel rooms and the same amount of retail space, conference/ballroom space, and public plaza and park area. Alternative 3 would result in a reduction in the amount of traffic generated by the proposed project to a total of 8,3357,909 daily trips compared to the 8,4868,109 daily trips that would be generated by the proposed project. Alternative 3 would still result in significant and unavoidable impacts on intersection and freeway segments in the project area. In addition, while parking demand would be slightly reduced compared to the proposed project, Alternative 3 would still result in significant impacts related to parking. Overall, Alternative 3 would result in similar impacts on transportation, circulation, and parking as the proposed project.

Section 7.6.4.12, Page 7-24

7.6.4.12 Transportation, Circulation, and Parking

Alternative 4 would result in the reduction of 27 slips at the marina compared to the proposed project, but would construct the same number of hotel rooms and the same amount of retail space, conference/ballroom space, and public plaza and park areas. The reduction in boat slips would result in a slight reduction in the amount of traffic generated by the proposed project, with Alternative 4 resulting in a total of 8,4268,001 daily trips compared to the 8,4868,109 daily trips that would be generated by the proposed project. Alternative 4 would still result in significant and unavoidable impacts on intersection and freeway segments in the project area. In addition, parking demand would be similar compared to the proposed project and Alternative 4 would result in significant impacts on transportation, circulation, and parking as the proposed project.

Section 7.6.5.12, Page 7-28

7.6.5.12 Transportation, Circulation, and Parking

Alternative 5 would construct a total of <u>1,132851</u> rooms at the project site, which would represent a reduction of <u>283212</u> rooms compared to the proposed project. Other project components, such as

retail space, public plaza and park areas, and the marina, would remain the same. The reduction in hotel rooms would reduce trip generation to <u>6,8926,552</u> average daily trips compared to the <u>8,4868,109</u> daily trips that would be generated by the proposed project. With this reduction in traffic, Alternative 5 would reduce all direct impacts on intersections and freeway segments to lessthan-significant levels, but would still result in significant and unavoidable cumulative impacts. However, parking demand under Alternative 5 would also be substantially reduced, and significant and unavoidable parking impacts would be avoided under this alternative as well. Overall, Alternative 5 would result in substantially reduced impacts related to transportation, circulation, and parking compared to the proposed project because it would avo5d the direct significant and unavoidable transportation impacts resulting from the proposed project.

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Section 7.6.5.15, Page 7-28

7.6.5.15 Relationship to Project Objectives and Summary of Impacts

The Reduced Density Alternative would meet most of the basic project objectives. Specifically, it would meet Objectives #1 through #7 because it would provide a full-service hotel appropriate for first-class convention operations, provide lower-cost visitor-serving accommodations at the site, provide infill development on District tidelands that is compatible with surrounding uses, increase activation along the waterfront by providing public plaza and park areas, and provide new public vista points. However, because of the decrease in hotel rooms under Alternative 5, this alternative would not fully meet Objective #1: developing a full-service hotel that is a financially viable operation or providing a similar number of hotel rooms as the adjacent hotels (under this alternative, only 680675 rooms would be provided in the hotel tower). This alternative would not fully meet Objective #2 as compared to the proposed project, because the reduced number of lowercost visitor-serving beds would reduce access and enjoyment by the public and reduce the project's ability to meet Board Policy 775. In addition, although whether this alternative would meet the economic objectives of Objective #3 involves economic and policy considerations within the discretion of the Board of Port Commissioners, it would not fully meet Objective #3 because this alternative would not maximize the economic benefit to the District and City of San Diego at the project site. However, this alternative would substantially reduce the project's direct significant and unavoidable impacts related to transportation, circulation, and parking.

Section 7.6.6.2, Pages 7-31 and 7-32

Table 7-3. Estimate of Construction Emissions Under Alternative 6 Below Grade Parking Alternative Prior to Mitigation (pounds per day)

Construction Disco	VOC	NO	60	60	PM10	PM10	PM10 Tatal	PM2.5	PM2.5	PM2.5
Construction Phase	VOC	NOx	CO	SOx	Exhaust	Dust	Total	Exhaust	Dust	Total
Phase 1: Mobilization and Site Preparation										
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas										
Excavation and Foundation	8	206	44	3	3	39	42	3	12	14
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	69 79	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	10<u>7</u>	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	4 <u>338</u>	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	128 129	247	163	1	4	44	48	4	13	17
San Diego County SLTs	75	250	550	150			100			55
Exceed Significant Threshold?	Yes	No	No	No			No			No

Source: ICF Emissions Modeling (Appendix CAttachment 2).

Notes: Maximum daily emissions for each pollutant varies. Totals may not add exactly due to rounding.

Table 7-4. Estimate of Construction Emissions Under the Below Grade Parking Alternative after Mitigation (pounds per day)

	WOG	No			PM10	PM10	PM10	PM2.5	PM2.5	PM2.5
Construction Phase	VOC	NOx	CO	SOx	Exhaust	Dust	Total	Exhaust	Dust	Total
Phase 1: Mobilization and Site Preparation										
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas										
Excavation and Foundation	8	185	42	3	3	35	38	2	11	13
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	21 24	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	<u>32</u>	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	15 13	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	<u>4546</u>	225	163	1	4	40	44	4	12	16
San Diego County SLTs	75	250	550	150	-	-	100	-	-	55
Exceed Significant Threshold?	No	No	No	No	-	-	No	-	-	No
Source: ICF Emissions Modeling (Appendix CAttachment 2).										

Source: ICF Emissions Modeling (<u>Appendix CAttachment 2</u>).

Notes: Maximum daily emissions for each pollutant varies. Totals may not add exactly due to rounding.

Section 7.6.6.6, Pages 7-34 through 7-36

7.6.6.6 Greenhouse Gas Emissions and Climate Change

Under Alternative 6, all components of the proposed project would be implemented, and the alternative would result in the same GHG emissions as would occur under the proposed project. With the development of a subterranean garage, all parking would be accommodated on site and would therefore reduce the amount of driving associated with looking for parking off site. However, this alternative would require an increase in haul trucks to remove excavated material for the subterranean parking garage, which would increase emissions during construction. A quantitative analysis was performed to estimate the degree to which GHG emissions and climate change impacts would change relative to the proposed project.

The methodology used to estimate GHG emissions and climate change impacts under Alternative 6 is similar to the proposed project except that inclusion of the subterranean parking garage would increase the amount of excavated materials to be taken to an offsite recycling facility from 36,500 CY under the proposed project to 141,500 CY under Alternative 6. This increase in excavation would increase the number of total trucks to 9,800 trucks over the 100-day excavation and foundation phase (Phase 2.1). Similar to the proposed project, it was assumed that excavated soils would be taken to a recycling facility in Arizona. Emissions were estimated using the same exhaust emission factors assumed for the proposed project, as described in Section 4.6.4.1.

As shown in Table 7-5, emissions during construction of Alternative 6 would generate approximately 6,055 MTCO₂e over the projected 2.5-year construction period, which is 1,885 $MTCO_2e$ more than the proposed project (Table 4.6-8), due solely to the increase in soil hauling. As described in Section 4.6.4, total construction emissions are amortized over a 20-year duration and would equate to approximately 303 MTCO₂e per year, which is 94 MTCO₂e per year more than the proposed project. Consistent with industry best practices, amortized emissions are added to operational landside emissions before mitigation in Table 7-6 and operational landside emissions after mitigation in Table 7-7. Note that operation of the proposed project and Alternative 6 are expected to be the same; the only difference herein is the amount of amortized construction emissions (which differs) added to operational emissions (which does not differ) in estimating total project emissions. As shown in Table 7-6, Alternative 6 landside emissions would meet the efficiency target for 20215 after including site design (VMT) reductions, but would fall short of the efficiency target for 2030 and 2050 after including site design (VMT) reductions but prior to mitigation. Therefore, post-2020 GHG emission impacts under Alternative 6 are considered significant. As discussed for the proposed project in Section 4.6.4.3, after implementation of the identified mitigation measures, emissions associated with Alternative 6, similar to the proposed project, would be substantially reduced and would be on a downward trajectory, but would remain significant because there is no certainty that the project's reduced emissions, after mitigation, would represent its fair share of the requisite reductions to achieve statewide post-2020 targets. Because Alternative 6 emissions would be slightly higher than those of the proposed project, the renewable energy project or amount of GHG offsets increases such that, to meet the 2030 target, either option or a combination must achieve a total annual reduction of 3,513 3,974 MTCO₂e per year, or 15,739 <u>17,808</u> megawatt-hours per year (MWh/year), which would amount to $\frac{70,252}{79,478}$ MTCO₂e over 20 years (between 2030 and 2050). To meet the 2050 target, either option or a combination must achieve a total annual reduction of 12,029-5,826 MTCO2e per year or 53,90126,106 MWh/year, which would amount to 445,091,215,549 MTCO₂e over 37 years (between 2050 and the end of the

lease in 2087). After mitigation, impacts associated with Alternative 6 would remain significant and unavoidable, similar to the proposed project.

Under cumulative conditions, Alternative 6, like the proposed project, would have the potential to result in a cumulatively considerable contribution of GHG emissions impacts and require the same mitigation measures as identified in Chapter 5, *Cumulative Impacts*. However, similar to the proposed project, impacts would be reduced to less than cumulatively considerable levels with implementation of mitigation measures, while other impacts would remain cumulatively considerable after implementation of mitigation measures, as described in Section 4.6, *Greenhouse Gas Emissions and Climate Change*.

Therefore, impacts on GHG emissions and climate change under Alternative 6 would be slightly greater, but similar to those of the proposed project.

Table 7-5. Estimate of Construction GHG Emissions Under the Below Grade Parking Alternative (total metric tons)

Emission Source	CO ₂ e
Phase 1- Mobilization and Site Preparation	
Mobilization/Demolition	26
Dewatering/Shoring	22
Phase 2 – Market- Rate Hotel Tower, Meeting Areas, and Pa	rking Structure
Excavation and Foundation	2,831
Structural Frame	601
Exterior Closure and Roofing	403
Interior Rough-In (Elev./MEP/Framing)	145
Interior Construction/Finishes	261
MEP Systems	289
Phase Completion Work	60
Phase 3 – Lower-Cost Visitor-Serving Hotel	
Foundations	39
Structural Frame	80
Exterior Closure	109
Interior Construction/Finishes	137
Phase Completion Work	14
Phase 4 - Site Work	
Offsite Demolition/Grading/Utilities	191
Site Improvements	218
Phase 5 – Waterside Work	
Marina Construction	630
Total Construction (over 2.5 years)	6,055
Annual Total (Amortized over 20 years)	303
Note: Totals may not add exactly due to rounding. Source: Appendix C<u>Attachment 2</u>.	

Element		202 <u>5</u> 1	2030	2050
Total Operations		<u>12,351</u> 13,996	11,981<u>11,281</u>	11,587<u>8,936</u>
Amortized Con	struction	303	303	303
Reductions	VMT Reductions from Site Location and other project features	<u>-1,825<mark>-2,098</mark></u>	<u>-1,610-1,608</u>	<u>-1,484-1,482-</u>
Total Project	Landside	12,171<u>10,829</u>	10,676<u>9,</u>974	10,407<u>7,744</u>
Existing Lands	side Annual ¹	625	625	625
Net New Over	Existing	11,546<u>10,204</u>	10,051<u>9,349</u>	9,783<u>7,119</u>
Service Popula	ation (rooms)	1,415<u>1,071</u>	1,415<u>1,071</u>	1,415<u>1,071</u>
Project Efficie	ncy (MT/room)	<u>8.29.53</u>	7.1<u>8.7</u>	<u>6.96.6</u>
Significance T	hreshold (MT/room)	12.9 9.54	6.3	1.4
Exceed Target	?	No	Yes	Yes

Table 7-6. Estimate of Alternative 6 Landside GHG Emissions with State Measures (metric tons per year)

Element		202 <u>5</u> 4	2030	2050
Total Operations		<u>12,351</u> 13,996	<u>11,281</u> 11,981	<u>8,936</u> 11,587
Amortized Con	struction	303	303	303
	VMT Reductions from Design	-2,098<u>-1,825</u>	-1,608 -1,610	-1,482 -1,484
Reductions ²	MM-GHG-2/3 CAP and Sustainability Measures	-	-227 -271	-227 -252
	MM-GHG-4 PV/Offsets		-963<u>-2,370</u>	-7,583<u>-5</u>,374
Total Project	Total Project Landside		9,487<u>7,332</u>	2,598<u>2,118</u>
Existing Lands	ide Annual ³	625	625	625
Net New Over	Existing	11,546<u>10,204</u>	8,862<u>6,</u>708	1,973<u>1,493</u>
Service Popula	tion (rooms)	1,415<u>1,071</u>	1,415<u>1,071</u>	1,415<u>1,071</u>
Project Efficier	ncy (MT/room)	<u>8.29.53</u>	6.3	1.4
Significance Threshold (MT/room)		12.9 9.54	6.3	1.4
Exceed Target?	,	No	No	No

Section 7.6.6.12, Page 7-40 through 7-42

Construction

In addition to the subterranean parking garage level, Alternative 6 would construct the same number of hotel rooms and the same amount of retail space, conference/ballroom space, public plaza and park areas, and expanded marina as the proposed project. Under Alternative 6, the overall construction schedule would be similar to the proposed project. Construction of Alternative 6 is

anticipated to begin in 2018 and would occur over a 24- to 30-month period, ending in 2021 when the project is fully operational. Peak construction is anticipated to occur between May and June of 2020. Construction of the Below Grade Parking Alternative would occur during the Excavation and Foundation phase (Phase 2.1) of the overall project construction schedule. As such, the Excavation and Foundation phase would be the only construction phase that would experience changes in the number of trips associated with Alternative 6. During construction, extensive ground-disturbing activities would be required, including excavation and grading of the entire 5-acre project site. Excavation for the below grade parking garage level would extend to an average depth of approximately 12 feet.

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Operation

Project operations under Alternative 6 would be similar to the proposed project. Other than the subterranean parking garage level, Alternative 6 would include the same components of the proposed project, including the same number of hotel rooms, square footage of retail space, and number of marina slips. As such, operation of Alternative 6 would generate the same number of daily trips (8,4868,109 daily trips) that would be generated by the proposed project. Consequently, when compared to the proposed project, Alternative 6 would result in the same operational-related project-level and cumulative transportation and circulation impacts and require the implementation of the same mitigation measures identified in Section 4.10, *Transportation, Circulation, and Parking*, and Chapter 5, *Cumulative Impacts*. For the reasons described in Section 4.10, *Transportation, Circulation, and Parking*, and Chapter 5, *Cumulative Impacts*, similar to the proposed project, transportation and circulation impacts and unavoidable under Alternative 6.

Under Alternative 6, a total of 478 parking spaces would be provided in a concrete parking structure that includes a subterranean parking level. The P1 level would include 190 standard stall spaces, 9 ADA spaces, and 64 valet spaces. The P2 level would include 167 standard spaces and 48 valet spaces. Operation of Alternative 6, including the proposed market-rate hotel tower, lower-cost visitor-serving hotel, retail space, marina, and public plaza and park areas, would require 472449 parking spaces. Under the proposed project, 263260 parking spaces would be provided in a ground-level parking garage, resulting in a deficiency of 209189 parking spaces. As such, with the development of a subterranean parking garage level under Alternative 6, all of the parking demand generated during operations would be accommodated on site, resulting in a surplus of 6 parking spaces during the highest demand period. Consequently, implementation of Alternative 6 would reduce the significant and unavoidable project-level and cumulative parking impact that would occur under the proposed project to less-than-significant levels, thereby eliminating the need for a parking management plan as required by the mitigation measure described in Section 4.10, *Transportation, Circulation, and Parking*, and Chapter 5, *Cumulative Impacts*.

Overall, Alternative 6 would result in similar project-level and cumulative impacts on transportation and circulation, and substantially reduced impacts on parking during operations compared to the proposed project.

Section 7.6.7, Pages 7-43 and 7-44

7.6.7 Environmentally Superior Alternative

Pursuant to CEQA, the EIR is required to identify the environmentally superior alternative. Although the No Project/No Build Alternative (Alternative 1) reduces the greatest number of significant impacts, CEQA requires that when the environmentally superior alternative is the No Project/No Build Alternative, another alternative should be identified. The No Project/Port Master Plan Consistency Alternative (Alternative 2) reduces the second-largest number of significant impacts; however, this alternative would not achieve most of the project objectives and is also a No Project Alternative. Considering the importance of parking in the area, the Below Grade Parking Alternative (Alternative 6) would add additional parking on site and meet all the basic project objectives. However, this alternative would result in similar and, in some cases, greater impacts than the proposed project. Therefore, the No Net New Marina Alternative (Alternative 3) is considered the environmentally superior alternative (see Table 7-10) because it would reduce the greatest number of impacts while still achieving most of the project objectives (see Table 7-11). Alternative 3 would eliminate the marina expansion, which would avoid all of the waterside impacts that would result under the proposed project; the alternative would also result in reduced impacts on biological resources, GHG emissions, hazardous materials, hydrology and water quality, and noise and vibration. In additionHowever, Alternative 3 would not meet all the basic project objectives with the exception of and would only partially meet Objective #4 because the project would not include an expanded marina. However, all other project components would be incorporated, including an infill development that provides a full-service hotel that is comparable in size to adjacent hotels, a lowercost visitor-serving hotel, plaza and park areas, restaurant and retail space, a water transportation center, improved links to the waterfront, and sustainable development features (see Table 7-11).

Section 7.6.7, Page 7-46

Table 7-11. Summary Project Objective Comparison of Proposed Project Alternatives

Project Objective	No Project/ No Build (Alternative 1)	No Project/Port Master Plan Consistency Alternative (Alternative 2)	No Net New Marina Alternative (Alternative 3)	Phase I Only Marina Alternative (Alternative 4)	Reduced Density Alternative (Alternative 5)	Below Grade Parking Alternative (Alternative 6)
1. Provide full service hotel	No	No	Yes	Yes	Partially	Yes
2. Provide lower-cost visitor-serving hotel	No	No	Yes	Yes	Partially	Yes
3. Provide infill development, maximum hotel room revenue, restaurant and retail sales	No	Partially	Yes	Yes	Partially	Yes
4. Increase activation on site by providing public park, plaza space, retail, expanded marina, water transportation center	No	Partially	No<u>Partially</u>	Partially	Yes	Yes
5. Provide new public vista opportunities of San Diego Bay from vantage points	No	Yes	Yes	Yes	Yes	Yes
6. Improve access to the waterfront and Embarcadero Promenade by providing wayfinding signage	No	Yes	Yes	Yes	Yes	Yes
7. Pursue LEED Certification	No	Yes	Yes	Yes	Yes	Yes

5.2.18 Changes to Chapter 9, References

Pages 9-2 and 9-3, References for Section 4.2, Air Quality and Health Risk

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5.2.19 Figure Revisions

All figures on the following pages have been revised as a result of comments received during public review of the Draft EIR or changes to the project description since public review of Draft EIR, with the exception of Figure 4.9-1, which was revised to depict the correct planning subarea boundaries.

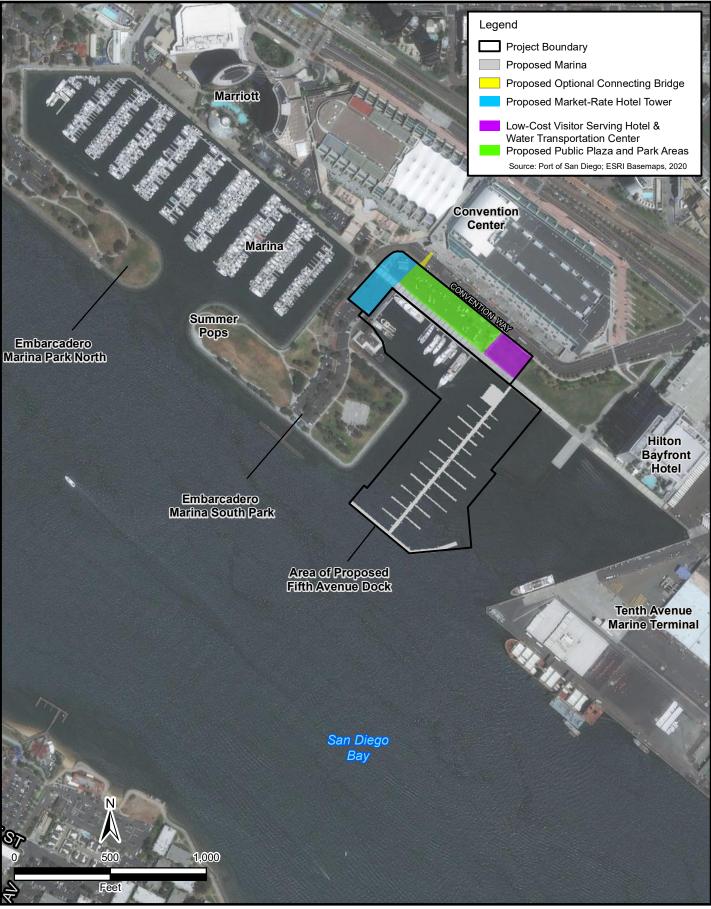
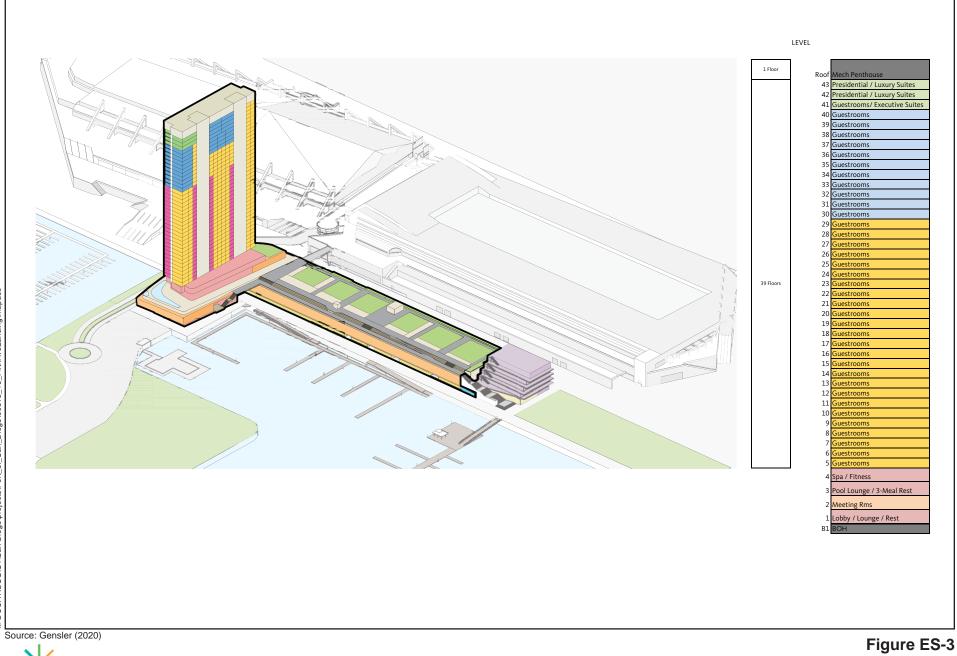
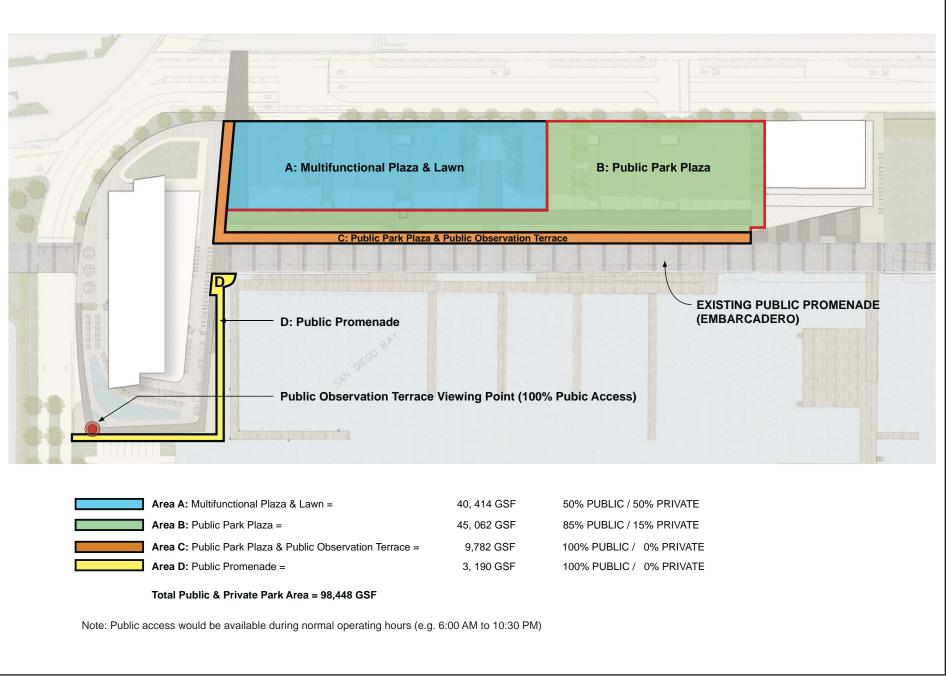


Figure ES-2 Project Site Boundaries Fifth Avenue Landing Project



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Figure ES-3 Proposed Hotel Tower Stacking Diagram Fifth Avenue Landing Project



Source: Gensler (2020)



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Figure ES-10 Proposed Public Access Areas Fifth Avenue Landing Project

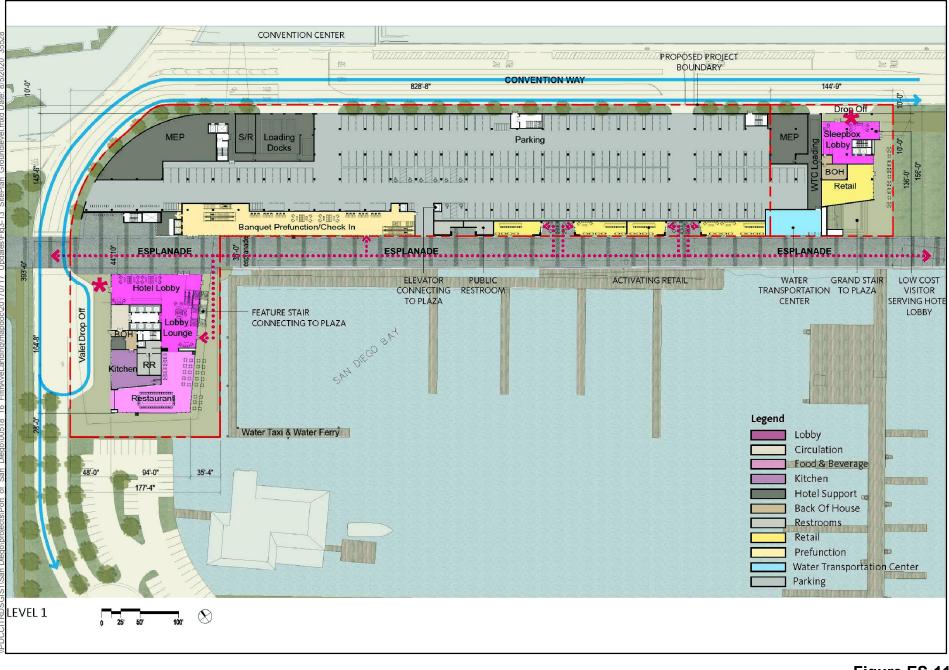
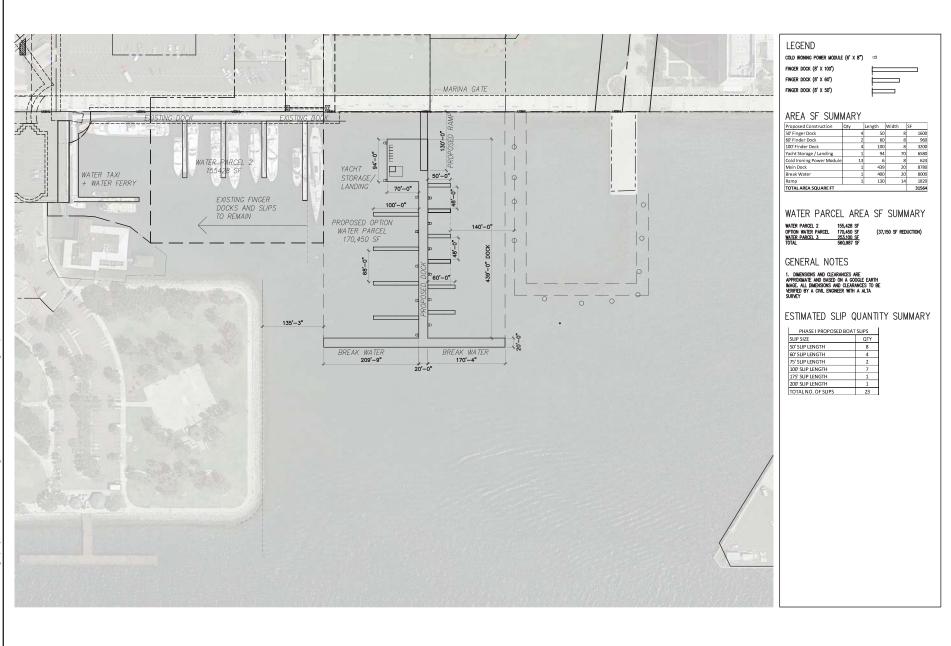


Figure ES-11 Proposed Site Plan at the Ground Level Fifth Avenue Landing Project

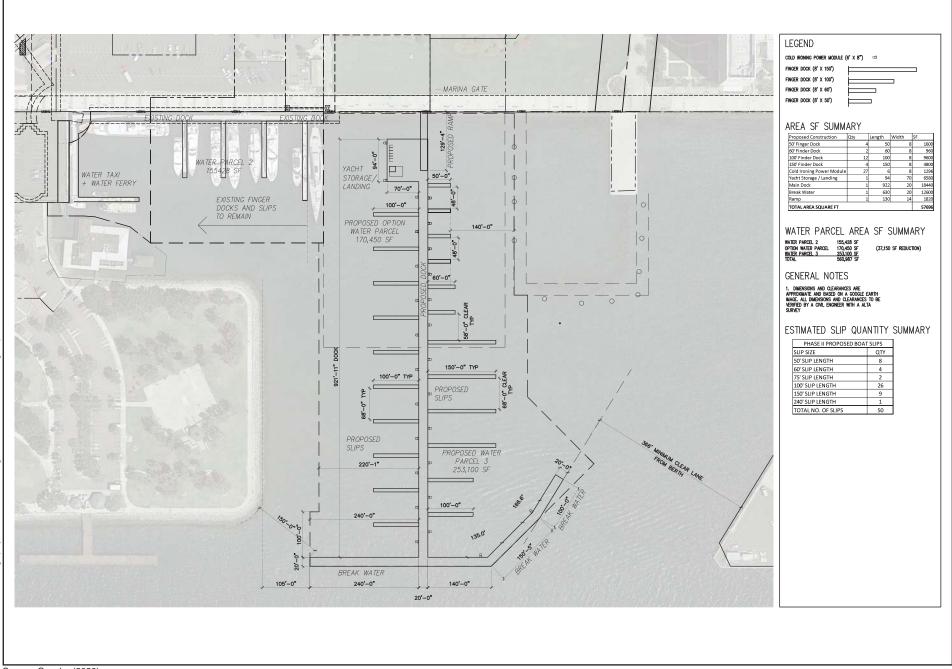


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Source: Gensler (2020)



Figure ES-12 Proposed Phase I Marina Expansion Fifth Avenue Landing Project



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Source: Gensler (2020)



Figure ES-13 Proposed Phase II Marina Expansion Fifth Avenue Landing Project

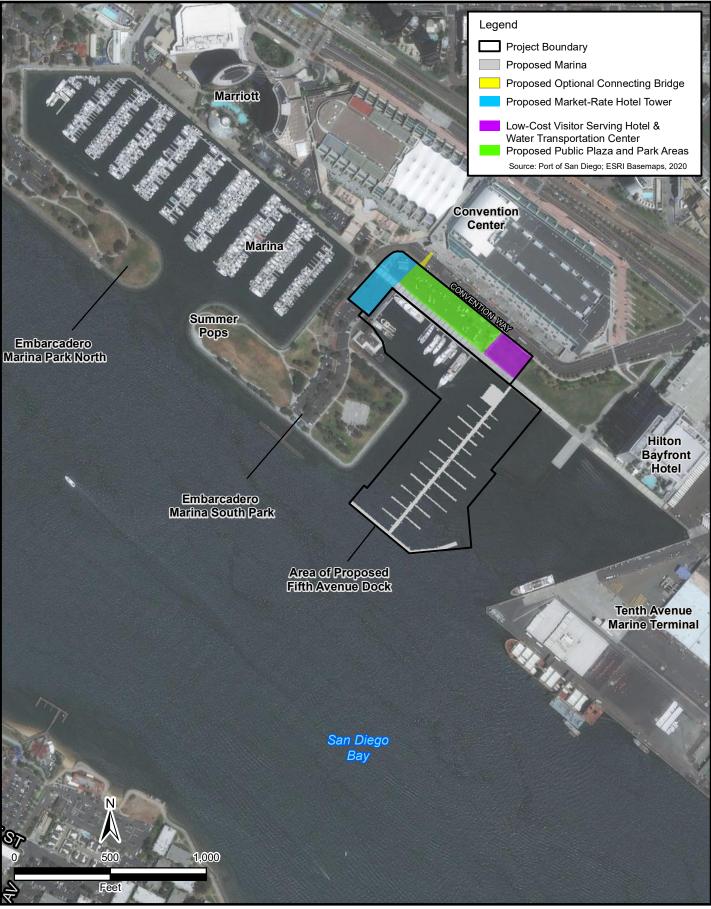


Figure 2-2 Project Site Boundaries Fifth Avenue Landing Project

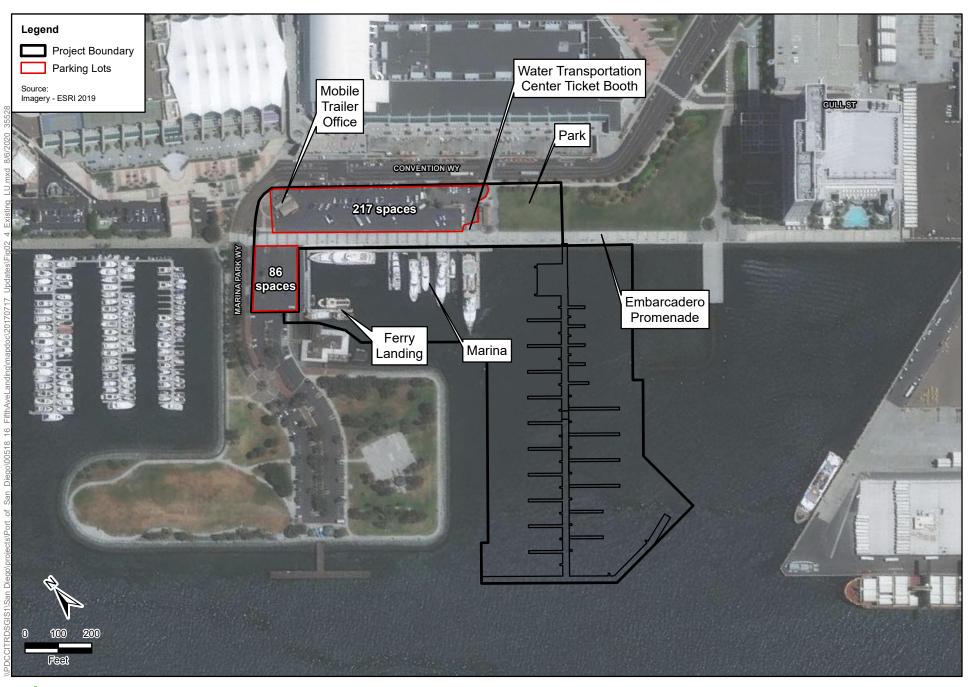
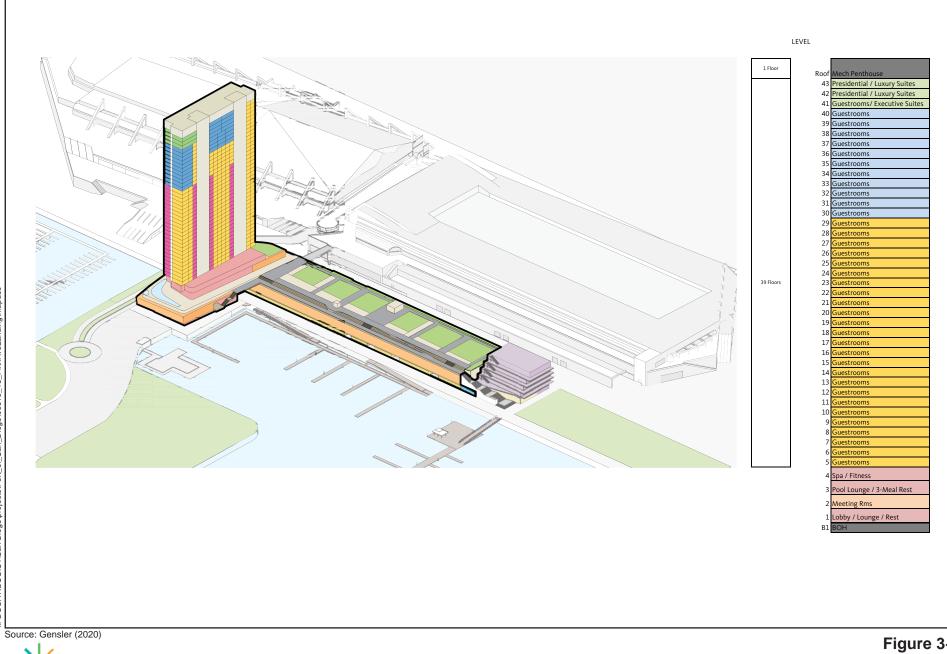
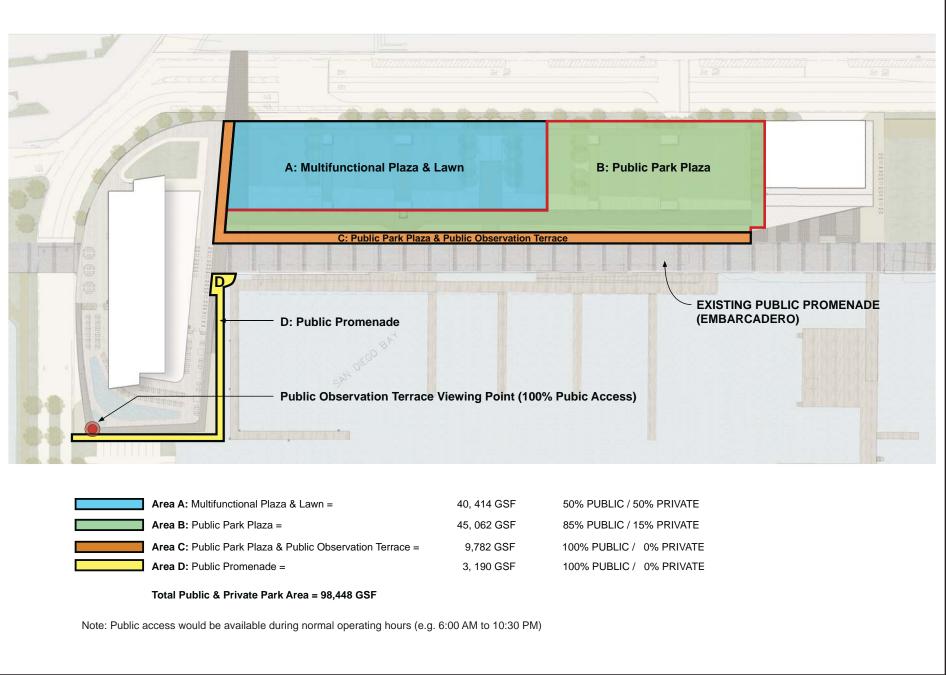




Figure 2-4 Existing Land Uses Fifth Avenue Landing Project







Source: Gensler (2020)

Figure 3-12 Proposed Public Access Areas Fifth Avenue Landing Project

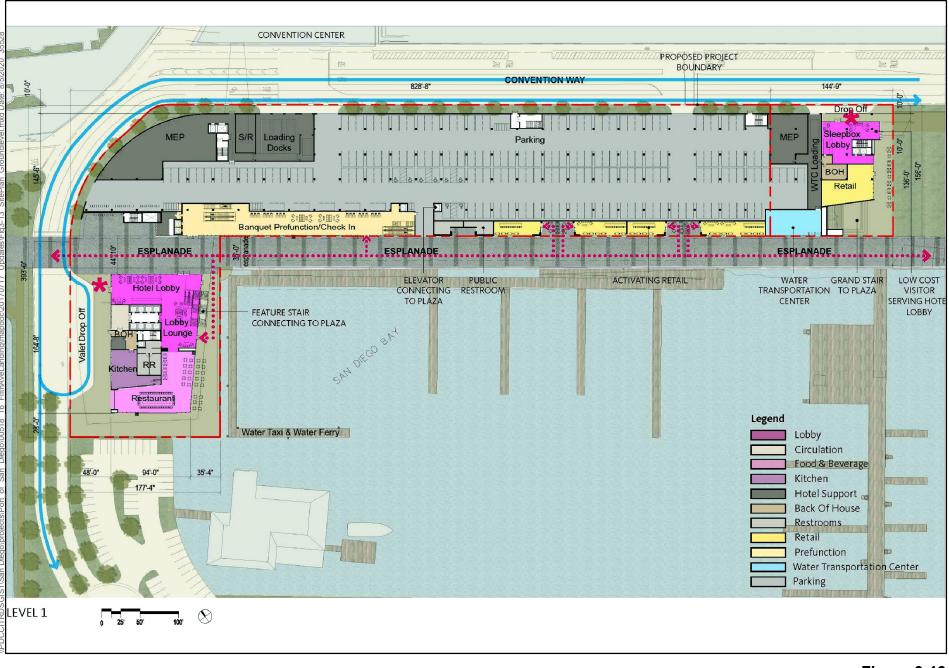
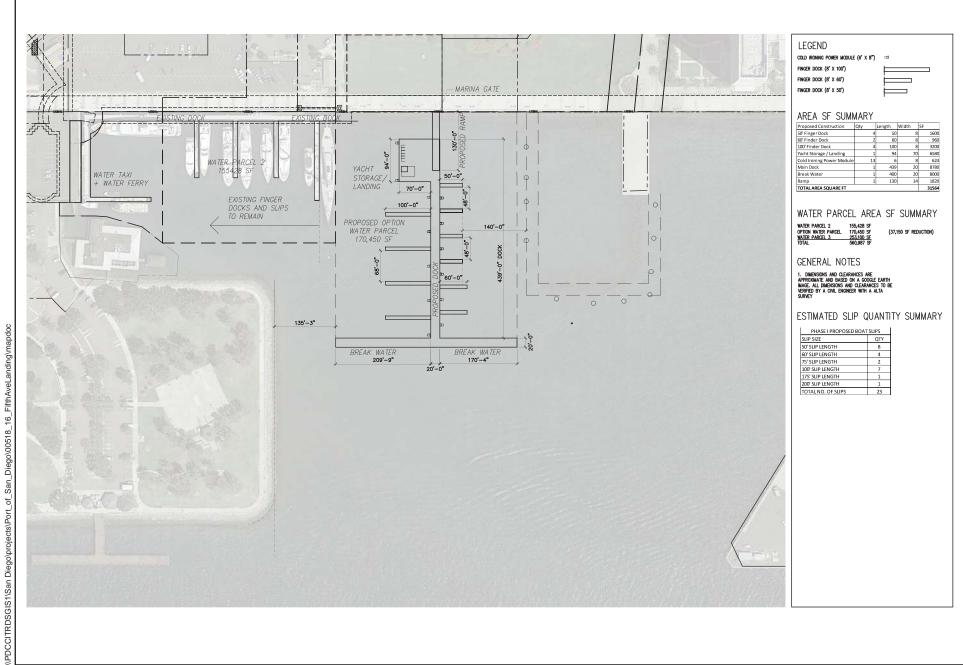


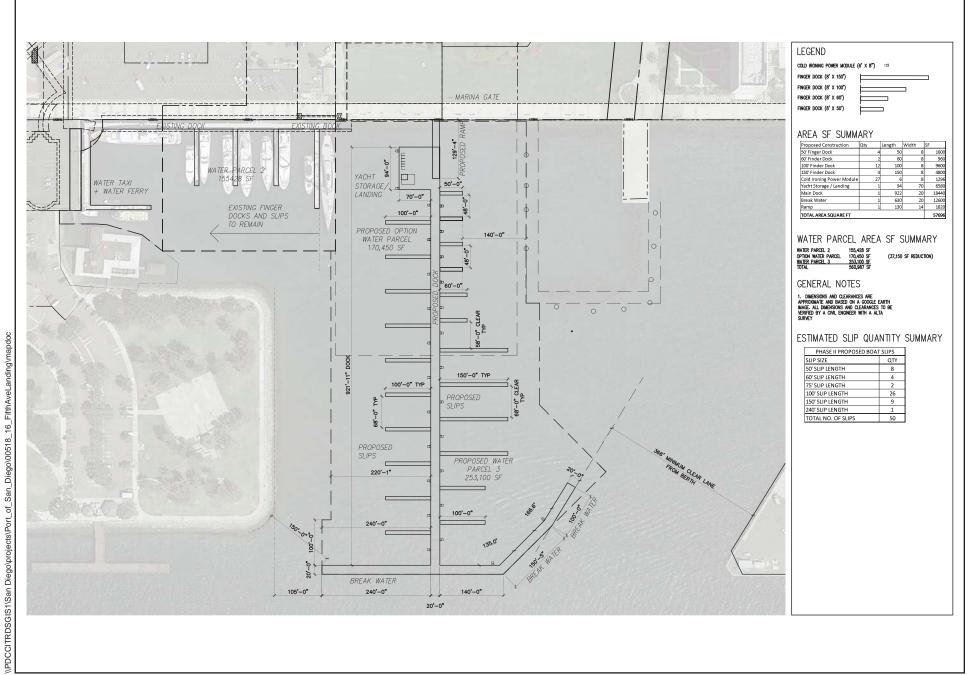
Figure 3-13 Proposed Site Plan at the Ground Level Fifth Avenue Landing Project



Source: Gensler (2020)

/ICF

Figure 3-14 Proposed Phase I Marina Expansion Fifth Avenue Landing Project



Source: Gensler (2020)



Figure 3-15 Proposed Phase II Marina Expansion Fifth Avenue Landing Project





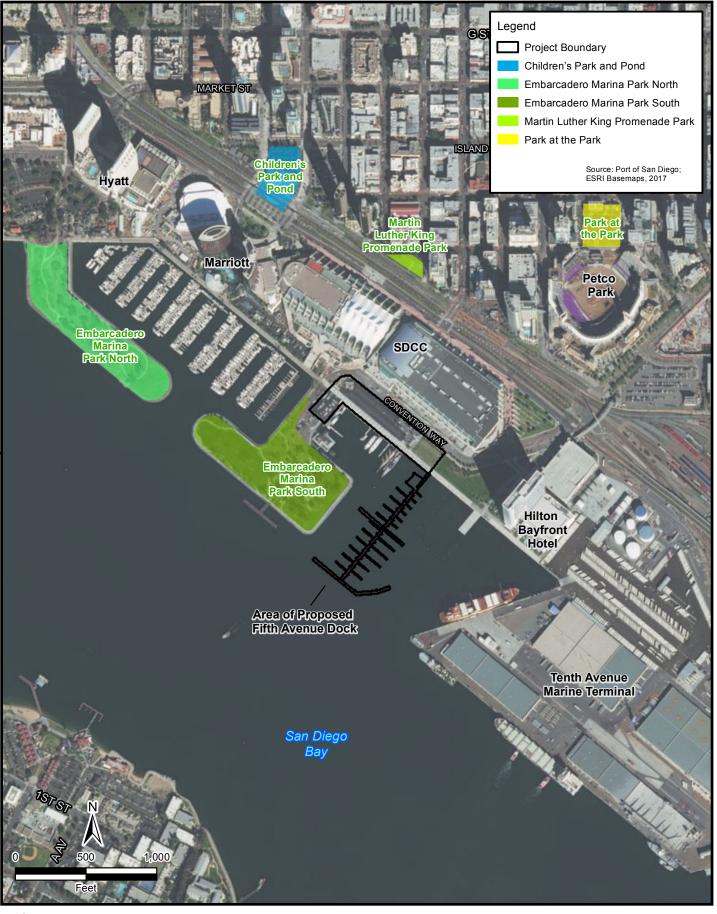
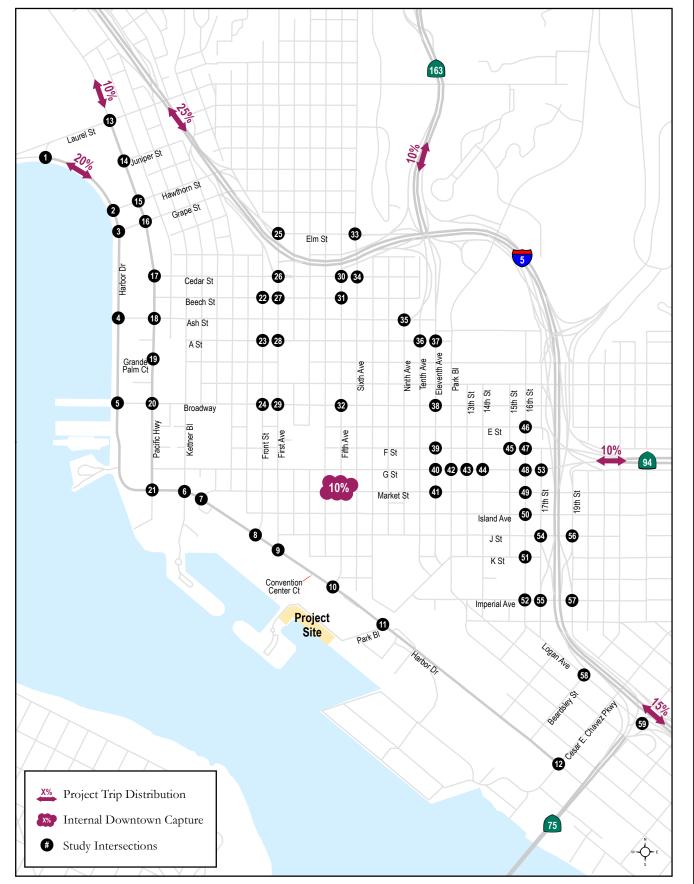


Figure 4.11-2 Existing Parks Near the Project Site Fifth Avenue Landing Project







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Figure 4.12-2 Project Trip Distribution Fifth Avenue Landing Project

5.2.20 Changes to Appendix C, Draft Port Master Plan Amendment

The Draft Port Master Plan Amendment (PMPA) has been revised as a result of comments received during public review of the Draft EIR and changes to the project, as well as to correct an error on Figure 12. The Amended South Embarcadero Public Access Plan (PAP) is included as an attachment to the PMPA.



TABLE 4: PORT MASTER PLAN LAND AND WATER USE ALLOCATION SUMMARY

LAND USE

COMMERCIAL	. <u>454.5</u> 4 57.9
Marine Sales and Service	s 9.1
Airport Related Commerci	al 38.0
Commercial Fishing	8.3
Commercial Recreation	<u>394.8<mark>398.2</mark></u>
Sportfishing	4.3

ACRES

INDUSTRIAL	1158.7
Aviation Related Industrial	152.9
Industrial Business Park	69.5
Marine Related Industrial	318.6
Marine Terminal	149.6
International Airport	468.1

PUBLIC RECREATION.	<u>412.8</u> 407.5
	<u>414.5</u> 4 13.7 *]
Open Space	66.9
Park/Plaza	. <u>216.2</u> 211.0
	[217. <mark>9</mark> 2*]
Golf Course	
Promenade	<u>31.9</u> 31.8

CONSERVATION	485.3
Wetlands	375.8
Habitat Replacement	109.5

PUBLIC FACILITIES	<u>239.5</u> 241.4
Harbor Services	2.6
City Pump Station	0.4
Streets	<u>236.5</u> 238.4

MILITARY	. 25.9
Navy Fleet School	.25.9

TOTAL LAND AREA...... 2776.7

AN LAND AND WATER U	SE ALLOCATI		RY
	TOTAL		% of
WATER USE	ACRES	ACRES	TOTAL
COMMERCIAL	<u>400.5</u> 388.8	<u>855</u> 84 6.7	15%
Marine Services Berthin	g 17.7		
Commercial Fishing Ber	thing 18.8		
Recreational Boat Berth	ing <u>352.9<mark>341.2</mark></u>		
Sportfishing Berthing	11.1		
INDUSTRIAL	<u>206.9</u> 212.0 <u>1</u>	<u>365.6</u> 1370.7	. 24%
Specialized Berthing	<u>159.7</u> 164.8		

PUBLIC RECREATION	681.1 <u>1093.9<mark>1088.6</mark></u> 19%
	[1094.8*]
Open Bay/Water	681.1

CONSERVATION	1084.6 1569.9 28%
Estuary	1084.6

PUBLIC FACILITIES <u>381.3387.9</u> <u>620.8</u> 629.3
Harbor Services10.5
Boat Navigation Corridor 274.3
Boat Anchorage25.0
Ship Navigation Corridor <u>47.353.9</u>
Ship Anchorage24.2
MILITARY
MILITARY
Navy Small Craft Berthing6.2
Navy Small Craft Berthing6.2

MASTER PLAN LAND AND WATER ACREAGE TOTAL 5656.7** 100%

*Includes <u>1.7</u>6.3 acres of rooftop park/plaza <u>& inclined walkway</u>

** Does not include 1.76.3 acres of rooftop park/plaza & inclined walkway

CENTRE CITY EMBARCADERO: PLANNING DISTRICT 3

Introduction

The Embarcadero of San Diego is the downtown waterfront area for an urban region of over 2.7 million people. The pierside maritime activities of commercial fishing boats, merchant ships, Navy vessels and pleasure craft contribute to the fabric of the Embarcadero. Planning District 3 covers all of the Port District waterfront from the U.S. Coast Guard Air Station to the Tenth Avenue Marine Terminal. From Laurel Street to Market, Port land boundaries follow parallel to the shoreline and extend easterly to Pacific Highway, except for two major land blocks; the five-block-long property of the County of San Diego's Administrative Center and the four-block-long property of the U.S. Navy's Commander, Naval Base San Diego and Naval Supply Center. The owners of both of these properties have extensive renovation and proposed redevelopment plans, which include commercial recreation, county government's administration, and U.S. Navy uses.

In order to coordinate the redevelopment of this area and adjoining agency properties, an alliance was formed to develop a single, comprehensive plan. The North Embarcadero Alliance includes the Port District, City of San Diego, County of San Diego, Centre City Development Corporation, and the U.S. Navy. The Alliance developed a Visionary Plan in 1998 to guide the redevelopment of the contiguous properties. The specific recommendations of the Visionary Plan that pertain to Port District land and water areas within the Planning District 3 Precise Plan area are incorporated into the Master Plan. All other recommendations of the Visionary Plan guide development within Planning District 3.

Precise Plan Concept

The basic concept of the redevelopment of the Embarcadero is to create a unified waterfront, both visually and physically, which creates an overall sense of place. In this concept, the Embarcadero becomes а pedestrian spine along which commercial and recreational activities are located. In order to emphasize the pedestrian oriented waterfront experience, through traffic is routed to Pacific Highway, and considerable effort is directed toward improving the amenities and people spaces of the public thoroughfare along North Harbor Drive. Industrial uses adjacent to the airport are renovated and retained as important employment centers and as airport buffer land use activities. The renovation of marine terminal facilities will retain the active use of deep draft berthing and continue carefully selected functions of a working port. The commercial fishing industry is given a major focus at several locations with the development of new piers and a mooring basin. A major hotel and commercial complex with recreational facilities is proposed to connect and enhance nearby portions of downtown.

The Embarcadero is intensively used by many people. With the mixture of activities going on here, it is important to emphasize that several activities may occur at the same location, depending on a scheduling overlap to accommodate all of them. For example, Broadway Pier may be used at different times for tuna fleet berthing, cruise ship berthing, excursion or ferry boat berthing, public access, passive recreation, and commercial recreation. The redefined Specialized Berthing designation applies to this precise plan area only, and may include marine-related uses such as transient and general berthing of small boats, historic ship berthing, ferry or excursion boat berthing, and commercial fishing boat berthing as the highest priority use. The designation carried on the

Precise Plan indicates the primary use but secondary uses may occur. This is particularly true of water areas and of public access, which may be available at other sites than those mentioned.

Land and Water Use Allocations

The Precise Plan allocates a balanced distribution of commercial, industrial, public recreation and public facility uses in this 434- acre planning area. More detailed allocations are indicated in the Land and Water Use **Table 10**, and use areas are graphically portrayed on the **Precise Plan Map**.

Centre City Embarcadero Planning Subareas

The Planning District has been divided into six subareas as shown in *Figure 12*.

The North Embarcadero Alliance Visionary Plan area includes all of Subareas 31, 32, 33, and part of Subarea 34. The Visionary Plan proposes to revitalize San Diego's downtown waterfront through a concept for public improvements and by guiding development to property values, public access optimize opportunities and priority waterfront and waterdependent uses. The Plan recommends a substantial linear esplanade park on the urban waterfront with public art, street furniture, public spaces, expansive Bay views and public parking. The Plan proposes two major parks and plazas at the County Building and the foot of Broadway, and includes recreational piers and associated public facilities, harbor excursion landings and water-related commercial uses on Port tidelands. General commercial, residential, and commuter traffic would utilize an enhanced Pacific Highway grand boulevard, while North Harbor Drive would serve waterfront public access, water-dependent, and Embarcadero commercial recreational uses. An extension of the downtown San Diego small-block street grid

across the railroad right-of-way, off Port lands, to the Bay would enhance public views and pedestrian access opportunities from upland areas (See Visionary Plan Figure 3.1 for illustrative plan of the area). Aboveground parking structures which are visible at the perimeter of a development should be limited to a maximum of six levels of parking or 60 feet above grade. (See Visionary Plan - p.79) North Harbor Drive, Broadway, Ash Street, and Grape Street are envisioned as active pedestrian linkages to the Bay from upland areas. Building frontage adjacent to these streets shall be developed with uses that promote pedestrian activity and public oriented uses. On other streets, ground-level facades shall maximize the sense of contact between indoor and outdoor activities. (See Visionary Plan - pp.67, 68.)

Laurel Street Corridor

The established aviation related industrial use in this subarea, subsequent to renovation and beautification of the physical plant, is anticipated to continue in operation: however, if such use is discontinued, the Visionary Plan proposes the extension of vehicle and pedestrian access, parking, service access, and view corridors along extensions of Kalmia, Juniper, and Ivy streets through this parcel to North Harbor Drive. Building height limits of 60 feet are proposed for this area; however, this height limit would be superseded by any more-stringent FAA runway approach zone restrictions. (See Visionary Plan Figures 4.5, 4.10, 4.11, and 4.12.) Grape and Hawthorn Streets, Pacific Highway and North Harbor Drive from Laurel Street to Hawthorn Street will be modified to accommodate traffic flow and with streetscape improvements to match the balance of the streets through Subareas 31-34. Geometric improvements to direct traffic flow from North Harbor Drive to Pacific Highway will be made at the Grape Street intersections with these roadways. The block between Hawthorn, Grape, Pacific Highway and North Harbor Drive (2.3 acres) will remain in commercial recreation use

with some landscape improvements or possible parking facility development. The landscaped triangle at Laurel and North Harbor Drive is shown on the Plan as Open Space.

Crescent Zone

The most important element influencing design in the Crescent Zone is the curvilinear form of the waterfront. Dramatic panoramic views can be realized at either vehicular or pedestrian speeds. The Port Master Plan capitalizes on this attribute to establish a grand pedestrian-oriented esplanade (no less than 100-feet wide) and major entryway into the Centre City district from Grape Street to Broadway. The promenade connects with the North Harbor Drive bicycle path to provide a continuous pedestrian/bicycle path from Navy Estuary to Fifth Avenue, a distance of four miles. Pacific Highway streetscape improvements would continue through this subarea. An esplanade at least 25-feet wide, bayward of Harbor Drive, will be added from Laurel Street to Grape Street. North Harbor Drive will be narrowed to three lanes to reduce through traffic. The unused right-of-way will be developed with landscaped promenades, parks and plazas. Along the water's edge the concrete pathway will continue its present use as both pedestrian promenade and service area for commercial fishing boats tied up along the Crescent Zone bulkhead. Four public viewing/vista points would be spaced along the Crescent shoreline.

The waterfront between Grape Street and Ash Street will be used for Ship Anchorage, Boat Navigation Corridor, and Specialized Berthing. The three existing piers no longer function or are needed as commercial fishing berthing or fuel pier; therefore they will be replaced with a 30,000 square-foot curvilinear pier at Grape Street, with a 12,000-square-foot public boat dock designated as Park Plaza. The waterside termination of this pier is designated as Commercial Recreation to allow possible

development of a commercial facility. Wave attenuation structures would protect the boat A 5,000-square-foot parcel with a docks. maximum 10,000-square-foot floor area designated as Commercial Recreation will provide for a major restaurant or other commercial recreation use on the esplanade at the foot of the Grape Street Pier. Development density with a Floor Area Ratio (FAR) of 3.0 and a building height limit of 12 feet is prescribed for this area, with the exceptions of the proposed commercial recreation parcel where a 13-foot high second story would be allowed. Building stepbacks along the inland side of North Harbor Drive for upper stories shall be 25-foot minimum at 50 feet along the inland side of North Harbor Drive and 15-foot on east-west streets. (See Visionary Plan Figures 4.4, 4.5 and 4.8) Commercial Fishing Berthing has been allocated to the Crescent water interface (18.6 acres) as the highest priority use; however, this water is also used for transient berthing and occasional general berthing for small boats. The boat channel area just offshore is also used for temporary anchorage for small boats; therefore, the designation is changed to Specialized Berthing, which includes these uses within this precise plan area only.

Anchorage A-3, Laurel Street Roadstead Anchorage, is sheltered from the open sea but is located in both the most visible and the widest part of northern San Diego Bay. Approximately 20.6 acres of water area is allocated to accommodate about 50 vessels on swing point mooring buoys. Onshore, a public rest room, three dinghy floats and connecting shore ramps provide for the landing needs of the anchorage user. As a federally designated anchorage, the boundaries are shown on coastal charts and identified on site by boundary markers. Administration of the anchorage is exercised by the Port District, pursuant to local ordinance. Thirty to forty percent of the moorings are to be set aside for short-term use by cruising or transient vessels. Section III, Water Based

Transportation system, contains information on the baywide small craft anchoring system.

Civic Zone

The zone of highest activity is the Civic Zone from Ash Street to Broadway. This zone reflects its waterfront orientation, with operating piers extending into the bay, Navy facilities, commercial fishing activity, and historic sailing vessels. Its physical relationship to Centre City attracts large numbers of people and the future development of both areas is integrated by the Visionary Plan.

Significant redevelopment is recommended for the Civic Zone. The landscaped esplanade and streetscape improvements mentioned in the Crescent Zone will be continued along North Harbor Drive and Pacific Highway through the Civic Zone. North Harbor Drive will be reduced by narrowing to three lanes. Parking areas along the street will be interspersed with landscaping, vertical elements used to frame and enhance views, and lawn areas. *(See Visionary Plan Fig. 5.3)*

The esplanade expands into plazas at Beech and Ash Streets, B Street Pier, and Broadway Pier. These plazas will be designed to provide open space, sitting and strolling areas for tourists and nearby workers, and to increase the sense of destination for Embarcadero visitors.

Passive green spaces (parks) are proposed between the plazas on the esplanade, providing recreational opportunities and places for people to relax, play, and enjoy Bay views. The promenade is a continuous 25-foot-wide paved area adjacent to the water's edge. The wharf side remains clear of objects or furnishings that would block Bay views. A delicate string of lights, a planting area with tall palms, and a 10-foot-wide bike path border the landward side of the promenade (See *Figure 5.3 of the Visionary Plan*).

The most important element in this zone is the conversion of the old Lane Field site and Navy Engineering building into a new complex of buildings and open spaces. Primary consideration is a 600-to-800-room hotel. The intent of the plan is to retain flexibility for considering a wide array of development options. The concept includes possible multiple utilization of activities that could provide for commercial recreation; international trade, travel and cultural complexes; commercial and office space for maritime business; support facilities related to the Port; and subject to negotiation with the U.S. Navy, the provision of equal or better building space for the relocation of the Naval Facilities Engineering Command. The FAR for Lane Field parcel is 7.0 and 6.5, while building height limits range from 400 feet to 200 feet sloping toward the Bay. Special setback requirements along the Broadway side of this parcel range from 55 feet to 65 feet, widening toward the Bay (See Figure 4.7 of the Visionary Plan, which also illustrates the special radius setback on North Harbor Drive/ Broadway SW corner). Stepbacks for upper stories are 25-feet minimum at 50-feet building height except for the B Street side of the parcel and on other east-west streets where they are 15 feet. There are no stepback requirements along Pacific Highway. (See Visionary Plan Figures 4.5, 4.6, 4.7 and 4.8)

The Visionary Plan proposes public right-ofways aligned with existing downtown streets through development parcels, including Lane Field. These right-of-ways include pedestrian and vehicle traffic, view corridors, parking and service access. The right-of-ways shall be a minimum of 80-feet-wide with the character of a public street, and would enhance the physical and visual access to the Bay. The C Street segment through Lane Field may vary in alignment with existing street up to 20 feet north or south, and it may or may not accommodate vehicular circulation. A north-south pedestrian link, if practical, is also proposed through this parcel. (See Visionary Plan Figures 4.10, 4.11, 4.12, and 6.1).

B Street Pier is scheduled for substantial redevelopment of the apron wharf and the structures on the pier. The south shed will be removed or redesigned to create space for parking and a promenade. The western end of the pier will be converted for specialized commercial uses such as a shopping bazaar, and foods and services reflecting the maritime character of the Embarcadero and which will be compatible with cruise ship berthing. The Cruise Ship Terminal will be expanded and both sides of the pier will accommodate ship berthing. Cruise ships may tie up at both the B Street and Broadway Piers. The shopping bazaar could be expanded into the terminal building and the existing Maritime Museum could be provided with land-based support area, storage and work area, and possibly a living museum of nautical craftsmen; however, loading, off-loading, and storage capabilities for general cargo will be retained as needed. Alternatively, the Maritime Museum may be relocated to another location along the Embarcadero, such as the curvilinear pier at Grape Street. A FAR of 2.0 applies to the B Street and Broadway piers. The building height limit for the B Street Pier is 50 feet; however, an expanded cruise ship terminal, now under study, may require (for functional reasons) building(s) in excess of 50 feet in height. Pursuant to the Port's cruise ship terminal study, alternative height restrictions and other guidelines affecting B Street Pier may be appropriate and acceptable, and they should be considered by the Alliance. (See Visionary Plan Figs. 4.4, 4.5 and pp. 63, 64)

Broadway Pier will continue to provide recreational space on its plaza and viewing platform, as well as accommodating commercial shipping and miscellaneous vessel berthing, including day cruisers. Improvements to the pier will include paving, plantings, lighting, and furniture. The harbor excursion and ferryboat water lease north of Broadway Pier may also remain as part of the recreational experience along the waterfront or move to another location along the Embarcadero.

Tuna Harbor

This subarea consists of the Tuna Harbor, the harbor formed by its pier, the proposed new bayfront public park, the new Pier Walk building with commercial recreation and commercial fishing uses, parking, and adjacent areas.

Tuna Harbor and the shoreline area between it and Navy Pier are planned to provide space for commercial fishing and commercial recreation activities. The plan concept is to create a physical and visual linkage along North Harbor Drive by tying together Broadway Pier and the Tuna Harbor area.

The aircraft carrier Midway is docked on the south side of the Navy Pier. The Terminal Berthing designation would be changed to Commercial Recreation and Park/Plaza for the proposed 0.8-acre public viewing area with a designated vista point on the bow deck of the ship. The Commercial Fishing Berthing designations in this water area would be replaced with Specialized Berthina to accommodate multiple uses. Landscaping and streetscape improvements on North Harbor Drive would continue through this area.

Parking for visitors to the Midway and its museum will be provided, on an interim basis, at the Navy Pier, pursuant to the museum's lease with the United States Navy. When and if the Navy determines that its use of the Navy Pier is no longer necessary, the Port will accept the proposal by the San Diego Aircraft Carrier Museum to convert the Navy Pier into a "public park" use, thereby allowing the pier to be converted into a memorial park complementing the Midway and its museum, while affording additional public open space and bay vistas. Vehicle parking for museum visitors will then be shifted to nearby offsite locations. However, since the Navy Pier's future is uncertain and will be determined by decisions of the federal government, the conversion of the pier

to a 5.7-acre memorial park is a specific planning goal of the Port, and environmental analysis for the park conversion will be conducted prior to the Navy relinquishing ownership and/or control of the Navy Pier such that construction of the park can occur as soon as feasible thereafter. The park conversion will be subject to all appropriate laws at the time the Navy Pier Park is proposed.

Mitigation for the loss of 4.1 acres of open water habitat resulting from the placement of the aircraft carrier Midway and its mooring platform structures has been provided by an expansion of an existing degraded marsh, known as Lovett Marsh, east of south San Diego Bay, in the City of National City, resulting in the creation of approximately 5.8 acres of new coastal salt marsh.

A small waterfront plaza, fishing technology displays, restaurants, marine related office and retail space is planned on the periphery of the mole. Tourist traffic on the public areas will be encouraged, consistent with safety. The Embarcadero pedestrian path loops through the area.

A substantial portion of Tuna Harbor is devoted to commercial fishing use. It is anticipated that offices for the tuna and fresh fish fleet will locate here, as well as ancillary uses such as small processors, fish markets, seafood marine instrument and equipment sales, fishing and ocean technology displays, and automobile parking. The northern side of the mole has been renovated by stabilizing the existing concrete slab wall with rock revetment. The south face of the mole has been renovated with rock revetment for shore protection. Floating docks will provide 50- and 60-foot berths for commercial fishing boats. Low level lighting is provided for the berths. Landside support services, auto parking, and truck access are included. Approximately 100 commercial fishing berths are provided alongside the floating docks.

To shelter Tuna Harbor from the south, a concrete breakwater pier approximately 400 feet

long has been built from the land lying between the former Harbor Seafood Mart area and Seaport Village. The pier provides additional berthing for tuna seiners and large market fishing boats, allows public access to the water, and accommodates water taxi service. The entrance to this joint use pier will be enhanced to provide a strong pedestrian linkage from waterfront viewing areas to the reconfigured commercial fishing and retail area (formerly occupied by the Harbor Seafood Mart building). This pier walk will connect to the new bayfront public park to the north, as well as the entrance to Seaport Village and the south side of the redeveloped Old Police Headquarters (OPH) building.

The Harbor Seafood Mart building is planned to be demolished and the site redeveloped with a new Pier Walk building of comparable size and use allocation, which will consist of an improved fish processing facility with sufficient parking and loading/unloading spaces to support the operation, as well as ancillary retail and restaurant uses related to and supportive of the commercial fish processing uses in the building. The development will be designed so that the commercial fishing use will be able to continue to utilize and maintain the existing fish unloading dock, with direct. unrestricted joint use access to of the pier/dockside facilities. The new facility will be large enough to support both the current capacity requirements of the fishing industry, and allow for the expansion of services for seafood processing. The Precise Plan underlying the portion of the new Pier Walk building nearest the unloading dock will have a land use designation of Commercial Fishing to provide for the retention of valued commercial fishing activities. The facility will be integrated with the surrounding public walkways and plazas with opportunities for public viewing and access opportunities.

In conjunction with the reconfiguration of the fishing facility, the Precise Plan will also be designated as Park/Plaza to allow for the construction of a new three-acre bayfront public

park on the north end of the site. The open space provided by the new bayfront park will enhance pedestrian and visual access to the Bay, as well as create a pleasant rest area and viewing place along the Embarcadero promenade for event gatherings and public activities. Adjoining parking areas will also be reconfigured and enhanced with landscaping and pedestrian linkages to the surrounding uses. The parking areas are intended to serve the public park, commercial fishing and reactivated recreation uses. Old Police Headquarters building, as well as Seaport Village.

Marina Zone

The Marina Zone, located along Harbor Drive from Pacific Highway to Park Boulevard, is planned to be intensively developed as a major public and commercial recreational complex. Major projects, including the 22-acre Embarcadero Marina Park; the restaurant and specialty retail center of Seaport Village; a regional convention center and, convention hotels and marina, have started the transformation of this waterfront area into an attractive commercial and recreational resource. Marina Zone projects will provide the southerly anchor for the Embarcadero development and the six-mile long promenade that extends north to Spanish Landing Park along the waterfront. Pedestrian linkages from the upland areas will provide access to this lively activity center for residents and visitors alike.

The plan concept is to rehabilitate and the historically designated, reactivate and presently vacant, Old Police Headquarters building with restaurant, specialty retail, indoor/outdoor public market, and entertainment uses. On the district Precise Plan, this area will be designated as Commercial Recreation. The north side of the site along Harbor Drive will be designated as Park/Plaza and will be redeveloped into an urban park and plaza area of approximately one acre in size with enhanced landscaping and pedestrian features. The new urban park will create visual and physical linkages from the OPH to the new bayfront park across Pacific Highway, as well as link to enhanced pedestrian connections to and along the Embarcadero through Seaport Village and along Kettner Boulevard. A small portion of the site on the north side of OPH will retain the Commercial Recreation land use designation in order to allow for associated outdoor commercial, or activating, uses. The parking areas surrounding the OPH and Seaport Village will be reconfigured to accommodate vehicles more efficiently, as well as allow for valet parking and loading areas.

Across from the hotel development, the west side of Kettner Boulevard from Harbor Drive to Seaport Village will be developed with landscaping and pedestrian features to provide improved connectivity between tideland uses, as well as increase activating uses.

Between the existing Marriott and Hyatt Hotels, an accessway known as "Marina Walk" is proposed consistent with the South Embarcadero Public Access Program, as amended. Marina Walk public will improve pedestrian connectivity between Harbor Drive and the Embarcadero shoreline promenade and enhance public views towards the Bay through removal of existing landscaping and surface parking, leveling of the existing grade, relocation of the large cooling towers, and construction of a joint, cohesive public accessway spanning both the Marriott and Hyatt leaseholds. Approximately one half of the Marina Walk length will be a total of 50 feet wide and will contain a 40-foot-wide public pedestrian access corridor, and a 10-foot-wide landscape buffer to help screen the adjacent Hyatt parking structure. The 40-foot-wide public access corridor will include a 33.5-foot-wide dedicated pedestrian walkway, a 2-foot width for intermittent benches and lighting, and a 4.5-foot-wide landscape buffer with lowlevel, drought-resistant shrubs and groundcover that shall not exceed 3 feet in height. Adjacent to the existina approximately 10-foot-wide mechanical equipment enclosure on the Hyatt leasehold, the public access corridor may narrow to approximately 32 feet wide to allow for

construction of a low-scale retaining wall and vine plantings to screen the enclosure. Marina Walk will contain amenities such as decorative paving, signage, public art features, low-level lighting, bicycle racks, benches, trash receptacles, a wheelchair accessible ramp, and restrooms open to the public during daylight hours. Marina Walk will widen to 80 feet as it approaches the Embarcadero promenade, and will widen to 145 feet at the Harbor Drive gateway to Marina Walk. At the project level, minor adjustments and revisions to the corridor, parking areas, and driveway may be made to increase the width of the walkway and improve connectivity between Marina Walk, Marina Terrace, and the Embarcadero promenade. Adjacent to this gateway, removal of the existing parking booths/gates and substantial narrowing of the entry drive (from 78 feet to 40 feet in width) will create a more inviting entrance and will encourage a more pedestrian-oriented environment. The Harbor Drive gateway area will be kept clear of physical barriers, signage, or visual obstructions that would discourage public use of Marina Walk.

Bayward of the Marriott and Hyatt hotels, a continuous pedestrian promenade links the two Embarcadero Marina Park peninsulas and assures public access along the shoreline. Pedestrian linkage to the uplands is provided around and over the expanded Convention Center. An existing accessway between the Marriott Hotel and the Convention Center has been improved to provide functional, safe, and environmentally educational passage to the waterfront, as provided in the Public Access Program. The Convention Center includes another public accessway with a minimum width of 20 feet over the Convention Center connecting Harbor Drive and the Embarcadero Promenade. The public accessway will continue to be open and publicly accessible via stairs and the funicular on the Harbor Drive side of the Convention Center. At the intersection of Park Boulevard (formerly Eighth Avenue) and Harbor Drive, the promenade connects with the adjacent Gaslamp Quarter pedestrian and trolley facilities. The public accessway extends from the south end of the Convention Center expansion and along both sides of Park Boulevard. A pedestrian bridge spans Harbor Drive at the Park Boulevard and Harbor Drive intersection and provides a contiguous link from the waterfront to downtown and the ballpark. The expansion to the Hilton San Diego Bayfront will provide an elevated public pedestrian accessway that will link the existing pedestrian bridge with the waterfront promenade. The elevated pedestrian accessway will culminate with a new staircase from the existing portecochere to ground-level adjacent to the waterfront promenade.

The District, in conjunction with the City of San Diego, has implemented a public access program of signage, pavement markings, amenities and public information to inform and invite the public to and along the Embarcadero, as is more specifically shown in the Convention Center's "Public Access Program" (as revised) and the "South Embarcadero Public Access Program" (as amended), which are incorporated into the plan by reference.

It is recognized that providing all required parking on-site can result in a significant amount of waterfront land being dedicated to parking lots and structures, thereby limiting the ability to provide visitor-serving uses such as parks and commercial development. New commercial development in the Marina Zone shall participate in the implementation of the Parking Management and Monitoring Plan (PMMP), as amended. Such participation is intended to achieve maximum reduction feasible in automotive traffic, facilitate the extension and utilization of mass transit to serve the Marina Zone, provide and support means of nonautomobile circulation to employees and guests, make more efficient use of existing parking lots and structures, and help avoid significant effects associated with a lack of parking for waterfront projects. Additionally, the PMMP requires new commercial development to provide maximum

feasible on-site or proximate parking facilities on Port and nearby City lands, and participate in the tiered, legally available, off-site parking program to address peak individual and cumulative demand. Required participation in the PMMP shall be monitored and reported annually to the Port and California Coastal Commission for the economic life of the development. Throughout the South Embarcadero (G Street mole to the Hilton San Diego Bayfront Hotel and Expansion Hotel), commercial development is also required to participate in and contribute a fair share to the Port District's implementation of a permanent bayside shuttle system that would serve and connect tideland uses along the waterfront, such as the Convention Center Hotel Public Parking Facility, hotels, Seaport Village, and other waterfront destinations. Although outside the South Embarcadero, the bayside shuttle should also provide service to the Midway. In addition, this bayside shuttle system should include linkages to public roadside shuttle systems serving downtown San Diego, the airport, and MTS transportation hubs. Port District implementation of the bayside shuttle system is intended to serve visitors as part of an integrated waterfront access and parking program that the Port District shall pursue in conjunction with the City of San Diego, CCDC and MTS. The Port District will fund the bayside shuttle system at its cost and may seek cost recovery and financial participation consistent with its policies and practices and applicable laws. Cost recovery and financial participation may include: collection of fares, grants, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for Port District tenant projects within the South Embarcadero, and other sources as may be identified by the Port District. If rider fares are collected, fares will be kept at a low cost as compared to comparable transportation services within the region. The District will prepare a bayside shuttle system program and operational plan prior to the shuttle system commencing operations. The bayside shuttle system will be operational in accordance with the conditions of approval for the North Embarcadero Visionary Plan (NEVP) Phase 1 project.

The regional Convention Center is supported by major hotel complexes: Marriott Hotel and Hyatt Hotel. The Marriott Hotel is located immediately adjacent to the northwest of the Convention Center and contains twin 25-story towers accommodating 1,400 hotel rooms and a 450-slip marina. The Hyatt Hotel is located north of the Marriott Hotel and contains two hotel towers, one with 875 rooms and the other with 750 rooms. The 750-room second hotel tower was constructed with a minimum 100-foot set back from Harbor Drive, and a maximum height of 62 feet for the lobby galleria/ballroom structure connecting the second tower to the first tower. The second tower includes meeting space, 34,000 square feet of exhibit space, and 30,000 square feet of ballroom space. Ancillary uses in this area include banquet, meeting, restaurant, hotel guest-oriented retail space, court game areas, and automobile parking.

The Marriott Hotel proposes а renovation/expansion of its Marriott Hall meeting space to include approximately 44,000 square feet of additional ballroom and exhibit space. The aesthetics and visual accessibility of the area will enhanced through the be contemporary, transparent architectural features and siting of the new Marriott Hall building, which will be reoriented such that its public side faces Harbor Drive. The maximum height of the new Marriott Hall shall not exceed 68 feet, including rooftop equipment and parapet wall, and the distance between the new Marriott Hall building and Hyatt parking structure shall be a minimum of 120.5 feet. Removal of underutilized hotel parking will allow for construction of the new meeting space and Marina Walk public access improvements, which will enhance physical and visual access to the Bay, and encourage a more pedestrian-oriented environment.

To further enhance and activate public access in the South Embarcadero, the Marriott proposes a 25,000-square-foot paved, flexible outdoor space at the bayward terminus of Marina Walk, adjacent to the Embarcadero promenade, known as "Marina Terrace." Marina Terrace will be used for hotel events such as mixers, cocktail parties, luncheons, and receptions, and occasionally may be increased to a maximum size of 35,000 square feet. When not in use for outdoor hotel events. Marina Terrace will be accessible for use by the public as an open gathering and activity space (see South Embarcadero Public Access Program, as amended). During the times when Marina Terrace will be publicly accessible, approximately 85% of the year, the Marriott will provide and/or facilitate the provision of public pedestrianactivating amenities on Marina Terrace such as seasonal events/festivals, temporary visitorserving retail such as food carts and vendors, and placement of movable modular street furniture for public use on Marina Terrace. This modular furniture will include public benches, chairs, tables, and outside shade structures. At a minimum, the Marriott will ensure that permanent public seating is provided along the bayward perimeter of Marina Terrace. Six-foot-wide paved pathways through the existing landscape buffer will ensure vertical pedestrian linkages between Marina Terrace and the Embarcadero promenade. Public pedestrian use of the Marina Terrace space will be further encouraged with consistent paving and low-level vegetation to help attract visitors along Marina Walk and the Embarcadero promenade. To encourage interaction between the public spaces on Marina Terrace, Marina Walk, and the Embarcadero promenade, the Marriott will promote and inform the public about various activities and pedestrian-serving amenities available at Marina Terrace through use of interchangeable signage and other methods of advertisement. In addition, Marriott will provide fixed picnic-type tables between Marina Terrace and the Embarcadero promenade on a permanent basis. The 35-space parking lot between Marina Walk and Marina Terrace shall be signed and designated for marina use (30 spaces) and public use (5 spaces).

Marriott's proposed improvements trigger its mandatory participation in the Port District's implementation of the permanent bayside shuttle system. The bayside shuttle system will be operational prior to the opening of the Marriott Hall expansion, and Marriott's participation in the shuttle system will be a condition precedent to issuance of a certificate of occupancy for the proposed Marriott Hall expansion.

Situated within the eastern portion of the Marina Zone is an 11-acre site, fronting onto Harbor Drive and Fifth Avenue, which has been developed into a regional Convention Center that opened in 1989. Floor area is allocated for display and exhibit area, meeting rooms, and support space, such as lobbies, storage, food service, and parking.

Phase II of the Convention Center, completed in 2001, expanded the facility into a contiguous 13acre site southeast of the facility, occupying the area bounded by Harbor Drive, Park Boulevard, Avenue. and Convention Way. Fifth an undedicated street south of Harbor Drive, was closed as part of the development of the original Convention Center. Harbor Drive is partially depressed to provide an alternate access to an existing underground parking garage and to enhance the urban design character at the Convention Center. Phase II added approximately one million gross feet of floor area to the Convention Center. A Phase III expansion to the Convention Center is proposed to add approximately 400,000 square feet of exhibit area, meeting rooms, and ballrooms, and approximately 560,000 square feet of support spaces. Approximately 15,000 square feet of visitor-serving uses (i.e., retail, museum, art gallery, vitrines, or other activating uses) is planned along the southwesterly facing (bayside) facade of the Phase III expansion. Convention Way will be shifted closer to the waterfront to accommodate

the Phase III expansion. The south side of the Convention Center will expand onto the Fifth Avenue Landing site and into a parcel (site originally proposed for a 250-room hotel) on the south side of the park entry road. The Embarcadero Promenade will not be affected by the Phase III expansion. A pedestrian accessway immediately adjacent to, and inland of, the realigned Convention Way will be constructed to improve pedestrian circulation inland of Convention Way and provide access to the visitorserving uses proposed along the southwesterly facade of the Phase III expansion. At least three crosswalks will be provided at regular intervals along Convention Way to provide access between the waterfront promenade and the visitor-serving uses on the inland side of Convention Way.

Public access from Harbor Drive to San Diego Bay, the waterfront promenade, and Embarcadero Marina Park South will be improved through the addition of the following new permanent physical enhancements. Amenity stations, with street furniture such as benches and pedestrian lighting, will be located at periodic intervals on Harbor Drive along Phases II and III of the Convention Center to allow pedestrians the opportunity to stop and rest and enjoy downtown views while walking southeast to the Park Boulevard/Harbor Drive intersection. Wayfinding signage will be installed at the public access elevators and escalators, at the amenity stations along Harbor Drive, and along Park Boulevard, to guide pedestrians to their destination.

An integrated wayfinding program that will recognize the partnership with the Port, City of San Diego, and Coastal Commission shall be developed prior to issuance of a Coastal Development Permit for the Convention Center Expansion; the wayfinding program will be prepared by Permittee. The comprehensive signage package will address size, location and placement of public access signage, including directional signage to/from the bay and city. The program may include replacement of existing signage to better facilitate a comprehensive wayfinding system.

The Park Boulevard corridor will serve to orient visitors, whether by vehicle or by foot, and draw them to the waterfront. The corridor will consist of open lawn, landscaped areas (including low scale shrubbery), artwork, enhanced concrete paving, pedestrian scale lighting, and furnishings that provides a visual and physical linkage to the bay. Treatments in corridor will also provide a linkage to both the Convention Center and Hilton Hotel. The Park Boulevard view corridor will be preserved. This spacelt will also feature a landscaped area adjacent to the hotel amenities. Along Park Boulevard, treatment of the exposed exterior of the parking garage structure and ramp to the Hilton Hotel will be treated with public art (i.e., mosaics) and/or decorative vertical landscaping to enhance the pedestrian experience between Harbor Drive and the Hilton access route. The waterside promenade will maintain its 35-foot width. Shade trees will be located, as appropriate, within the 35foot wide waterside promenade.

An approximately five acre public park/plaza will be constructed on the rooftop of the Phase III expansion. This public realm space, which will vary between approximately 50 to 100 feet above grade, will be accessible from at least six access points, including: the grand stairs and funicular at Harbor Drive, the grand stairs and elevator at the southwest corner of the rooftop park/plaza, elevators at the south midpoint of the rooftop park/plaza, the landscaped inclined walkway, and the elevator along Park Boulevard, as well as one access point from within the Convention Center. The rooftop park/plaza will include a mix of hardscape and landscape, including lawns, grasses, wildflowers, shrubs, trees, wetland plants; and pavilions and formal and non-formal gardens with lighted paths and fixed and movable furnishings. Observation vistas will be placed at opportune locations throughout the rooftop park/plaza to provide views to the Bay and uplands

skyline. Support facilities such as restrooms, park maintenance and mechanical facilities, and power and water service will also be provided.

There are 15 distinct rooftop park/plaza spaces including: Spine, Grove, Great Lawn, Pavilion, Coastal Chaparral, Gathering Place, Bluff Gardens, Living Room, Reading Room, Summit Plaza, Mesa, Lower Plaza, Overlooks, Ascent, and Non-Accessible Green Roof Areas.

The Spine would be a paved walkway that features furnishings to allow people to move freely between the spaces. The Spine serves as a transect through the various garden environments, offering rhythm and cadence to the experience of ascending to the park's high point as well as descending to the lower vistas in the park.

The Grove would be a flexible and adaptableuse space with large canopy trees in planters and paving and movable site furnishings. This space would offer power and water sources for events, services, and pedestrian lighting.

The Great Lawn would be a sculpted and sloping lawn plane. The Great Lawn would serve a wide range of passive and active recreational needs of the community such as, but not limited to, performance/event space, picnicking, and other lawn oriented activities.

The Pavilion would be an overhead open air shade structure. This environment would offer visitors shade for seating and events and a grand scale architectural feature that gives a focus to the Grove and the Great Lawn.

The Coastal Chaparral vegetation would consist of native coastal shrubs, ground covers and coastal trees. The character of the Coastal Chaparral is inspired by the beauty and simplicity of the native coastal bluff landscapes of southern California. The intent of this landscape is to offer users interesting and intimate gardens for interaction, strolling, and relaxation.

The Gathering Place would be a hardscape plaza environment designed to accommodate a wide range of events and activity. There would be both fixed and movable furnishings and paving, pavilions with power and water service, restrooms, pedestrian lighting, and vegetation.

The Bluff Gardens would be similar to the Coastal Chaparral with the addition of paved areas and additional planting, lighting, and furnishing that would give park visitors additional places to picnic and host small gatherings.

The Living Room would be a primary destination for shade and relaxation embedded within the heart of the public park/plaza. The space would feature a grand scale canopy supported by an informally organized glade of support columns that create an atmosphere of being in a tree glade. The canopy area would be furnished with hanging porch swings, movable tables and chairs, pedestrian lighting and power/water sources for event staging. Cornering the space would be a water feature that would be designed to engage both children and adults.

The Reading Room would be a contemplative garden destination immersed within the vegetation of the Coastal Chaparral. The Reading Room would consist of walkways, furnishings, sculpted lawn forms, and plantings that give the space an internal focus with an emphasis of orienting the experience to the San Diego skyline.

The Summit Plaza would be a mixed environment of plaza paving and structured event turf that would serve as a destination gathering space for public events, weddings, and ceremonies. This space would feature both power and water sources for event use.

- The Mesa would be a sculpted grass landform set at the high point of the green roof's ascent.

The Mesa would provide a grand scale viewing perch that would offer users sweeping views of the San Diego Bay and the surrounding San Diego skyline. The grass slope would allow for small performances and group gatherings while the bleacher-like steps offer casual seating and views to the park's gardens and spaces. Restrooms, park maintenance and mechanical facilities would be constructed below the Mesa's surface with a convenient adjacency to the Summit Plaza event space.

The Lower Plaza would be a predominantly paved environment with trees in planters, pedestrian lights, and paving. This space would offer both power and water sources for special events.

The Overlooks would be viewing areas along the southerly edge of the rooftop park/plaza that would offer intimate spaces that are discovered and provide views to the horizon. Several of the overlooks may be cantilevered over the Ascent.

The Ascent would be a 1,200-foot walkway leading from Convention Way to the base of the rooftop park/plaza on the southwestern corner. The grade of the ascent would be 5% and the width would be approximately 30 feet. As the Ascent proceeds westerly from its base, landscape and hardscape features would be designed to create a sense of compression and release.

Some portions of the rooftop park/plaza would be inaccessible due to weight limits and difficult access. These Non-Accessible Green Roof sections would be planted with small scale plants and would create a visual foreground to bay views from the rooftop.

The rooftop park/plaza would feature both native and exotic plants to the southern California coast, with the intent of capturing the character and feel of a coastal bluff landscape. Irrigation of the vegetation will be accomplished via subsurface drip using the existing brackish groundwater pumped daily using the de-watering system for the subterranean parking facility beneath Phase I of the Convention Center. The brackish groundwater will be blended with potable water to maintain low concentrations of salt that would be suitable for landscape application.

The rooftop park/plaza will be publicly accessible 85 percent of the year. Completion of the rooftop park/plaza will be required prior to the issuance of a final Certificate of Occupancy for the Phase III expansion. The rooftop park/plaza will be open to the public and managed for public access during hours similar to that of other Port parks.

Upon completion and opening of the Phase III Convention Center Expansion rooftop park/plaza, written quarterly reports will be provided to the California Coastal Commission by the appropriate entity having responsibility for such matters on the following:

 Utilization of the rooftop park/plaza and promenade for all public and private events during the prior quarter;

 Information on park programming and activities implemented to invite the public to access the rooftop park/plaza, promenade and coast;

 Marketing activities and signage to enhance way-finding and public usage of the rooftop park/plaza, promenade, and coastal access.

Responsibility for the above described items will be addressed in the subsequent coastal development permit issued by the Port to the City of San Diego and other agreements entered into by the parties.

Quarterly public meetings will be called by the Port subject to the Ralph M. Brown Act (Government Code Section 54950, et seq.) at the San Diego Convention Center to pursue strategies and funding to encourage public utilization of the rooftop park/plaza, promenade, and coastal access. Those invited to participate in these quarterly meetings shall include, but not be limited to, elected officials or officers representing the City of San Diego, San Diego Convention Center Corporation or any successor corporation or public agency, and the State Assembly Member and State Senator representing the Public Trust Land on which the convention center is located. Notice for and minutes of these meetings will be sent to the California Coastal Commission in accordance with provisions of the Ralph M. Brown Act.

No later than five years following completion and opening of the Phase III Convention Center Expansion, a report will be provided to the California Coastal Commission on the roof top park, promenade and coastal access utilization and potential opportunities that may be pursued by the appropriate entities that could enhance public access to the roof top park and waterfront promenade including possible additional access points and related infrastructure. This report will be an informational item and does not subject any of the entities involved in this Project, including the Port and the City of San Diego, to commitments regarding financing any such infrastructure or improvements.

Further, in order to ensure public access to the rooftop park/plaza, the subsequent coastal development permit issued by the Port to the City of San Diego will require the City of San Diego to reprioritize \$500,000 of the City's construction budget in consultation with the Executive Director of the California Coastal Commission to implement alternative access measures to activate the rooftop park/plaza. In prioritizing the use of these funds, consideration will be given to enhancements to the existing stairways and skywalk (including paving treatments, public art, etc.).

The Convention Center operator is required to implement the Parking Management Plan and Monitoring Program (November 1995, as amended and is incorporated by reference into the master plan) to meet the needs of the Convention Center visitors and support functions, as well as the public seeking access to the Embarcadero Marina Park South.

Convention Way Basin

A southward shift of Convention Way is planned to accommodate Phase III of the Convention Center. The earth mounds located near the end of Park Boulevard will be removed as part of the realignment of Convention Way.

The Fifth Avenue Landing project is proposed to include an up to 843-room, approximately 44-story hotel tower with approximately 69,100 square feet of meeting space; an up to 220-room, approximately 82-foot-high lower-cost, visitorserving hotel; approximately 7,750 square feet of visitor-serving retail along the promenade; and approximately 98,448 square feet of public plaza and park areas. Portions of this park and plaza space will be open to the public as specified in the South Embarcadero Public Access Program, as amended. Public access and wayfinding signage will be installed to direct visitors to these publicly accessible areas. A public pedestrian bridge may be developed that will cross Convention Way and will link the Convention Center to the hotel tower rooftop public plaza, providing elevated and expansive views of the Bay. A minimum of five elevated public vista areas will be provided at opportune locations, as shown on the Precise Plan map (see also South Embarcadero Public Access Program, as amended).

A water transit center for harbor excursion boats, water taxis and ferries is located adjacent to the promenade along Convention Way. Water taxi and ferry service to the Convention Center hotels and to other San Diego Bay locations is provided at the water transit center, which will be relocated west onto the former Spinnaker Hotel site. The <u>existing</u> "transient oriented" marina can also accommodate up to 20-30 large yacht slips and will be expanded with up to 50 new slips. At least one boat slip accommodating a vessel 30 feet in length will be provided for public use, at low cost or no cost. In addition, the existing water transportation center will be rebuilt as a new, approximately 2,000-squarefoot facility incorporated into the lower-cost visitorserving hotel. A public plaza (minimum 1,900 sq. ft.) will be located east of the relocated water transit center building. Adjacent to the relocated water transit center will be a public parking lot with at least 12 short-term public parking spaces.

Bayside improvements to this area include the continued extension of the pedestrian promenade along the waterfront, including extending the waterside promenade south (towards Embarcadero Marina Park South) to connect to the existing promenade adjacent to the over-water restaurant. This would provide for a continued waterside promenade from the Embarcadero Promenade to Embarcadero Marina Park South. Park/Plaza areas, which include the public plaza to be constructed adjacent to the relocated water transit center building, and the shoreline promenade will maintain views to the waterfront from Convention Way. The promenade is extended into the Embarcadero Marina Park South on the east side (restaurant side) of the park entry. The continuous promenade extends along the water's edge of the entire Fifth Avenue Landing and Hilton San Diego Bayfront (former Campbell Shipyard) sites, and connects to Harbor Drive for complete public pedestrian access throughout the public park/plaza areas in the vicinity of the Convention Center and Hilton Hotel. The Park Boulevard pedestrian corridor between Harbor Drive and the shoreline promenade ranges in width from 10-25 feet and includes landscaping, benches, and public art.

The former shipyard area is redeveloped with a 1200-room Convention Hotel (Hilton San Diego Bayfront) and support facilities including restaurant, retail, meeting space, ballroom, and an up to 2000-car public parking facility. The 1200-room hotel has a 20-foot building height for buildings along the promenade, stepping back to 50-feet in height in the development area to create a pedestrian-scaled public environment. The approximately 375-foot high hotel tower and parking structure are located outside and southeast of the Park Boulevard view corridor to maintain public views to the Bay from Harbor Drive. The Hilton may be expanded with a second hotel tower located adjacent to the parking structure. The expansion hotel may include up to 500 rooms, a lobby, approximately 55,000 net square feet of ballroom/meeting space, and other ancillary uses. To utilize the close proximity to the existing hotel and to reduce redundancy of facilities, the expansion hotel may share some support facilities with the existing hotel. In order for the expansion hotel to remain outside of the Park Boulevard view corridor, a portion of the hotel may cantilever over the existing parking garage and the ramp to the existing hotel. As such, the expansion hotel shall not encroach into the Park Boulevard view corridor. The height of the expansion hotel shall not exceed the height of the existing hotel. All rooftop equipment shall be screened from public view and shall be designed to be visually attractive from all public viewing areas. The existing public parking facility accommodates parking for the hotel, hotel expansion and public waterfront access.

The Hilton San Diego Bayfront Expansion Hotel will add up to 500 additional rooms within walking distance of the San Diego Convention Center and bayfront. With its adjacent location to the convention center and its participation in the South Embarcadero Public Access Program, as amended, the Hilton San Diego Bayfront Expansion Hotel creates synergy with the San Diego Convention Center and provides needed accommodations to users of the bayfront and convention center. As a special condition of the Coastal Development Permit for the hotel expansion, the Permittee for the Hilton San Diego Bayfront Expansion Hotel will develop or designate its fair-share of on-site or off-site lower cost visitor accommodations or pay an in-lieu fee based on a study conducted by the District.

The Hilton operator is required to implement the Parking Management Plan and Monitoring Program (May 2012) which is incorporated by reference into the master plan to meet the needs of the Hilton guests and support functions.

The Hilton San Diego Bayfront Hotel and Expansion Hotel shall maintain pedestrian access along two major corridors, Park Boulevard and the Embarcadero promenade. Landscaped setbacks and/or street-front retail must be provided along Pedestrian-oriented uses these access ways. compatible with the Commercial Recreation land use designation, such as visitor serving retail shops and restaurants, which may include outdoor seating, are provided in the Hilton San Diego Bayfront Hotel to activate the pedestrian access Shoreline promenade and landscape wavs. improvements are included in the 35-foot minimum setback of the hotel from the water's edge. The first 26 feet of promenade adjacent to the water's edge shall remain open and unobstructed for public pedestrian use.

A public access pier (adjacent to Hilton San Diego Bayfront) is set back a distance sufficient to preserve the continued use of the Tenth Avenue Marine Terminal Berths 1 and 2 for commercial cargoes. Perimeter railings and seating will be extended onto the public access pier, which will also be made ADA accessible. State-of-the-art best management practices will be used in the marina to reduce spills, reduce or prohibit toxic bottom paints, and mandate new pump-out stations.

Specific implementation proposals will be evaluated by the San Diego Water Quality Control Board for compliance with all applicable regulations and will include the best management practices required by the Port District Urban Runoff Action Plan and Stormwater Management Ordinance.

The amount of water coverage in Subarea 36, Convention Way Basin, resulting from redevelopment of the bulkhead and pier structure shall be minimized and necessary to construct the public promenade, water transit center, public access pier, and recreational marina. Any increase in water coverage from that which previously existed when the leaseholds were developed with the Campbell shipyard and R.E. Staite marine construction yard shall be subject to further environmental review and mitigation.

The public promenade, public access pier and Embarcadero Marina Park South will be open to general public use at all times. Any temporary special events held in these areas must obtain a special event permit from the San Diego Unified Port District, according to the Port District Special Event Procedures and Guidelines. The pier will be publicly accessible 85 percent of the year. At no time will the public access to the sidewalk promenade be fenced, screened or blocked off by any structure. Completion of the improvements to the public access pier will be required prior to the issuance of a final Certificate of Occupancy for the expansion to the Hilton San Diego Bayfront.

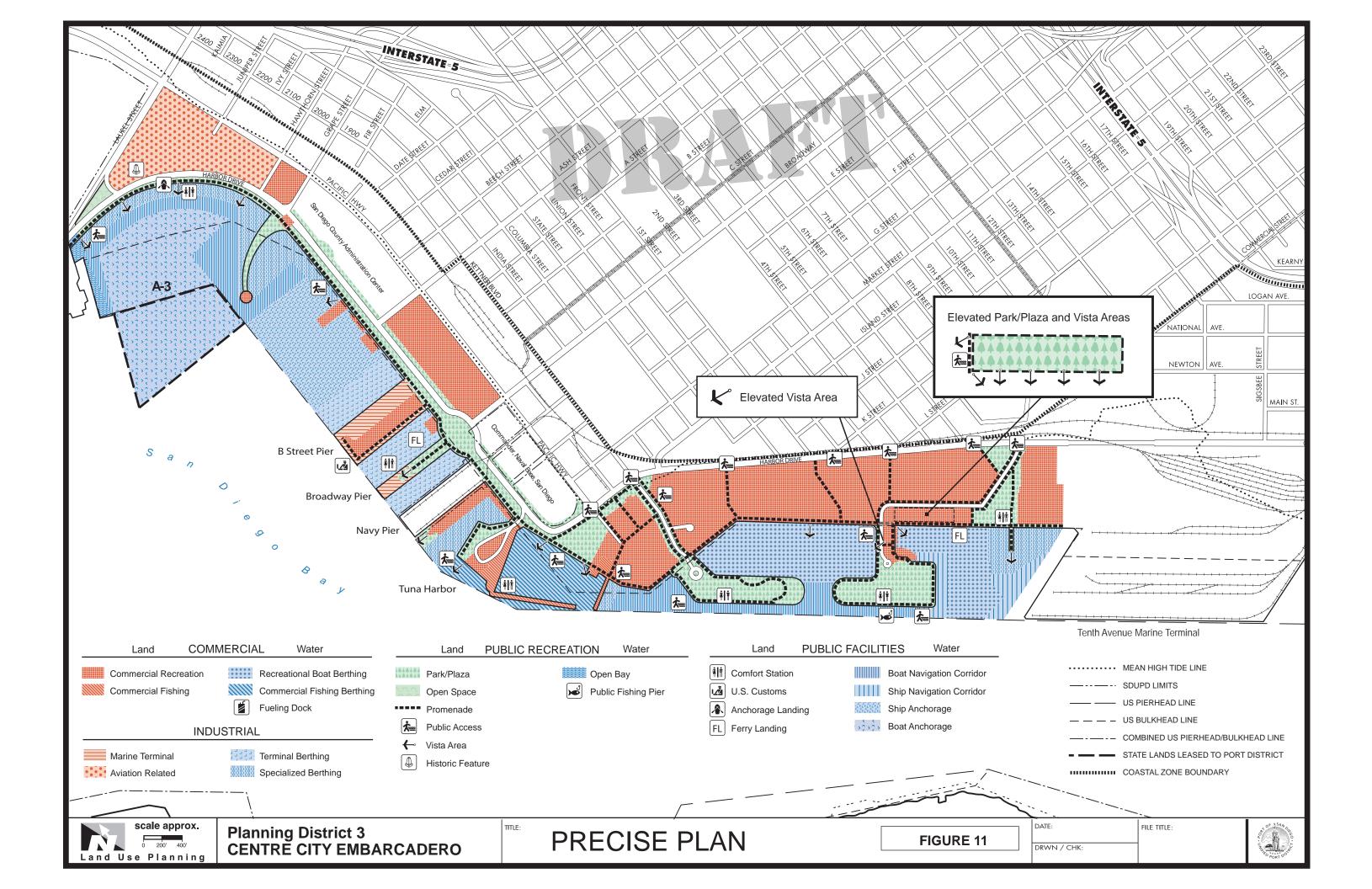
TABLE 10: Precise Plan Land and Water Use Allocation CENTRE CITY EMBARCADERO: PLANNING DISTRICT 3

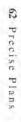
		TOTAL	% of
LAND USEACRES	WATER USEACRES	ACRES	TOTAL
COMMERCIAL <u>107.7</u> 111.1 Commercial Fishing5.4 Commercial Recreation <u>102.3</u> 105.7	COMMERCIAL <u>47.5<mark>35.81</mark></u> Commercial Fishing Berthing13.1 Recreational Boat Berthing . <u>34.422.7</u>	<u>55.2</u> 146.9	<u>35</u> 33%
INDUSTRIAL29.2 Aviation Related Industrial22.3 Marine Terminal6.9	INDUSTRIAL	<u>85.6</u> 90.7	<u>19</u> 21%
PUBLIC RECREATION 63.558.2	PUBLIC RECREATION4.7	<u>68.2<mark>62.9</mark></u> [69.1*]	<u>16</u> 14%
PUBLIC FACILITIES <u>44.946.8</u> Streets <u>44.946.8</u>	PUBLIC FACILITIES87.393.91Boat Navigation Corridor29.6Boat Anchorage25.0Ship Navigation Corridor8.515.1Ship Anchorage24.2	<u>32.2</u> 14 0.7	<u>30</u> 32%
TOTAL LAND AREA245.3	TOTAL WATER AREA 195.9		

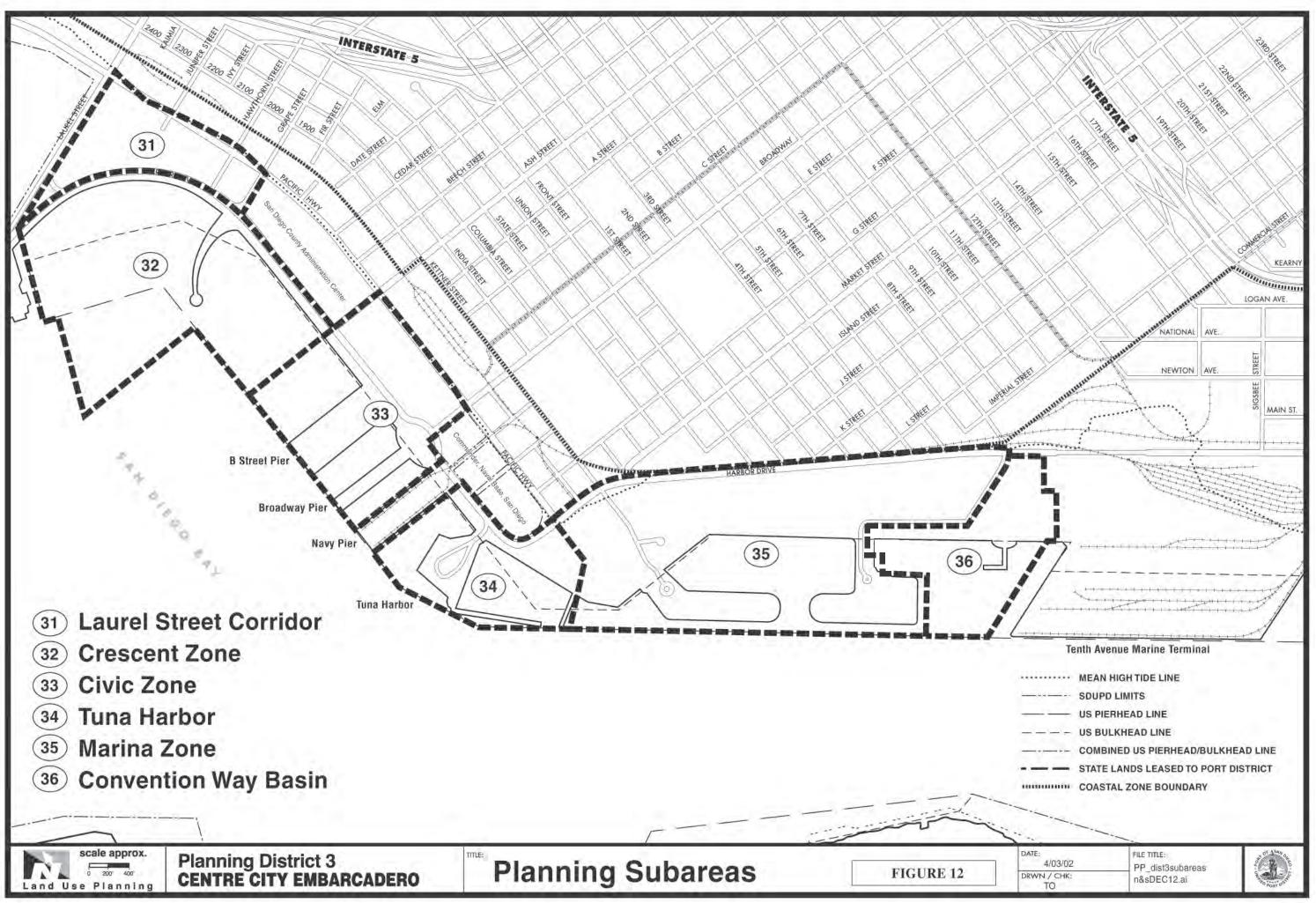
Note: Does not include: State Submerged Tidelands 22.6 acres

* Includes 1.76.3 acres of rooftop park/plaza & inclined walkway

** Does not include 1.76.3 acres of rooftop park/plaza & inclined walkway







CENTRE CITY/EMBARCADERO: PLANNING DISTRICT 3

1.	NORTH HARBOR DRIVE, GRAPE TO BROADWAY: Reduce traffic lanes; install landscaping, irrigation; develop bike path	Sub 33	Dev P	App Y	FiscYear 2005-20
2.	PUBLIC ACCESS: Pedestrian access improvements to waterfront and promenade	35	т	N	2007-08
3.	LANE FIELD DEVELOPMENT: 600-to-800-room hotel, office building, retail, and parking	33	Т	Y	2005-10
4.	NORTH EMBARCADERO REDEVELOPMENT: (a) Visionary Plan public 33 improvements, (b) esplanade, (c) street improvements, (d) vista points, (e) Grape Street piers replacement + restaurant, (f) park and plaza areas, (g) Broadway Pier cruise ship terminal (approximately 60,000 sq. ft., maximum 50-foot building height) to cover no more than 50 percent of the pier, public events space, 15,000 sq. ft. public recreation and viewing area, a 25-foot wide public access corridor along the southern side of the pier, and infrastructure improvements, (h) B and C Street linkages between Pacific Highway and North Harbor Drive.	1-34	Ρ	Υ*	2005-20
5.	PASSENGER TERMINAL AT B STREET PIER: Cruise Ship Terminal Modernization.	33	Ρ	Ν	2006-10
6.	WATER TRANSIT CENTER-AND MARINA: Relocate Prepare site, construct buildings, piers, (including ticket offices, marina offices, and public restrooms) and parking (of which at least 12 will be dedicated for short-term public parking) to the west on former Spinnaker Hotel site, maintain pedestrian access and extend continuous (minimum 25'-wide) waterside promenade to connect to south towards Embarcadero Marina Park South; add public plaza (minimum 1,900 sf) east of the relocated water transit center building; maintain landscape improvements to and along the San Diego Bay shoreline; accommodate water-based transportation, includin a ferry landing, water taxi access, transient-oriented berthing (including yachts), and public boat access.	36 g	Т	N** 2(1 15-2018<u>2001-05</u>
7.	HILTON SAN DIEGO BAYFRONT: Construct hotel tower with up to 1200 rooms, a lobby, ballroom, meeting rooms, retail shops, restaurants, other ancillary uses, above-grade parking structure, public access pier, ground-level and elevated pedestrian access to the waterfront, plaza, and landscape improvements; expand hotel with second hotel (not to exceed height of existing hotel tower) adjacent to and on top of parking garage (and outside of Park Boulevard view corridor) with up to 500 rooms, a lobby, up to 55,000 net sq. ft. of ballroom/meeting rooms, up to 2,500 sq. ft. retail space, other ancillary uses, and landscape improvements.	36	Т	Υ	2006-18
8	-CONVENTION CENTER PHASE III: Construct third phase of regional convention center to provide contiguous expansion, including adding up to 400,000 sq. ft. of exhibit area, meeting rooms, and ballrooms, 560,000 sq. ft. of support spaces, and approximately 15,000 sq. ft. of visitor-serving uses, infrastructure upgrades, landscape improvements, realign Convention Way to the south (bayward), add 5-acre public rooftop park/plaza on top of expansion.	35	Ţ	N	-2015-18
9 8	. PEDESTRIAN BRIDGE OVER HARBOR DRIVE: Self-anchored suspension bridge over Harbor Drive connecting to public parking garage to Eighth Avenue.	35	Т	N	2006-08
10	9. EIGHTH AVENUE PEDESTRIAN CROSSING: At grade pedestrian crossing to be completed with pedestrian bridge over Harbor Drive.	35	Т	Ν	2006-10
11	 OLD POLICE HEADQUARTERS REHABILITATION: Rehabilitation and adaptive reuse of historically designated Old Police Headquarters building with a mix of specialty retail, entertainment and restaurant uses; reconfiguration of surrounding parking areas; and, pedestrian access, plaza and landscape improvements. 	34,35	Т	Y	2007-08
12	11. PIER WALK BUILDING: Remove existing Harbor Seafood Mart building and construct	34	Т	Y	2008-09

new Pier Walk building to accommodate existing commercial fish processing operations, as well as associated retail, restaurant and other services/support uses.				
1312. BAYFRONT PARK: Construct new bayfront public park along the southern edge of Harbor Drive, between the waterfront and Pacific Highway, including lawn and landscaped areas, walkways, as well as other park/plaza features.	34	Ρ	Ν	2009-10
1413. MARRIOTT HOTEL MEETING SPACE EXPANSION: Demolish and reconstruct Marriott Hall; create new outdoor hotel/public space ("Marina Terrace"); construct improved and widened Marina Walk walkway; improve public amenities, including public views towards the bay and pedestrian access; modify parking configuration; install landscape and hardscape improvements.	35	Т	Y	2013-14
14. FIFTH AVENUE LANDING: Construct 843-room hotel (with associated retail, restaurant and meeting space) and 220-room lower-cost visitor serving hotel; public plaza and park areas; reconstruct water transportation center and expand marina with up to 50 new slips.	36	T	Y	2021-25

P- Port District T- Tenant N- No Y- Yes

* "Vista Points" and Broadway Pier infrastructure improvements are non-appealable projects.

** Any modifications to the marina for "recreational small craft marina related facilities" is an appealable project.

SOUTH EMBARCADERO

PUBLIC ACCESS PROGRAM

SAN DIEGO UNIFIED PORT DISTRICT ENVIRONMENTAL & LAND USE MANAGEMENTDEVELOPMENT SERVICES DEPARTMENT 3165 PACIFIC HIGHWAY SAN DIEGO, CALIFORNIA 92101-1128 (619) 686-62836419

> MAY 26, 1998 Amended October 2013August 2020

> > <u>081020</u>

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2. Planning District 3 – Table A – Access and Recreation Components
3. South Embarcadero Public Access Map
4. Marriott Marina Terrace Activation
5. Fifth Avenue Landing Proposed Public Plaza and Park Public Access Areas

1. South Embarcadero Public Access Program

The South Embarcadero Public Access Program defines and implements an extensive multimodal pedestrian, bicyclist, mass-transit and automobile-based system to provide a variety of free and low-cost San Diego Bay waterfront public recreational opportunities for a broad range of individuals and families who reside in the region, as well as visitors. Access facilities will be constructed and maintained to be accessible to persons with disabilities.

The Embarcadero Promenade, which extends along 4,600 linear feet of San Diego Bay in Planning Subareas 34 (Tuna Harbor), 35 (Marina Zone), and 36 (Convention Way Basin), offers an unparalleled pedestrian California urban waterfront experience, including a commercial and naval harbor, working fisheries, two publicly accessible piers, three shoreline public parks, recreational boating and ferry/water taxi facilities, and many water-related commercial recreational enterprises. The 70,000 SF Promenade also serves to provide convenient non-automotive pedestrian linkages between and among the San Diego Convention Center, hotels, and other commercial recreation uses in the Planning Area. As a result of improvements made through the South Embarcadero Redevelopment Program (SERP) I Port Master Plan Amendment, the Promenade alone can readily accommodate 10,000 persons at one time, or 30-50,000 persons per day.

Along the inland boundaries of the Planning Area, Harbor Drive roughly parallels the Promenade and provides a diversified multi-modal corridor. In response to increasing public interest, a substantially enlarged and landscaped 10-foot wide urban sidewalk, as well as designated driveway crossings and a unified multi-language directional signage program, will be incorporated along the west side of Harbor Drive.

The Old Police Headquarters (OPH) 1.0-acre open space Urban Plaza, pedestrian linkages around and through the OPH, and activating uses along the west side of Kettner Blvd, along with the existing 0.7-acre open space plaza adjacent to the Hyatt tower, will connect Harbor Drive, between California Street and Kettner Blvd, with existing Embarcadero Marina Park North. The open space areas will create visual and physical linkages from the OPH to the 3.5-acre waterfront park across Pacific Highway, as well as link to enhanced pedestrian connections to and along the Embarcadero through Seaport Village and along Kettner Blvd. These parks will be improved with environmentally sustainable features to enhance family recreation opportunities, and other recreational and access support facilities, such as lighting, paths, fitness course, signs, restrooms, water, telephones, tables, seating, and trash disposal.

The proposed Phase III Expansion to the Convention Center will include an approximately 5.0acre rooftop park/plaza, approximately 50-100 feet above grade. The rooftop park/plaza will be

accessible from at least six access points, including: the grand stairs and funicular at Harbor Drive, the grand stairs and elevator at the southwest corner of the rooftop park/plaza, elevators at the south midpoint of the rooftop park/plaza, the landscaped inclined walkway, and the elevator along Park Boulevard, as well as one access point from within the Convention Center. The rooftop park/plaza will include a mix of hardscape and landscape, including lawns, grasses, wildflowers, shrubs, trees, wetland plants; and pavilions and formal and non-formal gardens with lighted paths and fixed and movable furnishings. Observation vistas will be placed at opportune locations throughout the rooftop park/plaza to provide views to the Bay and uplands skyline. Support facilities such as restrooms and power and water service will also be provided.

Eleven public accessways 15 to 60 (minimum) feet wide, and comprising a total of 8,000 lineal feet, will directly connect the Harbor Drive walkway in the Planning Area with the Embarcadero Promenade: (1) on the north side of Tuna Harbor, (2) on the breakwater-pier on the south side of Tuna Harbor; (3) along the foot of Pacific Highway, (4) along the foot of California Street and south through the rehabilitated OPH building; (5) along the west side of Kettner Blvd, (6) along Pier Walk, from Market Street at Harbor to the Tuna Harbor Pier (7) along Market Plaza to the Embarcadero at Seaport Village East (8) along Marina Walk between the existing Marriott and Hyatt hotels; (9) through the canyon path between the Marriott Hotel and the existing Convention Center; (10) in the Skyward elevated access between Harbor Drive and Embarcadero Marina Park South at the junction of the existing and expanded convention center elements; and (11) from Park Boulevard Plaza along Park Boulevard to the waterfront. These connecting accessways are united with existing upland (City) sidewalks at Pacific Highway, California Street, Kettner Blvd, Market Street, Front Street-Childrens' Park-First Street, Fifth Avenue, and Park Boulevard (former Eighth Avenue). The connecting accessways on Port lands are, or will be, improved with a variety of access support and safety components as shown below in Table A. No existing accessway will be reduced in size or functional capacity. Pedicab service, including designated holding areas, will be provided in conjunction with all public access, public recreational, and commercial recreational facilities, including the Convention Center, consistent with the capacity of existing and proposed accessways, and with pedestrian safety.

As redevelopment within the South Embarcadero occurs, additional opportunities to maximize and enhance public access will be incorporated. The Marriott hotel's reconstruction of its Marriott Hall ballroom and meeting facility will enable construction of Marina Walk, a joint, cohesive public accessway spanning both the Marriott and Hyatt leaseholds (#8 above). Public views and public pedestrian connectivity to the Bay will be significantly improved through relocation of the large cooling towers, removal of tall landscaping and underutilized surface parking, and leveling of the existing grade. Approximately one half of the Marina Walk length will be a total of 50 feet wide and will contain a 40-foot-wide public pedestrian access corridor and a 10-foot-wide landscape buffer to help screen the adjacent Hyatt parking structure. The 40foot-wide public access corridor will include a 33.5-foot-wide dedicated pedestrian walkway, a 2-foot width for intermittent benches and lighting, and a 4.5-foot-wide landscape buffer with low-level, drought-resistant shrubs and groundcover that shall not exceed 3 feet in height. Adjacent to the existing approximately 10-foot-wide mechanical equipment enclosure on the Hyatt leasehold, the public access corridor may narrow to approximately 32 feet wide to allow for construction of a low-scale retaining wall and vine plantings to screen the enclosure. Marina Walk will contain amenities such as decorative paving, signage, public art features, low-level

lighting, bicycle racks, benches, trash receptacles, a wheelchair accessible ramp, and restrooms open to the public during daylight hours. Marina Walk will widen to 80 feet as it approaches the Embarcadero promenade, and will widen to 145 feet at the Harbor Drive gateway to Marina Walk. At the project level, minor adjustments and revisions to the corridor, parking areas, and driveway may be made to increase the width of the walkway and improve connectivity between Marina Walk, Marina Terrace, and the Embarcadero promenade. Adjacent to this gateway, removal of the existing parking booths/gates and substantial narrowing of the entry drive (from 78 feet to 40 feet in width) will create a more inviting entrance and will encourage a more pedestrian-oriented environment. The Harbor Drive gateway area will be kept clear of physical barriers, signage, or visual obstructions that would discourage public use of Marina Walk. As part of the Marina Walk construction, the existing solid southeast façade of Sally's restaurant on the Hyatt leasehold will be partially replaced with windows, which will also improve public physical and visual access towards the Bay.

Visibility of Marina Walk will be improved through architectural treatment and orientation of the buildings on either side of the public accessway. The aesthetics and visual accessibility of the area will be enhanced through the use of contemporary, transparent architectural features and siting of the new Marriott Hall building, which will be reoriented such that its public side faces Harbor Drive. The maximum height of the new Marriott Hall shall not exceed 68 feet, including rooftop equipment and parapet wall, and the distance between the new Marriott Hall building and Hyatt parking structure shall be a minimum of 120.5 feet.

To further enhance and activate public access in the South Embarcadero, the Marriott proposes Marina Terrace, a 25,000-square-foot paved, flexible outdoor space at the bayward terminus of Marina Walk, adjacent to the Embarcadero promenade, to be accessible for use by the public as an open gathering and activity space when not in use for outdoor hotel events. During the times when Marina Terrace will be publicly accessible, approximately 85% of the year, the Marriott will provide and/or facilitate the provision of public pedestrian-activating amenities on Marina Terrace such as seasonal events/festivals, temporary visitor-serving retail such as food carts and food vendors, and placement of movable modular street furniture for public use on Marina Terrace. This modular furniture will include public benches, chairs, tables, and outside shade structures. At a minimum, the Marriott will ensure that permanent public seating is provided along the bayward perimeter of Marina Terrace. Six-foot-wide paved pedestrian accessways through the existing landscape buffer will ensure vertical pedestrian linkages between Marina Terrace and the Embarcadero promenade. Public pedestrian use of the Marina Terrace space will be further encouraged with consistent paving and low-level vegetation to help attract visitors along Marina Walk and the Embarcadero Promenade. To encourage interaction between the public spaces on Marina Terrace, Marina Walk, and the Embarcadero Promenade, the Marriott will promote and inform the public about various activities and pedestrian-serving amenities available at Marina Terrace through use of interchangeable signage and other methods of advertisement. In addition, Marriott will provide fixed picnic-type tables between Marina Terrace and the Embarcadero promenade on a permanent basis. See "Marriott Marina Terrace Activation" graphic for a potential concept of how Marina Terrace and the Embarcadero promenade can be activated through Marriott's placement of permanent tables and seating and provision/facilitation of movable modular furniture and retail carts on Marina Terrace. The 35space parking lot between Marina Walk and Marina Terrace shall be signed and designated for marina use (30 spaces) and public use (5 spaces).

Marriott's proposed improvements trigger its mandatory participation in the Port District's implementation of the permanent bayside shuttle system, discussed below. The bayside shuttle system will be operational prior to the opening of the Marriott Hall expansion, and Marriott's participation in the shuttle system will be a condition precedent to issuance of a certificate of occupancy for the proposed Marriott Hall expansion. To mitigate any potential parking shortfall that may result from the Marriott project, the Marriott is required to implement the parking management strategies as discussed in the South Embarcadero Parking Management and Monitoring Program (PMMP), as amended, which is incorporated by reference in the Port Master Plan.

The South Embarcadero Planning Area and immediately adjacent areas are presently served by publicly accessible automobile parking spaces, bicycle parking spaces, and three trolley and three bus stops. These spaces and transit stops will be maintained, although some may be relocated. To facilitate additional public recreational waterfront access opportunities, the Plan Amendment also provides for an additional water taxi landing at Tuna Harbor Pier (consistent with continued commercial fishing uses), additional automobile, new bicycle parking spaces and lanes, and three new bus stops along Harbor Drive (implementation of which will be in coordination with San Diego Transit). Throughout the South Embarcadero (G Street mole to the Hilton Bayfront Hotel), commercial development is also required to participate in and contribute a fair share to the Port District's implementation of a permanent bayside shuttle system that would serve and connect tideland uses along the waterfront, such as the Convention Center Hotel Public Parking Facility, hotels, Seaport Village, and other waterfront destinations. Although outside the South Embarcadero, the bayside shuttle should also provide service to the San Diego Aircraft Carrier Museum (USS Midway). In addition, this bayside shuttle system should include linkages to public roadside shuttle systems serving downtown San Diego, the airport, and MTS transportation hubs. Port District implementation of the bayside shuttle system is intended to serve visitors as part of an integrated waterfront access and parking program that the Port District shall pursue in conjunction with the City of San Diego, CCDC and MTS. The Port District will fund the bayside shuttle system at its cost and may seek cost recovery and financial participation consistent with its policies and practices and applicable laws. Cost recovery and financial participation may include: collection of fares, grants, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for Port District tenant projects within the South Embarcadero, and other sources as may be identified by the Port District. If rider fares are collected, fares will be kept at a low cost as compared to comparable transportation services within the region. The District will prepare a bayside shuttle system program and operational plan prior to the shuttle system commencing operations. Operation of the bayside shuttle system will occur as described in the Port Master Plan.

The unified public access directional and information signage program, as well as the environmental education signage program, are proposed to be expanded throughout the Planning Area, and to be augmented by works of public art. Substantial environmental education displays of San Diego's on-shore and off-shore coastal geology will be incorporated into the design of public access ways.

As part of the redevelopment of South Embarcadero, the pier adjacent to the Hilton San Diego Bayfront will be publically accessible 85 percent of the year. Perimeter railings and seating will be extended onto the public access pier, which will also be made ADA accessible. Completion

of the improvements to the public access pier will be complete prior to the issuance of the Certificate of Occupancy for the Hilton San Diego Bayfront Expansion.

The Fifth Avenue Landing project includes two hotels (an up to 843-room hotel and an up to 220-room lower-cost, visitor-serving hotel) and a marina expansion, that shall incorporate a variety of public access features, including:

- Approximately 98,448 square feet of public plaza and park areas. The public plaza and park areas would serve as resting and viewing areas for visitors and would include interpretive signage and public art. All the proposed public plaza and park areas would be designed with a combination of hardscape, drought-tolerant landscape, grass lawns, and artificial turf. Portions of this park and plaza space will be available to the public as follows (see also Fifth Avenue Landing Proposed Public Plaza and Park Public Access Areas graphic). Under no circumstances shall the closure of the public plaza and park areas for private hotel events (private access) be more than the following percentages:
 - O Multifunctional Plaza and Lawn (40,414 SF) 50% public access/50% private access. This area would be available for private events 50% of the year, which is defined as the equivalent of 182.5 days per year (not to exceed the equivalent of 80 days during the summer (Memorial Day to Labor Day)), inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 50% of the year (182.5 days). For clarification purposes, if a private event occupies the Multifunctional Plaza and Lawn for part of a day, it shall count as occupying the Multifunctional Plaza and Lawn for an entire day when calculating the 182.5-day private event limit. Public access would be available during normal operating hours (e.g. 6:00AM to 10:30PM).
 - <u>o</u> Public Park Plaza Area (45,062 SF) 85% public access/15% private access. This area would be available for private events 15% of the year, which is defined as the equivalent of 55 days per year (not to exceed the equivalent of 40 days during the summer (Memorial Day to Labor Day)), inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 85% of the year (310 days). For clarification purposes, if a private event occupies the Public Park Plaza for part of a day, it shall count as occupying the Public Park Plaza for an entire day when calculating the 55-day private event limit. Public access would be available during normal operating hours (e.g. 6:00AM to 10:30PM). Pedestrians may access the public plaza and park areas via the grand staircase and proposed accessible elevators. The stairs will be highly visible with guards, wide stair widths, oversized landings, and visible wayfinding signage to encourage public access.
 - <u>o</u> Public Park Plaza and Public Observation Terrace (9,782 SF) 100% public access, 0% private access. This area would be not be available for private events, and would be open to the public at no cost 100% of the year. Public access would be available during normal operating hours (e.g. 6:00AM to 10:30PM).

If the private event area is blocked off from the public usable areas, such barriers shall not be solid materials but shall be a material like ropes. To ensure the private event area is

restored for the public use, all trash and debris shall be immediately picked up and disposed of appropriately during and after the private event.

During times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during non-private event times), the hours of operation shall be the same as the District's park hours of operation (e.g. 6:00AM to 10:30PM).

During all private events, clear signage shall be placed in publicly visible locations (i.e., not posted inside the hotel) at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge (if developed), and two locations along the existing Embarcadero Promenade, that indicate the Multifunctional Plaza and Lawn area and/or the Public Park Plaza areas, if applicable, are open to the public. Clear signage shall be placed at the Public Park Plaza and Public Observation Terrace that indicates it is open to the public.

After project construction is complete, on January 31 of each year, the project operator shall submit an annual public access usage report to the District that demonstrates, for the preceding year, that the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private access (for private events) as follows:

- Multifunctional Plaza and Lawn (50% public access/50% private access)
- Public Park Plaza (85% public access/15% private access)
- Public Park Plaza and Public Observation Terrace (100% public access)

The report shall be broken down by the Multifunctional Plaza and Lawn and Public Park Plaza areas and shall list the date, private event, start and end times, duration of each event, setup and breakdown time, and total number of days (including number of days during the summer (Memorial Day to Labor Day)) and percentage of private use for that year. Furthermore, the report shall contain confirmation, such as photographs or a signature by the hotel manager, that for each private event, signage indicating public use of the remaining area (if applicable) was placed. For the Public Park Plaza and Public Observation Terrace area, the report shall confirm that this area was accessible to the public 100% of the year and contained signage indicating such.

- <u>o</u> Public Promenade (3,190SF) 100% public access. Public access would be available during normal operating hours (e.g. 6:00AM to 10:30PM).
- <u>o Public Observation Terrace Viewing Point 100% public access. Public access would be</u> available during normal operating hours (e.g. 6:00AM to 10:30PM).
- Activities proposed in the public access spaces to encourage activation of these areas may include:
 - <u>o</u> Multifunctional Plaza and Lawn: Meditation (e.g., open field yoga/Pilates) and viewing/observing (e.g., observation points, view terraces, and view telescopes).

- <u>o</u> Public Park Plaza: Meditation (e.g., open field yoga/Pilates) and viewing/observing (e.g., observation points, view terraces, and view telescopes), and social gathering (e.g. passive seating, pod seating, and outdoor film screening).
- <u>o</u> Public Park Plaza and Public Observation Terrace: Game activities (e.g., mobile board games, tables, and mobile oversized board games), linear recreation (e.g., walking, strolling, running, jogging, cycling, and bicycling), social gathering (e.g. passive seating, pod seating, and outdoor film screening), and viewing/observing (e.g., observation points, view terraces, and view telescopes).
- Public access and wayfinding signage will be installed to direct visitors to these publicly accessible areas. The project operator shall post wayfinding signage and signage at the grand staircase, market-rate hotel tower exterior staircase, public observation terrace, optional pedestrian bridge, and two locations along the existing Embarcadero Promenade, that directs visitors to the proposed public plaza and park areas on the rooftop of the parking structure and hotel ballrooms as well as the walkway around the market-rate hotel tower, and designate the areas as available to the public with open hours listed (i.e., 6:00AM to 10:30PM). Photographic proof of the wayfinding signage and designation signage shall be submitted to the District. In addition, the project operator shall allow the District to conduct periodic inspections to ensure that this space remains publicly accessible. The wayfinding signage shall clearly direct the public to the public plaza and park areas and public observation terrace and indicate that the space is open to the public except during certain circumstances consistent with the PMPA.
- The project shall maintain and enhance the existing 35-foot-wide Embarcadero Promenade across the site by providing retail adjacent to the Promenade to encourage activation, increasing the amount of seating areas, providing public restrooms, connecting the lower-cost visitor-serving hotel and market-rate hotel tower to the Promenade with small plazas or lobbies, and providing access to the parking structure from the Promenade. Public signage along the Promenade would illustrate San Diego Bay history, including its past and present working waterfront, interpretive signage, and location and wayfinding maps. Activities proposed on the Promenade to encourage activation of this area may include linear recreation (e.g., walking, strolling, running, jogging, cycling, and bicycling) and viewing/observing (e.g., observation points, view terraces, and view telescopes).
- A public pedestrian bridge may be developed that will cross Convention Way and if so, shall link the Convention Center to the hotel tower rooftop public plaza, providing elevated and expansive views of the Bay. The width of this bridge would range from 18 feet to 26 feet.
- A minimum of five elevated public vista areas will be provided at opportune locations, as shown on the Port Master Plan Precise Plan map. Four shall be located along the public observation terrace on the rooftop public plaza and park areas and the fifth shall be located on the west end of the market-rate hotel tower terrace (public observation terrace viewing point). These designated vista points shall be delineated with signage and open to

the public at all times. Public access would be available during normal operating hours (e.g. 6:00AM to 10:30PM).

- The marina operator shall provide at least one boat slip for public use, for a vessel of a maximum size of 30 feet in length, at low cost or no cost. To ensure sufficient availability to the public, berthing at the low-cost or no-cost slip shall be a maximum of 6 hours at any one time. Signage shall be provided and availability of the low-cost or no-cost slip shall be posted on the marina operator's website.
- Port of San Diego Shuttle The project operator shall participate in the Port of San Diego Shuttle system as a condition precedent to issuance of a certificate of occupancy for the market-rate hotel or lower-cost visitor-serving hotel, whichever hotel is completed first.
 Participation may include: collection of fares, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for District tenant projects within the South Embarcadero, and other forms of participation as identified by the District.

Any construction activities in the South Embarcadero shall minimize impacts to public access, including access to public spaces such as parks and promenades.

TABLE A - PLANNING DISTRICT 3, ACCESS AND RECREATION COMPONENTS

NAME	LOCATION	MAP REF. NO.	SIZE/PARKING	USE TYPES	FACILITIES
A. Promenade	Embarcadero	1	4600 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			70000 SF		
Segment 1	Laurel Broadway	2	5200 LF	P,B,Rb, Ed, A:ha	VP,p,I
			72800 SF		
Segment 2	Broadway Com	3	950 LF	P,B,Rb,Ed,A:ha	p,l
5			3800 SF		
Segment 3	Tuna Harbor	4	800 LF	P,B,Rb,Ed,A:ha	VP,p,I
j i j			11200 SF		
			200/85 Spaces		
Segment 4	Seaport Village	5	1100 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
oognon		Ŭ	15400 SF		
Segment 5	N Emb Mar Park	6	1600 LF	P,B,B/Ap,Rb:ha	VP,p,t,w,I,tI,b,tb,s
Jegineni J		0	22400 SF		vi,p,t,w,i,ti,b,tb,3
Sogmont 6	Kettner Blvd	7	1600 LF	P,B,Rb:ha	n with the
Segment 6	(includes 0.7 acre	1	32000 SF	P,D,KU.IId	p,,w,I,tI,b,tb,s
			32000 SF		
C	Hyatt Plaza)	0	(0015		
Segment 7	Hyatt Hotel 1/2	8	600 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			48,000 SF		
			100 Spaces		
Segment 8	Marriott	9	600 LF	P,B,Rb,Ed,A:ha	p,t,w,l,tl,b,tb,s
			18000 SF		
Segment 9	S Emb Mar Park	10	4075 LF	P,B,B/Ap,Rb:ha	VP,p,t,w,I,tI,b,tb,s
			44500 SF		
			132 Spaces		
Segment 10	Conv Cntr/Exp	11	3350 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			37500 SF		
Segment 11	5th Ave Landing	12	1200 LF		
0			7200 SF		
Segment 12	Campbell	13	700 LF		
			4200 SF		
B. Tuna Harbor	Harbor Drive	14	800 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			45000 SF		
			200/85		
C. Urban Plaza	South of side of	15	200/05	Plza,P,A:ha	p,t,w,I,tI,b,tb,s
C. UIDall Flaza	Harbor Dr; North	10		FIZA,F,A.Ha	p,ı,w,ı,ıı,b,ıb,s
	side of OPH				
			1 Acre		
D. Waterfront Park	S of Harbor Dr	16	See Seg. 3	Prk,P,Pg,B/Ap,A:ha	
		10	, v	Рік, Р, Ру, Б/Ар, А.Па	P,T,W,L,TL,B,TB,S
	W of Monket Ct	17	3.5 Acres	Dha	
E. Pier Walk	W of Market St	17	1250 LF	P:ha	VP,p,t,w,I,tI,b,tb,s
F T 11 - 51			50000 SF		
F. Tuna Hrb Pier	W of Pier Walk	18	400LF	P,CF,WT:ha	VP,p,tl,s
			10000 SF		
G. N Emb Mar Pk	S of Central Pk	19	See Seg. 5	Prk, P,Pg,B/Ap,A:ha	VP,p,t,w,I,tI,b,tb,s
			10.7 Acres		
			87 Spaces		

NOTE: The data in this table is indicative rather than determinative (i.e., the numbers are approximations).

Legend: A=(public) Art Ed=Envirn. Education PRK=Park VP=View Point sp=parking spaces w=water available B=Bikepath P=Pedestrian walkway Rb=Roller Blade Accessible ha=handicapped accessible t=toilet facility B/Ap=Bike/Auto parking Pg=Playground SA=Shaded Area Available I=lighting tb=table/benches

TABLE A - PLANNING DISTRICT 3, ACCESS AND RECREATION COMPONENTS (cont'd)

NAME	LOCATION	MAP REF. NO.	SIZE/PARKING	USE TYPES	FACILITIES
H. Pacific Hwy.	S of Harbor Dr.	20	650 LF	P,B:ha	p,s,
			65000 SF		
I. Kettner Blvd.	S. of Harbor Dr.	21	900 x 2 LF	P,B:ha	p,s
			54000 SF		
			35 Spaces		
J. California	S. of Harbor Dr.	22	650 LF	P,B,A:ha	p,s
			32500 SF		
K. Harbor Dr.	Plaza Pk to Park	23	4000 LF	P,B:ha	p,s
			40000 SF		
			18 Spaces		
L. Marina Walk	S. of Harbor Dr.	24	600 LF	Plz,P,B:ha	p,s
			36000 SF		
M. Access Cyn.	S. of Harbor Dr.	25	750 LF	P,A,Ed:ha	p,s,Ed
j			7500 LF		
N. Skywalk	At CC/CCE	26	800 LF	P,Ed,A:ha	VP,p,s,I,b,tb
·) ·			16000 SF		
O. S Emb Mar Pk	S of Conv Cntr.	27	See Seg. 9	Prk,P,Pg,B/Ap,A:ha	VP,p,t,w,I,tI,b,tb,s
			12 Acres	SF	
P. Park Blvd Plaza	Harbor at Park	28	See Seg. 10	Plz,P,B/Ap,A:ha	p,s,t,w,l,tl,b,tb
			30000 SF		
Q. Transit Stops	BusStp @ Waterfront Park	29	Bus turnout	P,B,Ed:ha	p,s
	BusStp @ Conv.	30	Bus turnout	P,B,Ed:ha	nc
	BusStp @ Park	30	Bus turnout	P,B,Ed:ha	p,s
		31	NS/East Line	P,B,Ed:ha	p,s
	Trolley S @ Mkt.				p,s
	Trolley S @ 1st	33 34	NS/East Line NS/East Line	P,B,Ed:ha	p,s
D Dublic Dorking	Trolley S @ 5 th	34		P,B,Ed:ha	p,s
R. Public Parking	Pacific Hwy.		40Spaces	B/Ap:ha	p,s
	SPV Main Lot	36	453 Spaces (493 w/ valet)	B/Ap:ha	p,s
	Waterfront Park/Pier Walk Bldg	37	172 Spaces	B/Ap:ha	p,s
	Hyatt 2	38	100 Spaces	B/Ap:ha	p,s
	SPV East	39	124 Spaces (204 w/ valet)	B/Ap:ha	p,s
	Marriott	40	5 Spaces	B/Ap:ha	p,s
	Conv.Cntr.	41		B/Ap:ha	p,s
S. S Emb MarFP	S Emb Mar Pk	42	132 Spaces	P,SF,B:ha	VP,p,w,l,b,tb,s
T. Village Wiks	SPV (1978)	43	1.52 094005	P,Plz,A,Ed:ha	I,p,Rb,SA,s,sp,t,tb,tl
U. Conv Cntr Rftp	Rooftop of Conv Ctr Phase III Exp	44	5 Acres	PRK, P, ha, PLZA	VP, w, t, SA, I, tb

NOTE: The data in this table is indicative rather than determinative (i.e., the numbers are approximations).

Legend: A=(public) Art Ed=Envirn. Education PRK=Park VP=View Point sp=parking spaces w=water available B=Bikepath P=Pedestrian walkway Rb=Roller Blade Accessible ha=handicapped accessible t=toilet facility B/Ap=Bike/Auto parking Pg=Playground SA=Shaded Area Available I=lighting tb=table/benches

TABLE A - PLANNING DISTRICT 3, ACCESS AND RECREATION COMPONENTS

NAME	LOCATION	MAP REF. NO.	SIZE/PARKING	USE TYPES	FACILITIES
A. Promenade	Embarcadero	1	4600 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			70000 SF		
Segment 1	Laurel Broadway	2	5200 LF	P,B,Rb, Ed, A:ha	VP,p,I
			72800 SF		
Segment 2	Broadway Com	3	950 LF	P,B,Rb,Ed,A:ha	p,l
	y		3800 SF		
Segment 3	Tuna Harbor	4	800 LF	P,B,Rb,Ed,A:ha	VP,p,l
J			11200 SF		
			200/85 Spaces		
Segment 4	Seaport Village	5	1100 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
ocyment		0	15400 SF		
Segment 5	N Emb Mar Park	6	1600 LF	P,B,B/Ap,Rb:ha	VP,p,t,w,I,tI,b,tb,s
Jeginent J		0	22400 SF		
Segment 6	Kettner Blvd	7	1600 LF	P,B,Rb:ha	p,,w,I,tI,b,tb,s
Segment	(includes 0.7 acre	/	32000 SF	r,d,Ku.lla	p,,w,i,u,u,u,s
			32000 SF		
C	Hyatt Plaza)	0	(00) 5		
Segment 7	Hyatt Hotel 1/2	8	600 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			48,000 SF		
			100 Spaces		
Segment 8	Marriott	9	600 LF	P,B,Rb,Ed,A:ha	p,t,w,I,tI,b,tb,s
			18000 SF		
Segment 9	S Emb Mar Park	10	4075 LF	P,B,B/Ap,Rb:ha	VP,p,t,w,I,tI,b,tb,s
			44500 SF		
			132 Spaces		
Segment 10	Conv Cntr/Exp	11	3350 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
			37500 SF		
Segment 11	5th Ave Landing	12	1200 LF		
J. J	J		7200 SF		
Segment 12	Campbell	13	700 LF		
		10	4200 SF		
B. Tuna Harbor	Harbor Drive	14	800 LF	P,B,Rb,Ed,A:ha	VP,p,t,w,I,tI,b,tb,s
		14	45000 SF		
			200/85		
C. Urban Plaza	Couth of olds of	15	200/00		
C. Urban Plaza	South of side of Harbor Dr; North	15		Plza,P,A:ha	p,t,w,I,tI,b,tb,s
	side of OPH				
			1 Acre		
D. Waterfront Park	S of Harbor Dr	16	See Seg. 3	Prk,P,Pg,B/Ap,A:ha	P,T,W,L,TL,B,TB,S
			3.5 Acres		
E. Pier Walk	W of Market St	17	1250 LF	P:ha	VP,p,t,w,I,tI,b,tb,s
			50000 SF		
F. Tuna Hrb Pier	W of Pier Walk	18	400LF	P,CF,WT:ha	VP,p,tl,s
			10000 SF		
G. N Emb Mar Pk	S of Central Pk	19	See Seg. 5	Prk, P,Pg,B/Ap,A:ha	VP,p,t,w,I,tI,b,tb,s
		17	10.7 Acres		
			87 Spaces		

NOTE: The data in this table is indicative rather than determinative (i.e., the numbers are approximations).

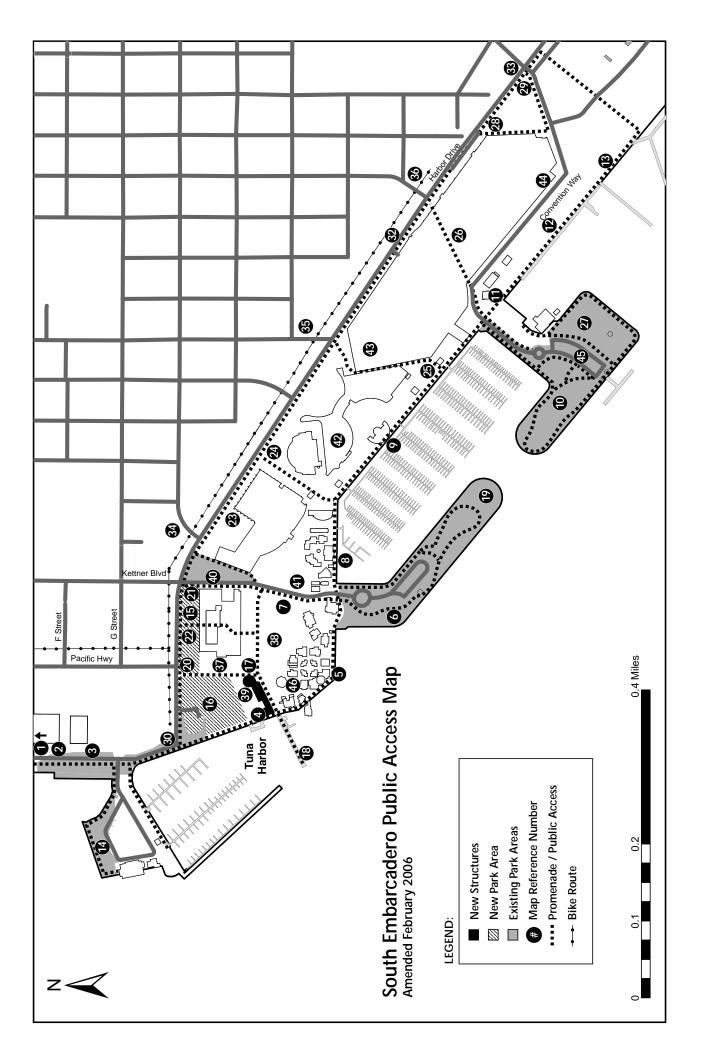
Legend: A=(public) Art Ed=Envirn. Education PRK=Park VP=View Point sp=parking spaces w=water available B=Bikepath P=Pedestrian walkway Rb=Roller Blade Accessible ha=handicapped accessible t=toilet facility B/Ap=Bike/Auto parking Pg=Playground SA=Shaded Area Available I=lighting tb=table/benches

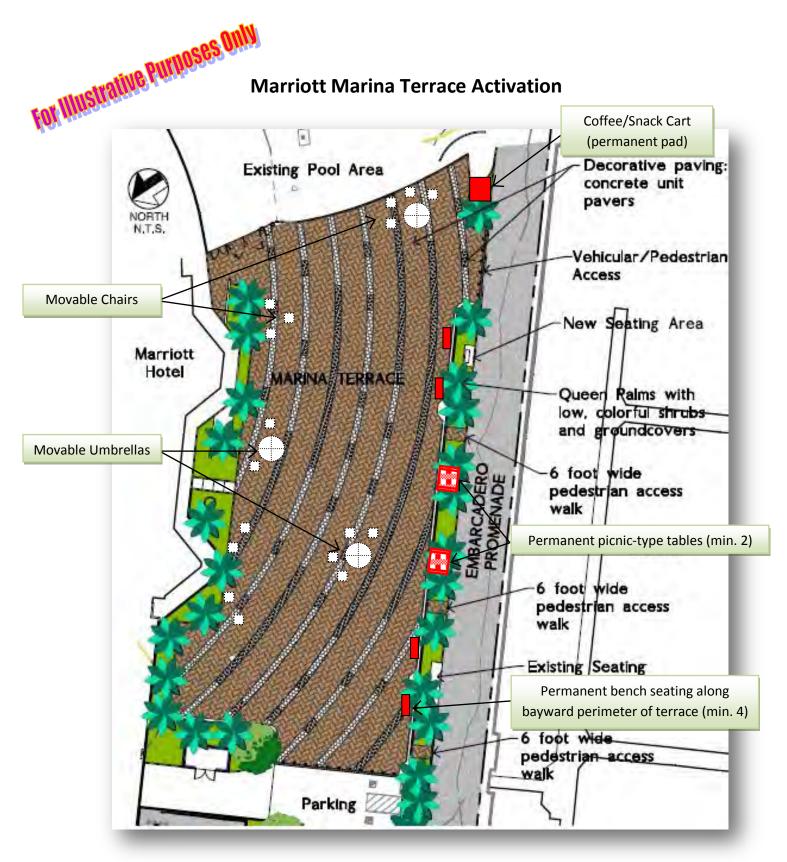
TABLE A - PLANNING DISTRICT 3, ACCESS AND RECREATION COMPONENTS (cont'd)

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-			65000 SF		
I. Kettner Blvd.	S. of Harbor Dr.	21	900 x 2 LF	P,B:ha	p,s
			54000 SF		
			35 Spaces		
J. California	S. of Harbor Dr.	22	650 LF	P,B,A:ha	p,s
			32500 SF		
K. Harbor Dr.	Plaza Pk to Park	23	4000 LF	P,B:ha	p,s
			40000 SF		
			18 Spaces		
L. Marina Walk	S. of Harbor Dr.	24	600 LF	Plz,P,B:ha	p,s
			36000 SF		
M. Access Cyn.	S. of Harbor Dr.	25	750 LF	P,A,Ed:ha	p,s,Ed
			7500 LF		[····
N. Skywalk	At CC/CCE	26	800 LF	P,Ed,A:ha	VP,p,s,l,b,tb
			16000 SF		
O. S Emb Mar Pk	S of Conv Cntr.	27	See Seg. 9	Prk,P,Pg,B/Ap,A:ha	VP,p,t,w,I,tI,b,tb,s
			12 Acres	SF	
P. Park Blvd Plaza	Harbor at Park	28	See Seg. 10	Plz,P,B/Ap,A:ha	p,s,t,w,I,tI,b,tb
		20	30000 SF		p,5,t,w,i,ti,b,tb
Q. Transit Stops	BusStp @ Waterfront Park	29	Bus turnout	P,B,Ed:ha	p,s
	BusStp @ Conv.	30	Bus turnout	P,B,Ed:ha	p,s
	BusStp @ Park	31	Bus turnout	P,B,Ed:ha	p,s
	Trolley S @ Mkt.	32	NS/East Line	P,B,Ed:ha	p,s
	Trolley S @ 1 st	33	NS/East Line	P,B,Ed:ha	p,s
	Trolley S @ 5 th	34	NS/East Line	P,B,Ed:ha	p,s
R. Public Parking	Pacific Hwy.	35	40Spaces	B/Ap:ha	p,s
<u>na rubio runang</u>	SPV Main Lot	36	453 Spaces (493 w/ valet)	B/Ap:ha	p,s
	Waterfront Park/Pier Walk Bldg	37	172 Spaces	B/Ap:ha	p,s
	Hyatt 2	38	100 Spaces	B/Ap:ha	p,s
	SPV East	39	124 Spaces (204 w/ valet)	B/Ap:ha	p,s
	Marriott	40	5 Spaces	B/Ap:ha	p,s
	Conv.Cntr.	41		B/Ap:ha	p,s
S. S Emb MarFP	S Emb Mar Pk	42	132 Spaces	P,SF,B:ha	VP,p,w,I,b,tb,s
T. Village Wiks	SPV (1978)	43		P,PIz,A,Ed:ha	I,p,Rb,SA,s,sp,t,tb,tl
U. Conv Cntr Rftp	Rooftop of Conv Ctr Phase III Exp	44	5 Acres	PRK, P, ha, PLZA	VP, w, t, SA, I, tb

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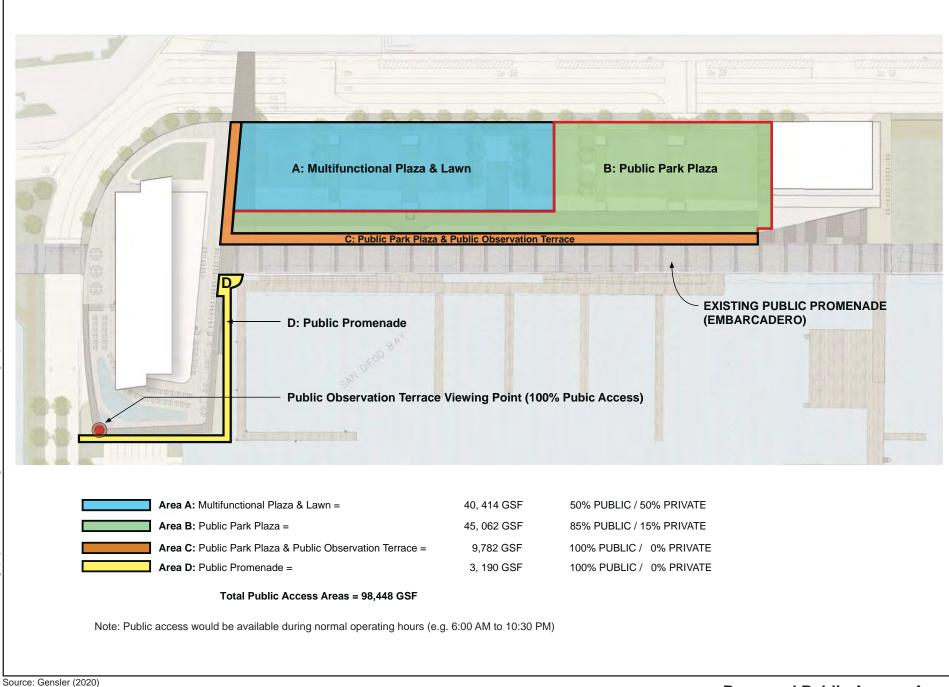
Legend: A=(public) Art Ed=Envirn. Education PRK=Park VP=View Point sp=parking spaces w=water available B=Bikepath P=Pedestrian walkway Rb=Roller Blade Accessible ha=handicapped accessible t=toilet facility B/Ap=Bike/Auto parking Pg=Playground SA=Shaded Area Available I=lighting tb=table/benches





Movable modular furniture, including chairs and umbrellas, will be placed within the Marina Terrace area on a variable basis (amount and location dependant on day of week and weather conditions). A minimum of two (2) fixed picnic-type tables and four (4) fixed benches will be provided along the bayward perimeter of the terrace on a permanent basis. A pad will be established adjacent to the Embarcadero Promenade for placement of a temporary cart.

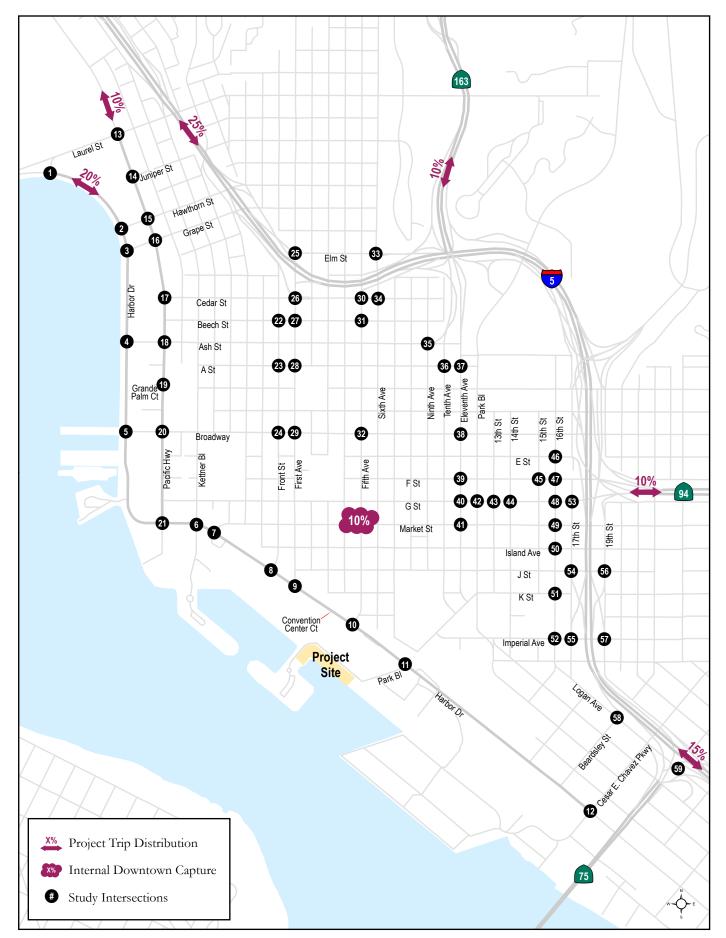
FIFTH AVENUE LANDING PROPOSED PUBLIC PLAZA AND PARK - PUBLIC ACCESS AREAS



Proposed Public Access Areas Fifth Avenue Landing Project

5.2.21 Changes to Appendix K-1, *Transportation Impact Analysis*

Figure 3-2 on the following page has been revised in Appendix K-1, *Transportation Impact Analysis.*



Fifth Avenue Landing Project Transportation Impact Analysis CHEN + RYAN Figure 3-2 Project Trip Distribution

6.1 Introduction

The Draft Environmental Impact Report (EIR) was available for public review for 49 days beginning on December 13, 2017 and ending on January 30, 2018. The San Diego Unified Port District (District) posted an electronic version of the Draft EIR on the District's website, hard copies were sent to the City of San Diego Central Library, and a hard copy was available for review at the District's Administration Building at 3165 Pacific Hwy, San Diego, CA 92101. A Notice of Availability was posted with the County Clerk on December 13, 2017, posted on the District's website, and mailed to various agencies, organizations, individuals, and known interested parties. All requisite documents, including the Notice of Completion form, were sent to the State Clearinghouse on December 13, 2017.

6.2 Comments Received on the Draft EIR

The District received comment letters from 13 commenters on the Draft EIR during the public review period. Topics included aesthetics and visual resources, air quality and health risks, biological resources, cultural resources, geology and soils, greenhouse gas (GHG) emissions and climate change, hazards and hazardous materials, hydrology and water quality, land use and planning, public services and recreation, transportation, circulation and parking, and utilities and energy use. Table 5-1 lists the agencies, organizations, and interested parties that provided comment letters. Each comment letter is assigned a letter (e.g., Comment Letter A) and each issue that was raised within each comment letter has been assigned a consecutive number that corresponds to a response number (e.g., Response to Comment A-1).

Letter	Agency/Organization	Dated	Received	Page
Federal	Agencies			
А	National Marine Fisheries Service	2/20/18	2/20/18	6-3
State Ag	encies			
B1	State Clearinghouse and Planning Unit	1/29/18	2/6/18	6-7
B2	State Clearinghouse and Planning Unit	1/31/18	2/6/18	6-13
С	Department of Toxic Substances Control	1/3/18	1/5/18	6-20
D	California Department of Transportation, District 11	1/30/18	1/30/18	6-30
Е	California Coastal Commission	1/30/18	1/31/18	6-47
Regiona	l and Local Agencies			
F	City of San Diego Planning Department	1/30/18	1/30/18	6-71
G	City of San Diego Public Utilities Department	1/30/18	1/30/18	6-99
Organiz	ations			

Table 6-1. Agencies, Organizations, and Interested Parties that Submitted Comment Letters on theDraft EIR

Letter	Agency/Organization	Dated	Received	Page
Н	Fifth Avenue Landing, LLC	1/30/18	1/30/18	6-101
Ι	Save Our Heritage Organisation	1/30/18	1/29/18	6-163
J	San Diego Convention Center Corporation	1/30/18	1/30/18	6-165
К	San Diego County Archaeological Society, Inc.	1/29/18	1/31/18	6-173
Individu	als			
L	Mark G. Stephens	1/29/18	1/29/18	6-174
М	Spencer Mosher	1/30/18	1/30/18	6-179

6.3 Comment Letters and Responses

6.3.1 Comment Letter A: National Marine Fisheries Service

From:	Eileen Maher <emaher@portofsandiego.org></emaher@portofsandiego.org>	
Sent:	Tuesday, February 20, 2018 4:19 PM	0
To:	Dana Sclar	Comment Letter A
Subject:	Fwd: FAL issues	

Begin forwarded message:

From: Eric Chavez - NOAA Federal <<u>eric chavez@noaa.gov</u>> Date: February 20, 2018 at 11:05:03 AM PST To: Eileen Maher <<u>emaher@portofsandiego.org</u>>, Robert Smith <<u>Robert R. Smith@usace army.mil</u>> Subject: Re: FAL issues

Hi Eileen (and Robert),

Thanks again for discussing this proposed project with me last week, Eileen, and for your efforts to understand and address some of the points I brought up. As I said on the phone, given that

A-1 NMFS will conduct an essential fish habitat (EFH) consultation and provide input on how to conserve EFH under section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act as this project goes through the U.S. Army Corps of Engineers permitting process, this input should be considered pre-consultation technical assistance for that EFH consultation. In general, your email captured my concerns well, though I'd like to make a few points of clarification.

Regarding #1, we support the overall concept of mitigating for a loss of open water habitat by restoring eelgrass habitat. My main point was that since green sea turtles (GSTs), which are listed as endangered under the Endangered Species Act (ESA), are known to utilize the proposed mitigation site at the former South Bay Power Plant intake channel, potential impacts to GSTs and their habitat would need to be carefully considered by NMFS staff that will be conducting the ESA section 7 consultation. In addition to impacts associated with construction activities at

A-2 the issA section 7 consultation. In addition to impacts associated with constitution activities at filled some of the deeper channel habitat, additional loss of this particular type of habitat would have to be evaluated. This evaluation will likely include coordination with NMFS Science Center staff involved in GST conservation. Although the proposed mitigation may not "eliminate existing or any remaining turtle habitat" as your email states, it could substantially reduce it. NMFS may not be able to fully evaluate these potential impacts until we've received and reviewed a proposed compensatory mitigation plan, and we note the previous mitigation project at that site required formal consultation under the ESA.

Regarding #2, I think you've captured my concerns pretty well. Please note that I also relayed that "formalizing the credits" should include a verification process (e.g., by reviewing permits

1

A-3 issued for specific projects) to get an accurate assessment of overwater structures removed and installed since the baseline period. To date, all we've ever received related to Port of San Diego shading credit accounting is a spreadsheet (i.e., a "ledger") without any supporting information

Response to Comment A-1

This comment is an introductory comment stating that the National Marine Fisheries Service (NMFS) will conduct an essential fish habitat (EFH) consultation and provide input on how to conserve EFH as the project goes through the U.S. Army Corps of Engineers (USACE) permitting process. The comment states that this input should be considered pre-consultation technical assistance for that EFH consultation. The commenter states that it is providing points of clarification on a previous email from the District in an attempt to summarize NMFS comments, which is provided as comment number A-5 below.

The District appreciates NMFS's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are listed separately (below) along with the District's responses.

Response to Comment A-2

The commenter references a previous email from the District, which is provided as comment number A-5 below. The comment expresses support for the overall concept of mitigating the loss of open water habitat by restoring eelgrass habitat as described in mitigation measure MM-BIO-5, Section 2.B. However, the comment states that potential impacts on green sea turtles and their habitat will need to be considered by NMFS staff because the species are known to utilize the proposed mitigation site at the former South Bay Power Plant intake channel. The comment further states that additional loss of this particular habitat type would have to be evaluated due to a recent large-scale eelgrass mitigation project that filled some of the deeper channel habitat. The commenter suggests that the evaluation will likely include coordination with NMFS Science Center staff involved in green sea turtle research and conservation. The commenter states that the proposed mitigation could substantially reduce turtle habitat and indicates that NMFS may not be able to fully evaluate these potential impacts without a proposed compensatory mitigation plan.

The District appreciates NMFS input regarding the potential infeasibility of the former South Bay Power Plant as a mitigation site due to the presence

of green sea turtle habitat. As identified in Section 4.3, Biological Resources, MM-BIO-5 identifies four mitigation options to reduce Impact-BIO-5 to below a level of significance. As stated in the mitigation measure, prior to the issuance of a Coastal Development Permit, the project proponent shall request and participate in stakeholder meetings with resource agencies, including NMFS. The mitigation option selected to fully mitigate overwater coverage impacts would be identified through consultation with resource agencies and by obtaining all necessary agency approvals and permits. The project proponent is required to prepare a mitigation plan for review and approval by the District's Development Services and Planning & Green Port (P&GP) Departments. Furthermore, the project proponent is required to secure all applicable permits for the mitigation of overwater coverage and complete construction of the mitigation requirements for the mitigation site prior to commencement of waterside construction. If, during the resource agency consultation process, it is determined that the former intake channel is deemed infeasible, another mitigation option described in MM-BIO-5 may be implemented, as described below. MTS, the marine biology consultant for the proposed project, completed a preliminary review of potential sites within the San Diego Bay and identified several locations that may be considered by the project proponent, District, and the resource agencies.

As noted above, the final determination of either a mitigation site or implementation of one of the other mitigation options would be determined by the District during consultation with the resource agencies. Therefore, no changes to the Final EIR are required as a result of this comment.

Response to Comment A-3

The commenter references a previous email from the District, which is provided as comment number A-5 below. The commenter expresses concern regarding the mitigation option of purchasing shading credits listed under mitigation measure MM-BIO-5, Section 2.D. The commenter's concern is that the shading credits are not formalized, and suggests that a verification process should be established to get an accurate assessment of overwater structures removed and installed since the baseline period. The commenter states that NMFS has only received a spreadsheet (i.e., ledger) from the District without any supporting information as to how the entries were derived and/or verified by the District and resources agencies, or how the baseline year was selected. A-3 as to how those entries were derived and/or verified by the Port and other resource agencies, or cont, how the baseline year was selected and justified.

Regarding #3, you're correct in stating that NMFS has some concerns with construction and subsequent boat activity near the Campbell Shipyard Mitigation CAP site, especially since the marina expansion is, at least in part, supposed to accommodate larger vessels. Given that the eelgrass habitat at the Campbell Shipyard site was created as a mitigation site to offset impacts elsewhere, there is a presumption that the habitat functions at the site will continue indefinitely. Therefore, any impacts to that site should be avoided to the greatest extent practicable and

A-4 Interfore, any impacts to that are should occur. If impacts to the practical occur, developing an appropriate mitigation ratio would likely be more complicated than the standard process and ratios outlined in the California Eelgrass Mitigation Policy, and would require careful coordination between the Corps, NMFS, and other interested stakeholders.

Thanks again and feel free to contact me with any questions, Eric

On Fri, Feb 16, 2018 at 4:09 PM, Eileen Maher < emaher@portofsandiego.org > wrote:

Eric

Per our conversation, please let me know if I captured your concerns regarding the FAL - EIR.

1) There is concern with MM-BIO-5, Section 2.B, which states that one of the mitigation options for loss of open water habitat from marine operations is to restore edgrass habitat at the former South Bay Power Plan cooling water intake channel at a 1:1 ratio. Although similar mitigation was included in the BAE EIR, the concern is that this option would eliminate existing or any remaining turtle habitat in the intake channel.

A-5 2) NMFS is concerned that another mitigation option listed under MM-BIO-5, Section 2.D, that states that the project may purchase credits from the District Shading Credit Program established pursuant to board Policy 735. Apparently they are concerned that shading credits are not formalized and they requested the Port set up a meeting with the resource agencies to establish a baseline year and to formalize the credits.

3) The NMFS is also concerned about the impacts or potential loss of eelgrass on the habitat CAP due to increased boat traffic and marina operations (specifically propwash) in such close proximity to the eelgrass.

2

Please let me know if your concerns are captured.

thanks

Eileen Maher

In 2017, the Port submitted an application to USACE to formalize the shading credit ledger that accurately documents overwater structures that have been removed and installed in San Diego Bay since the late 1990s. No baseline year has been established to date.

The District's P&GP Department will continue to work with USACE to formalize the shading ledger. Additionally, P&GP is coordinating with the District's Engineering and Development Services Departments to obtain and archive supporting documentation for all projects included in the ledger. Supporting documentation includes: USACE permits, CEQA documents, Coastal Development Permits; project construction drawings, project approval letters, aerial photography, and other imagery and agency correspondence that documents overwater structure calculations applicable to individual project overwater square footage for shading credits.

The District anticipates that USACE will coordinate with other resource agencies per USACE's standard process to formalize the ledger.

In addition, as identified in Section 4.3, *Biological Resources*, of the Draft EIR, use of shading credits is one of four mitigation options identified to reduce Impact-BIO-5 to below a level of significance. As stated in the mitigation measure, prior to the issuance of a Coastal Development Permit, the project proponent shall request and participate in stakeholder meetings with resource agencies, including NMFS. Therefore, the final mitigation option selected to fully mitigate overwater coverage impacts would be identified through consultation with resource agencies and obtainment of all necessary permits for the mitigation of overwater coverage prior to the commencement of project waterside construction that requires mitigation.

Response to Comment A-4

The commenter references a previous email from the District, which is provided as comment number A-5 below. The commenter expresses concern regarding the construction and operation of the marina expansion near the Campbell Shipyard Mitigation CAP site, particularly because the marina expansion would accommodate larger vessels. The commenter states that the eelgrass habitat at the Campbell Shipyard site was created to offset impacts and that there is a presumption that the habitat functions at the site will continue indefinitely. The commenter further states that impacts on this site should be avoided to the extent possible and monitoring should occur. The comment indicates that impacts on the

Principal, Environmental Conservation

3165 Pacific Highway, San Diego, CA 92101

(0) <u>(619) 686.6254</u>



connect: 0 0 0 0 0 0

Port administration offices are open Monday-Thursday and every other Friday from 8am-5pm.

This email may contain public information and may be viewed by third parties pursuant to the Cal. Public Records Act.

3

Protected Resources Division NOAA Fisheries West Coast Region U.S. Department of Commerce Phone: (562) 980-4064 <u>Eric Chavez@noaa.gov</u> www.westcoast.fisheries.noaa.gov



mitigation site would require coordination between USACE, NMFS, and other interested stakeholders and notes that developing an appropriate mitigation ratio would likely be more complicated than the standard process.

As identified in Section 4.3, *Biological Resources*, of the Draft EIR, the proposed project's construction and operational related impacts on the Campbell Shipyard Mitigation CAP were analyzed with the preparation of propeller wash study (Appendix E-2 of the Draft EIR) and a potential eelgrass impacts memorandum (Appendix E-3 of the Draft EIR). Based on these studies, potential impacts on the eelgrass within the Campbell Shipyard Mitigation Cap were identified during construction (Impact-Bio-7) and operation of the marina (Impact-Bio-8). Mitigation measures MM-BIO-6 through MM-BIO-8 were identified to reduce impacts to a less-thansignificant level. To address the commenters concern regarding the monitoring of the eelgrass during the construction and operation of the proposed project, MM-BIO-6 has been revised to clarify the required eelgrass monitoring schedule. These changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment A-5

This comment summarizes the concerns previously discussed between the District and NMFS. Concerns raised by the comment include the loss of open water habitat/green sea turtle habitat as a result of mitigation measure MM-BIO-5, Section 2.B, the purchasing of shading credits under mitigation measure MM-BIO-5, Section 2.D, and the potential loss of eelgrass habitat on the CAP from increased boat traffic and marina operations.

Please see responses to comments A-2 through A-4 above for responses to the three issues raised by NMFS.

6.3.2 Comment Letter B1: State Clearinghouse and Planning Unit



Gover

STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Comment Letter B1

RECEIVED

January 29, 2018

FEB 0 6 2018 BAN DIEGO UNIFIED PORT DISTRICT

Dana Sclar San Diego Unified Port District 3165 Pacific Hwy San Diego, CA 92101

Subject: Fifth Avenue Landing Project and Port Master Plan Amendment SCH#: 2016081053

Dear Dana Sclar.

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 26, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

B1-1

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recomment that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincere Scott Morgan

Director, State Clearinghouse

Enclosures cc: Resources Agency

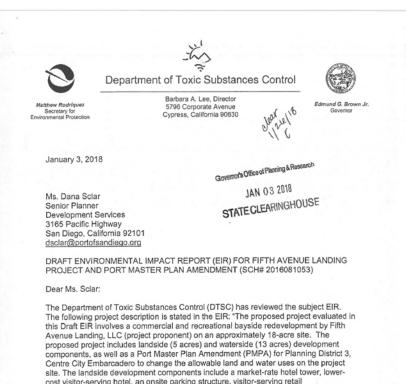
> 1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Response to Comment B1-1

The comment notes that select State agencies received the Draft EIR for comment and the date the comment period closed. A letter from the California Department of Toxic Substances Control (see Comment Letter C) was included. In addition, the comment notes that the project has complied with the State Clearinghouse review requirements for the Draft EIR pursuant to CEQA.

The District appreciates the Office of Planning and Research's coordination of the Draft EIR. As indicated, one comment letter was received by the State Clearinghouse during the review period that ended on January 26, 2018. This comment letter was also received separately by the District. The letter is labeled as Comment Letter C, and the District's responses follow.

	Document Details Report State Clearinghouse Data Base
SCH#	2016081053
Project Title Lead Agency	Sing Avenue Landing Project and Port Master Plan Amendment San Diego Unified Port District
Type	EIR Draft EIR
Description	The proposed project would construct an approx. 850 room hotel tower, an approx. 565 bed lower cost visitor serving hotel, retail development along the promenade, approx. 1.96 acres of public access plaza space, approx. 263 onsite parking spaces, a connecting bridge from the hotel public access plaza to the San Diego Convention Center, and a marina expansion. In addition, the proposed project would maintain the existing public in-bay water transportation system, including the water
	Accus maintain the casaring pooline incogravation analysis and accus system, including the water transportation forry and water taxi service. The proposed project also includes a Port Master Plan Amendment for Planning District 3, Centre City Embarcadero, to change the allowable land and water uses on the project site.
Lead Agenc	y Contact
Name	Dana Sclar
Agency	San Diego Unified Port District
Phone	619-400-4765 Fax
email	
Address	3165 Pacific Hwy
City	San Diego State CA Zip 92101
Project Loca	
County	San Diego
City	San Diego
Region	
	32° 42' 18.59" N / 117° 9' 43.3" W
Cross Streets	Convention Way and Marina Park Way
Parcel No.	
Township	Range Section Base
Proximity to	
	5, 163, 75, 282, 94
	SDIA, NAS north island
	BNSF, Amtrak, NCTD
	San Diego Bay
	Perksin ES, Burbank ES
Land Use	Commercial Recreation, Park/Plaza, recreational boat berthing, specialized berthing and ship navigation corridor
Project Issues	Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Public Services; Recreation/Parks; Sewer Capacity; Soli Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation;
	Vegetation; Water Quality; Water Supply; Landuse; Cumulative Effects; Other Issues; Aesthetic/Visual; Noise; Schools/Universities; Wetland/Riparian
Reviewing Agencies	Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 11; Office of Emergency Services, California;
	Department of Housing and Community Development; Resources, Recycling and Recovery; Regional Water Quality Control Board, Region 9; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission



The following project description is stated in the ER: "The proposed project evaluated in this Draft EIR involves a commercial and recreational bayside redevelopment by Fifth Avenue Landing, LLC (project proponent) on an approximately 18-acre site. The proposed project includes landside (5 acres) and waterside (13 acres) development components, as well as a Port Master Plan Amendment (PMPA) for Planning District 3, Centre City Embarcadero to change the allowable land and water uses on the project site. The landside development components include a market-rate hold to water transportation center (WTC) that would operate the existing water transportation center (WTC) that would operate the existing water transportation center (SDC), public plaza and park areas, and maintenance of the existing Embarcadero Promenade. The waterside development components include a marina expansion with additional slips to allow for both small and larger vessels to dock at the marina and the continued operation of a water transportation ferry and water taxis service, and several public soluces offsite infrastructure improvements that are needed to adequately serve the proposed project, as well as offsite construction staging and construction worker parking. The proposed project would construct an approximately 850-room hotel tower, an approximately 565-bed lower-cost visitor-serving hotel, retail development along the promenade.

Ms. Dana Sclar January 3, 2018 Page 2 approximately 2.1 acres of public access plaza space, approximately 213 onsite parking spaces, a connecting bridge from the hotel public access plaza to the San Diego Convention Center, and a marina expansion. In addition, the proposed project would include the potential use of approximately 110 offsite parking spaces in the Convention Center garage and maintain the existing public in-bay water transportation system including a water ferry service." Based on the review of the submitted document, DTSC has the following comments: 1. The Environmental Impact Report (EIR) should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances. If there are any recognized environmental conditions that exist on the project area, then proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction. 2. The EIR states: "The City constructed a garbage incinerator sometime between 1906 and 1921 on land formed of trash deposits and dredged fill material, which gradually expanded the shoreline nearer to the project site. Although the City garbage incinerator was removed from the project vicinity sometime in the 1930s, an area designated by the City as a garbage disposal site, which included a ramp and garbage chute, remained present east of the project site into the early 1940s." As the project site was used for garbage disposal, all potential contaminants should be investigated. In addition, the area was used for a garbage incinerator, the site should be investigated for polycyclic aromatic hydrocarbons (PAHs), dioxins and furans. 3. The EIR further states: "Moreover, previous soil studies and remediation reports indicate that, while portions of the project site have been cleaned up, there is still a possibility that soils contaminated with heavy metals are present on site (District 2012)." DTSC recommends investigation and cleanup, as necessary, to mitigate potential impact to human health and environment. 4. The EIR states: "As discussed in Section 4.8, Hydrology and Water Quality, past activities and current urban runoff, stormwater runoff, and sewer spills have also affected water quality in the San Diego Bay. Specifically, the Bay, Bay shoreline near Marriott Marguis San Diego Hotel and Marina (directly north of the project site), and Bay shoreline near Switzer Creek (directly south of the project site) have 303(d)-listed impairments for chlordane, PAHs, PCBs, and copper (State

Water Resources Control Board 2012)." Identify whether these impairments were mitigated. Otherwise, propose the mitigation measures in the EIR.

Ms. Dana Sclar January 3, 2018 Page 3

- 5. The EIR further states: "Stored hazardous materials are not currently present within the project site boundaries (both land and water) (Appendix H). Stored hazardous materials have been previously reported within the project site, as discussed in the next section. The Campbell Shipyard Bay Sediment Cleanup & Capping site, as well as the landside TPH-impacted soils area and the landside PAH zone, partially extend into the project site." Identify whether these contaminants were mitigated from the project area. Otherwise, propose the mitigation measures in the EIR.
- The EIR states that several agencies involved with the cleanup and abatement of soil and groundwater at several areas of the site.
 - Identify the name(s) of the regulatory agency(ies) that approved the closure of these remediation efforts and provide the specific locations of the project areas that are already remediated.
 - b. DTSC is unable to evaluate whether vapor sampling and/or potential vapor intrusion risk was adequately addressed due to lack of relevant detailed information in the EIR.
 - c. DTSC recommends soil gas sampling and vapor intrusion risk evaluation on sites with releases of volatile organic compounds (VOCs) and/or total petroleum hydrocarbon (TPH). DTSC recommends soil gas sampling after removal action to confirm no residual VOC contamination remain onsite and/or risk is acceptable based on applicable and relevant state guidelines.
- 7. As the soil is contaminated, excavated soil should be sampled prior to export/disposal. If the soil is contaminated, it should be disposed of properly in accordance with all applicable and relevant laws and regulations. In addition, if the project proposes to import soil to backfill the excavated areas, proper evaluation and/or sampling should be conducted to make sure that the imported soil is free of contamination.
- 8. If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area would cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the EIR should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

Ms. Dana Sclar January 3, 2018 Page 4

If you have any questions regarding this letter, please contact me at (714) 484-5476 or email at <u>Johnson.Abraham@dtsc.ca.qov</u>.

Sincerely, othe

loinson P. Abraham Project Manager Brownfields Restoration and School Evaluation Branch Brownfields and Environmental Restoration Program – Cypress

ed/sh/ja

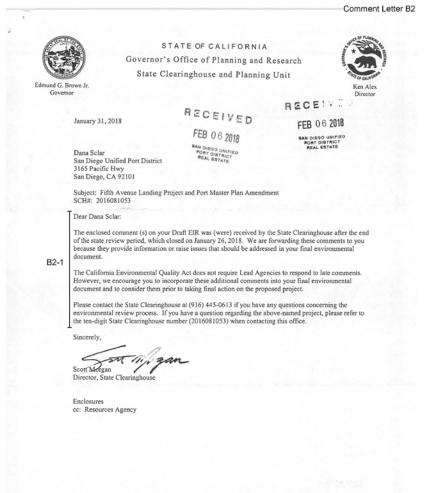
cc: Governor's Office of Planning and Research (via e-mail) State Clearinghouse P.O. Box 3044 Sacramento, California 95812-3044 State.clearinghouse@opr.ca.gov

Mr. Dave Kereazis (via e-mail) Office of Planning & Environmental Analysis Department of Toxic Substances Control Dave.Kereazis@dtsc.ca.gov

Mr. Shahir Haddad, Chief (via e-mail) Brownfields Restoration and School Evaluation Branch Brownfields and Environmental Restoration Program - Cypress Shahir.Haddad@dtsc.ca.gov

CEQA# 2016081053

6.3.3 Comment Letter B2: State Clearinghouse and Planning Unit

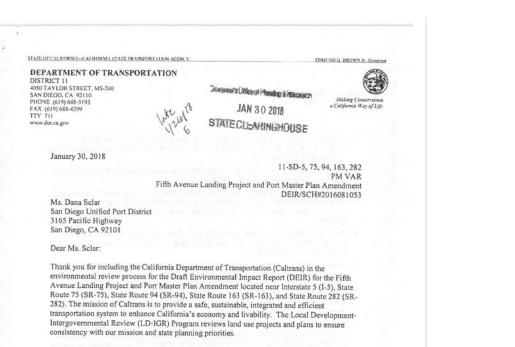


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Response to Comment B2-1

The comment notes that the State Clearinghouse received comment(s) on the Draft EIR after the state review period closed, which includes one attached letter from the California Department of Transportation (see Comment Letter D). The comment notes that the Lead Agency is not required to respond to late comments, but encourages the incorporation of these comments into the final environmental document and consideration prior to taking action on the proposed project.

The District appreciates the Office of Planning and Research's coordination of the Draft EIR. As indicated, one comment letter was received by the State Clearinghouse after the review period ended on January 26, 2018. This is comment letter was also received separately by the District. The letter is labeled as Comment Letter D, and the District's responses follow.



Caltrans has the following comments:

Traffic Impact Study

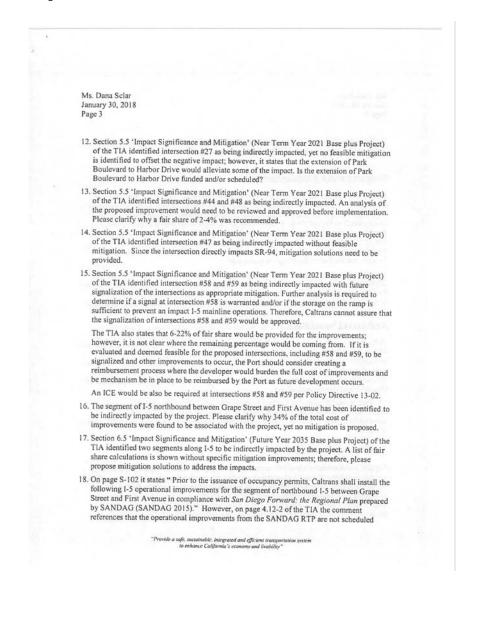
- The Traffic Impact Analysis (TIA) report is incomplete, as all appendices are missing. Caltrans must be able to review these in order to compare and respond thoroughly. Please submit the following appendices for the TIA:
 - a. Appendix A Traffic Counts
 - b. Appendix B Intersection LOS calculations for Existing Conditions
 - c. Appendix C Intersection LOS calculations for Existing Plus Project
 - d. Appendix D Near Term Year 2021 Base Intersection Volumes
 - e. Appendix E Intersection LOS calculations for Near Term Year 2021 Base
 - f. Appendix F Intersection LOS calculations for Near Term Year 2021 Base plus Project
 - g. Appendix G Relevant pages from Downton San Diego Mobility Plan
 - h. Appendix H Intersection LOS calculations for Future Year 2035 Base
 - i. Appendix 1 Intersection LOS calculations for Future Year 2035 Base plus Project
- The analysis of signalized and un-signalized intersections used procedures from the 2000 Highway Capacity Manual (HCM). Please use the 2010 HCM for all Caltrans' intersections.

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Ms. Dana Sclar January 30, 2018 Page 2

- The project distribution shown on Figure 3-2 'Project Trip Distribution' includes 10% of internal downtown capture. Assuming this 10% is vehicle traffic, the project trip distribution adds up to 110%. Please clarify.
- Please explain the project distribution which shows 20% coming from the Point Loma area, yet only 10% from east county San Diego(SR-94).
- 5. Traffic arriving from south San Diego most likely will use the Cesar Chavez Parkway exit, yet the intersection of Cesar Chavez Parkway and 1-5 northbound off-ramp was not analyzed. Please include this intersection to the traffic study and/or assign appropriate trips to this ramp and street.
- Section 3.3 'Project Study Area' of the TIA under 'Freeway' (page 19) states that there are currently not any ramp meters within the project study area; however, the Fifth Avenue southbound on-ramp is metered.
- 7. Section 4.6 'Impact Significance and Mitigation' (Existing plus Project) of the TIA recommends signalization of intersection #45 and #53 as mitigation for the direct impact. An Intersection Control Evaluation (ICE) would be required per the 2014 California Manual on Uniform Traffic Control Devices (CA-MUTCD). A submittal of traffic analysis with these improvements would need to be reviewed and approved before implementation, as both of these intersections directly affect SR-94.
- Section 4.6 'Impact Significance and Mitigation' (Existing plus Project) of the TIA recommends to restripe intersection #56 - the northbound left turn lane into a northbound left turn/through shared lane. A submittal of traffic analysis with these improvements would need to be reviewed and approved before implementation as this intersection directly affects the I-5 northbound 19th Street/J Street off-ramp.
- 9. The TIA also identifies a direct impact to a segment of I-5 northbound between Grape Street and First Avenue (AM peak hour). The report states that there are not any existing projects to contribute a fair share; therefore, this impact would remain significant and unavoidable. There are other options to mitigate this impact other than a contribution to an existing program; such as, ramp metering, adding storage capacity to on/off-ramps, etc.
- Please clarify why SR-94 was not analyzed even though various SR-94 intersections were determined to be negatively impacted by the proposed project.
- 11. Section 5.5 'Impact Significance and Mitigation' (Near Term Year 2021 Base plus Project) and Section 6.5 'Impact Significance and Mitigation' (Future Year 2035 Base plus Project) of the TIA recommends to pay a fair share percentage on the same three intersections (#45, #53, and #56). Please clarify why that was determined when these were already identified as being directly impacted by the proposed project. Furthermore, an ICE would also be required at these intersections, per 2014 CA-MUTCD.

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until Year 2050 and "no 'fair-share' fund established at this time." The Port should also set a reimbursement process for I-5 operational improvements.

Complete Streets and Mobility Network

Caltrans views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the transportation system. Caltrans supports improved transit accommodation through the provision of Park and Ride facilities, improved bicycle and pedestrian access and safety improvements, signal prioritization for transit, bus on shoulders, ramp improvements, or other enhancements that promotes a complete and integrated transportation system. Early coordination with Caltrans, in locations that may affect both Caltrans and the Port of San Diego, is encouraged.

To reduce greenhouse gas emissions and achieve California's Climate Change target, Caltrans is implementing Complete Streets and Climate Change policies into State Highway Operations and Protection Program (SHOPP) projects to meet multi-modal mobility needs. Caltrans looks forward to working with the Port of San Diego to evaluate potential Complete Streets projects.

Land Use and Smart Growth

Caltrans recognizes there is a strong link between transportation and land use. Development can have a significant impact on traffic and congestion on State transportation facilities. In particular, the pattern of land use can affect both local vehicle miles traveled and the number of trips. Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation system integrated through applicable "smart growth" type land use planning and policies.

The Port of San Diego should continue to coordinate with Caltrans to implement necessary improvements at intersections and interchanges, as well as coordinate with Caltrans as development proceeds and funds become available to ensure that the capacity of on-/off-ramps is adequate.

Traffic Control Plan/Hauling

Caltrans has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway System.

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Additional information is provided online at: http://www.dot.ca.gov/trafficops/permits/index.html

A Traffic Control Plan is to be submitted to Caltrans District 11, including the interchanges at I-5/Logan Avenue, at least 30 days prior to the start of any construction. Traffic shall not be unreasonably delayed. The plan shall also outline suggested detours to use during closures, including routes and signage.

Potential impacts to the highway facilities (1-5) and traveling public from the detour, demolition and other construction activities should be discussed and addressed before work begins.

Mitigation

Caltrans endeavors that any direct and cumulative impacts to the State Highway System be eliminated or reduced to a level of insignificance pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) standards.

Caltrans recommends consideration of "fair share" funds towards future improvements associated with I-5 corridor. Since the Project's cumulative impact is considered significant, feasible mitigation measures to State facilities should be identified in the TIS. Impacts that are significant and unavoidable need to have an alternative mitigation identified in the DEIR TIS. Recommended feasible mitigation measures include "fair share" contribution towards ramp metering and adding storage capacity to on-ramps. Mitigation identified in the traffic study, subsequent environmental documents, and mitigation monitoring reports, should be coordinated with Caltrans to identify and implement the appropriate mitigation. This includes the actual implementation and collection of any "fair share" monies, as well as the appropriate timing of the mitigation. Mitigation improvements should be compatible with Caltrans concepts.

Mitigation measures for proposed intersection modifications are subject to the Caltrans ICE policy (Traffic Operation Policy Directive 13-02). Alternative intersection design(s) will need to be considered in accordance with the ICE policy. Please provide ICE analysis to Caltrans District 11 for review and approval. Please refer to the policy for more information and requirements (<u>http://www.dotca.gov/trafficops/ice.htm</u>]).

Mitigation conditioned as part of a local agency's development approval for improvements to State facilities can be implemented either through a Cooperative Agreement between Caltrans and the lead agency, or by the project proponent entering into an agreement directly with Caltrans for the mitigation. When that occurs, Caltrans will negotiate and execute a Traffic Mitigation Agreement.

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Right-of-Way

Any work performed within Caltrans right-of-way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction. As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans's R/W, and any corresponding technical studies.

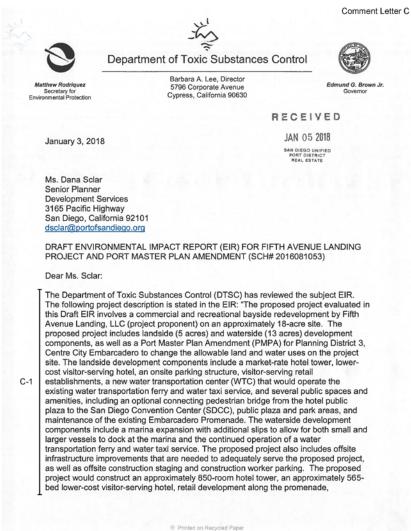
If you have any questions, please contact Kimberly Dodson, of the Caltrans Development Review Branch, at (619) 688-2510 or by e-mail sent to Kimberly.dodson@dot.ca.gov.

Sincerely, an

DAMON DAVIS, Acting Branch Chief Local Development and Intergovernmental Review Branch

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability" 1.0

6.3.4 Comment Letter C: Department of Toxic Substances Control



Response to Comment C-1

This comment is an introductory comment that summarizes the proposed project and states that the Department of Toxic Substances Control (DTSC) is providing comments on the Draft EIR.

The District appreciates DTSC's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are summarized separately (below) along with the District's individual responses.

C-2

C-4

C-5

Ms. Dana Sclar January 3, 2018 Page 2

approximately 2.1 acres of public access plaza space, approximately 213 onsite parking spaces, a connecting bridge from the hotel public access plaza to the San Diego

C-1 Convention Center, and a marina expansion. In addition, the proposed project would include the potential use of approximately 110 offsite parking spaces in the Convention Center garage and maintain the existing public in-bay water transportation system including a water ferry service."

Based on the review of the submitted document, DTSC has the following comments:

 The Environmental Impact Report (EIR) should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances. If there are any recognized environmental conditions that exist on the project area, then proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction.

2. The EIR states: "The City constructed a garbage incinerator sometime between 1906 and 1921 on land formed of trash deposits and dredged fill material, which gradually expanded the shoreline nearer to the project site. Although the City garbage incinerator was removed from the project vicinity sometime in the 1930s, an area designated by the City as a carbage disposal site. which included a ramp

C-3 and garbage chute, remained present east of the project site into the early 1940s." As the project site was used for garbage disposal, all potential contaminants should be investigated. In addition, the area was used for a garbage incinerator, the site should be investigated for polycyclic aromatic hydrocarbons (PAHs), dioxins and furans.

3. The EIR further states: "Moreover, previous soil studies and remediation reports indicate that, while portions of the project site have been cleaned up, there is still a possibility that soils contaminated with heavy metals are present on site (District 2012)." DTSC recommends investigation and cleanup, as necessary, to mitigate potential impact to human health and environment.

4. The EIR states: "As discussed in Section 4.8, Hydrology and Water Quality, past activities and current urban runoff, stormwater runoff, and sewer spills have also affected water quality in the San Diego Bay. Specifically, the Bay, Bay shoreline near Marriott Marquis San Diego Hotel and Marina (directly north of the project site), and Bay shoreline near Switzer Creek (directly south of the project site) have 303(d)-listed impairments for chlordane, PAHs, PCBs, and copper (State Water Resources Control Board 2012)." Identify whether these impairments were mitigated. Otherwise, propose the mitigation measures in the EIR.

Response to Comment C-2

This comment states that the EIR should identify the current or historic uses at the project site that could have resulted in the release of hazardous materials and waste. This comment also states that investigation, sampling, and remediation should be conducted under the oversight of the appropriate regulatory agencies if any recognized environmental conditions exist on the project site.

As discussed in Section 4.7, *Hazards and Hazardous Materials*, of the Draft EIR, there are several historic uses at and in the vicinity of the project site that involved the handling of hazardous materials and waste. Historic uses include the Campbell Industries Marine Construction and Design Company shipyard, a City of San Diego (City) garbage incinerator and disposal site, the former General Petroleum bulk fuel distribution facility, and a San Diego Gas & Electric (SDG&E) manufactured gas plant. These represent the recognized environmental conditions that exist within the project site. Section 4.7 of the Draft EIR also listed several other historic contamination areas that were identified within or in the vicinity of the project site; however, each of these cases is considered closed.

As detailed in Section 4.7 of the Draft EIR, the historical activities conducted at Campbell Shipyard involved the use of various hazardous materials that contaminated the offshore San Diego Bay sediment, soil, and groundwater. As a result, this site has been the subject of several environmental studies and cleanup and abatement orders (CAO), beginning in 1985. CAO No. 95-21, issued by the San Diego Regional Water Quality Control Board (RWQCB) on May 4, 1995, to Campbell, addressed the contaminated Bay sediments, upland soils, and groundwater at the former facility. In 2008, the District constructed an engineered cap and a habitat cap to isolate the sediments that were contaminated, in compliance with Order R9-2004-0295. Order R9-2004-0295 also required monitoring of the cap to ensure it continues to function effectively and contain the contaminants of concern so that water quality standards are not affected.

Additionally, a revised Addendum Number 3 to CAO No. 95-21 was issued on June 15, 2001, concerning the landside soil and groundwater contamination at the former shipyard. The soil and groundwater contamination resulted from previous activities at the former shipyard, as well as prior waste disposal activities associated with SDG&E and the City. Numerous investigations, sampling, and remedial actions have been

conducted in this area in accordance with the appropriate regulatory agencies' oversight. These previous studies and remediation reports indicate that, while portions of the project site have been cleaned up, there is still a possibility that soils contaminated with heavy metals are present on site.

As detailed in Section 4.7 of the Draft EIR, the proposed project would be required to implement mitigation measures to reduce potentially significant impacts associated with landside and waterside hazardous materials, including requiring proper investigation, sampling, and remedial actions overseen by the appropriate regulatory agencies to be conducted prior to construction. Specifically, mitigation measures MM-HAZ-1 through MM-HAZ-4 would be implemented to reduce potentially significant impacts associated with landside soil contamination, while mitigation measures MM-HAZ-5 through MM-HAZ-7 would address waterside sediment contamination and damage to the engineered cap. These mitigation measures require soil, groundwater, and sediment sampling, and, in the event contamination is encountered, require remediation in accordance with applicable local, state, and federal regulations and guidelines. With implementation of MM-HAZ-1 through MM-HAZ-4, potential landside impacts would be reduced to less-thansignificant levels because safeguards would be taken during landside construction to ensure upset and accident conditions do not occur, and effects in the event of an unanticipated upset condition would be minimized. While implementation of mitigation measures MM-HAZ-5 through MM-HAZ-7 would minimize potential impacts associated with waterside sediment contamination, the Draft EIR concluded that this impact would be significant and unavoidable because it is still possible that in-water construction activities for the marina expansion could be located within areas with contaminated sediment. In addition to the implementation of these mitigation measures, the RWQCB and/or other federal and state agencies have final regulatory authority to approve specific methods for in-water construction. No changes to the Final EIR are required as a result of this comment.

Response to Comment C-3

The commenter restates information from the Draft EIR regarding the historic use of the area adjacent to the project site as a garbage incinerator and disposal site. The commenter states that all potential contaminants,

including polycyclic aromatic hydrocarbons (PAHs), dioxins, and furans, should be investigated due to this historic use.

Please see response to comment C-2. The historic use of the area adjacent to the project site as a garbage incinerator and disposal site is discussed in Section 4.7, Hazards and Hazardous Materials, of the Draft EIR. The proposed project would be required to implement mitigation measures to reduce potentially significant impacts associated with landside and waterside hazardous materials. As required by mitigation measure MM-HAZ-1, a landside site contamination characterization report shall be prepared to delineate the extent and concentration of landside contamination, which would include contamination still present from the municipal burn dump. Additional soil and groundwater sampling shall be conducted if conditions detailed in the characterization report are met. Mitigation measure MM-HAZ-1 also requires testing of materials that will be disposed of during construction for all potential contaminants of concern, including CA Title 22 metals, PAHs, volatile organic compounds (VOCs), pesticides, polychlorinated biphenyls (PCBs), semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. The Testing and Profiling Plan that would be prepared under MM-HAZ-1 shall document compliance with CA Title 22 for proper identification and segregation of hazardous and solid waste as needed for acceptance at a CA Title 22-compliant offsite disposal facility. No development would occur until the area is deemed safe for construction and occupancy. No changes to the Final EIR are required as a result of this comment.

Response to Comment C-4

The commenter restates information from the Draft EIR regarding the possibility of soils contaminated with heavy metals being present on site. The comment recommends that investigation and cleanup be conducted as necessary to mitigate potential impacts on human health and the environment.

Please see response to comment C-2. As discussed in Section 4.7.0f the Draft EIR, the proposed project will be required to implement the comment's recommendation that the investigation and cleanup be conducted as necessary to mitigate potential impacts on human health and the environment. The proposed project would be required to implement mitigation measures to reduce potentially significant impacts associated with landside and waterside hazardous materials, and those mitigation measures include further investigation and cleanup wherever necessary.

As required by mitigation measure MM-HAZ-1, testing shall occur for all potential contaminants of concern, including CA Title 22 metals, PAHs, VOCs, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. Additionally, MM-HAZ-1 requires development and implementation of a Soil and Groundwater Disposal Plan, which shall describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site, and a Site Worker Health and Safety Plan to ensure compliance with Code of Federal Regulations (CFR), Title 29, Part 120, Hazardous Waste Operations and Emergency Response regulations for site workers at uncontrolled hazardous waste sites. Moreover, MM-HAZ-4 requires development and implementation of a Site-Specific Community Health and Safety Program that addresses the chemical constituents of concern for the project site. The program must include environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. With implementation of these mitigation measures, potential impacts on human health and the environment would be avoided. No changes to the Final EIR are required as a result of this comment.

Response to Comment C-5

The commenter restates information from the Draft EIR related to existing 303(d)-listed impairments for San Diego Bay for chlordane, PAHs, PCBs, and copper. The comment asks if these impairments have been mitigated or suggests that mitigation measures be proposed within the EIR to address the existing condition.

This comment addresses existing conditions, rather than potential impacts of the proposed project. The list of 303(d) impairments for the San Diego Bay shoreline near Marriot Marquis San Diego Hotel and Marina and Bay shoreline near Switzer Creek are a result of past activities and current urban runoff, stormwater runoff, and sewer spills not associated with the proposed project. As such, because these are existing conditions, the proposed project is not required to mitigate for existing 303(d)-listed impairments unless the proposed project would exacerbate the existing conditions. As detailed in Section 4.8, *Water Quality and Hydrology*, of the Draft EIR, the proposed project is required to implement mitigation measures MM-HWQ-1 through MM-HWQ-3 to reduce potential water quality impacts during construction and operation of the waterside components of the project. Specifically, these mitigation measures require C-6

C-7

C-9

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5. The EIR further states: "Stored hazardous materials are not currently present within the project site boundaries (both land and water) (Appendix H). Stored hazardous materials have been previously reported within the project site, as discussed in the next section. The Campbell Shipyard Bay Sediment Cleanup & Capping site, as well as the landside TPH-impacted soils area and the landside PAH zone, partially extend into the project site." Identify whether these contaminants were mitigated from the project area. Otherwise, propose the mitigation measures in the EIR.

- The EIR states that several agencies involved with the cleanup and abatement of soil and groundwater at several areas of the site.
 - Identify the name(s) of the regulatory agency(ies) that approved the closure of these remediation efforts and provide the specific locations of the project areas that are already remediated.
 - b. DTSC is unable to evaluate whether vapor sampling and/or potential vapor intrusion risk was adequately addressed due to lack of relevant detailed information in the EIR.
 - c. DTSC recommends soil gas sampling and vapor intrusion risk evaluation on sites with releases of volatile organic compounds (VOCs) and/or total petroleum hydrocarbon (TPH). DTSC recommends soil gas sampling after removal action to confirm no residual VOC contamination remain onsite and/or risk is acceptable based on applicable and relevant state guidelines.

7. As the soil is contaminated, excavated soil should be sampled prior to export/disposal. If the soil is contaminated, it should be disposed of properly in accordance with all applicable and relevant laws and regulations. In addition, if the project proposes to import soil to backfill the excavated areas, proper evaluation and/or sampling should be conducted to make sure that the imported soil is free of contamination.

8. If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area would cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the EIR should identify how any required investigation and/or remediation will be conducted, and

the appropriate government agency to provide regulatory oversight.

preparation and implementation of a Marina Best Management Practice Plan and copper reduction measures (MM-HWQ-1), water quality sampling for total and dissolved copper (MM-HWQ-2), and incorporation of marina design measures to promote tidal flushing (MM-HWQ-3). With implementation of these mitigation measures, potential construction- and operation-related water quality impacts of the proposed project would be reduced to less-than-significant levels, and the proposed project would not worsen the existing water quality of 303(d)-listed waterbodies. No changes to the Final EIR are required as a result of this comment.

Response to Comment C-6

The commenter restates information from the Draft EIR regarding the partial extension of the Campbell Shipyard Bay Sediment Cleanup and Capping site, landside total petroleum hydrocarbons (TPH)-impacted soils area, and landside PAH zone into the project site. The comment requests that the EIR identify whether these contaminants were mitigated in the project area, or otherwise propose mitigation measures in the EIR to address these existing contaminants.

This comment addresses existing conditions, rather than potential impacts of the proposed project. Mitigation is not required unless the proposed project would exacerbate the existing condition. As detailed in Section 4.7 of the Draft EIR, the proposed project would be required to implement mitigation measures MM-HAZ-1 through MM-HAZ-4 for potential landside hazardous materials impacts and MM-HAZ-5 through MM-HAZ-7 for potential waterside hazardous materials impacts. These mitigation measures are proposed to specifically address potentially contaminated soil, groundwater, and sediment associated with historical uses at and in the vicinity of the project site, including the Campbell Shipyard Bay Sediment Cleanup and Capping site, landside TPH-impacted soils area, and landside PAH zone. With implementation of MM-HAZ-1 through MM-HAZ-4, potential landside impacts would be reduced to less-than-significant levels because safeguards would be taken during landside construction to ensure upset and accident conditions do not occur, and effects in the event of an unanticipated upset condition would be minimized. However, while implementation of mitigation measures MM-HAZ-5 through MM-HAZ-7 would minimize potential impacts associated with waterside sediment contamination, the Draft EIR concluded that this impact would be significant and unavoidable because it is still possible that in-water construction activities for the marina expansion could be located within areas with contaminated sediment, and San Diego RWQCB and/or other

federal and state agencies have final regulatory authority to approve specific methods for in-water construction. No changes to the Final EIR are required as a result of this comment.

Response to Comment C-7

The comment restates information from the Draft EIR that several agencies were involved with the cleanup and abatement of soil and groundwater at several areas of the site and raises three separate issues, as described below.

The first issue raised by the commenter requests the name(s) of regulatory agencies that approved closure of the remediation efforts and the locations that have already been remediated. As stated in Section 4.7 of the Draft EIR, Appendix H includes the full list of sites that were identified within or near the project site, as well as their approximate geographic location. Also as stated in Section 4.7 of the Draft EIR, the site locations identified on the map are approximate because the extent of contamination and/or the exact location of sites are not always available. Onsite contamination sites that were identified during the hazardous materials database search are detailed in Table 4.7-2 of the Draft EIR. Table 4.7-2 provides a site summary and status, as well as the agency that provided regulatory oversight for each onsite contamination site. Clarifying language has been added to Table 4.7-2 of the Draft EIR to indicate that San Diego RWOCB was the agency responsible for regulatory oversight of the Campbell Shipyard Bay Sediment Cleanup and Capping site. This clarifying language is included in Chapter 5, Errata and Revisions, of the Final EIR. Please see Table 4.7-2 for the regulatory agencies responsible for oversight of the remaining onsite contamination sites identified during the hazardous materials database search.

The second issue raised in this comment indicates that DTSC is unable to evaluate whether vapor sampling and/or potential vapor intrusion risk was adequately addressed based on the information contained in the EIR. Mitigation measure MM-HAZ-1 in Section 4.7 of the Draft EIR requires the preparation of a Landside Site Contamination Characterization Report delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use, including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured gas plant waste disposal area. If data gaps are identified, MM-HAZ-1 states that additional sampling is required. Mitigation measure MM-HAZ-1 also states that the

project proponent shall enroll in the Voluntary Assistance Program with the County of San Diego Department of Environmental Health and shall submit the results of the Landside Characterization Report to Department of Environmental Health staff for regulatory concurrence of results. In addition, MM-HAZ-1 has been updated to clarify that requirements for the project proponent include a complete soil vapor analysis, which includes soil gas sampling and an indoor air quality risk assessment prior to construction. Additionally, MM-HAZ-1 has been clarified to explicitly state that if the Landside Site Contamination Characterization Report identifies residual contamination that would be disturbed by the proposed project and potentially cause harm to human health or the environment, additional remedial actions shall be taken, in accordance with Department of Environmental Health oversight. These remedial actions will be coordinated with the Department of Environmental Health and will include the removal of contaminated soils that pose a vapor intrusion risk and/or the incorporation of project design features that prevent vapor intrusion into the proposed new buildings and structures. The clarifications to MM-HAZ-1 do not constitute significant new information under Section 15088.5 of the State CEQA Guidelines, and therefore do not require recirculation of the Draft EIR. This clarifying language is included in Chapter 5, Errata and Revisions, of the Final EIR and is reflected in the project's Mitigation Monitoring and Reporting Program (MMRP).

The last issue raised by the commenter is a recommendation to conduct soil gas sampling and vapor intrusion risk evaluation on sites with releases of VOCs and/or TPH. The comment recommends soil gas sampling after removal action to confirm that no residual VOC contamination remains or that it is below applicable and relevant state guidelines. As mentioned above, MM-HAZ-1 has been clarified to indicate that a soil vapor analysis and an indoor air quality risk assessment are required, as well as the appropriate remedial actions based on coordination with the Department of Environmental Health. This clarifying language is included in Chapter 5, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Response to Comment C-8

The comment states that excavated soil should be sampled prior to export/disposal and, if contaminated, be properly disposed of in accordance with all applicable laws and regulations. The commenter also

states that import soil for the backfilling of excavated areas should be properly evaluated and/or sampled to ensure it is free of contamination.

Please see response to comment C-2. The proposed project would be required to implement mitigation measures to reduce potentially significant impacts associated with hazardous materials. As detailed in Section 4.7 of the Draft EIR, MM-HAZ-1 requires preparation and implementation of a Soil and Groundwater Management Plan. In accordance with MM-HAZ-1, the Soil and Groundwater Management Plan includes a Landside Site Contamination Characterization Report, a Soil and Groundwater Testing and Profiling Plan, a Soil and Groundwater Disposal Plan, and a Site Worker Health and Safety Plan. As part of the Soil and Groundwater Testing and Profiling Plan, testing of materials that will be disposed of during construction will occur for all potential contaminants of concern, including CA Title 22 metals, PAHs, VOCs, pesticides, PCBs, semi-volatile organic compounds, hydrocarbons, or any other potential contaminants. Additionally, the Soil and Groundwater Disposal Plan will describe the process for excavation, stockpiling, dewatering, treating, and loading and hauling of soil and groundwater from the site. This plan shall be prepared in accordance with the Testing and Profiling Plan (i.e., in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27), and current industry best practices for the prevention of cross contamination, spills, or releases, such as segregation into separate piles for waste profile analysis based on organic vapor, and visual and odor monitoring. In the event contaminated soil is encountered, it would be removed and disposed of in accordance with CA Title 22 and DOT Title 40 CFR Part 263, CAC Title 27 and under the oversight of the County of San Diego Department of Environmental Health, which serves as the local regulatory agency responsible for oversight of hazardous materials issues in San Diego County. MM-HAZ-1 has been clarified to further explain the process for sampling and properly disposing of excavated soil, as well as testing of imported soil. The clarifications to MM-HAZ-1 do not constitute significant new information under Section 15088.5 of the State CEQA Guidelines, and therefore do not require recirculation of the Draft EIR. This clarifying language is included in Chapter 5, *Errata and Revisions*, of the Final EIR and is reflected in the project's MMRP.

Response to Comment C-9

The comment states that construction/demolition would cease and appropriate health and safety procedures should be implemented if soil and/or groundwater contamination is suspected during

C-10

Chapter 6. Comments Received and District Responses

Ms. Dana Sclar January 3, 2018 Page 4

If you have any questions regarding this letter, please contact me at (714) 484-5476 or email at <u>Johnson.Abraham@dtsc.ca.gov</u>.

Sincerely

Voinson P. Abraham Project Manager Brownfields Restoration and School Evaluation Branch Brownfields and Environmental Restoration Program – Cypress

ed/sh/ja

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> Mr. Dave Kereazis (via e-mail) Office of Planning & Environmental Analysis Department of Toxic Substances Control Dave.Kereazis@dtsc.ca.gov

Mr. Shahir Haddad, Chief (via e-mail) Brownfields Restoration and School Evaluation Branch Brownfields and Environmental Restoration Program - Cypress Shahir.Haddad@dtsc.ca.gov

CEQA# 2016081053

construction/demolition of the proposed project. The comment also states that the EIR should identify how any required investigation and/or remediation will be conducted if it is determined that contaminated soil and/or groundwater exists, as well as the appropriate government agency to provide regulatory oversight.

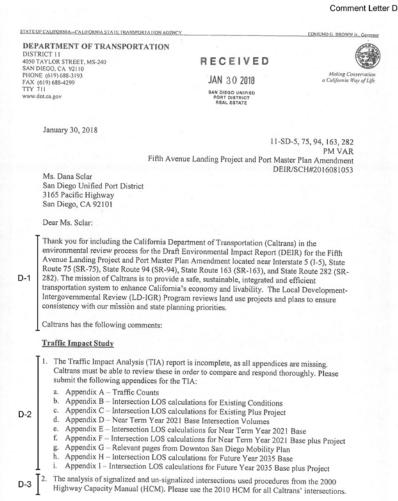
Please see responses to comments C-2, C-4, and C-8 for a discussion of the soil and groundwater sampling and disposal procedures required under mitigation measure MM-HAZ-1. In addition, MM-HAZ-1 also requires preparation and implementation of a Site Worker Health and Safety Plan to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z. 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the oversight of a California State Certified Industrial Hygienist. Moreover, MM-HAZ-4 requires the development and implementation of a Site-Specific Community Health and Safety Program that addresses the chemical constituents of concern for the project site. The guidelines of the Site-Specific Community Health and Safety Program shall be in accordance with the County of San Diego Department of Environmental Health's Site Assessment and Mitigation Manual (2009) and the U.S. Environmental Protection Agency's SW-846 Manual (1986). The Site-Specific Community Health and Safety Program shall include detailed plans on environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. No changes to the Final EIR are required as a result of this comment.

Response to Comment C-10

This comment concludes the comment letter and provides a contact name and information.

The District appreciates DTSC's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

6.3.5 Comment Letter D: California Department of Transportation, District 11



"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Response to Comment D-1

This comment is an introductory comment indicating that the California Department of Transportation (Caltrans) has reviewed the Draft EIR. The comment also summarizes the mission of Caltrans and the role of the Local Development-Intergovernmental Review Program. The comment further indicates that Caltrans' comments are to follow.

The District appreciates Caltrans' interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are listed separately below along with the District's individual responses.

Response to Comment D-2

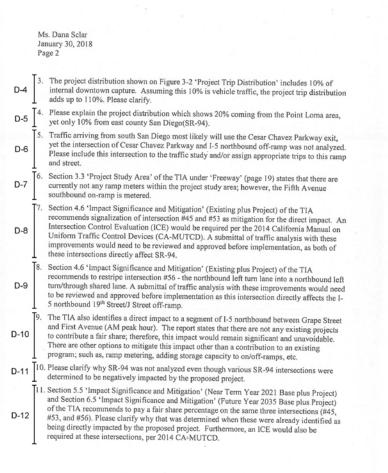
The commenter suggests that the Traffic Impact Analysis (TIA) report is incomplete because all of the associated appendices are missing. The comment states that Caltrans must review the TIA appendices and requests for them to be submitted.

As indicated in Appendix K-1, Transportation Impact Analysis, of the Draft EIR, the TIA appendices were available for review during the public review period at the District's Office of the District Clerk. Furthermore, in response to the comment, the District has provided a courtesy copy of the TIA appendices to Caltrans. The Draft EIR was complete and no changes to the Final EIR are required as a result of this comment.

Response to Comment D-3

The comment states that the analysis of signalized and unsignalized intersections used procedures from the 2000 Highway Capacity Manual (HCM), and requests that the 2010 HCM be used for all Caltrans intersections instead.

The original Downtown Community Plan EIR (March 2006) used the 2000 HCM to analyze and determine traffic impacts for the downtown area, including Caltrans intersections in the downtown area. Based on the 2000 HCM, several intersections within the downtown area were determined to operate at level of service (LOS) F. Mitigation measures were adopted, which are based on the 2000 HCM. Findings were made for each impact to identify where mitigation was feasible and where additional mitigation was not feasible. A Statement of Overriding Considerations was adopted



"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and Ivubility" that indicated that the benefits of the Downtown Community Plan outweighed the impacts, including significant traffic impacts. In 2016, the Downtown Community Plan was amended with the updated 2016 Mobility Plan. To maintain consistency in the analysis and mitigation prescribed, the Mobility Plan used the 2000 HCM as well. Therefore, to maintain consistency with the analysis and mitigation measures identified in the latest downtown-wide mobility study, the transportation analysis for the proposed project relies on the MMRP and Findings when identifying transportation improvements that have been approved. Consequently, it is important to maintain the same methodologies between the two documents. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-4

The comment suggests that the project trip distribution adds up to 110% based on the project distribution shown on Figure 3-2 of the TIA. The comment asks for clarification.

There was a typographical error on the figure; the project trip distribution adds up to 100%. Figure 4.12-2 of the Draft EIR and Figure 3-2 of the TIA (Appendix K-1 of the Draft EIR) have been revised to indicate that the project trip distribution adds up to 100%. This revision does not result in any changes to the analysis or conclusions in the TIA or the EIR. These changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment D-5

The comment asks for an explanation of why the project distribution shows 20% coming from the Point Loma area but only 10% from the east (i.e., State Route [SR-] 94).

The proposed project is a commercial and recreational bayside redevelopment, including a market-rate hotel tower and lower-cost visitor-serving hotel. As such, visitors to the project site would be primarily out-of-town visitors. Consequently, 20% of the hotel traffic is assumed to use Harbor Drive to access the San Diego International Airport, from which most hotel guests are expected to arrive. The 20% distribution of hotel to airport traffic assumption maintains consistency with the assumptions used in several other traffic studies prepared for the District and within downtown San Diego. The hotel is not anticipated to draw many guests from the east, and the 10% figure for traffic coming from SR-94 is anticipated to be associated with employees. In addition, it

is anticipated that 45% of visitors would be drawn from the north, 15% from the south, and the remaining 10% from the downtown area. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-6

The comment suggests that traffic arriving from south San Diego would likely use the Cesar Chavez Parkway exit, but that the intersection of Cesar Chavez Parkway and the Interstate (I-) 5 northbound (NB) off-ramp was not analyzed. The comment requests that this intersection be included in the TIA and/or that appropriate trips be assigned to this ramp and street.

Due to the presence of several I-5 NB off-ramps located within the downtown area, it is not likely that a significant percentage of the project traffic would use the I-5 NB off-ramp at Cesar Chavez Parkway. When traffic is at peak congestion, off-ramps farther south, such as the I-5 NB off-ramps located at 28th Street/National Avenue and at Harbor Drive in National City, are more efficient than Cesar Chavez Parkway. Furthermore, under Future Year 2035 Conditions, the Park Boulevard to Harbor Drive connection will be in place, likely making the J Street off-ramp the most direct connection when congestion is not experienced. The project is estimated to generate 405 inbound trips during the PM peak hour (highest peak). Over 12% of the project-related traffic (405 x 12% = 50 trips) would need to utilize the I-5 NB/Cesar Chavez Parkway off-ramp to trigger the City's requirement (50 peak hour trips—as per the City of San Diego Traffic Impact Study Manual, July 1998) for this ramp to be analyzed. With only 15% (see revised Figure 4.12-2 in Chapter 5, Errata and Revisions) of the total project traffic anticipated to come to/from the south utilizing I-5, it is not anticipated that 12% (the majority of the traffic coming from this direction) would utilize the I-5 NB/Cesar Chavez Parkway off-ramp. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-7

The comment indicates that the TIA claims that there are no ramp meters within the project study area, but states that the Fifth Avenue southbound (SB) on-ramp is metered.

As shown for intersection #30, Fifth Avenue & Cedar Street, in Figure 3-3B of the TIA (Appendix K-1 of the Draft EIR), the proposed project is anticipated to contribute 10 AM trips and 14 PM trips to the I-5 SB/Fifth

Avenue on-ramp. As per *the City of San Diego Traffic Impact Study Manual* (July 1998), this is well below the City's threshold of 50 peak hour trips required to analyze the ramp. Therefore, this ramp was not included in the project study area. No changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-8

The comment restates the recommendation from the TIA to signalize intersections #45 and #53 as mitigation. The comment states that an Intersection Control Evaluation (ICE) would be required per the 2014 *California Manual on Uniform Traffic Control Devices*. The comment states that a submittal of the traffic analysis with these improvements would need to be reviewed and approved before implementation because they would directly affect SR-94.

Please note that intersection #45 (15th Street/F Street) and intersection #53 (17th Street/G Street) are within the City of San Diego's jurisdiction. The City does not require an ICE for intersection control changes. As such, an ICE is not required for these intersections. Also, please note that mitigation measures for these intersections, MM-TRA-2 and MM-TRA-3, identified in Section 4.12, *Transportation, Circulation, and Parking,* of the Draft EIR, are consistent with the recommendations in the Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016). As identified in Section 4.12 of the Draft EIR, because the timing and implementation of the necessary improvements at these intersections are within the exclusive jurisdiction of the City and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring; thus, the impacts would remain significant and unavoidable. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-9

The comment indicates that the TIA requires restriping intersection #56 as mitigation. The comment states that a submittal of the traffic analysis with these improvements would need to be reviewed and approved by Caltrans before implementation because they would directly affect the I-5 NB 19th Street/J Street off-ramp.

Please note that intersection #56 (19th Street/J Street) is located within the City of San Diego's jurisdiction, not Caltrans'. However, this improvement, as identified as MM-TRA-4 in Section 4.12, *Transportation*,

Circulation, and Parking, of the Draft EIR, was included as feasible mitigation in the adopted Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016) under Future Conditions of the Preferred Alternative. Mitigation measure MM-TRA-4 has been clarified to state that the restriping shall be coordinated with Caltrans. The changes are included in Chapter 5, *Errata and Revisions,* of the Final EIR.

Response to Comment D-10

The comment indicates that the TIA identifies a direct impact on the freeway segment of I-5 NB between Grape Street and First Avenue (AM peak hour). The comment also indicates that the TIA did not identify any existing projects toward which the proposed project would be able to contribute a fair share payment and that the impact would remain significant and unavoidable. The comment states that there are other mitigation options, such as ramp metering or adding storage capacity to on-/off-ramps.

As identified in Section 4.12. Transportation, Circulation, and Parking, of the Draft EIR, mitigation measure MM-TRA-5 (which requires compliance with San Diego Forward: The Regional Plan) I-5 operational improvements were identified for the impact along NB I-5 between Grape Street and First Avenue (Impact-TRA-4). However, Impact-TRA-4 was determined to remain significant and unavoidable because the timing and installation of the recommended improvements are within the exclusive jurisdiction of Caltrans and not the District; therefore, the District cannot state with certainty that the improvements would be completed prior to an impact occurring. In addition, the proposed series of improvements along I-5 between I-15 and I-8 in compliance with San Diego Forward: The Regional Plan are not scheduled until Year 2050 and are subject to budget availability and the discretion of Caltrans. As with the project-related impacts identified within the downtown area, the TIA identified cumulative projects or improvements that have been planned or adopted that can make a fair-share contribution to help potentially alleviate some impacts once those plans/projects are implemented. However, as with the impacts on I-5 NB, these impacts were also identified as significant and unavoidable, as the District cannot ensure the timing of these improvements.

Additionally, the comment noted that additional measures such as ramp metering or adding ramp storage capacity to on-/off-ramps may also help to alleviate the significant impact. While these measures will help to store

and organize traffic entering the freeway facility, they will not reduce the overall vehicular demand or increase the capacity of the facility. Because the City of San Diego's Significant Impact Criteria for mainline freeway facilities is based on the increase in volume-to-capacity ratio of the segment, these measures will not reduce Impact-TRA-4. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-11

The comment requests clarification as to why SR-94 was not analyzed even though various SR-94 intersections were determined to be negatively affected by the proposed project.

As noted in Figure 3-3B of the TIA (intersections #47 and #48), 30 AM peak hour trips and 41 PM peak hour trips are anticipated to utilize SR-94 westbound, while 20 AM peak hour trips and 27 PM peak hour trips are anticipated to utilize SR-94 eastbound. As per *the City of San Diego Traffic Impact Study Manual* (July 1998), this is below the City's threshold of 50 peak hour trips to require the analysis of freeway facilities; therefore, these intersections were not included in the analysis for the TIA. Consequently, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-12

The comment indicates that the TIA requires the project proponent to pay a fair-share percentage on the same three intersections (#45, #53, and #56) and requests clarification as to why fair-share payments are needed when these three intersections were already identified as being directly affected by the proposed project. The comment further states that an ICE would also be required at these intersections.

Please note that intersections #45 (15th Street/F Street), #53 (17th Street/G Street), and #56 (19th Street/J Street) are located within the City of San Diego's jurisdiction. The City does not require an ICE for intersection control changes.

Moreover, the mitigation measures for these intersections (MM-TRA-2, MM-TRA-3, and MM-TRA-4, identified in Section 4.12, *Transportation, Circulation, and Parking,* of the Draft EIR) are consistent with the recommendations in the Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016). As identified in Section 4.12 of the Draft

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D-13
 12. Section 5.5 'Impact Significance and Mitigation' (Near Term Year 2021 Base plus Project) of the TIA identified intersection #27 as being indirectly impacted, yet no feasible mitigation is identified to offset the negative impact; however, it states that the extension of Park Boulevard to Harbor Drive would alleviate some of the impact. Is the extension of Park

Boulevard to Harbor Drive funded and/or scheduled?

 13. Section 5.5 'Impact Significance and Mitigation' (Near Term Year 2021 Base plus Project) of the TIA identified intersections #44 and #48 as being indirectly impacted. An analysis of the approach improvementation work that the approach intersection of the approach.

the proposed improvement would need to be reviewed and approved before implementation. Please clarify why a fair share of 2-4% was recommended.

14. Section 5.5 'Impact Significance and Mitigation' (Near Term Year 2021 Base plus Project) of the TIA identified intersection #47 as being indirectly impacted without feasible

D-15 of the 11A identified intersection #47 as being indirectly impacted without feasible mitigation. Since the intersection directly impacts SR-94, mitigation solutions need to be provided.

15. Section 5.5 'Impact Significance and Mitigation' (Near Term Year 2021 Base plus Project) of the TIA identified intersection #58 and #59 as being indirectly impacted with future signalization of the intersections as appropriate mitigation. Further analysis is required to determine if a signal at intersection #58 is warranted and/or if the storage on the ramp is sufficient to prevent an impact I-5 mainline operations. Therefore, Caltrans cannot assure that the signalization of intersections #58 and #59 would be approved.

The TIA also states that 6-22% of fair share would be provided for the improvements; however, it is not clear where the remaining percentage would be coming from. If it is evaluated and deemed feasible for the proposed intersections, including #58 and #59, to be signalized and other improvements to occur, the Port should consider creating a reimbursement process where the developer would burden the full cost of improvements and be mechanism be in place to be reimbursed by the Port as future development occurs.

An ICE would be also be required at intersections #58 and #59 per Policy Directive 13-02.

D-17 16. The segment of I-5 northbound between Grape Street and First Avenue has been identified to be indirectly impacted by the project. Please clarify why 34% of the total cost of improvements were found to be associated with the project, yet no mitigation is proposed.

D-18 [17. Section 6.5 'Impact Significance and Mitigation' (Future Year 2035 Base plus Project) of the TIA identified two segments along I-5 to be indirectly impacted by the project. A list of fair share calculations is shown without specific mitigation improvements; therefore, please propose mitigation solutions to address the impacts.

18. On page S-102 it states " Prior to the issuance of occupancy permits, Caltrans shall install the following 1-5 operational improvements for the segment of northbound 1-5 between Grape Street and First Avenue in compliance with San Diago Foreward, the Particul Harmonic Prior Foreward.

Street and First Avenue in compliance with San Diego Forward: the Regional Plan prepared by SANDAG (SANDAG 2015)." However, on page 4.12-2 of the TIA the comment references that the operational improvements from the SANDAG RTP are not scheduled

> "Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

EIR, each of these mitigation measures requires the project proponent to either pay for or directly implement the necessary improvement.

Because these improvements are located within the City's jurisdiction and not the District's, implementation of the mitigation measures would require approval by the City. Therefore, the City has the discretion to either require a payment or require the installation of the improvement. As identified in Section 4.12 of the Draft EIR, because the timing and implementation of the necessary improvements at these intersections are within the exclusive jurisdiction of the City and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring: therefore, the impacts would remain significant and unavoidable. To be conservative, because the direct impacts were identified as significant and unavoidable at these locations, no mitigation measures or improvements were assumed under the cumulative conditions. Therefore, the impacts were also identified as cumulative impacts because they would occur under cumulative conditions as well if the improvements were not made by the City or the project applicant.

Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-13

The comment indicates that the TIA identified a significant indirect impact on intersection #27 and determined that there would be no feasible mitigation to avoid this significant impact. The comment notes that the TIA indicates that the extension of Park Boulevard to Harbor Drive would alleviate the impact to some degree. The comment asks if the extension of Park Boulevard to Harbor Drive is funded and/or scheduled.

The extension of Park Boulevard is a funded City of San Diego Capital Improvement Plan Project (S15045 – Park Boulevard At-Grade Crossing). The extension was approved by the California Public Utilities Commission in October 2017 and is scheduled to begin construction soon. Because the project is funded and was included in the Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016), the extension was assumed under Future Year 2035 conditions.

In addition, the commenter appears to confuse an indirect impact with a cumulative impact. As identified in Chapter 5, *Cumulative Impacts,* of the Draft EIR, this intersection was identified as failing in the Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016) with no

feasible mitigation identified to improve operations. In the Downtown Mobility Plan Supplemental EIR, the City identified the following improvements at this intersection that would mitigate the impact: "First Avenue & Beech Street – Convert on-street parking to a travel lane on First Avenue between Cedar Street and Ash Street during the PM peak hour which would require on-street parking removal. Construct an additional eastbound left-turn lane at the Beech Street approach, which would require street widening." The Downtown Mobility Plan Supplemental EIR (adopted 2016) found these improvements to be infeasible due to the required roadway widening. Therefore, due to the uncertainty of the feasibility of these improvements, the impact was determined to be significant and unavoidable. The City of San Diego adopted a Statement of Overriding Considerations for the significant and unavoidable impacts. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-14

The comment indicates that the TIA identified a significant indirect impact on intersections #44 and #48. The comment states that an analysis of the proposed improvement would need to be reviewed and approved by Caltrans before implementation. The comment also requests clarification of why a fair-share contribution between 2 and 4% was recommended.

The commenter appears to confuse an indirect impact with a cumulative impact. As identified in Chapter 5, *Cumulative Impacts*, of the Draft EIR, the proposed improvements identified in mitigation measures MM-C-TRA-3 and MM-C-TRA-5 are within the City's jurisdiction, not within Caltrans jurisdiction, and would require the City's review and approval prior to implementation. Because the impacts on these intersections are cumulative, a fair-share payment is appropriate. The fair-share contribution at the intersections was derived by dividing the project-related traffic at the intersection by the total growth in traffic at the intersection (AM+PM Project Trips)/(AM+PM Existing Traffic – AM+PM Future Traffic). No changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-15

The comment indicates that the TIA identified a significant indirect impact on intersection #47 (16th Street and F Street) and did not identify any

feasible mitigation. The comment states that because the intersection directly affects SR-94, mitigation should be provided.

The commenter appears to confuse an indirect impact with a cumulative impact. As identified in Chapter 5, *Cumulative Impacts*, of the Draft EIR, this intersection was identified as failing in the Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016) with the following mitigation measure identified as infeasible: "16th Street & F Street – Construct an exclusive northbound through lane at the 16th Street approach which would require street widening." Therefore, the Downtown Mobility Plan Traffic Impact Study and Supplemental EIR (2016) identified the future impacts on this intersection as being significant and unavoidable due to the required roadway widening Consequently, due to the uncertainty of the feasibility of these improvements, the impact was determined to be significant and unavoidable. To maintain consistency with the vision of the Downtown Community Plan (amended 2016), no project-related improvements were recommended at this intersection and Impact-C-TRA-4 for the 16th Street and F Street intersection was significant and unavoidable. In addition, this intersection is outside of the District's jurisdiction; therefore, the District has no authority to implement any mitigation measures or other improvements at the intersection. As such, the project's incremental contribution to this cumulatively significant intersection impact was identified in the Draft EIR as being cumulatively considerable. Therefore, no changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-16

The comment raises three issues related to intersections #58 (Logan Avenue and I-5 SB off-ramp) and #59 (Logan Avenue and I-5 SB on-ramp).

(1) The comment claims that the TIA identified indirect impacts on intersections #58 and #59 with future signalization as mitigation identified in the TIA. The comment states that further analysis is required to determine if a signal is warranted at intersection #58 and/or if the storage on the ramp is sufficient to prevent an impact on I-5 mainline operations. The comment further states that Caltrans cannot ensure that signalization of these intersections would be approved.

The commenter appears to confuse an indirect impact with a cumulative impact. As identified in Chapter 5, *Cumulative Impacts*, of the Draft EIR, impacts on intersections #58 and #59 were identified as cumulative

impacts Impact-C-TRA-4 and Impact-C-TRA-5. As noted in the TIA and Draft EIR, the impacts on intersections #58 (Logan Avenue/I-5 SB offramp) and #59 (Logan Avenue/I-5 SB on-ramp) would be reduced to a less-than-significant level with the signalization of the intersections. As the impacts are identified in the Draft EIR as cumulative impacts and not direct impacts of the proposed project, the project proponent is required to pay a fair-share contribution to the improvement. The payment of a fair-share contribution is consistent with the recommendations of the Downtown Community Plan EIR. As noted in the TIA and response to comment D-13, these impacts will become less than significant with the extension of Park Boulevard to Harbor Drive, as shown under Future Year 2035 conditions. However, because these intersections are controlled by Caltrans and the District does not have jurisdiction to ensure that improvements are completed, it cannot be certain that the mitigation would be implemented when needed or at all, and, therefore, impacts would remain significant and unavoidable.

(2) The comment indicates that the TIA identifies a range of fair-share improvement contributions between 6 and 22%, but states that it is unclear where the remaining percentage would be coming from. The comment states that the District should consider creating a reimbursement process if the proposed signalization and other improvements are evaluated and deemed feasible. The comment suggests that the reimbursement process should require the developer to shoulder the full cost of the improvements and that a mechanism should be in place so the District could reimburse the developer as future development occurs.

Because the impacts on intersections #58 (Logan Avenue and I-5 SB offramp) and #59 (Logan Avenue and I-5 SB on-ramp) are cumulative (Impact-C-TRA-4), the proposed project would only be responsible for a fair share of the mitigation cost (i.e., 22% for intersection #58 and 6% for intersection #59). The proposed project is not responsible for the remaining costs, their source, or their collection. The payment of a fairshare contribution is consistent with the recommendations of the Downtown Community Plan EIR. Mitigation measures MM-C-TRA-1 and MM-C-TRA-2 have been clarified to state that the project proponent shall be required to enter into a Traffic Mitigation Agreement with Caltrans and shall provide proof of this agreement to the District prior to issuance of occupancy permits. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR. In addition, there are other non-District projects, such as the continued buildout of the Downtown Community

Plan (amended 2016) area, that contribute to the need for the improvement. A list of all of the projects within the Downtown Community Plan that were included in the analysis of the Draft EIR and TIA is provided in Table 5-2 of Chapter 5, *Cumulative Impacts*, of the Draft EIR.

Specific mitigation measures designed to reduce cumulative impacts on the freeway require Caltrans to provide oversight and implementation of the physical improvements. Therefore, the District is only able to require a fair-share payment by the project proponent that is proportional to the proposed project's impacts on freeway facilities within Caltrans' jurisdiction.

(3) The comment states that an ICE would be required at intersections #58 and #59 per Policy Directive 13-02.

As noted in the response to comment D-13 and in the Draft EIR, these impacts become less than significant with the extension of Park Boulevard to Harbor Drive, as shown under Future Year 2035 conditions. If Caltrans determines that the signalization is necessary, as required by mitigation measures MM-C-TRA-1 and MM-C-TRA-2, the project proponent is required to pay a fair-share contribution toward the improvement. However, implementation of the improvement falls within the jurisdiction of Caltrans, and the installation of any signalization must be approved by Caltrans, which will require any necessary analysis, which may include an ICE as noted in this comment.

No changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-17

The comment indicates that the TIA identifies an indirect impact on the freeway segment of I-5 NB between Grape Street and First Avenue. The comment requests clarification as to why 34% of the total cost of the improvements was determined to be associated with the project, but no mitigation is proposed.

The commenter appears to confuse an indirect impact with a cumulative impact. As discussed in Chapter 5, *Cumulative Impacts*, of the Draft EIR, mitigation measure MM-TRA-5 was identified, which would reduce the project's incremental contribution to this cumulatively significant impact to a less-than-cumulatively considerable level. Mitigation measure MM-TRA-5 requires Caltrans to install I-5 operational improvements for the segment of NB I-5 between Grape Street and First Avenue, in compliance with *San Diego Forward: The Regional Plan.* The TIA identifies the fair-

share contribution that the proposed project would be required to contribute toward the plan for the freeway facility improvements to be constructed. However, as identified in Chapter 5 of the Draft EIR, San *Diego Forward: The Regional Plan* includes a series of operational improvements along I-5 between I-15 and I-8, which would encompass the segments of NB and SB I-5 that would be affected by the proposed project. However, these improvements are not scheduled until Year 2050. These improvements are subject to budget availability and coordination with Caltrans. At present, there is no program in place into which the project proponent could pay its fair share toward the cost of such improvements. However, mitigation measure MM-TRA-5 has been clarified to state that the project proponent shall be required to enter into a Traffic Mitigation Agreement with Caltrans. The changes are included in Chapter 5, Errata and Revisions, of the Final EIR. Because the timing and installation of the recommended improvements are within the exclusive jurisdiction of Caltrans and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. As such, the impacts on freeway segments along NB and SB I-5 under near-term and future year conditions (Impact-C-TRA-6 and Impact-C-TRA-10) would remain significant and unavoidable.

Response to Comment D-18

The comment indicates that the TIA identified two segments along I-5 as being indirectly affected by the project. The comment states that a list of fair-share calculations is provided without specific mitigation improvements, and requests that mitigation solutions be proposed to address the impacts.

Please see response to comment D-17 above, which discusses the I-5 improvements proposed as mitigation in the Draft EIR. No changes to the TIA or the Final EIR are required as a result of this comment.

Response to Comment D-19

The comment restates information from the Draft EIR regarding the implementation of operational improvements to I-5 prior to the issuance of occupancy permits, as required by mitigation. The comment indicates that the TIA notes that the operational improvements from *San Diego Forward: The Regional Plan* are not scheduled to occur until Year 2050 and that no fair share fund is established at this time. The comment suggests

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D-19 until Year 2050 and "no 'fair-share' fund established at this time." The Port should also set a reimbursement process for I-5 operational improvements.

Complete Streets and Mobility Network

Caltrans views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the transportation system. Caltrans supports improved transit accommodation through the provision of Park and Ride facilities, improved bicycle and

D-20 pedestrian access and safety improvements, signal prioritization for transit, bus on shoulders, ramp improvements, or other enhancements that promotes a complete and integrated transportation system. Early coordination with Caltrans, in locations that may affect both Caltrans and the Port of San Diego, is encouraged.

To reduce greenhouse gas emissions and achieve California's Climate Change target, Caltrans is implementing Complete Streets and Climate Change policies into State Highway Operations and Protection Program (SHOPP) projects to meet multi-modal mobility needs. Caltrans looks forward to working with the Port of San Diego to evaluate potential Complete Streets projects.

Land Use and Smart Growth

Caltrans recognizes there is a strong link between transportation and land use. Development can have a significant impact on traffic and congestion on State transportation facilities. In particular, the pattern of land use can affect both local vehicle miles traveled and the number of

D-21 trips. Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation system integrated through applicable "smart growth" type land use planning and policies.

The Port of San Diego should continue to coordinate with Caltrans to implement necessary improvements at intersections and interchanges, as well as coordinate with Caltrans as development proceeds and funds become available to ensure that the capacity of on-/off-ramps is adequate.

Traffic Control Plan/Hauling

Caltrans has discretionary authority with respect to highways under its jurisdiction and may, upon application and if good cause appears, issue a special permit to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. The Caltrans Transportation Permits Issuance Branch is responsible for the issuance of these special transportation permits for oversize/overweight vehicles on the State Highway System.

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that the District should set up a reimbursement process for I-5 operational improvements.

Please see the responses to D-16 and D-17. Section 4.12, *Transportation, Circulation, and Parking* of the Draft EIR identifies a mitigation measure (MM-TRA-5) that would reduce the impact to a less-than-significant level. However, as discussed in Section 4.12, *Transportation, Circulation, and Parking,* and discussed above under response to comment D-17 in more detail, the impact would remain significant and unavoidable. Mitigation measure MM-TRA-5 has been clarified to state that the project proponent shall be required to enter into a Traffic Mitigation Agreement with Caltrans. The changes are included in Chapter 5, *Errata and Revisions,* of the Final EIR.

Response to Comment D-20

The comment states Caltrans' support for opportunities to improve safety, access, and mobility of all travelers in California and improved transit accommodation through enhancements that promote a complete and integrated transportation system. The comment also encourages early coordination with Caltrans in locations that may affect both Caltrans and the District. The comment states that Caltrans is implementing Complete Streets and Climate Change policies into State Highway Operations and Protection Program projects to reduce GHG emissions, achieve California's Climate Change targets, and meet multi-modal mobility needs. The comment further states that Caltrans is looking forward to working with the District to evaluate potential Complete Streets projects.

The District appreciates the information regarding the Complete Streets and Climate Change policies and looks forward to working together with Caltrans to identify any potential opportunities within the District's jurisdiction. This comment does not raise any issues requiring a response pursuant to CEQA.

Response to Comment D-21

The comment states that Caltrans recognizes the link between transportation and land use, and that Caltrans supports collaboration with local agencies to work toward a safe, functional, interconnected, multimodal transportation system integrated through applicable smart growth-type land use planning and policies. The comment also states that the District should continue to coordinate with Caltrans to implement necessary improvements to intersections and interchanges, and also Ms. Dana Sclar January 30, 2018 Page 5

Additional information is provided online at: http://www.dot.ca.gov/trafficops/permits/index.html

A Traffic Control Plan is to be submitted to Caltrans District 11, including the interchanges at 1-D-22 5/Logan Avenue, at least 30 days prior to the start of any construction. Traffic shall not be cont. unreasonably delayed. The plan shall also outline suggested detours to use during closures, including routes and signage.

Potential impacts to the highway facilities (I-5) and traveling public from the detour, demolition and other construction activities should be discussed and addressed before work begins.

Mitigation

Caltrans endeavors that any direct and cumulative impacts to the State Highway System be eliminated or reduced to a level of insignificance pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) standards.

Caltrans recommends consideration of "fair share" funds towards future improvements associated with I-5 corridor. Since the Project's cumulative impact is considered significant, feasible mitigation measures to State facilities should be identified in the TIS. Impacts that are significant and unavoidable need to have an alternative mitigation identified in the DEIR TIS. Recommended feasible mitigation measures include "fair share" contribution towards ramp

D-23 metering and adding storage capacity to on-ramps. Mitigation identified in the traffic study, subsequent environmental documents, and mitigation monitoring reports, should be coordinated with Caltrans to identify and implement the appropriate mitigation. This includes the actual implementation and collection of any "fair share" monies, as well as the appropriate timing of the mitigation. Mitigation improvements should be compatible with Caltrans concepts.

Mitigation measures for proposed intersection modifications are subject to the Caltrans ICE policy (Traffic Operation Policy Directive 13-02). Alternative intersection design(s) will need to be considered in accordance with the ICE policy. Please provide ICE analysis to Caltrans District 11 for review and approval. Please refer to the policy for more information and requirements (<u>http://www.dot.ca.gov/trafficops/ice.html</u>).

Mitigation conditioned as part of a local agency's development approval for improvements to State facilities can be implemented either through a Cooperative Agreement between Caltrans and the lead agency, or by the project proponent entering into an agreement directly with Caltrans for the mitigation. When that occurs, Caltrans will negotiate and execute a Traffic Mitigation Agreement.

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coordinate with Caltrans as development proceeds and funds become available to ensure that the capacity of on- and off-ramps is adequate.

The District appreciates Caltrans' interest in the proposed project. The District looks forward to continuing its coordination with Caltrans on District projects that may affect Caltrans facilities. This comment does not raise any issues requiring a response pursuant to CEQA.

Response to Comment D-22

The comment states that Caltrans has discretionary authority with respect to highways under its jurisdiction, summarizes the criteria under which a special permit may be issued, and identifies the Caltrans Transportation Permits Issuance Branch as the ones responsible for issuance of these special transportation permits. The comment also provides a link for more information on special permits. The comment further states that a Traffic Control Plan should be submitted to Caltrans District 11, including the interchanges at I-5/Logan Avenue, prior to construction and identifies issues that should be discussed in the plan.

As identified in Chapter 5. *Cumulative Impacts*, the impacts at the intersections of I-5/Logan Avenue on- and off-ramps (Impact-C-TRA-4 and Impact-C-TRA-5) are cumulative operational impacts and not construction impacts. Therefore, a Traffic Control Plan is not required for these intersections. However, as identified in Section 4.12, Transportation, *Circulation, and Parking*, of the Draft EIR, mitigation measure MM-TRA-1 requires the project proponent to provide a Transportation Demand Management (TDM) Plan prior to commencing any construction or demolition activities. Mitigation measure MM-TRA-1 has been revised to include Caltrans as a reviewing agency and identifies that prior to construction the project proponent shall prepare a Traffic Control Plan in accordance with Caltrans policies for impacts on the I-5 SB onramp/Boston Avenue intersection during construction of the proposed project. These changes are included in Chapter 5, Errata and Revisions, of the Final EIR. As this clarifies an existing mitigation measure and no new or more severe significant impacts were identified, this clarification does not require recirculation of the Draft EIR.

Response to Comment D-23

This comment states that any direct and cumulative impacts on the State Highway System should be eliminated or reduced to a level of insignificance pursuant to CEQA and National Environmental Policy Act

standards. The comment recommends consideration of fair share funds toward future improvements associated with the I-5 corridor, and states the opinion that the TIA should identify feasible mitigation measures for significant cumulative impacts of the project. The comment also indicates that alternative mitigation measures should be identified in the TIA for significant and unavoidable impacts, and outlines the process for fairshare contributions and proposed improvements to Caltrans facilities.

As identified in Section 4.12, Transportation, Circulation, and Parking, and Chapter 5, Cumulative Impacts, of the Draft EIR, mitigation measures MM-TRA-1, MM-TRA-5, MM-C-TRA-1, and MM-C-TRA-2 specifically address impacts associated with freeway facilities that are under the jurisdiction of Caltrans. The commenter recommends consideration of fair-share funds toward future improvements associated with the I-5 corridor. Mitigation measures MM-C-TRA-1 and MM-C-TRA-2 would require the project proponent to pay a fair-share contribution toward signalizations of I-5 ramps. Mitigation measures MM-C-TRA-1 and MM-C-TRA-2 have been clarified to require the project proponent to enter into a Traffic Mitigation Agreement with Caltrans for the fair-share contributions. With regard to the other I-5 improvements identified in mitigation measure MM-TRA-5 of the Draft EIR, mitigation measure MM-TRA-5 has been clarified to state that the project proponent shall be required to enter into a Traffic Mitigation Agreement with Caltrans. These changes are included in Chapter 5, Errata and Revisions, of the Final EIR. Because the timing and installation of the signalizations on I-5 ramps and recommended I-5 improvements are within the exclusive jurisdiction of Caltrans and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. As such, the impacts on I-5 SB on- and off-ramps (Impact-C-TRA-4) and the freeway segments along NB and SB I-5 under near-term and future year conditions (Impact-C-TRA-6 and Impact-C-TRA-10) would remain significant and unavoidable.

In addition, the commenter identifies that the impacts that are identified as significant and unavoidable need to have an alternative mitigation identified in the EIR and TIA. While preparing the TIA, Chen Ryan Associates reviewed numerous potential mitigation options. However, the City of San Diego's impact standards are currently based on volume-tocapacity ratios; therefore, unless the mitigation measure would reduce demand or increase the capacity (i.e., add more lanes), the significant impact would not be reduced. The commenter does not identify any specific mitigation measure alternatives for consideration, and no additional options were identified in the TIA and Draft EIR that would

reduce impacts. It should be noted that mitigation measure MM-TRA-8: Implement a Parking Management Plan that Provides Parking Management, as identified in Section 4.12, Transportation, Circulation, and *Parking*, in the Draft EIR, requires the project proponent to implement strategies such as coordination with transportation network companies (such as Lyft and Uber), provide bike racks on the project site or adjacent thereto, promote and encourage employees and patrons to use alternative modes of transportation, provide public transit subsidies for employees. participate in Port of San Diego shuttle system, provide a shuttle to and from the airport for hotel guests, participate in the San Diego Association of Governments-operated iCommute Program, designate employee carpool and vanpool parking spaces, and designate an onsite employee coordinator to inform employees of alternative commute options. Although the benefits cannot be quantified, the implementation of these strategies would reduce demand at the project site and ultimately reduce GHG emissions.

With regard to the comment related to intersection modifications being subject to Caltrans' ICE policy, the only area in which an ICE policy would be required is where the project proponent was required to install the signals at the Logan Avenue/I-5 SB off-ramp (MM-C-TRA-1) and Logan Avenue/I-5 on-ramp (MM-C-TRA-2). As noted in the response to comment D-13 and in the Draft EIR, these impacts become less than significant with the extension of Park Boulevard to Harbor Drive, as shown under Future Year 2035 conditions. If Caltrans determines that the signalization is necessary, as required by mitigation measures MM-C-TRA-1 and MM-C-TRA-2, the project proponent is required to pay a fair-share contribution toward the improvement. However, implementation of the improvement falls within the jurisdiction of Caltrans, and the installation of any signalization must be approved by Caltrans and will be subject to an ICE as noted by Caltrans.

These mitigation measures have been clarified to state that the project proponent shall be required to enter into a Traffic Mitigation Agreement with Caltrans. These changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

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Right-of-Way

D-24 Any work performed within Caltrans right-of-way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction. As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans's R/W, and any corresponding technical studies.

If you have any questions, please contact Kimberly Dodson, of the Caltrans Development Review Branch, at (619) 688-2510 or by e-mail sent to Kimberly.dodson@dot.ca.gov.

Sincerely,

DAMON DAVIS, Acting Branch Chief Local Development and Intergovernmental Review Branch

Response to Comment D-24

The comment states that any work performed within Caltrans' right-ofway (ROW) will require discretionary review and approval by Caltrans and an encroachment permit prior to construction. The comment states that a final environmental document addressing impacts with Caltrans' ROW, as well as any technical studies, is required as part of the encroachment permit process.

The proposed project would not require work within Caltrans' ROW, nor would it result in significant impacts within Caltrans's ROW.

Response to Comment D-25

This comment concludes the comment letter and provides a contact name and information.

The District appreciates Caltrans' interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

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6.3.6 Comment Letter E: California Coastal Commission

Comment Letter E

STATE OF CALIFORNIA - THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., Govern CALIFORNIA COASTAL COMMISSION SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4421 RECEIVED (619) 767-2370 JAN 31 2018 January 30, 2018 SAN DIEGO UNIFIED PORT DISTRICT REAL ESTATE Ms. Wileen Manaois San Diego Unified Port District Development Services Department 3165 Pacific Hwy San Diego, CA 92101

Subject: Comments on the Draft Environmental Impact Report for the Fifth Avenue Landing Project and Port Master Plan Amendment

Dear Ms. Manaois:

Commission staff appreciates the opportunity to review and comment on the abovereferenced environmental document which was received by our San Diego District Office on December 14, 2017. Commission staff has reviewed the Draft Environmental Impact Report ("DEIR"), dated December 2017, for the proposed project, which consists of a bayside redevelopment on an approximately 18-acre site (five acres of land and thirteen

E-1 acres of water) located west of the San Diego Convention Center. Waterside improvements include a 57,696 sq. ft. marina expansion with 50 slips ranging from 50 to 200 feet, and a 400 ft. by 20 ft. breakwater with wave attenuation panels constructed during Phase 1 and a 630 ft. by 20 ft. breakwater constructed during Phase 2. Landside improvements include construction of an approximately 796,000 sq. ft., 500 ft. high (44 story), 850 room market-rate hotel; an approximately 80,000 sq. ft., 82 ft. high, 565-bed lower-cost visitor-serving hotel which will include a 6,127 sq. ft. water transit center; a 263-space parking structure; 6,000 sq. ft. of visitor-serving retail establishments; and 85,490 sq. ft. of public plaza and park areas. Our preliminary comments are as follows:

Port Master Plan Amendment (PMPA)

The proposed project will replace the Convention Center Expansion, which was approved by the Commission on October 11, 2013 (6-PSD-MAJ-45-13), in the certified PMP. The proposed project will have many of the same impacts as the Convention Center Expansion, including impacts to coastal views to and along the San Diego Bay, and public access. The Convention Center Expansion PMPA contained considerable detail on

E-2 how the proposed project would protect and enhance coastal views and public access (e.g., drawing people to the waterfront and public promenade from Harbor Drive, wayfinding, pedestrian access ways, programming of the public park and special events, etc.). The PMPA proposed for the subject project, however, does not contain the same level of detail as the Convention Center Expansion PMPA, even though it raises serious concerns about the public's ability to access the waterfront, both physically and visually. As such, the proposed PMPA should be modified to include greater detail on how physical and visual public access to and along the waterfront will be proteed and improved as part of the subject project. Please use the language that was reviewed and

Response to Comment E-1

This comment is an introduction to the letter, summarizing the proposed project and indicating that California Coastal Commission (CCC) staff has reviewed the Draft EIR and is providing comments.

The District appreciates the CCC staff's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are listed separately (below) along with the District's individual responses.

Response to Comment E-2

The comment states that the proposed project will replace the San Diego Convention Center (SDCC) Expansion previously approved by the CCC and will generally have many of the same impacts, including impacts on coastal views and public access. The comment also states that the Convention Center Expansion Port Master Plan Amendment (PMPA) had considerable detail on how coastal views and public access would be protected and enhanced, but that the PMPA for the proposed project does not include the same level of detail. The commenter requests that the language that was reviewed and approved by the CCC as part of the Convention Center Expansion PMPA be used as guidance for the proposed PMPA for the proposed project.

In response to this comment, the South Embarcadero Public Access Program (PAP) has been amended to include the proposed project. It is incorporated by reference within the Draft PMPA for the proposed project. The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, *Errata and Revisions*, of the Final EIR. The Amended South Embarcadero PAP contains greater detail on how physical and visual public access to and along the waterfront will be protected and improved as part of the proposed project, consistent with the California Coastal Act. The Draft PMPA for the proposed project including the Amended South Embarcadero PAP contain detail comparable to the level of detail contained in the CCC-approved Convention Center Expansion PMPA. Specifically, the Amended South Embarcadero PAP for the proposed project includes: details on public and private access to the public plaza and park areas (including public access, wayfinding signage, and reporting requirements), public access to the Fifth Avenue Landing Project and Port Master Plan Amendment January 30, 2018 Page 2

E-2 approved by the Commission as part of the Convention Center Expansion PMPA as cont. guidance in drafting language for the proposed PMPA for Fifth Avenue Landing.

In addition, in reference to the programming of the public park and plazas, the proposed PMPA identifies that "Portions of this park and plaza space will be open to the public as

E-3 specified in the South Embarcadero Public Access Plan, as amended." The draft public access plan has not been included in the DEIR. Therefore, please include the proposed South Embarcadero Public Access Plan in the Final EIR so that it can be reviewed by the Commission, as well as the public. However, please note that programming details for the public park and plaza should also be included in the text of the PMPA itself.

As you are aware, the Commission cannot suggest modifications or place conditions on a Port Master Plan Amendment, but can only approve or deny the plan. Thus, it is vital

E-4 that the amendment contain the degree of specificity which will assure the Commission that all elements of the proposed access and parking plans are clearly identified and will be implemented.

Finally, of major concern to the Commission at the time the Convention Center Expansion PMPA was approved was the replacement of waterfront park space with a rooftop park. At the Commission hearing, the Port amended its submittal to require that after the development was completed, reports would be provided to the Commission that describe the utilization of the rooftop park/plaza and promenade for all public and private events; park programming and activities would be implemented to invite the public to access the rooftop park/plaza, promenade and coast; and marketing activities and signage would be implemented to enhance way-finding and public usage of the rooftop park/plaza, promenade, and coastal access. After five years, a summary report would also

E-5 be submitted with the addition of potential opportunities that could be pursued to increase public access to the rooftop park and waterfront promenade, including possible additional access points and related infrastructure. To further ensure public access to the rooftop park/plaza was maximized, the PMPA was also amended to include a requirement by the Port District that the coastal development permit issued by the Port to the City of San Diego (the project proponent) would require the City to reprioritize an amount of the City's construction budget to implement alternative access measures to activate the rooftop park/plaza. These changes to the PMPA resulted in the maintenance and improvement of public access in this area, and the Commission determined that the PMPA, as revised, was consistent with the Chapter 3 and Chapter 8 policies of the Coastal Act. Given the similarity of the project, similar provisions should be included in the subject PMPA.

Public Access and Recreation

E-6 Of primary concern to this office is the lack of proposed parking and reduction of street level park space, especially when viewed cumulatively with the proposed San Diego Symphony Bayside Performance Center project. In regards to parking, the DEIR references the Port's Tideland Parking Guidelines in the calculation of the required 472 parking spaces. However, the proposed project will be located on two existing parking lots that currently provide a total of 303 parking spaces, and the replacement of these

public promenade and public observation viewing point, activation activities proposed for the public plaza and park areas, maintenance and enhancement of the existing 35-foot-wide Embarcadero Promenade, description of the required minimum five elevated public vista areas, description of the required one low-cost or no-cost boat slip for public use, and required participation in the Port of San Diego Shuttle. The PAP also contains an exhibit describing the public access within the public plaza and park areas.

Response to Comment E-3

The comment cites text from the proposed PMPA related to the programming of the public park and plazas as specified in the South Embarcadero PAP, as amended. The comment states that the draft public access program has not been included in the Draft EIR and requests that the South Embarcadero PAP be included in the Final EIR. The commenter states that the programming details for the public park and plaza should also be included in the text of the PMPA itself.

As noted in response to comment E-2, the South Embarcadero PAP has been amended to include the proposed project. It is incorporated by reference within the Draft PMPA for the proposed project. The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, *Errata and Revisions*, of the Final EIR. As noted in response to comment E-2, the Draft PMPA contains an appropriate level of detail regarding public access on the project site.

Response to Comment E-4

The comment notes that the CCC cannot suggest modifications or place conditions on the PMPA, but can only approve or deny the plan. The comment states that the PMPA should contain the degree of specificity that will ensure that all elements of the proposed access and parking plans are identified and will be implemented.

As noted in response to comments E-2 and E-3, the South Embarcadero PAP has been amended to include the proposed project. It is incorporated by reference within the Draft PMPA for the proposed project. The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, *Errata and Revisions*, of the Final EIR. The Draft PMPA, coupled with the Amended South Embarcadero PAP, is consistent with the California Public Resource Code 30000 et seq. (California Coastal Act) Section and contains the degree of specificity needed to ensure that

all public access elements of the proposed project are clearly identified and will be implemented. The Amended South Embarcadero PAP includes the requirement for an Annual Public Access Usage Report, which is also required by MM-PS-1. In addition, if a coastal development permit is approved for the proposed project in the future, compliance with the PAP will be made a special condition of the permit and the PAP will be an attachment to the permit, consistent with other similar District tenant projects. With regard to parking, please see response to comment E-6 below.

Response to Comment E-5

The comment cites the concerns of the CCC from the Convention Center Expansion PMPA related to the replacement of waterfront park space with a rooftop park. The comment summarizes all of the requirements for the rooftop park that were included in the amended PMPA submittal at the CCC hearing for the Convention Center Expansion, including providing utilization reports to the CCC, implementing park programming and activities to invite people to access the rooftop park, implementing marketing activities and signage to enhance wayfinding and public usage of the rooftop park, submitting a summary report after 5 years with potential opportunities to increase public access to the rooftop park, and ensuring that the coastal development permit require the City of San Diego to budget funds to implement alternative access measures to activate the rooftop park. The comment states that, because of these changes to the Convention Center Expansion PMPA, the CCC determined that the Convention Center Expansion PMPA, as revised, was consistent with the California Coastal Act. The comment further states that similar provisions should be included in the PMPA for the proposed project given the similarity.

The proposed project is consistent with the California Coastal Act. As noted in response to comment E-2, the South Embarcadero PAP has been amended to include the proposed project. It is incorporated by reference within the Draft PMPA for the proposed project. The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, *Errata and Revisions*, of the Final EIR. The Amended South Embarcadero PAP contains detail on how physical and visual public access to and along the waterfront will be protected and improved as part of the proposed project consistent with the California Coastal Act.

The Fifth Avenue Landing PMPA proposed public access amenities that are

not similar in size and scale compared to the Convention Center Expansion PMPA proposed public access amenities. The proposed project proposes approximately 85,490 square feet of elevated public plaza and park areas at approximately 44 feet above grade, whereas the Convention Center Expansion proposed a 5-acre (217,800 square feet) rooftop park at 50 to 100 feet above grade. The Draft PMPA for the proposed project, coupled with the Amended South Embarcadero PAP, contains detail comparable to the level of detail contained in the CCC-approved Convention Center Expansion PMPA as appropriate for the proposed project. Specifically, the Amended South Embarcadero PAP for the proposed project includes: details on public and private access to the public plaza and park areas (including public access, wayfinding signage, and reporting requirements), public access to the public promenade and public observation viewing point, activation activities proposed for the public plaza and park areas, maintenance and enhancement of the existing 35-foot-wide Embarcadero Promenade, description of the required minimum five elevated public vista areas, description of the required one low-cost or no-cost boat slip for public use, and required participation in the Port of San Diego Shuttle. Furthermore, the PAP requires that an annual public access usage report be submitted to the District that demonstrates that the Multifunctional Plaza and Lawn, Pubic Park Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private access as allowed by the PAP (this requirement is also contained in mitigation measure MM-PS-1). The Amended South Embarcadero PAP is incorporated by reference within the Draft PMPA for the proposed project. The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, Errata and Revisions, of the Final EIR. In addition, if a coastal development permit is approved for the proposed project in the future, compliance with the PAP will be made a special condition of the permit and the PAP will be an attachment to the permit, consistent with other similar District tenant projects.

Response to Comment E-6

The commenter expresses concern regarding the lack of proposed parking and reduction of street level park space, especially when viewed together with the proposed San Diego Symphony Bayside Performance Center project. The commenter cites the project's requirement to provide 472 parking spaces from the Draft EIR, but notes that the project will be located on two existing parking lots that provide 303 parking spaces. The comment states that the required parking should be at least 775 spaces,

and that an equivalent amount of public parking spaces should be provided as one of the displaced parking lots is a public lot. The comment notes that the certified PMP requires at least 12 short-term public parking spaces adjacent to the relocated water transportation center (WTC) building, but that the proposed PMPA does not identify a number of parking spaces for the new WTC. The commenter states that it is unclear whether those 12 spaces as well as the proposed entire development (i.e., restaurant and retail uses) have been included in the parking calculations. The commenter indicates that it is inappropriate to use San Francisco hostel parking rates and suggests using a rate between that used for a traditional hotel and a hostel derived from a Southern California jurisdiction. The commenter also suggests that the actual parking deficit is likely greater than 500 parking spaces, and recommends that the Final EIR provide a more detailed explanation of the parking calculation methodology and consider all existing public parking requirements.

The existing 303 parking spaces are located within a private leasehold and while they may be available at times to the public for a parking fee, they are used by the SDCC and other event organizers for temporary staging and uses; as such, these parking lots cannot be depended upon by the general public. Accordingly, these spaces were not included in the parking calculation of the Draft EIR. Therefore, please note that the District identified an error in the depiction of the parking lots on Figure 2-4 of the Draft EIR. Figure 2-4 has been revised to correctly identify the parking lots within the project site and now identifies the number of parking spaces available in each lot. The revised figure is provided in Chapter 5. Errata and Revisions, of the Final EIR. In addition, the certified PMPA for the Phase III Expansion of the SDCC does require at least 12 short-term public parking spaces adjacent to the relocated WTC. This was a condition specifically related to the public access associated with that project and is not required to be carried over for the Fifth Avenue Landing Project. However, as identified in Section 4.12, Transportation, Circulation, and *Parking*, of the Draft EIR, the marina was identified as requiring 21 parking spaces. In addition, as shown in Table 4.12-21 of the Draft EIR, there are 96 parking spaces included within the proposed project's parking demand, which were allocated due to its proximity to public waterfront amenities for public access.

As noted in Table 4.12-13 of the Draft EIR, the retail storefronts are anticipated to serve hotel guests and not attract outside patrons other than passers-by already in the project area and thus were not included in the project trip generation. It is assumed that no additional trip Fifth Avenue Landing Project and Port Master Plan Amendment January 30, 2018 Page 3

parking spaces was not included in the calculation. Thus, the required parking should be at least 775 spaces. Further, one of these displaced parking lots is a public lot and an equivalent amount of public parking spaces should be replaced as such. In addition, the certified PMP requires a public parking jot with at least 12 short term public parking spaces adjacent to the relocated water transit center building, but the proposed PMPA does not identify how many parking spaces will be allocated for coastal access at the new water transit center in the lower-cost hotel, and it is unclear whether those 12 public parking spaces have been included in parking calculation. It is also unclear whether the entire proposed development has been included in the parking requirement calculation.

E-6 cont.

For example, the plans show a restaurant located at the lower-cost hotel, but it does not appear that this restaurant or the proposed retail spaces have been factored into the parking calculations. Finally, it does not seem appropriate to use San Francisco hostel parking rates to calculate required parking for the proposed lower-cost hotel given that proposed development is not technically a hostel, and public transportation in San Francisco is significantly more efficient than in San Diego. As such, the parking requirement should be determined using a rate in between that used for a traditional hotel and hostel; however, the hostel rate should be derived from a southern California jurisdiction. Thus, while the DEIR states the proposed project would result in a parking deficit of 209 spaces during its highest demand period, the actual number is likely greater than 500 parking spaces. The Final EIR should provide a more detailed explanation of how required parking was calculated and take into consideration all existing public parking requirements.

In addition, the Port has also proposed to construct a permanent venue for the San Diego Symphony at Marina Park North which would double the capacity of the existing temporary venue without providing for additional parking nearby. The DEIR's cumulative impact discussion for transportation, circulation, and parking is inadequate as it does not include an analysis of the cumulative impacts of both projects even though the subject project is proposed in the same general vicinity within the Port's jurisdiction as the Symphony project, and the EIR conducted for the Symphony project did include

E-7 une symptony project, and the EIK conducted for the symptony project dial include calculate linear analysis. The Final EIK should include a detailed analysis of the cumulative traffic and parking impacts from this project and the Symphony project, as well as other nearby projects including those proposed in North Embarcadero, Scaport Village, and the Gaslamp Quarter, once parking requirements have been recalculated. Because the proposed project is located in an area with an existing deficit of public parking, the Port and project proponent should seriously consider alternatives that reduce the scope of the project or contain additional parking spaces, as they would significantly reduce impacts to public access, traffic and parking.

While the DEIR represents that the proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.7 acre) to approximately 85,490 square feet (1.96 acres), which would result in a cumulative benefit

E-8 to recreation, it fails to analyze the quality of the proposed public plaza and park areas compared to existing. For instance, the proposed development would be built on top of an existing park (located at street level), which is not proposed to be replaced. Instead, the project incorporates roof-top parks and a wider promenade to increase the acreage of

generation will be associated with the retail uses; therefore, no additional parking demand was assumed. Additionally, as noted in the same table, both the restaurant uses and meeting spaces are assumed to be part of the hotel use and its associated trip generation; as such, the parking demand associated with these uses is included in the overall hotel parking demand.

Although an insufficient parking supply was identified during operations (Impact-TRA-7), mitigation measure MM-TRA-8 requires the project proponent to implement a parking management plan and requires the project proponent to enter into agreements to secure 189 parking spaces at one or more offsite parking lots and provide valet parking operations for these offsite parking spaces. Therefore, the parking required for the proposed project would be fulfilled with the combination of onsite and offsite parking. However, because the necessary agreements have not vet been reached and the project proponent has no control over those agreements, the District cannot ensure that they will be reached and, therefore, the project's parking impacts would remain significant and unavoidable. Additionally, the benefits of the parking management plan cannot be quantified and, therefore, impacts would remain significant and unavoidable even though the mitigation measure requires securing a sufficient number of parking spaces from the many nearby parking facilities. Clarifying language has been add to Section 4.12, *Transportation*, *Circulation, and Parking, and is included in Chapter 5, Errata and Revisions,* of the Final EIR.

With regard to the comment related to the hostel parking rates, the proposed lower-cost hotel was determined to be similar to a hostel because it will provide a mixture of family suites (448 square feet) with their own bathroom, and queen (68 square feet), single (42 square feet), and Americans with Disabilities Act (ADA) (68 square feet) units with shared bathrooms. The hotel is located in a downtown, urban area in proximity to the San Diego International Airport; a short walking distance to a highly used trolley station (5th Avenue) that provides local downtown access and regional access to the San Diego-Mexico border to the south, Old Town and Qualcomm stadium to the north, and access to communities to the east; surrounding attractions in downtown San Diego and along the waterfront; free downtown shuttles; easy access to Transportation Network Companies such as Uber and Lyft; and an abundance of bike share options.

Prior to using San Francisco parking rates, research was performed to identify a hostel parking rate in San Diego County or another jurisdiction

within Southern California; however, no rate was found or identified. Given the proposed project is located within the downtown community with a substantial number of transportation options, using a parking rate from San Francisco was deemed reasonable.

Response to Comment E-7

The comment notes that the proposed San Diego Symphony at Marina Park North project (a separate and unrelated project) would double the capacity of the existing venue but would not provide additional parking nearby. The commenter indicates that the cumulative impact analysis for transportation, circulation, and parking is inadequate because it did not include a cumulative impact analysis of both projects, while the Symphony project EIR did include cumulative impact analysis. The commenter suggests that the Final EIR include a detailed analysis of the cumulative traffic and parking impacts of these two projects and other nearby projects proposed in North Embarcadero, Seaport Village, and the Gaslamp Quarter once parking requirements have been recalculated. The commenter recommends that the District and the project proponent consider alternatives that reduce the project scope or contain additional parking spaces.

The Draft EIR adequately analyzes the cumulative parking impacts of the proposed project, as well as past, present, and reasonably foreseeable future projects in the cumulative study area. Cumulative parking impacts are addressed in Chapter 5, Cumulative Impacts, of the Draft EIR. Per State CEQA Guidelines Section 15130(b), the discussion of cumulative impacts does not need to be as detailed as the discussion of the effects of the project alone. The Draft EIR provides an appropriate level of detail to adequately analyze the cumulative parking impacts of the proposed project and cumulative projects. The San Diego Symphony Bayside Performance Park Enhancement Project was a reasonably foreseeable cumulative project and was considered in the cumulative transportation, circulation, and parking impact analysis. As discussed in Section 5.3.12 of the Draft EIR, the near-term scenario is based on the list method for shortterm cumulative impact analysis and includes all of the present and reasonably foreseeable future projects listed in Table 5-2 of the Draft EIR. The San Diego Symphony Bayside Performance Park Enhancement Project is specifically included as cumulative project #87 in Table 5-2. The Draft EIR concluded that parking supply deficits are anticipated to increase with reasonably foreseeable future projects, and cumulative parking impacts from past, present, and reasonably foreseeable projects are significant.

This determination reflects the cumulative effects on parking from the cumulative projects identified in Table 5-2 of the Draft EIR, including the San Diego Symphony Bayside Performance Park Enhancement Project. Additionally, the Draft EIR concluded that the proposed project's contribution to significant impacts on parking supply would be cumulatively considerable, and cumulative parking impacts would remain significant and unavoidable after mitigation.

Regarding the commenter's recommendation to consider alternatives that reduce the project scope or contain additional parking, in Chapter 7, Alternatives to the Proposed Project, the Draft EIR includes an analysis of a Below Grade Parking Alternative intended to avoid or substantially lessen the significant parking impacts of the proposed project. Under the Below Grade Parking Alternative, 478 parking spaces would be provided in a concrete parking structure, which would include a subterranean parking level approximately 12 feet below grade. The P1 level would include 190 standard stall spaces, 9 Americans with Disabilities Act spaces, and 64 valet spaces. The P2 level would include 167 standard spaces and 48 valet spaces. Valet parking would be provided between the drive aisles on both the P1 and P2 levels. Public parking would be provided on both the P1 and P2 levels. As such, all of the parking demand generated during operations would be accommodated on site under the Below Grade Parking Alternative, resulting in a surplus of six parking spaces during the highest demand period. Consequently, implementation of this alternative would reduce the significant and unavoidable project-level and cumulative parking impact that would occur under the proposed project to less-thansignificant levels. However, in comparison to the proposed project, this alternative would result in slightly greater, but still less-than-significant, impacts (after mitigation) associated with air quality emissions, cultural resources, geology and soils, GHG emissions and climate change, and hazards and hazardous materials. Therefore, no changes to the Final EIR are required as a result of this comment.

Response to Comment E-8

The commenter acknowledges that the Draft EIR identifies the increase in the total area of public plaza and park areas, but indicates that it fails to analyze the quality of the proposed public plaza and park areas compared to what is existing. The commenter suggests that it is unclear if a wider promenade will increase public recreation in the area or if the rooftop public plaza and park areas. It is not clear, however, that a wider promenade will increase public recreation in the area, nor if the roof park will be utilized by the public, especially

- E-8 cont. public recreation in the area, nor if the root park will be utilized by the public, especially since portions of it will be privatized 50-85 percent of the year. The Final EIR should include a qualitative analysis of the proposed changes to the public park and promenade area.
- E-9 The connecting bridge to the San Diego Convention Center (SDCC) should not be an optional component. It is critical that this new public access bridge be included as part of the project in order to connect the development with the SDCC view deck in order to
- provide visitors with elevated views of the north and mid-Bay and allow for travel to and from the City's Gaslamp Quarter.
- E-10 Finally, public access along the waterside perimeter of the market rate hotel site should be clearly identified and maintained so that pedestrians may walk along water's edge.

The potential impacts to public access from the proposed marina expansion are also of concern. In prior permit actions, the Commission has been concerned about the trend towards larger slips in marinas at the expense of smaller slips. In this case, the marina expansion includes 50 additional slips ranging from 50 to 200 feet. While it is difficult to contend that recreational boating is in fact a "low" cost recreational activity, in general, smaller boats are less expensive, and therefore more available to a larger segment of the population than are larger boats. While the Commission has not historically regulated the rates at which marinas rent their slips to the public, it has regulated the design of a marina trates at which marinas rent their slips to the public, it has regulated the design of a marina the population that are larger boats.

E-11 in order to ensure that the redesigned slips conform to the public access and recreation policies of the Coastal Act by providing the correct balance between the size of slips and boaters' demand for slips. To mitigate for the lack of smaller slips, MM-PS-2 requires that at least one boast slip accommodating a vessel 30 feet in length be provided for public use, at low cost or no cost. However, the proposed project should also include the specific mix of slip sizes, and a discussion related to the operation of the marina and the public's access to the boat slips and dock.

Regarding the proposed lower-cost hotel, additional information is needed to understand the operations and how the proposed hotel will be maintained as lower-cost through the duration of its lifetime.

E-13 Please identify the location of all proposed public amenities, including public restrooms, in the Final EIR.

Finally, the proposed Water Transit Center (WTC) appears to be a marina amenity more than transit center, as it will contain a marina office and a gym for marina members and hotel guests. Please clarify whether the restrooms located at the WTC will be available to the public, including ferry and water taxi users. Also, please identify how parking was

the public, including ferry and water taxi users. Also, please identify how parking was calculated for WTC users. park will be utilized by the public. The commenter suggests that the Final EIR include a qualitative analysis of these changes.

According to State CEQA Guidelines Section 15358(b), impacts to be analyzed in the EIR must be "related to physical changes" in the environment. The quality of public park space is highly subjective and what may be attractive to one person may not be to another. For example, providing substantially more park space than what is currently available may entice more visitors as it would provide more space and greater privacy for group gatherings that might otherwise not have sufficient space to hold such gatherings. Another person may find the views from approximately 44 feet above the current ground level to be more appealing than the current condition. Moreover, someone may have the opinion that the current park area lacks amenities, such as places to purchase refreshments (which is proposed by the project) or lack visual interest as the current space is open turf without any interesting landscaping or structural components (significant structural components are included in the design of the roof top park). In addition, while a portion of the turf area would be removed for the development of the lower-cost visitor-serving hotel and a park side café for park users, the majority of the existing turf area east of the project site would remain intact and available for continued use. Consequently, given the highly subjective nature of this issue, the quality of park space is generally not considered an issue subject to CEOA unless a specific physical impact on the environment would occur. The comment does not indicate how a decrease in the quality of public park space would result in a physical impact on the environment, and the District does not agree that the project would result in a decrease in the quality of park space compared to the existing condition. Therefore, no changes to the Final EIR are required as a result of this comment.

Notably, as identified in Section 4.1, *Aesthetics and Visual Resources*, of the Draft EIR, mitigation measure MM-AES-2 requires the project proponent to install wayfinding signage to direct visitors to the proposed public plaza and park areas on the rooftop. In addition, an Amended South Embarcadero PAP has been prepared to include the proposed project and identifies how the publicly accessible spaces within the project site would be accessed and activated within the implementation of the proposed project. As noted in response to comment E-2, the Amended South Embarcadero PAP includes details on public and private access to the public plaza and park areas, including public access, wayfinding signage, and reporting requirements. The Multifunction Plaza and Lawn area (Area

A as identified in Figure 3-12 of the Draft EIR) will be available for private events 50% of the year, while the Public Park Plaza area (Area B) will be available for private events 15% (not 85%) of the year. The Amended South Embarcadero PAP is incorporated by reference within the Draft PMPA for the proposed project. The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment E-9

The commenter indicates that the connecting pedestrian bridge to the SDCC should not be an optional component and states that it is necessary to provide elevated views of the north and mid-Bay, and facilitate pedestrian travel.

As discussed in Chapter 3, Project Description, of the Draft EIR, the proposed optional connecting bridge was identified as an optional project feature in the Draft EIR because an amendment to the Management Agreement between the District and the City (as the contractual managing entity of the SDCC) may be required. The District has determined as a result of the comment that an amendment would be required. The Management Agreement is between the District and the City, and any amendment thereto would require both parties' consent and agreement. Because there is no guarantee that the City would agree to amend the Management Agreement, the Draft EIR analyzed the project with and without the optional public access bridge component. This allows for CEQA compliance should an amendment to the Management Agreement to build the bridge be agreed to among the City and District. However, for informational and transparency purposes, it was defined as an optional project component. Clarifications to the Draft EIR have been made to more clearly indicate potential impacts with and without the bridge for specific resource topics such as aesthetics, land use and planning, and public services. These clarifications are reflected in Chapter 5, Errata and *Revisions*, of the Final EIR and do not change the impact conclusions for the proposed project.

The comment also suggests that the bridge is critical in order to connect the development of the existing SDCC view deck with the proposed project to provide visitors with elevated views of the north and mid-Bay and allow for travel to and from the City's Gaslamp District. Although the bridge may provide some additional view angles between the proposed project and the SDCC, as noted above, construction of the bridge would not reduce the

significant impact from the proposed project related to the obstruction of views within a vista area (i.e., Impact-AES-2) as the hotel tower would continue to dominate views from the SDCC viewing deck to the southwest whether or not the bridge is constructed. As for access to the Gaslamp District, visitors to the project site and in the general area surrounding the project site would be able to continue to access the Gaslamp District in the same manner as under current conditions. This includes stair and elevator access between the SDCC Phase I and Phase II expansions or walking around the SDCC Phase II expansion, through or around the Convention Center Park. The proposed project is designed to maintain the 35-footwide pedestrian promenade, and no change in the accessibility of the promenade would occur. Therefore, no changes to the Final EIR are required.

Response to Comment E-10

The commenter recommends that public access along the waterside perimeter of the market-rate hotel should be clearly identified and maintained so that pedestrians may walk along the water's edge.

As required by mitigation measure MM-AES-2, the project proponent will install wayfinding and public accessibility signage at the grand staircase, market-rate hotel tower staircase, public observation terrace, optional pedestrian bridge, and two locations along the existing Embarcadero Promenade that directs visitors to the proposed public plaza and park areas on the rooftop of the parking structure and hotel ballrooms as well as the walkway around the market-rate hotel tower. These areas are depicted as Exterior Areas B, C, and D on Figure 3-12 of the Draft EIR. The wayfinding signage will clearly direct the public to the public plaza and park areas, public access along the waterside perimeter of the market-rate hotel, and the public observation terrace and indicate that the space is open to the public except during certain circumstances consistent with the PMPA. In addition, Area D, identified on Figure 3-12 and in Table 3-2 of the Draft EIR, is an approximately 10-foot-wide walkway along the southeast portion of the market-rate hotel tower and will include a public viewing deck. Area D would provide 100% access to the public. Mitigation measure MM-PS-1 in the Draft EIR has been amended to include the requirement to maintain 100% public access of Area D. These changes are also included in Chapter 5, Errata and Revisions, of the Final EIR.

Response to Comment E-11

The commenter expresses concern regarding potential impacts on public access from the proposed marina expansion, particularly related to slip size. The comment notes the number and size of slips that would be provided by the project. The comment also notes that the CCC has not historically regulated slip rates, but rather has regulated the marina design to ensure conformance with the public access and recreation policies of the California Coastal Act. The comment cites the requirement of MM-PS-2 to provide at least one public use boat slip for a vessel smaller than 30 feet in length at low cost or no cost. The commenter suggests that the project be modified to include a more equitable range of slips, and also suggests that the project description include the specific mix of slip sizes, a discussion of marina operations, and the public's access to the boat slips and dock.

As discussed in Chapter 3, *Project Description*, of the Draft EIR, the marina would be constructed in two phases, with Phase I adding approximately 23 new slips ranging in size from approximately 50 to 200 feet in length, and Phase II adding approximately 29 slips ranging from approximately 50 to 240 feet in length. Total build-out would allow for 50 additional slips for smaller and larger vessels. The proposed slip mix could allow for smaller boats to be integrated into the marina while at the same time allowing for larger vessels to dock. These slips would be accessible from the approximately 20-foot-wide pile-supported dock. Additionally, Figures 3-14 and 3-15 of the Draft EIR depict the proposed Phase I and Phase II marina layouts, respectively, and the proposed dock and slip lengths and quantities.

In addition, Section 4.11, *Public Services and Recreation*, of the Draft EIR includes mitigation measure MM-PS-2 that requires the project proponent to provide at least one boat slip for public use, for a vessel of a maximum size of 30 feet in length, at low cost or no cost. Furthermore, the mitigation measure states that to ensure sufficient availability to the public, berthing at the low-cost or no-cost slip shall be a maximum of 6 hours at any one time, signage shall be provided, and availability of the low-cost or no-cost slip shall be posted on the project proponent marina operator's website. Nevertheless, the project proponent will be required to provide at least one boat slip for public use, for a vessel of a maximum size of 30 feet in length. A description of this requirement is also included in the text of the Draft PMPA and the Amended South Embarcadero PAP that is incorporated by reference within the Draft PMPA for the proposed project.

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Sea Level Rise

The flood analysis included in the DEIR considers the life of the structure to be 66 years for analysis purposes because that is the length of the lease with the Port; however, the Commission has historically provided guidance that sea level rise impacts should be analyzed for the economic life of the structure or 75 years. Thus, the flood analysis should be revised to consider a 75-year economic life.

E-15 Still, the analysis found the development would be impacted during its lifetime. Please include more specificity regarding the causes, types, and location of impacts. For instance, it does not appear that the analysis has taken into effect the impacts to the project from flooding due to the increase in impervious surfaces that will occur as a result of the project. In addition, it is not clear if the impacts would remain if portions of the project, such as the bulkheads, were not constructed. Finally, it is unclear why MM-LU-1 is proposed to assist with flooding once it occurs instead of moving ahead with a project that is designed to be safe from sea level rise throughout its lifetime or proposing adaptation strategies. The FEIR should identify if there are any alternatives that would assure the development would be safe from sea level rise for its 75-year economic life, such as an alternative with increased setbacks from the waterfront.

Biological Resources

MM-BIO-5 requires the applicant to implement mitigation for open water coverage and F-16 fill in coordination with several resource agencies but fails to name the Coastal Commission as one of those agencies, even though we will be analyzing the proposed project with the PMPA application and the associated Coastal Development Permit will also be appealable to the Commission. The FEIR should identify that coordination is

necessary with the Commission in the discussion regarding appropriate mitigation.

The Marine Biological Resources Report, included as Appendix E-1, finds that during construction of the proposed marina, fishes greater than or equal to 2 grams are expected to be injured when they occur within 33 meters of pile driving and fish less than 2 grams

E-17 are expected to be injured if they remain within 61 meters of pile driving. The Commission has typically required that the dual criteria not be exceeded at 10 meters distance from pile driving. Considerably higher sound levels are predicted for this project. Thus, attenuation devices and/or hydroacoustic monitoring should be considered and implemented to minimize potential impacts to marine resources in San Diego Bay.

In terms of landscaping, the project would remove 39 trees but it is unclear if these trees would be replaced. The total loss of trees should be mitigated by providing the same amount of trees preferably at the site. The DEIR identifies that the landscaping will be

E-18 drought tolerant, however, plants listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California should not be employed or allowed to naturalize or persist on the site.

The Draft PMPA (Appendix C) with the attached Amended South Embarcadero PAP is included in Chapter 5, *Errata and Revisions*, of the Final EIR.

The marina would operate as the only large vessel marina on the west coast and would satisfy a unique niche market for large vessels that have high-security operations and protocols. As such, a security perimeter would be observed around certain areas of the marina.

Response to Comment E-12

The commenter states that additional information is needed to understand the operations of the proposed lower-cost hotel and how it will be maintained as lower-cost through its lifetime.

As discussed in Chapter 3, Project Description, of the Draft EIR, the proposed project includes the construction of a lower-cost visitor-serving hotel that would be situated on its own leasehold as a stand-alone development. The project proponent would be required to enter into a long-term operational agreement with a company or non-profit organization whose principal business is operating lower-cost visitorserving hotels such as micro hotels. The lower-cost visitor serving hotel would provide a mix of family suites (448 square feet) with their own bathroom, and queen (68 square feet), single (42 square feet), and ADA (68 square feet) units with shared bathrooms. Through the long-term operational agreement and design, the lower-cost visitor-serving hotel would be maintained as a lower-cost visitor-serving hotel throughout the duration of the lease. It is important to note that Section 30213 of the California Coastal Act prohibits the District and the CCC from setting or regulating room rates and, in fact, states that "developments providing" public recreational opportunities are preferred." The proposed project is meeting this section of the California Coastal Act through providing both recreational opportunities and a lower-cost visitor-serving hotel.

Response to Comment E-13

The commenter requests that the Final EIR identify the location of all proposed public amenities, such as public restrooms.

The locations of public amenities, including restrooms, plaza and park areas, the observation terrace, and promenade, are depicted on Figures 3-

12 and 3-13 of the Draft EIR. No changes to the Final EIR are required as a result of this comment.

Response to Comment E-14

The commenter suggests that the proposed WTC appears to be a marina amenity more than a transit center and requests clarification on whether the WTC restrooms will be available to the public. The commenter also inquires how parking was calculated for WTC users.

As shown on Figure 3-13 of the Draft EIR, public restrooms would be provided along the existing Embarcadero Promenade, adjacent to the proposed activating retail. In addition, the restrooms on the rooftop public plaza and park area would be available to the public when the area is not used for a private event. However, there would not be public access to the restrooms located within the WTC. Regarding the WTC parking calculations, the existing ferry service and water taxi provide additional transportation options that enable users to move from one destination along District Tidelands to another without a vehicle. As provided in the District's *Tidelands Parking Guidelines* and identified in Table 4.12-21 of the Draft EIR, providing dedicated water transportation service results in a 10% parking reduction requirement.

As described in Section 3.4.2 of Chapter 3, *Project Description*, of the Draft EIR, the amenities in the WTC would serve the users of the marina and would provide operational support for the existing water transportation ferry service. Operational support for the ferry service and water taxi provided by the WTC includes an accessory office, business center, and ticketing. However, the other amenities, such as the gym for hotel guests and marina users, marina crew restroom/showers, and a marina guest lounge, would only be available for guests of the marina and/or hotel and not users of the ferry service and water taxi. No changes to the Final EIR are required as a result of this comment.

Response to Comment E-15

The comment notes that the Draft EIR considers the life of the structure as 66 years, but indicates that the CCC has historically provided guidance that sea level rise impacts should be analyzed for the economic life of the structure or 75 years. The commenter suggests that the flood analysis should be revised to consider a 75-year economic life, and requests that more specificity of the causes, types, and locations of sea level impacts be provided. The comment cites the increase in impervious surfaces as a

potential contributor to flooding and states that it is unclear if impacts would remain if certain project components, such as the bulkheads, were not constructed. In addition, the commenter states that it is unclear why MM-LU-1 is proposed instead of designing the project to address sea level rise throughout its lifetime or proposing adaptation strategies. The commenter suggests that the Final EIR identify any alternatives, such as an alternative with increased setbacks from the waterfront that would ensure the project would be safe from sea level rise for its 75-year economic life.

The District considers the length of the lease as the useful life of the project when conducting CEQA analyses, rather than the economic life of the structure. The current California Coastal Commission Sea Level Rise Policy Guidance (2015) specifies, "The goal of these Steps is to ensure careful attention to minimizing risk to development and avoiding impacts to coastal resources over the life of the project." The District considers the lease period to cover the entire authorized life of the project. If the lease were extended after this time, it would be a discretionary action subject to a new CEQA analysis, which would analyze the impacts of sea level rise over the new lease period.

The sea level rise analysis, which is provided in Section 4.6, *Greenhouse Gas Emissions and Climate Change*, and Section 4.9, *Land Use and Planning*, of the Draft EIR found that the development would not be exposed to daily inundation, even under a high sea level rise scenario, during the life of the lease. This is because the project site is protected from coastal flooding by existing bulkheads. Therefore, no mitigation strategies are required to protect the development from daily inundation by sea level rise.

When the flooding analysis included a 100-year storm surge in addition to sea level rise, the results show there is a risk of water overtopping the bulkheads at mid-century if sea level rise follows the upper end of the current projections. By 2100, a 100-year storm would overtop the bulkheads and flood the project site under the median and high sea level rise projections. If the bulkheads were overtopped during this storm event, the entire project site would be flooded.

To ensure the risks presented by sea level rise and storm surge are addressed, MM-LU-1 takes an adaptive management approach to mitigation. The measure has four primary components:

1. It requires integration of critical flood protection strategies, such as elevating mechanical and electrical equipment, and eliminating the infiltration of flood waters into water and sewage systems.

- 2. It requires the project proponent to contribute a "fair share" to future bulkhead improvements, which would protect the project site and neighboring properties from flooding.
- 3. Given that the project site is only projected to be exposed to future 100-year storm surge events under median to high sea level rise projections, the project proponent is required to prepare for the installation of additional coastal flood protection measures. In addition, MM-LU-1 has been revised to specify the trigger for implementing the additional flood protection mitigation measures, as follows:

Upon receipt of the operational strategies report (see below), the District's Development Services Department shall determine, if given the most up-to-date sea level rise projections, the current coastal protection features (e.g., the existing bulkheads) would be overtopped if a 100-year storm surge were to occur in the next 10 years. If so, within the next 5 years, the project proponent, in consultation with and approved by the District's Development Services, must either install onsite protections (e.g., flood walls and flood proof openings) to protect the buildings from a high sea level rise scenario and a 100-year storm surge through the end of the District lease or, as mentioned above, contribute a "fair share" to bulkhead improvements that would offer an equal or greater level of protection.

This adaptive management approach to sea level rise is advocated for in many climate change adaptation best practice documents, including the current California Coastal Commission Sea Level Rise Policy Guidance (2015).

4. It requires the development of operational strategies to prepare for flooding. This requirement acknowledges that (1) there may be future flooding events that exceed the 100-year storm analyzed in the EIR, and (2) the project site is dependent on other systems that may be less resilient to future sea level rise and storm surge (e.g., utilities). The operational strategies will enhance the robustness of the physical mitigation measures.

Fifth Avenue Landing Project and Port Master Plan Amendment January 30, 2018 Page 6

E-19 Finally, if a nesting bird is discovered in the project area during construction, MM-BIO-3 allows the applicant's biologist to determine the appropriate construction buffer. Instead, an appropriate buffer should be determined in consultation with the California Department of Fish and Wildlife, and any subsequent reports should also be sent to them.

Geological Hazards

Information in the Geological Hazards section is based on the Geotechnical and Environmental Reconnaissance Report for the San Diego Convention Center Expansion prepared by Geocon Incorporated in 2009 (Appendix G-1) and the Preliminary Geotechnical Evaluation Hilton Bayfront Hotel Tower Expansion prepared by Ninyo and

E-20 Moore in 2011 (Appendix G-2). The 2009 report was conducted within the proposed project site and the 2011 report was conducted adjacent to the project site. However, the project lies within 1500 ft. of the Rose Canyon Fault Line and additional research on this fault line has taken place since the previous studies. Further, the project is different than those analyzed in the previous reports and an updated geotechnical investigation should be prepared and analyzed with the subject DEIR and available for public review and comment, and not used as mitigation as is proposed in MM-GEO-1.

Visual Access

The DEIR states that a project objective is to "Provide for the development and operation of a full-service hotel of a ... similar size and stature as nearby hotels..." however, the represented by location hotels will be accurate with the service to the the service built be accurate to the service hotels...

E-21 proposed full-service hotel will be approximately 500 ft. tall, while the nearby Hilton is 372 ft. high and the two towers of the Marrioth hotel are 293 ft. This hotel will be considerable higher and compare only to the Manchester Grand Hyatt (two towers are 497 ft. and 446 ft.) which is believed to be the tallest existing building on the waterfront in California. The Final EIR should identify that this would be the tallest hotel tower along the San Diego waterfront. Given the potential adverse impacts to public access and traffic identified in the DEIR, the project proponent should consider reduced scope alternatives that include a market-hotel with a reduced height.

The FEIR should include a detailed lighting analysis that includes the types, numbers, E-22 and location, and impact of lighting for all aspects of the project, including to coastal birds within the Pacific Flyway, and include a visual rendering.

Water Quality

E-23 Given the proposed increase in impervious surfaces by 18,540 square feet, water quality design features should be identified and discussed in more detail in the Final EIR.

As for impervious surfaces, Section 4.8, *Hydrology and Water Quality*, of the Draft EIR analyzed the proposed project's potential to result in flooding on or off site. As detailed in Section 4.8, any increases in peak flows for storm events would be managed through the use of low-impact development (LID) features and stormwater pollutant control best management practices (BMPs) that are designed to retain (i.e., intercept, store, infiltrate, evaporate, and evapotranspire) stormwater runoff generated on the project site. Accordingly, the Draft EIR concluded that the proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in: (1) substantial erosion or siltation on or off site; or (2) flooding on or off site.

The changes to mitigation measure MM-LU-1 are included in Chapter 5, *Errata and Revisions*, of the Final EIR. In addition, based on further review of Sections 4.6 and 4.9 of the Draft EIR, some revisions were made to these sections to fix a few editorial errors and provide some additional clarifications of the analysis. These changes are also included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment E-16

The commenter cites the requirement of mitigation measure MM-BIO-5 to coordinate with several resources agencies but notes that CCC is not identified as one of those agencies. The commenter requests that the Final EIR identify coordination with the CCC in the mitigation discussion.

Mitigation measure MM-BIO-5 has been revised as suggested by the commenter to include the CCC as one of the coordinating agencies. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment E-17

The comment indicates that the *Marine Biological Resources Report* identifies impacts on fish from pile driving activities. The comment states that the CCC typically requires the dual criteria not be exceeded at 10 meters distance from pile driving and indicates that considerably higher sound levels are anticipated for the proposed project. The commenter suggests that attenuation devices and/or hydroacoustic monitoring be considered and implemented to minimize impacts on marine resources.

The marine biological assessment (Appendix E-1 of the Draft EIR) noted that the noise data was evaluated, and the thresholds for injury were

calculated, based on a worst-case scenario. It is likely that actual sound levels will be lower than those assumed for the analysis. Even modest reductions in sound levels at source will cause the distance threshold to be significantly reduced. However, the worst-case scenario was used because it is difficult to be certain with regard to in-water sound levels when actual field conditions vary from the conditions used in the model. For this reason, the District agrees that additional monitoring is required during construction. As identified in Section 4.3. Biological Resources. MM-BIO-2 requires that biological monitoring for marine mammals and green sea turtles within 384 feet be implemented during all pile driving activities to prevent impacts on these species. The mitigation measure has been revised to include a requirement to also complete hydroacoustic monitoring during pile driving activities in order to determine the actual noise levels from construction and require the biological monitor to work with the contractor to ensure that in-water construction does not exceed noise levels that would impact any marine species, including fish. The changes are included in Chapter 5, Errata and Revisions, of the Final EIR.

Response to Comment E-18

The comment notes that the project would remove 39 trees but states that it is unclear if they will be replaced. The commenter suggests that the loss of trees should be mitigated by replacing the same number of trees on site. The comment notes that drought-tolerant landscaping be used as identified in the Draft EIR and recommends that plants listed as problematic and/or invasive should not be used or allowed to naturalize on the site.

As identified in the figure at this end of the responses to this letter, the proposed project would install a total of 75 trees within the project site. Therefore, the proposed project would provide 36 more trees than the existing condition. In addition, as noted on the referenced figure, plants listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California, would not be installed on the project site. Section 3.4.9 of Chapter 3, *Project Description*, has been revised to identify the number of trees that would be planted on the project site and notes that all plants installed would not be problematic and/or invasive Plant Council, or as may be identified from time to time by the California of the california Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time

by the State of California. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment E-19

The comment notes that MM-BIO-3 permits the applicant's biologist to determine the appropriate construction buffer for nesting birds. The commenter suggests that instead an appropriate buffer should be determined in consultation with the California Department of Fish and Wildlife (CDFW) with any subsequent reports sent to them as well.

Mitigation measure MM-BIO-3 has been revised as suggested by the commenter to require consultation with CDFW when determining the appropriate construction buffer. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment E-20

The comment cites the geotechnical reports used in the Geological Hazards section of the Draft EIR, which were completed in 2009 for the project site and in 2011 for the property adjacent to the project site. The commenter notes the proximity of the Rose Canyon fault to the project site and indicates that additional research on this fault has been completed since the previous reports. The commenter notes that the proposed project is different than those previously analyzed and suggests that an updated geotechnical report be prepared and analyzed in the Draft EIR, rather than be included as mitigation as proposed in MM-GEO-1.

Although the proposed project is different from those analyzed in the Geotechnical and Environmental Reconnaissance Report for the San Diego Convention Center Expansion and the Preliminary Geotechnical Evaluation Hilton Bayfront Hotel Tower Expansion, the existing condition information in these reports was used to describe the geologic conditions in Section 4.5, *Geology and Soils*, of the Draft EIR. These reports provide an adequate level of detail for the purposes of conducting CEQA analysis. These reports are not intended to provide design-level geotechnical recommendations, but rather to provide an overview of the existing geologic conditions that could be affected by the proposed project. Because geologic conditions do not change over the course of only a few years, the setting and conclusions stated in the reports are still considered valid for the purposes of the environmental analysis. Under CEQA, an EIR is not required to analyze the potential impacts of the existing environmental conditions on a project unless the project would

exacerbate those conditions. Therefore, when discussing impacts from the environment on the project, such as how a fault rupture or soil condition may affect a project, the analysis will first determine if there is a potential for the project to exacerbate the issue. If evidence indicates it would not, then the analysis will conclude by stating such. If the proposed project would potentially exacerbate the issue, then analysis is provided to determine if the exacerbation would or would not be significant.

The commenter does not explicitly state the title of the updated report(s) and none was provided by the commenter. Therefore, the District is unable to review and provide a response related to those studies. However, a recent Fault Hazard Evaluation for the World Class Waterfront Development prepared by Ninyo Moore dated February 26, 2018 (available for review at the Office of the District Clerk), which is a large project currently in the planning stages, located near the project site, within the Seaport Village, Tuna Harbor, and Embarcadero Marina Park North areas. As identified in Figures 2 through 4 of this report, which are included at the end of this chapter, there are some faults that cross the proposed World Class Waterfront Development site; however, there are no faults that cross the Fifth Avenue Landing project site. Therefore, there is no evidence that the proposed project would exacerbate the potential for geologic hazards associated with the fault.

Moreover, the project must be built in accordance with the California Building Code and the City's Municipal Code, which include requirements to conduct geotechnical evaluations that identify geologic hazards and recommend measures that would minimize these hazards. While compliance with these existing regulations is required in order to construct the proposed project, they are further enforced through mitigation measure MM-GEO-1, which includes performance standards for the geotechnical report that is required to be prepared under this mitigation measure. The geotechnical report is required to be submitted to, and approved by, the City, which is the agency that would issue building permits for the proposed project. Therefore, no changes to the Final EIR are required as a result of this comment.

Response to Comment E-21

The comment restates the project objective related to providing a hotel similar in size and stature as nearby hotels. The commenter notes that the proposed hotel tower will be approximately 500 feet tall and provides the height of other nearby hotels that are smaller in height. The commenter

suggests that the Final EIR identify that the proposed hotel tower would be the tallest along the San Diego waterfront. The commenter further suggests that the project proponent consider reduced scope alternatives that include a reduced height market-rate hotel.

The Draft EIR fully discloses the potential impacts of the proposed project on aesthetics and visual resources. As discussed in Section 4.1. Aesthetics and Visual Resources, of the Draft EIR, the proposed project would result in significant and unavoidable operational impacts related to obstructed views within a vista area, displacement of existing designated vista areas, and new permanent sources of glare. It should be noted that the project has included design elements to minimize impacts on aesthetics and visual resources. Specifically, the market-rate hotel tower has been designed to accommodate existing viewsheds by proposing the tower to the west of the existing and proposed public plaza and park areas and by increasing the height of the tower in order to minimize its bulk (i.e., the tower would be tall and slender relative to the views from the Convention Center viewing decks). However, despite this design consideration, the proposed project would still result in significant and unavoidable impacts on aesthetics, as previously described, because it would block some panoramic views from the Grand Staircase. Furthermore, the commenter is correct that the proposed hotel tower would be the tallest tower along the Waterfront but it is comparable in height and massing to the nearby Hilton San Diego Bayfront Hotel, the Manchester Grand Hyatt, and the two towers of the Harbor Club Condominiums. As identified in Section 4.1, Aesthetics and Visual Resources, of the Draft EIR, the Hilton San Diego Bayfront 30 stories high, Marriott Marquis San Diego Marina is 25 stories high, and the Manchester Grand Hyatt is 40 stories high. The proposed hotel tower would be four stories taller than the existing tallest tower along the waterfront, which is the Manchester Grand Hyatt. Section 4.1, Aesthetics and Visual Resources, has been amended to include a statement that the proposed hotel tower would be the tallest hotel tower along the waterfront.

Regarding the commenter's suggestion to consider reduced scope alternatives that include a reduced height market-rate hotel, these alternatives were considered and analyzed under the Reduced Density Alternative (Alternative 5) in Chapter 7, *Alternatives to the Proposed Project*, of the Draft EIR. Under the Reduced Density Alternative, the hotel tower would be reduced by 20%, from 843 rooms to 675 rooms, and the lower-cost visitor-serving hotel would be reduced by 20%, from 228 beds (220 rooms) to 183 beds. The height of the hotel tower would be reduced

from 498 feet (45 stories) to 428 feet (38 stories). All other components of the proposed project would still occur under this alternative. The Draft EIR determined that the Reduced Density Alternative would result in similar impacts on aesthetics and visual resources as the proposed project because it would still block panoramic views from the Grand Staircase. The Board will take into consideration the alternatives analyzed in the Draft EIR when deciding whether to approve the proposed project or an alternative. No changes to the Final EIR are required as a result of this comment.

Response to Comment E-22

The commenter suggests that the Final EIR include a detailed lighting analysis of the types, numbers, location, and impact of project lighting, including impacts on coastal birds within the Pacific Flyway, as well as a visual rendering.

The exact types, numbers, and locations of lighting elements is not currently known at this stage of project design. In accordance with State CEQA Guidelines Section 15124, the project description contains the level of detail needed for the evaluation and review of environmental impacts. Several renderings of the proposed project are provided in Chapter 3, Project Description, of the Draft EIR. Specifically, Figures 3-2 through 3-4 and Figures 3-7 through 3-10 depict visual renderings of the various components of the proposed project, and provide a general representation of lighting conditions under the proposed project. Additionally, the potential impacts on aesthetics associated with light and glare are analyzed in Section 4.1 of the Draft EIR. As discussed in Section 4.1, the lighting from the proposed high-rise market-rate hotel tower would be visible within a wider viewshed because the height of the building would exceed surrounding structures such as the SDCC. The proposed marketrate hotel tower would ultimately establish new sources of nighttime lighting at the project site, which would be comparable to existing lighting sources at the Hilton San Diego Bayfront Hotel and those created by other high-rise buildings in the surrounding area. The Draft EIR concluded that, because existing nighttime views in the area surrounding the site already experience high levels of nighttime lighting, the market-rate hotel tower would not represent a significant new source of substantial light within the area.

Additionally, Section 4.3, *Biological Resources*, of the Draft EIR analyzed the potential for bird strikes to occur as a result of new reflective surfaces.

San Diego Unified Port District

Fifth Avenue Landing Project and Port Master Plan Amendment January 30, 2018 Page 7

E-24 Thank you again for the opportunity to review and provide preliminary comments on the proposed project. If you have any questions or require further clarification, please do not hesitate to contact me at the above office.

Sincerely,

M

Melody Lasiter Coastal Program Analyst

Ce (copies sent via e-mail): Karl Schwing (CCC) Deborah Lee (CCC) Kanani Brown (CCC) Dana Sclar (Port) Chapter 6. Comments Received and District Responses

As described in Section 4.3, many studies have concluded that the majority of bird strikes on buildings occur during the day and involve avian species that are spring or fall migrants as well as resident species hitting reflective plate glass windows. The Draft EIR determined that the market-rate hotel tower, lower-cost visitor-serving hotel, and glass surfaces in the pedestrian bridge from the hotel public access plaza to the SDCC would potentially increase the potential for bird strikes, which would result in significant impacts on avian species protected under the Migratory Bird Treaty Act and sensitive and listed species protected under the California Endangered Species Act. To reduce this potential impact to a less-thansignificant level, mitigation measure MM-BIO-4 requires the implementation of bird strike reduction measures on new structures. As required by MM-BIO-4, building plans must be reviewed by an ornithologist familiar with local species, retained by the developer and approved by the District, to verify that the proposed building has incorporated specific design strategies to reduce bird strikes and that qualify for Leadership in Energy and Environmental Design (LEED) credits, as described in the American Bird Conservancy's Bird-Friendly Building Design (Sheppard and Phillips 2015) or an equivalent guide to avoid or reduce the potential for bird strikes. MM-BIO-4 requires the incorporation of design strategies related to building facade and site structures, low reflective building materials, and exterior lighting. In addition, MM-BIO-4 requires that the design strategies be confirmed with the U.S. Fish and Wildlife Service (USFWS) and/or CDFW, also a performance monitoring plan is required to monitor the effectiveness of the building and site design in preventing bird collisions. Therefore, with implementation of MM-BIO-4, impacts on birds in flight would be less than significant. Some text has been added to mitigation measure MM-BIO-4 to clarify that the design strategies shall be confirmed with USFWS and/or CDFW and the performance monitoring plan shall be reviewed and approved by the District, USFWS, and/or CDFW. These changes are also included in Chapter 5, Errata and Revisions, of the Final EIR.

Response to Comment E-23

The commenter suggests that water quality design features be identified and discussed in greater detail in the Final EIR due to the proposed increase in impervious surfaces.

Section 4.8, *Hydrology and Water Quality*, of the Draft EIR, provides a detailed description of the construction and post-construction BMPs that would be implemented consistent with all applicable regulations. As

detailed in Section 4.8, the proposed project would be required to implement pollutant control BMPs, following the hierarchy described in the District's BMP Design Manual (retention, partial retention with biofiltration, biofiltration, or flow-through with participation in an Alternative Compliance Program). Stormwater pollutant control BMPs are engineered facilities that are designed to retain (i.e., intercept, store, infiltrate, evaporate, and evapotranspire), biofilter, and/or provide flowthrough treatment of stormwater runoff generated on the project site. Minimum BMPs consistent with the District's BMP Design Manual require the use of site design BMPs and source control and pollutant control BMPs. Additionally, the project proponent would prepare a project-specific Stormwater Quality Management Plan for approval by the District that identifies LID features (site design and source control BMPs) and pollutant control BMPs to reduce the discharge of pollutants to the maximum extent practicable. A draft Stormwater Quality Management Plan was prepared for the proposed project (Appendix I-1 of the Draft EIR), which identifies that the project would retain as much runoff as possible within the green roof and the landscaping areas along the proposed public plaza and park areas. In addition, modular wetland proprietary biofiltration units would be utilized throughout the project site to ensure proper treatment of stormwater to remove pollutants prior to discharge into the Bay.

Moreover, the proposed project would include non-structural BMPs such as storm drain stenciling and signage, properly designed outdoor materials storage areas, properly designed trash storage areas, proof of ongoing BMP maintenance, and other items relevant to operations of the site. Implementation of site-specific LID features and pollutant control BMPs, in accordance with the Jurisdictional Runoff Management Program, would filter potential pollutants from runoff prior to discharge into receiving waters. No changes to the Final EIR are required as a result of this comment.

Response to Comment E-24

This comment concludes the comment letter by providing a contact name. The District appreciates the CCC's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

6.3.7 Comment Letter F: City of San Diego Planning Department

Comment Letter F

SAN DIEGO

RECEIVED JAN 30 2018 SAN DIEGO UNIFIED PORT DISTRICT REAL ESTATE

January 30, 2018

Dana Sclar Development Services Department San Diego Unified Port District 3165 Pacific Highway San Diego, CA 92101-1128

SUBJECT: FIFTH AVENUE LANDING PROJECT AND PORT MASTER PLAN AMENDMENT DRAFT EIR (SCH# 2016081053)

Dear Ms. Sclar:

 The City of San Diego ("City") Planning Department has received the Draft Environmental Impact Report ("Draft EIR") prepared for Fifth Avenue Landing Project and appreciates this opportunity to provide comments to the San Diego Unified Port District on the Project and the EIR. In response to this request for public comments, the City has identified significant issues with the project. Plan Amendment, and EIR that may directly conflict with the City's previously approved project for a San Diego Convention Center Expansion at the same location. Approval of this project or the Environmentally Superior Alternative (#3) prevents any contiguous expansion of the San Diego Convention Center, and as such, adversely impacts the City's San Diego Convention Center Phase III Expansion project.

Additionally, the proposed project would have a number of significant and unavoidable impacts as disclosed within the Draft EIR, including substantial adverse impacts to visual resources associated with a scenic vista, greenhouse gas emissions for post-2020 statewide targets, release of hazardous materials release associated with the waterside improvements, exposure of persons to excessive noise levels during construction, substantial increase in ambient noise levels from mechanical equipment and outdoor special events, effects of the project on park and recreational resources, construction and operational impacts to transportation circulation, and inadequate parking supply. In addition to these identified significant and unavoidable impacts, the City believes that there are additional or substantially greater significant impacts not previously identified for land use as it

F-2 relates to the consistency with the Downtown Community Plan that is immediately adjacent to the project site and within the Coastal Zone, circulation impacts on delivery and freight traffic associated with the existing and future expansion of the San Diego Convention Center, the secondary environmental effects on greenhouse gas and air quality emissions from the woefully inadequate parking supply programmed for the project, and the lack of a water supply assessment as required for projects subject to CEQA under SB 610 (2001) that must be contained within the environmental analysis document prepared by the Port of San Diego, the Lead Agency under CEQA.

The City has further comments on the adequacy of the analysis, including the Project Objectives, analysis of potential environmental effects of the project, and alternatives analyzed within the EIR. The following City departments have provided comments on the Draft EIR for this project: Planning Department, Public Utilities Department, Transportation & Storm Water Department, and Development Services Department, as further detailed below.

Response to Comment F-1

This comment is an introductory comment indicating that the City of San Diego Planning Department has reviewed the Draft EIR and is providing comments. The comment states that the City has identified significant issues with the project, PMPA, and EIR that may directly conflict with the City's previously approved SDCC Expansion at the same location. The comment further states that approval of the proposed project or Alternative 3 would prevent any contiguous expansion of the SDCC and adversely impacts the City's SDCC Phase III Expansion project as a result.

The District appreciates the City of San Diego taking the time to comment on the proposed project. This comment does not raise a specific issue with the environmental analysis contained within the Draft EIR. The comment correctly indicates that the proposed project site is at the same location as the SDCC Phase III Expansion site and is correct in concluding that both the proposed project and the SDCC Phase III Expansion, which is analyzed as Alternative 2 in Chapter 7 of the Draft EIR, could not occur at the same location. The proposed PMPA would modify the Port Master Plan (PMP) to allow for the proposed hotel, lower-cost visitor serving hotel, and other components of the proposed project.

Response to Comment F-2

The comment indicates that the Draft EIR discloses a number of significant and unavoidable impacts. However, the comment suggests that there are additional or substantially greater significant impacts not previously identified for land use, circulation, the secondary environmental effects from inadequate parking supply, and the lack of a water supply assessment. The comment also states that the City has further comments on the adequacy of the analysis, including the project objectives, analysis of potential environmental effects of the project, and alternatives analyzed within the EIR. The comment identifies the City departments providing comments on the Draft EIR, which include the Planning Department, Public Utilities Department, Transportation & Storm Water Department, and Development Services Department. The comment indicates that these comments are further detailed below.

This comment provides an overview of the comments to come in the City's letter concerning a number of specific issues with the environmental

Page 2 Ms. Dana Sclar January 30, 2018

F-3

F-4

F-5

PLANNING DEPARTMENT - LONG RANGE PLANNING DIVISION Tait Galloway - Principal Planner / Program Manager

1) The Draft EIR did not include the proposed text for the Port Master Plan Amendment nor did it provide a reference where the public could review the amendment. The proposed amendment has the potential to significantly modify the Port Master Plan, and directly affect the future opportunity for the expansion of the San Diego Convention Center. The Draft EIR should be recirculated with the proposed Port Master Plan Amendment (PMPA), or a referenced location for which this can be found, in order to provide the public, responsible and trustee agencies with the complete text allowing for meaningful review and comment of the Draft EIR in accordance with CEQA.

 Public views from the Phase II San Diego Convention Center to the San Diego Bay would be directly impacted by the proposed project's bulk, scale, and height. This impact would be in

direct conflict with the Draft EIR project objective of "Provide new public vista opportunities of San Diego Bay from vantage points such as the San Diego Convention Center and proposed public plaza and park areas", and as documented in the Draft EIR, this is an impact that would be significant and unavoidable.

3) Fundamentally, the proposed project reduces public access when compared to the adopted Port Master Plan with the San Diego Convention Center Phase III Expansion project; and therefore, it would be inconsistent with the adopted Port Master Plan. Further, the Draft EIR proposes an "optional" pedestrian bridge, with the language stating, "As an optional project feature, the proposed project may potentially include a new public access bridge connecting the proposed market-rate hotel tower rooftop public plaza and park areas to the San Diego Convention Center view deck." This proposed bridge appears to be determined to be necessary for the proposed project. However, depending on the location, the public visitors at the southern boundary of the

- project. However, depending on the location, the public visitors at the southern boundary of the San Diego Convention Center would need to walk over 500 feet to access the bridge to the public plaza and park areas. It is anticipated that the location could further reduce public coastal views which was not analyzed within this Draft EIR. The Draft EIR should be revised to include the applicant's bridge as a component of the proposed project rather than optional, including the proposed location, as this bridge could mitigate the impacts of the project on public access.
- 4) The Draft EIR is unclear regarding the responsible entity for the construction of the proposed optional bridge, and when it would occur. The Draft EIR states that, "Concurrence by the District, and potentially the City of San Diego as the contractual managing entity of the San Diego Convention Center, would be required prior to implementing this portion of the proposed project." Since the implementation and timing of the applicant's optional bridge is unclear, public
- F-6 access from the San Diego Convention Center to the proposed public plaza and park areas would be significantly reduced, and thus impacted. This would also be inconsistent with the project objectives, since the public at the San Diego Convention Center would not have greater access to the proposed recreational facilities. The Draft EIR should be revised to identify how, without the bridge, public access as required under the Coastal Act from the San Diego Convention Center to the proposed public plaza and park areas would be impacted.

analysis contained within the Draft EIR; those comments are addressed when the specific comments are raised further along in the City's letter.

Response to Comment F-3

The comment states that the Draft EIR did not include the proposed text for the PMPA or provide a reference to where it could be reviewed. The comment states that the PMPA has the potential to significantly modify the PMP and directly affect the expansion of the SDCC. The comment further states that the Draft EIR should be recirculated with the proposed PMPA or a referenced location for where it can be found.

The PMPA was included as Appendix C of Volume II, *Technical Appendices*, of the Draft EIR. Volume II was circulated for public review with Volume I, *Draft EIR*, beginning December 13, 2017, and ending on January 30, 2018. Volume II was included on a labeled CD with each hardcopy of Volume I, was available on the District's website, and was available for review at the District's Port Administration Building located at 3165 Pacific Highway. The Notice of Availability, which indicates where copies of the Draft EIR and all documents referenced in the Draft EIR may be reviewed, was posted on the District's website and mailed to various agencies, organizations, individuals, and interested parties. Responsible and interested agencies, including the City of San Diego, received the Notice of Availability and a CD with the complete Draft EIR volume set.

The specific location of the PMPA within Volume II is identified in several locations in the Draft EIR, including the Table of Contents on page vi of the Draft EIR, the Executive Summary on page S-26, and the Project Description on page 3-31.

As the PMPA was available for review during the public review period and referenced in appropriate locations in the Draft EIR, such as the Table of Contents of the Draft EIR, no recirculation or additional referenced locations are necessary. No changes to the Final EIR are required.

Response to Comment F-4

The comment states that public views from the Phase II SDCC to San Diego Bay would be directly affected by the proposed project's bulk, scale, and height. The commenter suggests that this impact would be in direct conflict with the project objective to "provide new public vista opportunities of San Diego Bay from vantage points such as the SDCC and proposed public plaza and park areas." The comment restates the

conclusion of the Draft EIR that this impact would be significant and unavoidable.

As the commenter indicates, the Draft EIR identified a significant and unavoidable aesthetic impact due to obstructed views within a vista area. Specifically, the Draft EIR indicates that the introduction of a high-rise market-rate hotel tower within the viewshed of vista areas at the SDCC's existing plaza and grand staircase would block or substantially obstruct existing expansive and uninterrupted views of the San Diego Bay, including views of the San Diego-Coronado Bay Bridge. This obstruction is in reference to Key Observation Point (KOP) 5.

The project's objective to "provide *new* public vista opportunities of San Diego Bay from vantage points such as the SDCC and the proposed public plaza and park areas" (italics added for emphasis) is not in conflict with the obstruction of one existing scenic vista. As stated on page 4.1-26. "In addition, the proposed project would introduce up to 98,448 square feet of new public and park areas on the roof of the proposed parking structure and hotel ballrooms that would be at a similar height as KOP 2 and could restore views similar to those offered by KOP 2. The proposed rooftop public plaza and park areas would sit closer to the waterfront than KOP 2 and would be larger than the existing SDCC plaza where KOP 2 is located." As shown on the Draft Figure 11 of the proposed PMPA (Appendix C of the Draft EIR), the project would add up to eight designated vista areas, most of which would be elevated and would provide direct visual access to the Bay and Coronado. In addition, the proposed project's public plazas would be limited to two stories and would match the viewing decks of the SDCC. As such, expansive views from the SDCC Phase II viewing balconies would be maintained. Therefore, the addition of new scenic vistas is consistent with the project's objective to provide new public vista opportunities. No changes to the Final EIR are required.

Response to Comment F-5

The comment suggests that the proposed project reduces public access when compared to the SDCC Phase III Expansion project in the adopted PMP, and therefore would be inconsistent with the adopted PMP. The comment states that the proposed optional pedestrian bridge appears to be determined to be necessary for the proposed project, but depending on the location, public visitors at the southern boundary of the SDCC would have to walk over 500 feet to access the bridge. The commenter indicates that the location could further reduce public coastal views, which was not

analyzed in the Draft EIR. The commenter suggests that the Draft EIR be revised to include the pedestrian bridge as a component of the project because it could mitigate the project's impacts on public access.

The first portion of this comment is a general comment that suggests that public access is reduced by the proposed project when compared with the SDCC Phase III Expansion. As the City does not provide evidence to support this statement, the District cannot provide a specific response. However, as detailed in Chapter 4, including Sections 4.1, *Aesthetics and Visual Resources*, 4.9, *Land Use and Planning*, 4.11, *Public Services and Recreation*, and 4.12, *Transportation, Circulation, and Parking*, the proposed project's impacts on public access would be less than significant with mitigation incorporated. Therefore, no further mitigation is necessary and the project would not result in a significant and unavoidable public access impact.

The second part of this comment suggests that the optional pedestrian bridge is determined to be necessary for the proposed project. The District is not clear why the City believes this is the case as no supporting evidence is provided. As stated in the Draft EIR on page 3-18, under the heading *Optional Connecting Bridge to the San Diego Convention Center*, it is described clearly that the connecting bridge is optional. It states, "[a]s an optional project feature, the proposed project may potentially include a new public access bridge connecting the proposed market-rate hotel tower rooftop public plaza and park area to the SDCC view deck. This optional bridge connection would provide visitors with elevated and expansive views of the entire north and mid-Bay and would allow for travel to the City's Gaslamp Quarter. This optional bridge would be approximately 1,882 square feet with a length of 85 feet and a width at the narrow end of 18 feet and wide end of 26 feet. The paving materials for the proposed bridge would be designed to be integrated with the proposed rooftop public plaza and park area and may consist of a variety of enhanced materials including integral color decorative finished concrete, precast pavers, and/or stone accent paving. In addition, planting material would be included along the bridge in either integrated or freestanding planters. The guardrails are proposed to be constructed of painted metal or stainless steel or a combination of these along with solid planter walls. Concurrence of the District, and potentially the City of San Diego as the contractual managing entity of the SDCC, would be required prior to implementing this portion of the proposed project. An amendment to the Management Agreement between the District and the City of San Diego may also be required. Therefore, the bridge is identified

as optional in this EIR. The EIR analyzes the project with and without the optional public access bridge component."

As indicated, the bridge is labeled as optional because it would require concurrence from the City and possibly the San Diego Convention Center Corporation (SDCCC), and potentially an amendment to the Management Agreement between the District and City. Given the uncertainty associated with approvals outside of the District's sole control, the District elected to fully analyze the bridge pursuant to CEQA, but cannot require the bridge. As such, the Draft EIR includes a full environmental analysis of the bridge should the City, District, and SDCCC come to an agreement; however, none of the mitigation relies on the bridge and, therefore, its construction is not required as a component of the proposed project to reduce the project's significant impacts.

The commenter suggests that the bridge location is unknown. However, the location is clearly shown on multiple figures, including the overall site plan, where is it also labeled as "Optional Bridge." Please see Figures 3-1, 3-5, 3-6, 3-10, 3-13, 3-16, 3-18, and 4.1-9. The commenter expresses the opinion that the optional connecting bridge would reduce public coastal views and that it was not analyzed in the Draft EIR. It is not clear why the commenter believes the connecting bridge would block public coastal views, as no evidence was provided for consideration. The bridge would link the SDCC to the second-level terrace of the proposed public plaza and park area atop the ballrooms, meeting rooms, and proposed parking structure. The public plaza and park area is limited to two stories to ensure views from the SDCC second-story balconies are retained, as analyzed in KOP 2 (please see the response to comment F-4). The bridge would be at the same elevation as the public plaza and park area and second-story floor of the SDCC. The bridge is shown on Figure 4.1-9, which demonstrates no view obstruction beyond what has already been identified from other components of the proposed project in Section 4.1, Aesthetics and Visual Resources. No changes to the Final EIR are required.

Response to Comment F-6

The comment states that the Draft EIR is unclear of the entity responsible for the construction of the proposed optional bridge and when it would occur. The comment cites text from the Draft EIR regarding the agencies requiring concurrence prior to implementing the optional bridge. The commenter then suggests that public access from SDCC to the proposed public plaza and park areas would be significantly reduced and affected

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5) The existing public promenade (shown on Figure ES-10) would be divided by the proposed open area pedestrian archway within the market rate hotel as shown on Figure ES-14. While Figure ES-11 appears to show the path continuing through the market rate hotel, the Draft EIR is unclear how public access would be impacted for people entering the open area pedestrian archway. The Draft EIR does not address if public access to the pedestrian archway would be limited during certain hours, and therefore, public access would be available during normal operating hours (e.g., 6:00 AM to 10:30 PM). It is unclear if this would be applied to the existing public promenade. Please provide clarification if access through the pedestrian archway would be limited or restricted during events or time of day.

6) The proposed public promenade around the harbor side of the proposed market rate hotel shown as Area D on Figure ES-10 would only be 10 feet wide as shown in Table ES-1. The existing promenade is 35 feet wide. The proposed public promenade would limit and potentially discourage coastal public access due to its limited width. The width of the proposed public promenade to encourage people to access the promenade without the feeling of it being a private space only for hotel guests.

7) Mitigation Measure MM-HAZ-8 requires that the project applicant "Obtain ALUC and FAA Formal Review and Determination". The proposed PMPA is required by the California Aeronautics Act to be submitted to the Airport Authority acting as the San Diego County ALUC for a consistency determination with the Airport Land Use Compatibility Plan for San Diego International Airport prior to the District taking action to approve the amendment. This is actually a regulatory requirement that must be done as part of the project and would not be a mitigation measure under CEQA. And the City of San Diego will not issue construction permits until a proposed

- F-9 project has obtained determinations of No Hazard from the FAA as addressed in the City of San Diego, Development Services Department - Information Bulletin 520. This requirement and the process should be included in the Applicable Rules and Regulations of the Land Use Section of this Draft EIR, with a detailed analysis and summary of the actions required for this project. Further, the City of San Diego will not issue construction permits until a proposed project has obtained determinations of No Hazard from the FAA as addressed in the City of San Diego, Development Services Department - Information Bulletin 520. Please revise this mitigation measure to require FAA No Hazard Determinations prior to the issuance of building permits.
- F-10 [8] On Page 4.9-4: Surrounding Community: Please make the following edit: <u>Mixed-Use Multifamily</u> land use designations are located inland to the north/northwest in the City's juridiction.
- F-11 9) Within Figure 4.11-2, please address the following figure revision: Children's Park boundaries are incorrectly depicted on Figure 4.11-2.

F-12
 10) The proposed project does not provide adequate parking to meet the onsite demand, nor does the project identify nearby shared parking opportunities reasonably foreseeable and feasible to address the demand. While parking directly would not be a significant effect on the

until the bridge is built. The comment also attempts to link an inconsistency with the project objectives and SDCC's access to the proposed project. The commenter then suggests that the Draft EIR be revised to identify how public access from the SDCC to the proposed public plaza and park areas would be affected without the bridge.

The optional pedestrian bridge is included as an optional component of the proposed project; therefore, as with the other elements of the proposed project, Fifth Avenue Landing, LLC (FAL), the project proponent, would be responsible for the construction and operation of the pedestrian bridge should it be implemented. Regarding the commenter's concerns of the potential impacts of the optional pedestrian bridge, please see the response to comment F-5. As detailed in Chapter 4, including Sections 4.1, Aesthetics and Visual Resources, 4.9, Land Use and Planning, 4.11, Public Services and Recreation, and 4.12. Transportation, Circulation, and Parking. the proposed project's impacts on public access would be less than significant with mitigation incorporated. Moreover, the impact determination contained within the Draft EIR does not rely on building the optional bridge to avoid or mitigate a significant impact. The City suggests that convention goers who wished to access the proposed project's public plaza and park areas from the second floor of the SDCC would somehow be affected such that a significant impact on the environment would occur. However, even without the bridge, convention goers would continue to have access to the project area in the same manner as under the current condition. This includes using the stairs and elevators between the Phase I and Phase II SDCC sections or walking around the Phase 2 expansion, or through or around the Convention Center Park to access the adjacent parcel at the ground level. Once at the existing promenade (ground level), pedestrians would be able to safely climb one flight of stairs, use the ramp. or take an elevator to the second-level public plaza and park area. Therefore, the project would not result in a significant and unavoidable public access impact. No changes to the Final EIR are required.

Response to Comment F-7

The comment states that the existing public promenade would be divided by the proposed open area pedestrian archway within the market-rate hotel. The commenter suggests that the Draft EIR is unclear how public access would be affected for people entering the open area pedestrian archway or if access would be limited during certain hours. The comment notes the operating hours of 6:00 a.m. to 10:30 p.m. from Figure ES-10 of the Draft EIR, and states that it is unclear if this would be applied to the

existing public promenade. The commenter requests clarification as to whether access would be limited or restricted during events or time of day.

The proposed project would not limit public access along the existing public promenade. As stated on page S-13 of the Draft EIR, "Figure ES-10 depicts the public plaza and park area locations, and Table ES-1 provides further detail on each area. *The proposed project would also maintain and enhance the existing 35-foot-wide Embarcadero Promenade across the site. The existing promenade does not count toward the acreage of the proposed project's public plaza and park areas."* (Italics added for emphasis.)

Please see Figures ES-11 and 3-13 as well as Figure 3-8. As shown on these figures, the public promenade would remain and would continue to connect with the offsite public promenade. No barriers are proposed, and no project-related restrictions would be placed on the existing public promenade during project operation.

The public promenade extension shown on Figure ES-10 and referenced by the commenter is an additional connection to the full public promenade and would serve as public access around the perimeter of the proposed hotel tower. This would function as an additional pedestrian connection and would be in addition to the existing 35-foot-wide public promenade, not a replacement for it. This additional area would be associated with the hotel tower and therefore is not open during the late night and early morning hours between 10:30 p.m. and 6:00 a.m. The proposed project would not change the operating hours of the existing public promenade. No changes to the Final EIR are required.

Response to Comment F-8

The comment indicates that the proposed public promenade around the harbor side of the proposed market-rate hotel would only be 10 feet wide per Table ES-1. The commenter notes that the existing promenade is 35 feet wide and expresses the opinion that the width of proposed public promenade would limit and potentially discourage coastal public access. The commenter suggests that the width of the proposed public promenade be increased to be consistent with the existing promenade.

The proposed project would provide an additional 10-foot-wide connection (Area D) to the existing 35-foot-wide Embarcadero Promenade and would serve as public access path around the perimeter of the proposed hotel tower. As explained in response to comment F-7 above, this connection is an additional connection to the full public promenade

and would serve as public access around the perimeter of the proposed hotel tower, and the proposed project would maintain and enhance the existing 35-foot-wide Embarcadero Promenade across the site. The commenter raises an issue regarding the design of the proposed project, but does not raise a specific issue with the environmental analysis contained within the Draft EIR. Therefore, no changes to the Final EIR are required and no further response is required pursuant to CEQA. However, this comment will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

Response to Comment F-9

The comment cites the requirement of mitigation measure MM-HAZ-8 to obtain Airport Land Use Commission (ALUC) and Federal Aviation Administration (FAA) formal review and determination. The commenter states that the proposed PMPA is required to be submitted to the Airport Authority prior to District approval of the amendment. The comment further states that this is a regulatory requirement and not a mitigation measure under CEQA, and suggests that the required process be included in the Applicable Rules and Regulations portion of the Land Use section of the Draft EIR. The commenter indicates that the City will not issue construction permits until this determination has been obtained and requests that the mitigation measure be revised to require the FAA No Hazard Determinations prior to the issuance of building permits.

The additional language requested by the commenter is already contained within the Draft EIR on page 4.7-13, under Section 4.7.2.4, which states, "Airport Land Use Commission (ALUC) review is required for land use plans and regulations within Review Area 2 proposing increases in height limits and for land use projects that: (1) have received from the Federal Aviation Administration (FAA) a Notice of Presumed Hazard, a Determination of Hazard, or a Determination of No Hazard subject to conditions, limitations, or marking and lighting requirements; and/or (2) would create any of the following hazards (San Diego County Regional Airport Authority 2014). [...]

Local agencies must submit an application for consistency determination to the ALUC for its review prior to construction (San Diego County Regional Airport Authority 2014). The ALUC must respond to a local agency's request for consistency determination within 60 calendar days after the application is deemed complete by ALUC staff."

While CEQA does not require that existing regulations be made into mitigation measures, as the lead agency for CEQA compliance of the proposed project, the District, at its discretion, may include mitigation measures that are designed to ensure compliance with existing regulations. As identified in Section 4.7, *Hazards and Hazardous Materials*, mitigation measure MM-HAZ-8 requires FAA approval and ALUC formal review and determination. In response to this comment, MM-HAZ-8 has been revised to change "prior to initiation of project construction" to "prior to the Board of Port Commissioners taking final action to adopt the PMPA in accordance with 14 California Code of Regulations Section 13632(e)." As the mitigation measure does not conflict with the applicable regulations and serves to ensure its enforcement, no further changes to the Final EIR are required. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment F-10

The commenter requests that "multifamily" be revised to "mixed-use" on page 4.9-4 of the Draft EIR.

In response to this comment, minor clarifications have been made to indicate that "Multiple Use" land uses are present inland to the north/northwest in the City's jurisdiction, which is consistent with Figure LU-2 of the Land Use Element (2015) of the City's General Plan. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment F-11

The commenter indicates that the Children's Park boundaries are incorrectly depicted on Figure 4.11-2 and requests that the figure be revised.

Figure 4.11-2 has been revised to reflect the correct boundaries for the Children's Park. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment F-12

The comment states that the proposed project does not provide adequate parking to meet the onsite demand or identify reasonably foreseeable and feasible nearby shared parking opportunities. The commenter suggests that the secondary effects of inadequate parking were not analyzed, specifically as it relates to air quality, GHG emissions, and noise. The Page 4 Ms. Dana Sclar January 30, 2018

F-12

F-14

cont

environment, the secondary effects of woefully inadequate onsite parking has not been analyzed. Specifically, the effects on air quality emissions related to intersection queuing and CO "hot spots" that can directly impact nearby pedestrians and bicyclists, increase in greenhouse gas emissions from idling or circling vehicles, and increased noise at congested street segments and intersections from idling cars and trucks. A detailed analysis of the potential secondary (indirect) effects of the inadequate onsite parking should be included within the Draft EIR.

- 11) Mitigation Measure MM-TRA-8 requires that the project applicant "Implement a Parking Management Plan that Provides Parking Management Strategies". This planning and analysis of parking management is an inappropriate deferral of analysis and possible mitigation because no specific performance standards have been identified. The City recommends that the applicant prepare the Parking Management Strategies at this time, and recirculate the Draft EIR to include
- F-13 this information, as it would likely identify significant new information on the feasible mitigation measures related to the identified impact such as participation in the SANDAG-operated Icommute program, provision of parking spaces for employee carpools and vanpools, discounted employee transit passes, and designation of an onsite employee coordinator to inform employees of the alternative commute options, all of which should be included as mitigation measures and incorporated into the Mitigation Monitoring and Reporting Program (MMRP) for this project.

12) Mitigation Measure MM-AES-2 requires that the project applicant "Install Wayfinding and Public Accessibility Signage". The proposed wayfinding signage and locations should be consistent with the adopted Port Master Plan and additional wayfinding sign locations should be included since the proposed project would be physically separated from the San Diego Convention Center and form a barrier to public access along Convention Way. It is recommended that the following

form a barrier to public access along convention Way. It is recommended that the following locations for wayfinding and public accessibility signage be included to identify coastal access points: the pedestrian bridge at Harbor Drive, along Convention Way and Park Blvd, along the public promenade, and public access corridors at the San Diego Convention Center.

13) Threshold 2 (4.9.4.2 Thresholds of Significance) states that "Implementation of the proposed project would conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect". The Draft EIR did not address the City's General Plan and Downtown Community Plan which is immediately adjacent to the project rae. Please address in the Draft

- F-15 EIR if implementation of the proposed project would project would be policies and/or goals of the City's General Plan and Downtown Community Plan, including view corridors, public access, and circulation. This includes a number of policies related to public view corridors extending down to the water front, prohibition of "sky walks" that would affect public view, ensure waterfront development is low in scale and intensity with tapering from Broadway south, maintain a comprehensive downtown-wide wayfinding system, and encourage the use energy conserving techniques such as photovoltaics.
- F-16 14) With respect to the last policy, there is great concern that the proposed project would directly conflict with the future installation of photovoltaic panels on the rooftop of the San Diego

comment states that a detailed analysis of the potential secondary effects should be included in the Draft EIR.

The Draft EIR identifies a significant and unavoidable impact associated with the lack of sufficient parking proposed on site (Impact-TRA-7). However, mitigation measure MM-TRA-8 would require that the deficit number of parking spaces (i.e., 189) be secured through agreements with nearby parking operators. Nearby garages, which are identified on page 4.9-31, include the adjacent Hilton San Diego Bayfront Hotel Parking garage, the SDCC parking garage, 6th and K Parkade, 550 J St Parking Garage, the Padres Public Parking Garage, and the Autopark Public Parking Garage. All of these facilities are less than 0.5 mile from the project site. No excessive idling or driver circling would occur because a sufficient number of parking spaces would be available between the onsite spaces provided and the nearby offsite spaces that would be secured through a formal agreement. Therefore, no new or more severe significant environmental impacts would occur. No changes to the Final EIR are required.

Response to Comment F-13

The comment notes the requirement of mitigation measure MM-TRA-8 to implement a parking management plan and indicates that this planning and analysis of parking management is a deferral of analysis and possible mitigation because no specific performance standards have been identified. The commenter recommends that the applicant prepare the Parking Management Strategies at this time and recirculate the Draft EIR to include this information. The commenter also suggests a number of strategies that should be included as mitigation measures.

Implementation of mitigation measure MM-TRA-8 is not a deferral of analysis or mitigation. As noted in the Draft EIR, the proposed project would include 260 parking spaces on site, which, if applying the District's *Tidelands Parking Guidelines*, is a deficit of approximately 189 spaces. Mitigation measure MM-TRA-8, in addition to identifying and requiring additional ways to reduce the project's parking demand, requires that the project proponent secure 189 spaces with one or more nearby parking operators through a formal agreement through the life of the proposed project lease. Supplying or guaranteeing the supply of adequate parking (i.e., an additional 189 spaces) is a performance standard that the project must meet before it may operate. Consequently, the project would not be under-parked at any point during its operation, and, because this

requirement is triggered prior to project operations, there is no deferral of mitigation.

Moreover, the mitigation measure is specific in its other requirements for the parking management plan. Designated pick-up/drop-off locations for transportation services such as Uber and Lyft are required. A direct path and clear signage to the water taxi and ferry is required. Bike sharing facilities would be provided within 1,000 feet of the project site, and bike racks for a minimum of 24 bikes would be provided. A hotel-sponsored airport shuttle is required and the project proponent would be required to provide public transit subsidies for employees. Therefore, the mitigation in the Draft EIR identifies the specific requirements that would need to be included, among any additional measures identified, in the Parking Management Plan.

Furthermore, the District appreciates the City's additional measure suggestions and has amended mitigation measure MM-TRA-8 to include several strategies, including participation in the San Diego Association of Governments-operated iCommute Program, provision of employee carpool and vanpool parking spaces, and designation of an onsite employee alternative commute options coordinator. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR. As identified in mitigation measure MM-TRA-8, public transit subsidies for employees would be required as one of the parking management strategies. As such, the commenter's suggestion to add discounted employee transit passes is included in the mitigation measure in the form of employee subsidies.

Response to Comment F-14

The comment notes the requirement of mitigation measure MM-AES-2 to install wayfinding and public accessibility signage and suggests that the proposed signage and locations should be consistent with the adopted PMP. The commenter also suggests that additional wayfinding sign locations should be included and indicates that the proposed project would be physically separated from the SDCC and form a barrier to public access along Convention Way. The comment identifies four locations for wayfinding and public accessibility signage.

The current PMP designates the project site for the SDCC Phase III Expansion. Locations of wayfinding signage described in the PMP are specific to that project. Although the commenter suggests that wayfinding signage should be consistent with the current adopted PMP, it should be noted that the proposed project also consists of an amendment to the PMP

to replace the existing Phase III Convention Center Designation with the designations that would allow the proposed project to be implemented. As a result, because the PMPA would modify the PMP to replace the Convention Center Phase III Expansion with the proposed project, the locations of wayfinding signage currently included in the PMP would not be applicable to the proposed project. No changes to the Final EIR are required.

Response to Comment F-15

The comment restates Threshold 2 of Section 4.9, *Land Use and Planning*, of the Draft EIR. The commenter indicates that the Draft EIR did not address the City's General Plan and Downtown Community Plan and requests that the Draft EIR address whether implementation of the proposed project would conflict with the polices and/or goals of these plans. The comment identifies specific policies related to view corridors, public access, circulation, and energy conservation.

As noted by the commenter, Threshold 2 states "Implementation of the proposed project would conflict with an applicable land use plan, policy, or regulation of an agency *with jurisdiction* over the project..."(italics added for emphasis). The proposed project is located on public tidelands within the District's land use jurisdiction. Within the District's jurisdiction, the PMP is the primary document that governs land and water uses, while the City's General Plan and applicable community plans serve as the governing land use documents for projects within the City's jurisdiction. Moreover, the City does not have any discretionary authority over the proposed project. As such, the City is not a responsible agency and an analysis of City planning documents is not required. An analysis of the proposed project's consistency with the goals, policies, and objectives of the PMP is provided in Table 4.9-3 of the Draft EIR. No changes to the Final EIR are required.

Response to Comment F-16

The commenter expresses concern that the proposed project would directly conflict with the future installation of solar photovoltaic (PV) panels on the rooftop of the SDCC. The commenter requests that a shading study be conducted of secondary impacts related to the ability to further reduce GHG emissions on the SDCC, under existing and expanded scenarios. The commenter states that the Draft EIR should include analysis

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cont.

Convention Center. A shading study should be conducted to ensure that secondary (indirect) impacts related to the ability to further reduce greenhouse gas emissions on the adjacent San Diego Convention Center, under both existing and expanded scenarios. Full disclosure of the analysis of this potential impact should be included in the Draft EIR and recirculated as required under CEQA Guidelines Section 15088.5 to allow for meaningful public review and comment on this important area of analysis related to greenhouse gas emissions and the City's Climate Action Plan, adopted in December 2015.

- 15) Under California Water Code section 10912, the proposed project is proposing more than 500 hotel rooms; and therefore, is subject to SB610 which requires that the City of San Diegd's Public Utilities Department (PUD), as the water supplier, prepare a water supply assessment for the proposed project. Neither the applicant nor the Port have requested the City PUD to prepare a water supply assessment pursuant to SB610. Under State law, this assessment must be prepared and incorporated into the CEQA environmental document to allow for disclosure of potential impacts related to water supply. Further, this document must be included as part of the decision making process by the CEQA Lead Agency, which is the Port of San Diego, on a
- F-17 Interestion making process by the CEQA tead Agency, which is the Port of san Drego, on a project that meets such requirements under SB610. While state regulatory code mentions the applicability of these regulations are to a City or County, because it also refers to the CEQA Lead Agency for consideration of the Water Supply Assessment, the City asserts that this requirement would also apply to the Port of San Diego as an independent land use authority and CEQA Lead Agency for such planning and development projects. Therefore, the applicant has not adequately demonstrated with substantial evidence that adequate water supplies exist for the proposed project. Please revise the Draft EIR to include a WSA and full recirculation of the analysis of whether there would be adequate water supplies for this project. At this time, all conclusions are unsubstantiated and deficient under CEQA.
 - 16) The Draft EIR rejected the San Diego Convention Center Expansion and Market-Rate Hotel Tower Alternative proposed by the San Diego Convention Center Corporation (SOCCC). The Draft EIR states that "... this alternative was rejected because (1) it is not likely to reduce a significant impact pursuant to CEQA, (2) it is uncertain if sufficient park space could be provided with the reduction of the rooftop park proposed as part of the San Diego Convention Center Expansion approved by the Port Board and the Coastal Commission, and (3) only FAL has leasing rights to the site and would need to agree to any changes to its current leasing agreement that would be up to FAL's sole discretion. However, rejection of this alternative from further consideration in the Draft EIR does not preclude future consideration of a San Diego Convention Center
- F-18 Expansion/Hotel Tower project by the Port Board." By rejecting this alternative, the project has Expansion/Hotel Tower project by the Port Board." By rejecting this alternative, the project has taken the ability for decision makers and the public to consider the environmental impacts of the proposed San Diego Convention Center Expansion and Market-Rate Hotel Tower Alternative and compare it to the other alternatives. This alternative, while it would not reduce all significant impacts, would reduce some impacts which is adequate for consideration of an alternative could result in a reduction of the rooftop park, proposed as part of the San Diego Convention Center Phase III Expansion, this could be addressed as to how the alternative would meet the project objectives. Leasing rights to the site is not an issue under CEQA which cannot be used as a reason for rejection of the proposed alternative. The Draft EIR should include the San Diego

of this potential impact and be recirculated as it relates to GHG emissions and the City's Climate Action Plan (CAP).

While the addition PV solar panels on the SDCC rooftop would contribute to the GHG reduction targets in the City's CAP, the amount of GHG reductions provided would likely be minimal compared to the City's overall reduction targets. Moreover, the future installation of PV panels on the rooftop of the SDCC is not identified in the City's CAP as a means to reduce the City's GHG emissions. As such, the proposed project would not directly impede implementation of the City's CAP, as there are a number of other ways that the City could reach its GHG reduction targets other than through the installation of a PV system on the SDCC rooftop. In addition, CEOA requires that an EIR evaluate a project's potential effects on existing environmental conditions. The PV panels referenced by the commenter are not currently present on the SDCC rooftop, and therefore are not part of the environmental baseline. Although the installation of a PV system on the SDCC rooftop is a mitigation requirement of the SDCC Phase III Expansion EIR and would be reasonably foreseeable if the currently approved Phase III Expansion were to proceed rather than the proposed project, development of the proposed project would preclude development of the SDCC Phase III Expansion project as analyzed in the SDCC Phase III Expansion EIR because they would occupy the same space. Therefore, because there is no evidence that the proposed project would hinder the City's ability to reach its CAP targets and because there are currently no PV panels on the SDCC, nor were any plans provided to suggest there might be in the future, an analysis of the proposed project's effects on a potential future PV installation on the SDCC rooftop is not required. Therefore, no changes to the Final EIR are required.

Response to Comment F-17

The commenter suggests that the proposed project is subject to Senate Bill (SB) 610 because it proposes more than 500 hotel rooms and states that neither the applicant nor the District have requested a water supply assessment from the City's Public Utilities Department. The comment states that the water supply assessment must be incorporated into the CEQA document and included as part of the decision-making process under state law. The commenter acknowledges that the state regulatory code identifies that these requirements are applicable to a city or county, but expresses the opinion that this requirement would also apply to the District as an independent land use authority and CEQA Lead Agency. The commenter asserts that the applicant has not demonstrated with

substantial evidence that adequate water supply exists and requests that the Draft EIR be revised to include a water supply assessment and recirculated.

The District disagrees with the commenter's interpretation of the referenced California Water Code Section 10910 et. al and SB 610. As the commenter notes, California Water Code Section 10912 requires city and county lead agencies to request that water purveyors prepare water supply assessments for certain projects subject to CEQA. As defined in Section 15155(a)(5) of the State CEQA Guidelines, a city or county lead agency means a *city or county*, acting as lead agency, for purposes of certifying or approving an EIR, negative declaration, or a mitigated negative declaration for a water-demand project. As such, because the District is not a city or county government, California Water Code Section 10910 does not apply to the proposed project, and a water supply assessment is not required.

Moreover, the California Department of Water Resources (DWR) issued a guidebook to assist with compliance with SB 610 and 221. In the introduction of the guidebook, DWR writes: "Senate Bills 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by *cities and counties*. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers and *cities and counties*. Both statutes require detailed information regarding water availability to be provided to the *city and county* decision-makers prior to approval of specified large development projects. Both statutes also require this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the *city or county* on such projects" (italics added). Therefore, not only do the California Water Code, SB 610 and 221, and the State CEOA Guidelines clearly state that SB 610 and California Water Code Section 10910 apply only to city and counties, DWR's *Guidebook for* Implementation of Senate Bill 610 and Senate Bill 221 of 2001 clearly indicates that these laws only apply to cities and counties as part of city and county decision-making. Notably, none of these documents, regulations, and legislative bills support the City's opinion that non-city and non-county agencies with land use decision authority over a project and/or acting as a CEQA lead agency be required to prepare a water supply assessment.

It is important to note that while the District is not required to prepare a water supply assessment for the proposed project, the Draft EIR does contain a complete analysis of the project's water demand and the likely supply, as well as an impact determination. Section 4.14, *Utilities and Energy Use*, of the Draft EIR describes the overall environmental setting associated with water and water supply (including details extracted from the City's and County's Urban Water Management Plans), the existing water demand at the project site, and the proposed water demand with all project components. The Draft EIR also describes several options for obtaining water to meet the project's future demand as well as the mitigation measures related to GHG emissions that will reduce the water demand of the proposed project compared to typical hotel projects by a minimum of 20%. The Draft EIR concluded that impacts on water supply and facilities would be less than significant. Therefore, no changes to the Final EIR are required.

Response to Comment F-18

The comment restates the reasons from the Draft EIR for rejecting the SDCC Expansion and Market-Rate Hotel Tower Alternative. The commenter suggests that by rejecting this alternative, the project has taken away the ability for decision-makers and the public to consider the environmental impacts of this alternative. The commenter acknowledges that this alternative would not reduce all significant impacts but states that it would reduce some impacts, which is adequate for considering the alternative. The commenter provides reasons why the alternative should be considered and states that leasing rights to the site is not an issue under CEQA that can be used as a reason for rejection of an alternative. The commenter requests that the Draft EIR be revised to consider this alternative and recirculated.

The State CEQA Guidelines require that an EIR present a range of reasonable alternatives to a project, or to the location of a project, that could feasibly attain a majority of the basic project objectives, but that would avoid or substantially lessen one or more significant environmental impacts of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are not feasible, or do not avoid or

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Convention Center Expansion and Market-Rate Hotel Tower Alternative selected for analysis to provide Port of San Diego Board of Directors the ability to evaluate this alternative. The Draft EIR should be revised for consideration of this alternative within the reasonable range of alternatives, and recirculated as required under CEQA Guidelines Section 15088.5 as both a feasible project alternative and to allow for meaningful public review and comment.

PLANNING DEPARTMENT - ENVIRONMENTAL &RESOURCE ANALYSIS Myra Herrmann - Senior Planner/Archaeologist/Tribal Liaison

17) Section 4.4 – Cultural Resources. Subsection 4.4.3 under the heading "Existing Historical Resources provides a summary of the methodology used to address Cultural Resources within the Project site, including "Native American consultation". Section 4.13 – Tribal Cultural Resources clearly states that no consultation was conducted in accordance with Assembly Bill 52 (AB 52) because notification from any California Native American tribes in San Diego County

requesting consultation for projects under Port jurisdiction were not received, and as such no further review or evaluation was required. While this is clear to a CEQA practitioner, the statement in Section 4.43 is conflicting and should merely be revised to clarify that the Native American consultation for cultural resources discussed in this section was conducted as part of the extensive records search, background research and survey rather than under the auspice of AB 52. Inserting a cross-reference to Section 4.13 would be recommended in this case.

TRANSPORTATION AND STORM WATER DEPARTMENT – STORM WATER DIVISION Vicki Kalkirtz – Senior Planner

18) The project site and surrounding area include important components of the City of San Diego storm drain system, including storm drain lines and outlets, which would be affected by project construction and operation. Some of these facilities are tidally influenced. Please ensure that that any adverse environmental impacts of the proposed project and Port Master Plan

F-20 Amendment, as well as cumulative impacts, on the City's storm drain system are fully addressed and disclosed within the Draft EIR. Additionally, the new marina appears to be located directly on or adjacent to the City of San Diego's storm drain outlet (Figure 4.8-1). This location may have impacts during high tidal and storm events that should be analyzed and included within this Draft EIR. Please recirculate the Draft EIR to include an analysis of the project's impacts on the storm drain outlet, as well as any impacts and mitigation measures as necessary.

19) Page 4.8-3. Section 4.8.2.2, last sentence should be revised as follows: "The most significant sources of pollutants affecting the beneficial uses of San Diego Bay are urban runoff, and marinas and boating activities (Project Clean Water 2017)."

20) Page 4.8-4, Section 4.8.2.2, second paragraph, last sentence should be revised as follows: "In response to this contamination, the San Diego RWQCB has been working collaboratively with the City of San Diego to study the sources of PAHs for San Diego Bay (San Diego RWQCB 2017)." substantially lessen any significant environmental effects (State CEQA Guidelines, Section 15126.6(c)).

The Draft EIR considered but rejected four alternatives, and six alternatives were carried through for detailed analysis. As such, the Draft EIR included a reasonable range of alternatives. Additionally, as detailed in Section 7.5.1.4 of the Draft EIR, the SDCC Expansion and Market-Rate Hotel Tower Alternative was rejected from further consideration because it would not likely reduce a significant impact pursuant to CEQA, and actually would potentially result in greater impacts on air quality, noise, GHG emissions, and transportation, circulation, and parking because these uses would most likely increase the amount of traffic traveling to and from the project site. Therefore, this alternative would potentially have greater impacts compared to the proposed project, which is sufficient for eliminating an alternative from detailed consideration pursuant to State CEQA Guidelines Section 15126.6(c).

However, not reducing significant impacts was just one of the reasons this alternative was rejected from further consideration. CEQA also requires that alternatives be feasible. Feasible is defined in CEQA as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code Section 21061.1). The State CEQA Guidelines indicate that factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (State CEQA Guidelines Section 15126.6).

As detailed in Section 7.5.1.4, the SDCC Expansion and Market-Rate Hotel Tower Alternative would require the consent of the current lessee of the project site, FAL, and an agreement between multiple parties, such as FAL, the City, and SDCC, in order to implement the alternative. Because FAL is the current tenant on the project site and is the proponent of the proposed project, this alternative would be infeasible unless FAL were to agree to an assignment of its leasehold interest. No changes to the Final EIR are required.

Response to Comment F-19

The comment states that Section 4.4.3 of the Draft EIR provides the methodology used to address cultural resources, including Native

American consultation. The commenter restates text from Section 4.13, *Tribal Cultural Resources*, of the Draft EIR related to Assembly Bill 52 consultation. The commenter suggests that the statement in Section 4.4.3 is conflicting and should be revised for clarification. The commenter also suggests inserting a cross-reference to Section 4.13.

In response to this comment, Section 4.4.3 has been revised to clarify that the methodology in Section 4.4 involved Native American due diligence outreach, rather than Native American consultation. A cross-reference to Section 4.13 has also been added as suggested by the commenter to indicate that formal consultation processes can be found in that section. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment F-20

The comment states that the project site and surrounding area include components of the City's storm drain system, some of which are tidally influenced, that would be affected by project construction and operation. The commenter requests that any environmental impacts of the proposed project on the City's storm drain system be fully addressed in the Draft EIR. The commenter states that a storm drain outlet located within or adjacent to the new marina could be affected during high tidal and storm events, and requests that the Draft EIR be recirculated to include an analysis of potential impacts on this outlet.

A Preliminary Drainage Report was prepared for the proposed project, dated December 22, 2016. The Preliminary Drainage Report was included as Appendix I-2 of the Draft EIR. The Preliminary Drainage Report provided detailed descriptions of the existing and proposed drainage patterns and storm drain improvements known at this level of design detail for the proposed project. The analysis is considered preliminary and subject to change as the design progresses. A hydrologic analysis using the rational method determined the relative difference in peak flows for the existing and proposed conditions for each outfall and verified that the proposed project would not adversely affect the existing storm drains. Based on the results of the preliminary hydrologic analysis, the total peak flow from the proposed project is expected to be similar to existing conditions. The proposed green roof and other site landscaping would reduce the percentage of rainfall that becomes runoff and enters the storm drains. While the proposed project would result in an increase in impervious surfaces, the runoff conditions are expected to be similar to

existing conditions. As such, the proposed project is not anticipated to adversely affect storm drains on site. In addition, pipe capacity calculations for each existing pipe system were reviewed. Pipe capacities identified during the work associated with the SDCC Phase III EIR showed that no existing storm drains in the Fifth Avenue Landing project area were significantly under capacity. As the building design progresses, the drainage analysis would be revised to match the proposed storm drain layout. However, it is anticipated that because the site has several existing storm drains to tie into with available capacity, there is flexibility for the proposed storm drain design to ensure that the proposed project does not adversely affect the existing storm drain improvements. Refer to the Preliminary Drainage Report in Appendix I-2 of the Draft EIR for additional details.

The additional 50 boat slips in the marina would result in a net increase in floating dock area of approximately 57,696 square feet of pile-supported dock space. Several outfalls discharge within this proposed marina expansion location; however, as identified above, runoff conditions are expected to be similar to existing conditions, so substantial additional discharges are not expected. Nonetheless, the additional boat slips would result in more pilings that could affect the discharge of existing stormwater from these outfalls. Impact-HWO-2 identified that the addition of the proposed marina expansion and the breakwater could also reduce tidal flushing within the marina interior compared to existing conditions. Proper flushing was identified as necessary to ensure that the water quality within the marina is maintained. The Draft EIR identified the proposed marina should be designed so that the structures do not significantly restrict the natural circulation of water caused by tidal action. Mitigation measure MM-HWQ-3 requires the proposed project to be designed to maximize the flushing rate and promote circulation within the marina. This mitigation measure would consider the storm drain outfall discharges in order to ensure proper tidal flushing. Because flows are anticipated to remain similar to existing conditions and design measures would be implemented to maximize tidal flushing, the proposed project is not anticipated to result in impacts on storm drains during high tidal and storm events. No changes to the Final EIR are required.

Response to Comment F-21

The comment requests that the last sentence on page 4.8-3 be revised as follows: "The most significant sources of pollutants affecting the beneficial

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Chapter 6. Comments Received and District Responses

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F-23
 Page 4.8-27, Section 4.8.4.3, Marina Construction Phase section: This section is missing a discussion of the Campbell Shipyard Engineered Cap, which is discussed at length in other sections of the document such as under Biological Impacts. The impacts of the construction of the marina on the Campbell Shipyard Engineered Cap are potentially significant and merit a thorough discussion in the Hydrology and Water Quality section of this report. Please include a detailed analysis within the Draft EIR and any identified impacts.

F-24 22) Figure 2-3: Include the location of the Campbell Shipyard Engineered Cap (as seen on Figure 4.7-1) to this figure for a visual representation of the overlap.

- 23) The impacts of the construction and ultimate use of the new marina on the Campbell Shipyard Engineered Cap should be thoroughly explored. While disturbance of the sediment on this Cap was discussed, the City has substantial concerns that any waterside improvements could cause re-contamination of this area which would be a significant impact under CEQA that necessitates coordination with regulating agencies, careful analysis, and disclosure of a worst case scenario from unforeseen contaminants and disturbance within this Draft EIR. Further, the mitigation
- F-25 measure should include a monitoring plan for a minimum of the constituents from the Cleanup and Abatement Order should be included for the construction phase of the marina, as well as a clear plan to prevent disturbance of the sediment and eelgrass once the marina is in use. This analysis should be included and the Draft EIR should be recirculated for review and comment on this potential environmental impact.

DEVELOPMENT SERVICES DEPARTMENT - TRANSPORTATION DEVELOPMENT SECTION Ismail Elhamad, RTE - Associate Traffic Engineer

24) According to Table ES-2 in the Executive Summary, most of the Existing Plus Project transportation impacts, and all of the cumulative transportation impacts, are described as significant and unavoidable after mitigation based on the findings listed in Table 4.12-1 and Table 5-1 of the Draft EIR. City staff disagrees with the rationale for most of these determinations in Table 4.12-1 for Existing Plus Project impacts, and Table 5-1 does not provide

- F-26 rationale, but rather statement of impacts. In many cases City staff believes that mitigation measures are feasible, such as signalization of the intersections of 15th Street and F Street, 17th Street and G Street and 19th Street and J Street and that the project should implement the mitigation measures. The Draft EIR should clarify that the project would implement mitigation measures on City transportation facilities, even if it is possible they may not be completed by the time of the first impact.
- F-27 25) Page 4.12-1: MM-TRA-1: Construction related impact. This mitigation measure by implementing the TDM, should be estimated and quantified.
- F-28 26) Page 4.12-2: The statement "Significant and Unavoidable", All Direct and Near Term mitigation measures should be implemented such as MM-TRA-1, MM-TRA-2, and MM-TRA-3. (Transportation, Circulation and Parking, Page 4.12-1).

uses of San Diego Bay are urban runoff, and marinas and boating activities (Project Clean Water 2017)."

The text the commenter is requesting to be revised is from a credible source, Project Clean Water. The quoted text states, "The most significant sources of pollutants affecting the beneficial uses of San Diego Bay are urban and agricultural runoff, resource extraction, septic systems, and marinas and boating activities (Project Clean Water 2017)." However, the text has been revised to reflect the specific language from Project Clean Water, which indicates that the aforementioned pollutant sources affect the beneficial uses of the San Diego Bay Watershed Management Area, rather than just the San Diego Bay. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment F-22

The commenter requests that the last paragraph of the second paragraph on page 4.8-4 be revised as follows: "In response to this contamination, the San Diego RWQCB has been working collaboratively with the City of San Diego to study the sources of PAHs for San Diego Bay (San Diego RWQCB 2017)."

The text the commenter is requesting to be revised is from a credible source, the San Diego RWQCB. The cited paragraph states, "In response to this contamination, the San Diego RWQCB has initiated efforts to develop a TMDL for this site (San Diego RWQCB 2017)." Therefore, because the text is quoted from a credible source, the District views the current statement as sufficient evidence and cannot keep the citation while modifying the quote. As this does not address the adequacy of the environmental analysis, no change to the Final EIR is required. However, the District acknowledges and appreciates the City's collaborative work with the San Diego RWQCB in helping to improve the water quality of the City's watersheds.

Response to Comment F-23

The commenter suggests that page 4.8-27, Section 4.8.4.3, *Marina Construction Phase*, is missing a discussion of the Campbell Shipyard engineered cap. The comment indicates that the impacts of the proposed marina construction on the Campbell Shipyard engineered cap are potentially significant and requests that a detailed analysis be included in the Hydrology and Water Quality section.

The existing Campbell Shipyard engineered cap and the project's potential impact associated with the cap are discussed and analyzed in substantial detail in Section 4.7. Hazards and Hazardous Materials. Section 4.7 focuses on known and suspected contamination within the project site and in the project vicinity. Therefore, discussion of the contaminated site within the context of Section 4.7 is appropriate. As described on page 4.7-3, the "Campbell Industries Marine Construction and Design Company (together referred to as "Campbell") operated a shipyard partially within the project site from approximately 1915 to the 1990s (District 2012). The historical activities conducted at Campbell Shipyard related to various hazardous materials contaminated the offshore San Diego Bay sediment, soil, and groundwater (Ninvo & Moore 2006). As a result, this site has been the subject of several environmental studies and cleanup and abatement orders (CAO), beginning in 1985 (RWQCB 1995). CAO No. 95-21, issued by the San Diego Regional Water Quality Control Board (RWQCB) on May 4, 1995, to Campbell, addressed the contaminated Bay sediments, upland soils, and groundwater at the former facility. Chemicals of concern included copper, lead, zinc, total petroleum hydrocarbons (TPH), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and tributyltin (TBT)."

Consequently, rather than repeating the same impacts in several sections, the significant impact from potential sediment contamination from the existing contamination at the Campbell Shipyard is disclosed in Section 4.7 as Impact-HAZ-2. As described in this section, "historical information and monitoring reports compiled from previous site assessments and database searches indicate that it is reasonably foreseeable that contaminated sediments may be encountered during construction activities within the marina portion of the project site. As such, construction activities that disturb the sediment would potentially result in a release of hazardous materials and create a potentially significant hazard within the environment by bringing and releasing subsurface sediment contaminants to the surface of the Bay floor or exacerbating the existing hazardous conditions by spreading contaminated sediment." The section concludes by determining that while mitigation measures MM-HAZ-5, MM-HAZ-6, and MM-HAZ-7 may reduce impacts to less-than-significant levels, the District has conservatively concluded that impacts would be considered significant and unavoidable because there would still be the potential to result in a hazardous materials release if in-water construction activities are located within areas with contaminated sediment.

To be responsive to the commenter's request, reference to this impact is now provided in Section 4.8, *Hydrology and Water Quality*, for additional clarity. The addition of this clarifying reference does not change the conclusions in Section 4.7 related to Impact-HAZ-2. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR. However, because a full discussion of this potential impact is provided in Section 4.7 of the Draft EIR, the addition of this clarifying reference does not constitute significant new information requiring recirculation.

Response to Comment F-24

The commenter requests that Figure 2-3 be revised to include the location of the Campbell Shipyard engineered cap for a visual representation of the overlap.

Figure 2-3 of the Draft EIR depicts the land and water use designations for the project site and surrounding area as identified within the current PMP. Because the Campbell Shipyard engineered cap is not a land or water use designation, it has not been included on Figure 2-3. However, a visual representation of the Campbell Shipyard engineered cap is provided on Figure 4.7-1 in Section 4.7, *Hazards and Hazardous Materials*, of the Draft EIR, which depicts the landside and waterside project boundaries as well as the approximate boundaries of the engineered cap. As such, Figure 4.7-1 sufficiently provides a visual representation of the overlap between the project boundaries and the engineered cap. No changes to the Final EIR are required.

Response to Comment F-25

The comment indicates that the City has substantial concerns that any waterside improvements could cause recontamination of the Campbell Shipyard engineered cap, which would necessitate coordination with regulating agencies, careful analysis, and disclosure within the Draft EIR of a worst-case scenario from unforeseen contaminants and disturbance. The commenter states that mitigation measures should include a monitoring plan for a minimum of the constituents from the Cleanup and Abatement Order for the marina construction phase and a plan to prevent sediment and eelgrass disturbance during marina operation. The commenter suggests that the Draft EIR be recirculated with this analysis.

Please see the response to comment F-23. Section 4.7, *Hazards and Hazardous Materials*, provides a detailed analysis and mitigation measures related to any disturbance of contaminated sediment and the engineered

cap. The Draft EIR discloses all potential significant impacts related to the existing sediment contamination and engineered cap and, as stated in Section 4.7, determined that mitigation measures MM-HAZ-5, MM-HAZ-6, and MM-HAZ-7 would potentially reduce impacts to less-than-significant levels. However, the analysis considered the worst-case scenario and conservatively concluded that impacts would be significant and unavoidable because there is still the potential for the project to encounter contaminated sediment that could be released into the project area even with the mitigation required of the project. In addition, the significance determination noted that the state and federal permitting process has yet to be initiated and completed, which occurs after the CEQA process is concluded. As such, coordination with the appropriate regulatory agencies will occur prior to any potential activities that may affect the engineered cap.

In regard to the commenter's suggestion that a monitoring plan should be implemented during the marina construction phase, please note that there is a mitigation measure that already specifies this requirement. Mitigation measure MM-HAZ-6 requires the retention of a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment contamination, sediment sampling, and contamination remediation to perform all sediment sampling and analysis required by the Sampling and Analysis Plan and Marine Sediment Contamination Characterization Report (Sediment Characterization Report). The Professional Engineer will perform sediment sampling in area(s) of potential disturbance for in-water construction activities that are located outside of the engineered cap, as it will not be disturbed directly pursuant to mitigation measure MM-HAZ-5. The samples will include analysis of (1) grain size analysis, (2) physical parameters, (3) total organic carbon, (4) Target Analyte List metals, (5) pesticides, (6) PAHs, (7) PCBs (all 209 individual PCB congeners), as analyzed and reported by U.S. Environmental Protection Agency Method 1668, and (8) total polychlorinated terphenyls. However, mitigation measure MM-HAZ-6 has been augmented to also require sampling for additional constituents that are identified in the Cleanup and Abatement Order, including TPHs and TBT. The changes are included in Chapter 5, *Errata and Revisions*, of the Final EIR.

In addition, the Sediment Characterization Report will delineate the vertical and lateral extent and concentration of the project site's sediment contamination outside the engineered cap (Sediment Characterization) and will rely on the Effects Range – Low (ER-L) and Effects Range –

Median (ER-M) guideline values of the National Oceanic and Atmospheric Administration's Sediment Quality Guidelines (1999) as the basis for characterizing the sediment. The results of the Sediment Characterization Report will be provided to the RWQCB and the District (and any other appropriate regulatory agencies), and consultation with the RWQCB on the contamination characterization of the sediment will be held. If contaminated sediment is identified in the Sediment Characterization Report, the project proponent will prepare a Contaminated Sediment Management Plan (Sediment Management Plan) for the District's, RWOCB's, and any other appropriate regulatory agencies' review and approval. Once approved, the Sediment Management Plan will be implemented by the project proponent subject to oversight by the District, RWOCB, and any other appropriate regulatory agencies, as applicable. The Sediment Management Plan will describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the contaminated sediment outside the engineered cap as identified in the Sediment Characterization Report and the monitoring that will occur post-construction. The mitigation measure includes potential methods and reporting requirements as well.

The last applicable mitigation measure in Section 4.7, MM-HAZ-7, requires that prior to in-water construction, the project proponent will need to obtain all federal and state permits required for in-water construction activities. The project proponent will then need to demonstrate to the District compliance with all permit conditions during in-water construction. In addition, the project proponent will not impede the District's compliance with Investigative Order No. R9-2017-0081 as it pertains to the project site.

The commenter also suggests that a clear plan be developed to prevent disturbance of the sediment and eelgrass once the marina is operational. It should be noted that there are already existing marina operations in the project area. The project would continue marina operations and would potentially result in an increase in recreational vessels. As analyzed in Section 4.4, *Biological Resources*, a propeller wash study was conducted to determine if marina vessels would potentially affect the cap and associated eelgrass habitat that was installed. The study concluded that under normal operations there would be no effect from vessel use, and impacts would only occur if boaters drifted away from the marina and into the cap area. However, mitigation measures MM-BIO-7 and MM-BIO-8 would minimize any potential impacts to less-than-significant levels by avoiding any vessel operations over the cap and by installing a floating

barrier to demarcate the eelgrass beds and create a visual barrier to protect the eelgrass beds from negligent boating. No changes to Section 4.4 are required as a result of this comment.

Clarifications to Section 4.8, *Hydrology and Water Quality*, have been made that include an analysis summary and significance determination related to the Campbell Shipyard engineered cap, which are discussed in detail in Section 4.7, *Hazards and Hazardous Materials*, and these changes are reflected in Chapter 5, *Errata and Revisions*, of the Final EIR. No changes to Section 4.7 are required as a result of this comment and no new or more severe impacts have been identified within the EIR. As none of the conditions described in Section 15088.5(a) of the State CEQA Guidelines have been met, recirculation of the Draft EIR is not warranted.

Response to Comment F-26

The commenter states that, according to Table ES-2 in the *Executive Summary*, most of the Existing Plus Project transportation impacts and all of the cumulative transportation impacts are significant and unavoidable based on the findings in Tables 4.12-1 and 5-1 of the Draft EIR. The commenter states that the City disagrees with the rationale for most of these determinations and suggests that Table 5-1 does not provide a rationale. The commenter further states that City staff believes that mitigation measures are feasible in many cases, such as the signalization of 15th Street and F Street, 17th Street and G Street, and 19th Street and J Street. The commenter requests that the Draft EIR clarify that the project would implement mitigation measures on City transportation facilities even if they may not be completed by the time of first impact.

Tables ES-2 and 5-1 of the Draft EIR are only impact and mitigation summary tables that briefly summarize the impact analysis and significance determinations discussed at length in each applicable resource section. A full discussion of the rationale for the significance determinations for transportation impacts is provided in Section 4.12.4.3 for project impacts and Section 5.3.12 for the project's cumulative contributions.

In addition, the commenter appears to confuse the significant and unavoidable impact determinations with the feasibility of implementing the proposed mitigation measures. The Draft EIR provides mitigation measures that would minimize significant transportation-related impacts of the project. The Draft EIR does not make any determinations as to the feasibility of mitigation measures, but rather describes the factors that

contribute to the uncertainty of being able to implement the proposed mitigation measures. For example, all of the transportation impacts that were determined in the Draft EIR to be significant and unavoidable after mitigation would occur on Caltrans or City of San Diego controlled transportation facilities. However, this does not eliminate the requirement to implement the mitigation, it only explains the uncertainty of another jurisdiction choosing to make the improvement or deciding on another course of action, all of which is outside the control of the District because it is outside of the District's jurisdiction and land use authority.

As detailed in Section 4.12, *Transportation, Circulation, and Parking*, of the Draft EIR, because the timing and installation of the recommended improvements are within the exclusive jurisdiction of Caltrans or the City of San Diego and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. This includes the recommended signalization of the 15th Street and F Street intersection (MM-TRA-2) and the 17th Street and G Street intersection (MM-TRA-3) referenced by the commenter, as well as the recommended restriping of the NB left-turn lane at the 19th Street and J Street intersection (MM-TRA-4). Although these measures are required to be implemented if they are feasible, the District cannot guarantee when the mitigation measures would be implemented. For these reasons, the Draft EIR concluded that impacts on the identified transportation facilities would be significant and unavoidable because the ultimate implementation of the actual improvements is not certain. No changes to the Final EIR are required.

Response to Comment F-27

The commenter suggests that mitigation measure MM-TRA-1, which requires implementation of a TDM Plan, should be estimated and quantified.

The Transportation Impact Analysis recommends a TDM Plan as mitigation for temporary construction impacts, which is included as mitigation measure MM-TRA-1 in the Draft EIR. One of the required components of the TDM entails restricting workers from accessing the project site during the AM and PM peak periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). If all construction workers are compliant with the TDM Plan, no peak hour trips associated with construction workers will occur. The TDM also requires the implementation of ride-sharing program to encourage carpooling among the workers; the provision of offsite

San Diego Unified Port District

Page 8 Ms. Dana Sclar January 30, 2018

F-29

27) Page 4.12-2: MM-TRA-4: Restriping of northbound left turn lane at 19th Street/J Street intersection. The Draft EIR should contain a conceptual design to demonstrate that this mitigation measure can feasibly be implemented via restriping alone.

28) Page 4-2-2 and Page 4-12-42: With respect to the rationale for finding of significant and unavoidable after mitigation for MM-TRA-1, MM-TRA-2, and MM-TRA-3, the determination on the two referenced pages are conflicting. Page 4-2-2 states that these mitigation measures cannot

F-30 two reterenced pages are contincing. Page 4-2-2 states that these mitigation measures cannot be implemented due to outside jurisdiction, while Page 4.12-42 says the project shall install/construct these improvements. Please revise for consistency or clarify the conflicting determinations as provided within the Draft EIR.

 Page 4.12-3: MM-TRA-8, The Draft EIR should clarify that the project would implement the Parking Management Plan described in MM-TRA-8, even if the project cannot guarantee that the result would be to reduce parking demand to less than parking supply. All parking sections should also note the loss of the existing 303 onsite parking spaces stated on Page 4.12-16 of the Draft EIR.

 30) The Draft EIR, Appendix K Transportation Impact Study should include traffic signal warrants analysis for all proposed signalized intersections e.g. 15th Street and F Street, and 17th Street and G Street.

Based on the City's comprehensive review of the Draft EIR, the analysis on the subject topics detailed above is incomplete. As required under CEQA Guidelines Section 15088.5, the analysis and the determination of all potential environmental impacts under CEQA, and any feasible mitgation measures and alternatives that would lessen identified environmental impacts of the project, including the City's expansion of the San Diego Convention Center in the same area, should be

F-33 including the City's expansion of the San Diego Convention Center in the same area, should be recirculated for meaningful public review and comment with the previously recommended analysis and revisions.

Please contact me directly if there are any questions regarding the contents of this letter or if the San Diego Unified Port District would like to meet with City staff to discuss our comments.

Muto, Deputy Planning Department

MJH/mjh

cc: Reviewing Departments (via email) Review and Comment online file parking locations for workers outside of the area with shuttle services to bring them to the site; and the provision to subsidize transit passes for construction workers However, because compliance of all of the individual recommended strategies and overall TDM Plan is unable to be confirmed or estimated, the Draft EIR conservatively concluded that constructionrelated impacts on study area roadways and intersections would be significant and unavoidable after mitigation. No changes to the Final EIR are required.

Response to Comment F-28

The commenter cites the statement of "significant and unavoidable" on page 4.12-2 and suggests that all direct and near-term mitigation measures should be implemented, such as mitigation measures MM-TRA-1, MM-TRA-2, and MM-TRA-3.

Please see response to comment F-26. The determination of "significant and unavoidable" refers to the significance of the impact after the implementation of all feasible mitigation measures and does not preclude the implementation of mitigation measures. Unless noted otherwise in the Draft EIR, all mitigation measures proposed for transportation impacts are anticipated to be implemented. No changes to the Final EIR are required.

Response to Comment F-29

The commenter suggests that the Draft EIR contain a conceptual design of mitigation measure MM-TRA-4, which requires restriping of the NB left-turn lane at the 19th Street/J Street intersection, to demonstrate that it can be feasibly implemented via restriping alone.

The restriping of the NB left-turn lane at the 19th Street and J Street intersection, as required by mitigation measure MM-TRA-4 in the Draft EIR, was included in the Downtown Mobility Plan and Downtown Community Plan, which was adopted by the City of San Diego in June 2016. Therefore, the Draft EIR assumed that this improvement can be feasibly implemented, as it was included in an adopted City planning document and the City has jurisdiction and control over the proposed improvement. No changes to the Final EIR are required.

Response to Comment F-30

The commenter suggests that the rationale for a finding of significant and unavoidable after implementing mitigation measures MM-TRA-1, MM-TRA-2, and MM-TRA-3 is conflicting on pages 4.12-2 and 4.12-42. The

comment indicates that page 4.12-2 states that these mitigation measures cannot be implemented due to outside jurisdiction, while page 4.12-42 states that the project will install/construct these improvements. The commenter requests that the Draft EIR be revised for consistency or clarification be provided.

The pages and text cited by the commenter are referring to two separate discussions; therefore, the information on page 4.12-2 and page 4.12-42 are not in conflict. Each threshold in Section 4.12.4.3 is organized with the following headings: Impact Discussion, Level of Significance Prior to Mitigation, Mitigation Measures, and Level of Significance After Mitigation. Table 4.12-1 is intended to provide a brief summary of the impact analysis detailed later in Section 4.12.4.3, including a summary of the final significance determination. The heading *Mitigation Measures* on page 4.12-42 details the mitigation measures proposed to reduce project impacts. while the heading Level of Significance After Mitigation, also on page 4.12-42, provides a discussion of the significance of project impacts after the implementation of mitigation measures. As detailed on pages 4.12-42 and 4.12-43, because the timing and installation of the recommended improvements are within the exclusive jurisdiction of Caltrans or the City and not the District, the District cannot state with certainty that the improvements will be completed prior to an impact occurring. This conclusion is consistent with the rationale for the finding after mitigation in Table 4.12-1. No changes to the Final EIR are required.

Response to Comment F-31

The commenter suggests that the Draft EIR clarify that the project would implement the Parking Management Plan described in mitigation measure MM-TRA-8, even if the project cannot guarantee that the parking demand would be reduced to less than the parking supply. The comment requests that all parking sections note the loss of the existing 303 onsite parking spaces stated on page 4.12-16 of the Draft EIR.

The proposed project would be required to implement all mitigation measures proposed to reduce project impacts, even if the significance determination is significant and unavoidable after mitigation. The determination of "significant and unavoidable" means after the implementation of all recommended mitigation measures.

Regarding the commenter's request to note the loss of the existing 303 onsite parking spaces, these existing parking spaces were not included in the parking calculation of the Draft EIR because they are private spaces

and not public spaces. On an as-needed and frequent basis, the SDCC uses the parking lots as temporary staging areas for events held at the SDCC. As such, these parking lots are not always available for parking, and therefore were not considered public in the parking analysis. No changes to the Final EIR are required.

Response to Comment F-32

The commenter suggests that the Transportation Impact Analysis include traffic signal warrants analysis for all proposed signalized intersections.

Signalization is recommended for the 15th and F Street intersection and 17th and G Street intersection as mitigation in the adopted Downtown San Diego Mobility Plan. Signal warrants are provided for both intersections within Appendix P of the Downtown San Diego Mobility Plan Technical Report. The Fifth Avenue Landing Project Transportation Impact Analysis (Appendix K-1 of the Draft EIR) assumed implementation of the improvements and mitigation measures, consistent with their respective phasing, identified in the Downtown San Diego Mobility Plan, as it is an adopted City planning document. No changes to the Final EIR are required.

Response to Comment F-33

The commenter states that, based on the City's review of the Draft EIR, the analysis of the subject topics detailed above is incomplete. The comment cites State CEQA Guidelines Section 15088.5 and suggests that the Draft EIR should be recirculated. The comment concludes the comment letter by providing a contact name and information.

As described in the responses to the City's comments, none of the conditions described in Section 15088.5(a) have been met, and, as such, recirculation of the Draft EIR is unwarranted. No new comments are raised in this comment and no further response is required.

The District appreciates the City's interest in the proposed project and the time required to provide written comments on the project.

6.3.8 Comment Letter G: City of San Diego Public Utilities Department (PUD)

Comment Letter G

The Cit	ty of		
SA	N DIEGO	RECEIVED	
	Utilities Department ng and Program Management Division		
		JAN 30 2018	
		SAN DIEGO UNIFIED PORT DISTRICT REAL ESTATE	
	January 30, 2018		
	Ms. Dana Sclar		
	Senior Planner		
	San Diego Unified Port District Development Services Department		
	3165 Pacific Highway San Diego, CA 92101-1128		
	Dear Ms. Sclar:		
	Subject: Fifth Avenue Landing and Port Master Plan (UPD #EIR-2016-06; SCH #2016081053)	Amendment Project Draft EIR	
-	Under Section 4.14 Utilities and Energy Use – 4.14.4. Measures (Operation) of the subject EIR, please addr	3 Project Impacts and Mitigation ess the following comments:	
G-1	 The project needs to prepare a sewer study fo San Diego. The sewer study needs to identify connection to the public system. 		
G-2	 If the City's upgrade to the Harbor Drive Trun shall upgrade the Harbor Drive Trunk Sewer p the public sewer system. Based upon the app project, additional reaches of the Harbor Drive completed. 	prior to making a sewer connection to roved sewer study for the subject	
G-3	If you have any questions, please contact me at (858)) 614-5722.	
	Sincerely,		
	Durt christ		
	Dirk Smith		
	Senior Planner		
	cc: Leonard Wilson, Senior Civil Engineer, Public	Itilities	
	cc. Leonard wilson, senior civit Engineer, Fubic	ounties	
San Diego,	z Way, M.S. 901A CA 92123		T (858) 614-5722
www.sandi	ego.gow/publicutilities		sandlego.gov

Response to Comment G-1

This comment requests that the specific comments that follow be addressed in Section 4.14, *Utilities and Energy Use*. The comment states that the project needs to prepare a sewer study for review and acceptance by the City, and that the sewer study needs to identify the location of the project's sewer connection to the public system.

A Preliminary Sewer Study was prepared for the proposed project and is included as Appendix L-1 to the Draft EIR. The Preliminary Sewer Study is based on the design criteria outlined in the City of San Diego Sewer Design *Guide* (May 2015). The study provides detailed descriptions of existing and proposed sewer facilities and analyzes the proposed project's effect on the existing sewer infrastructure to determine if there is a need to upsize the facilities. The analysis is considered preliminary and subject to change as the design progresses. The Preliminary Sewer Study determined that a 12-inch sewer main is required to convey the total post development peak flow from Marina Park, SDCC, and the project site to the Harbor Drive trunk sewer. As a result, the existing 8-inch polyvinyl chloride (PVC) sewer line that runs through the project site would be abandoned either in place and/or removed as necessary. The sewer main would be relocated into the center of Convention Way, resulting in approximately 550 linear feet of new 12-inch sewer line. Additionally, the existing 10-inch sewer line within Convention Way would be upsized to a 12-inch PVC main from the force main manhole to West Harbor Drive. for a total of approximately 1,500 linear feet. The proposed new 12-inch sewer line would connect to the existing 15-inch trunk sewer located west of the intersection of West Harbor Drive and Park Boulevard, adjacent to SDCC. Exhibit A of the Preliminary Sewer Study depicts the existing and proposed sewer improvements. In accordance with Sections 64.0400 and 64.0401 of the City's Municipal Code, the project proponent will submit construction plans, including proposed wastewater facilities, to the City for approval prior to constructing any wastewater improvements. No changes to the Final EIR are required as a result of this comment.

Response to Comment G-2

The comment states that, if the City's upgrade to the Harbor Drive Trunk Sewer is not complete, the project shall complete the upgrade prior to making a sewer connection to the public sewer system. The comment also

states that additional reaches of the Harbor Drive Trunk Sewer may need to be completed based on the approved sewer study for the project.

As detailed in Section 4.14 of the Draft EIR, the existing 15-inch trunk sewer located west of the intersection of West Harbor Drive and Park Boulevard would need to be upsized to accommodate wastewater generated by the proposed project. In the event that upsizing of the existing 15-inch trunk sewer does not occur, mitigation measure MM-UTIL-1 will be implemented. As required by MM-UTIL-1, the project proponent shall upsize the existing 15-inch trunk sewer main located at the intersection of West Harbor Drive and Park Boulevard to a 30-inch trunk sewer main prior to occupancy and operation of the proposed market-rate hotel tower or the lower-cost visitor-serving hotel, whichever is first. At no point shall the project proponent operate the market-rate hotel tower or the lower-cost visitor-serving hotel prior to the trunk sewer main being upsized. No changes to the Final EIR are required as a result of this comment.

Response to Comment G-3

The comment concludes the comment letter by providing a contact name and information.

The District appreciates the City's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

6.3.9 Comment Letter H: Fifth Avenue Landing, LLC

Comment Letter H

Fifth Avenue Landing, LLC

January 30, 2018	RECEIVED
San Diego Unified Port District Attn: Dana Sclar	JAN 30 2018
Senior Planer Development Services Department	SAN DIEGO UNIFIED PORT DISTRICT REAL ESTATE
3165 Pacific Highway San Diego, CA 92127	
dsclar@portofsandiego.org	

Draft Environmental Impact Report ("DEIR") for Fifth Avenue Landing Project and Port Master Plan Amendment (SCH#2016081053) ("Project")

Dear Ms. Sclar:

H-1

Fifth Avenue Landing LLC (FAL) and its predecessor companies have been tenants of the Port in good standing on the FAL leasehold since 1984.

As proposed, the Project requires no public funds. It generates over \$100 million in revenue to the Port over ten years. It provides a similar amount to the City in tax revenue. The water transportation center provides the opportunity to link the south bay cities to the north. It will create high paying wages based on the agreement we have with Unite HERE. More specifically:

The economic impact of the Project is estimated to produce a regional economic impact of \$600

- to \$775 million (based on SANDAG regional economic construction multipliers)
- The Hotel is estimated to produce \$11 to \$13 million in TOT to the City of San Diego annually
- The Port of San Diego is estimated to receive \$7 to \$10 million in annual rents
- The Project is estimated to provide 750 to 1,100 construction jobs over a 2-3 year period and 550 to 700 permanent jobs for the Hotel alone

The DEIR has done a thorough job of analyzing Project impacts and, where possible, identifying feasible mitigation measures to reduce impacts to below a level of significance. However, in the interest of clarity, FAL desires to supplement the record regarding the DEIR's conclusions and mitigation measures.

Section 4.3 / Biological Resources

H-2 The DEIR suggests that the Hotel tower will impact eelgrass beds at the nearby Marriott Marina through shading of sunlight. However, there is no causal nexus between temporary and seasonal shading from a hotel tower and damage to an eelgrass bed.

The DEIR states that the operations of the Marina Expansion will impact the Port's eelgrass beds contained in the adjoining engineered cap. Under existing conditions, these eelgrass beds appear to be less than 40% productive. At that level of productivity, it makes little sense to try to rehabilitate them. There is also a lack of a nexus between prop wash from the Marina Expansion and the eelgrass beds of the cap, particularly when compared to the high-volume prop wash coming from the adjoining Tenth Avenue Marina Terminal.

Response to Comment H-1

This comment is an introductory comment that provides the commenter's estimated economic benefits that would result from implementation of the proposed project. The comment states that the Draft EIR does a thorough job analyzing project impacts and identifying feasible mitigation measures to reduce impacts below a level of significance, where possible. The commenter states the desire to supplement the record regarding the Draft EIR's conclusions and mitigation measures.

The District appreciates FAL's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are listed separately below along with the District's individual responses.

Response to Comment H-2

The comment restates the impact determination contained within the Draft EIR that the hotel tower would significantly affect eelgrass beds at the nearby Marriot Marina by increasing shading. The commenter states the opinion that there is no causal nexus between temporary and seasonal shading from a hotel tower and damage to an eelgrass bed.

Eelgrass is a marine vascular plant that is held in place with rhizomes and roots similar to terrestrial grasses. As such, it is dependent upon the conditions of its surroundings to survive. Alteration of factors such as sediment chemistry, water temperature, water chemistry, and levels of photosynthetically active radiation (portion of sunlight spectrum) can improve or degrade conditions relative to a given site's ability to support eelgrass. The "causal nexus" in the current context is that the hotel would increase shading and therefore decrease light levels at the existing eelgrass beds at the Marriott Marina. What is not certain, however, is the extent to which the modest decreases identified in the biological resources assessment would actually cause a noticeable decline in eelgrass coverage or density.

Sunlight attenuates rapidly moving through the water column in Southern California embayments. Bays and harbors typically have water that is clearer than open water. This results in a reduced photic zone where marine plants and algae can receive enough sunlight to grow and persist. In the north central portion of San Diego Bay where Fifth Avenue Landing

and the Marriott Marina occur, eelgrass is generally found to occur in water that is not shaded from surface structures and is less than -12 feet below mean lower-low water level. In other words, it only takes 12 feet of water to reduce light levels to the point at which eelgrass cannot survive. Given the rapid attenuation of light through water, even modest changes in the duration and intensity of light at the surface can reduce photosynthesis to a point where eelgrass cannot persist. This is why eelgrass will often temporarily die back from some areas in winter months.

The shading model included in the marine biological resources report (Appendix E-1 of the Draft EIR) found that the hotel would shade the eelgrass beds at the Marriot Marina. However, shading was generally limited to morning hours and was more pronounced in the winter months. It is scientifically certain that the reduced light will mean reduced photosynthesis. What is not certain is if eelgrass would receive enough light when exposed to sun to ensure that it persists in the same locations with the same density and overall health once the hotel tower is constructed. For this reason, mitigation and monitoring (MM-BIO-6 of the Draft EIR) is required to ensure that potentially significant impacts are reduced to less-than-significant levels. As identified in Section 4.3, Biological Resources, mitigation measure MM-BIO-6 requires pre- and post-construction surveys to monitor potential impacts on eelgrass. If impacts are detected, the project proponent is required to mitigate impacts in accordance with the mitigation measure. No change to the Final EIR is warranted as a result of this comment.

Response to Comment H-3

The comment restates the impact determination contained within the Draft EIR that operation of the marina expansion would significantly affect the eelgrass beds located in the adjoining engineered cap. The commenter states the opinion that these eelgrass beds appear to be less than 40% productive under existing conditions, and, as a result, it is not prudent to attempt to rehabilitate them. The commenter further states the opinion that there is a lack of a nexus between propeller wash from the marina expansion and the eelgrass beds of the cap, particularly when compared to propeller wash from operations at the adjoining Tenth Avenue Marine Terminal.

The commenter expresses an opinion about the appearance of the existing productivity of the eelgrass bed, but does not present any evidence to

support its opinion. Furthermore, it is uncertain what time of year the commenter made its observations. Observations in months with less sun exposure would have reduced eelgrass habitat, whereas months with greater sun exposure would have more eelgrass habitat. (Please see response H-2 for a detailed explanation of the link of eelgrass health with sun exposure.) No change to the Final EIR is warranted as a result of this comment.

The commenter's second comment suggests there is no nexus between propeller wash created from harbor craft that would use the proposed marina and the eelgrass beds of the cap. The environmental impact analysis conducted for the proposed project included a propeller wash study (Appendix E-3 of the Draft EIR). The report found that yachts measuring longer than 50 feet would not be able to access any areas near the eelgrass habitat and thus would have no effect on the engineered eelgrass habitat area. Typical vachts measuring up to 50 feet, a length at which some may be able to use the portion of the proposed marina bordering the eelgrass habitat area, also are generally not expected to affect the eelgrass habitat. It is possible that vachts around 50 feet in length may cause velocities exceeding the original criteria of 1.1 feet per second (for initiation of motion of the capping material at the eelgrass habitat area) at the eelgrass habitat area when making their final turn toward a boat slip. However, these high propeller wash velocities experienced during vessel docking would be localized, infrequent, and short in duration; while these velocities may result in some initiation of motion of some sediment particles, these particles would quickly settle once the vessel is docked. Consequently, there may be some minor localized shifting of the capping material at eelgrass habitat areas that experience these high vet infrequent propeller wash velocities, but there would be no significant bed erosion or sediment transport in such areas. However, as identified in Section 4.4, *Biological Resources*, of the Draft EIR, vessels near the Campbell eelgrass bed could disturb beds directly from running aground on the ocean floor or from propeller wash if vessels are pushed off course due to wind, inexperience, or negligence (Impact-BIO-8). However, with the implementation of mitigation measure MM-BIO-6, MM-BIO-8, and MM-HWQ-1, impacts would be reduced to less-thansignificant levels. No change to the Final EIR is warranted as a result of this comment.

H-4

The DEIR recommends that copper free zones be created in the Marina Expansion and that economic incentives be provided to marina guests to somehow persuade them to stop using copper based paints. It is not the Port's role to set rate structures for a tenants' customers. And the vessels coming to the FAL marina will not be persuaded to change their bottom paint because of some small and temporary slip

rental rate reduction. It is important to note that the industry trend is to move away from copper based paints. But most vessels visiting the FAL marina are foreign flagged vessels and neither the Port nor FAL can influence their bottom paint decisions.

Section 4.7 / Hazards and Hazardous Materials

With respect to the waterside portion of the Project described as the Marina Expansion, the DEIR assumes a level of disturbance to marine sediments that is overstated and imposes mitigation measures that are infeasible. The DEIR mitigation measures require that each of the 188 piles in the Marina Expansion be surrounded by an individual silts curtain and that the applicant perform pre- and postconstruction sampling, remediation, and reporting. That mitigation is based on the premise that pile

H-5 construction sampling, remediation, and reporting. That mitigation is based on the premise that pile installation and spud placement will exacerbate the level of contaminated sediments by disseminating contamination already present in the waterside portion of the Project area. In truth and in fact, the actual area of Bay floor disturbed by construction of the Marina Expansion will be less than 0.3% of the waterside Project area. A single storm event or a ship docking at the Tenth Avenue Marine Terminal will have a far greater capacity to introduce or disseminate contaminants than this minor level of disturbance.

Contamination of sediments throughout San Diego Bay has been a topic of concern for many years. Similarly, the Project vicinity has had its share of attention with RWQCB CAO No. 95-21 (Campbell Shipyard), the Proise to that order by completing an engineered sediment cap and 20-year monitoring plan that began in 2008 and, more recently, RWQCB Investigative Order No. R9-2017-0081 covering the 10th Avenue Marine Terminal and surrounding areas.

Despite the efficacy of the Campbell Shipyard cap in isolating contaminated sediment, the Regional Harbor Monitoring Program (RHMP) has confirmed that pollutants are present in Bay sediment in immediate vicinity of Project Area. Although the Project is outside the scope of RWQCP Investigative Order R9-2017-0081, sampling indicates the presence of pollutants listed on the 303(d) list (including

H-6 copper, mercury, PAHs, PCBs, zinc, chlordane, etc.) at various levels of toxicity in the Bay sediment south of the waterside portion of the Project area. This is due to the dynamism of this portion of the Bay with currents, storm drain outfalls and proy wash. For example, the DEIR notes that Switzer Creek, located directly south of the Project, has 303 (d)-listed pollutants including chlordane, PAHs, PCBs and copper. (DEIR, 4.7-4). As a result, new upstream-originating pollutants are introduced with every storm event. Tug boats routinely operate in the immediate vicinity of the Project with heavy, high-volume prop wash capable of introducing additional contaminants.

In spite of the dynamism of the environment, the DEIR has identified mitigation measures for the construction of the Marina Expansion that the applicant estimates will cost up to \$5 million (in testing alone)—an amount completely disproportionate to the Project's potential for contributing to the contamination of Bay sediment. In evaluating whether imposition of such a disproportionate burden on the Project is good policy, we ask the Port to consider the following:

 The operation and construction of the Marina Expansion will not introduce any pollutants or contaminants into the Project area and the applicant will employ best management practices to minimize dispersion of existing sediments.

2

Response to Comment H-4

The commenter states that the mitigation requirements prescribed in the Draft EIR create copper-free zones in the marina expansion and provide economic incentives for marina guests to reduce the use of copper-based paint. The commenter states that it is not the District's role to set rate structures for tenant customers, and that a temporary slip rental rate reduction would not influence bottom paint decisions of marina users, noting that most vessels visiting the marina are foreign flagged vessels and neither the District or FAL (i.e., the marina operator) can influence their bottom paint decisions.

Language used in MM-WQ-1 has been relocated to MM-WQ-2 to clarify that certain BMPs must be considered if copper levels exceed the Basin Plan water quality objectives, but acknowledges that one or more BMPs may not ultimately be feasible. Importantly, the critical requirement of MM-WQ-2 is that should the Basin Plan water quality objectives be exceeded by the project at any point during the proposed marina's operation, the project proponent is required to implement one or more BMPs that would successfully reduce total and dissolved copper to a level below the Basin Plan's water quality objectives. Clarifications to MM-HWQ-1 and MM-HWQ-2 have been made and are reflected in Chapter 5, *Errata and Revisions*, of the Final EIR.

Response to Comment H-5

The commenter states the opinion that the Draft EIR overstates the level of disturbance to marine sediments and imposes infeasible mitigation measures. The comment restates the mitigation requirements prescribed in the Draft EIR and indicates that the mitigation is based on the premise that pile and spud placement would exacerbate the level of contaminated sediment by disseminating contamination already present in the waterside portion of the project area. The commenter believes that the area of Bay floor disturbance would be less than 0.3% of the waterside project area, and states the opinion that a single storm event or ship docking at Tenth Avenue Marine Terminal would have a greater capacity to introduce or disseminate contaminants.

The commenter is referring to Impact-HAZ-2 and MM-HAZ-6 in the Draft EIR. Sediment in the Bay has been contaminated with polychlorinated biphenyl, copper, zinc, lead, tributyltin, polynuclear aromatic hydrocarbons, and total petroleum hydrocarbons due to previous

activities conducted by Campbell (Kleinfelder 2016; Ninyo & Moore 2006). A cap was constructed over the contaminated sediment to protect the Bay from potential water quality impairments that could occur if the contaminated sediment is disturbed. The Draft EIR notes that Campbell Shipyard cap extends into the eastern portions of the project site. Therefore, if the cap is disturbed and/or contaminated sediments are present outside of the cap, construction of the marina could result in a release of hazardous materials and create a potentially significant hazard within the environment by exacerbating the existing hazardous conditions. Disruption of contaminated sediment and/or the cap could result in a potential violation of, or interfere with the goals of, Order No. R9-2004-0295 and would be considered a significant impact (Impact-HAZ-2). Clarification to Impact HAZ-2 has been provided to indicate that disruption of the cap could result in a potential violation of, and/or interfere with the goals of, Order No. R9-2004-0295. This clarification is reflected in Chapter 5, Errata and Revisions, of the Final EIR. The San Diego RWQCB is responsible for enforcing the order.

Mitigation measure MM-HAZ-5 requires complete avoidance of the cap. MM-HAZ-6 requires specific steps to ensure construction activities, namely jetting and spudding, do not encounter and then re-suspend contaminated sediments that may currently be residing several feet below the Bay floor outside of the capped area. (Note: the engineered cap represents the known boundaries of contamination, but as identified in Section 4.7, *Hazards and Hazardous Materials*, of the Draft EIR, based on historical information and monitoring reports it is reasonably foreseeable that contaminated sediments may be encountered outside the boundaries of the cap.) The commenter suggests that the EIR assumes a level of disturbance that is overstated and that the recommended mitigation is infeasible, but does not present any evidence to support this opinion. As such, the mitigation measure is required unless its infeasibility can be proven, which would then be documented as part of the CEQA findings.

Furthermore, the commenter attempts to draw a conclusion that because the area of effect from the proposed jetting and spudding is small relative to the entire project site, impacts should be less than significant. Of vital importance, however, is that the commenter is only calculating the twodimensional area that would be affected and does not factor in the volume of sediment that would be disturbed by the project's proposed jetting and spudding, which would require excavating deep into the sediment layers. In addition, the comment employs a type of "ratio analysis" (i.e., the size of the area affected compared to the size of the entire project area) that is

inappropriate under CEQA. The key consideration is whether or not the project has the potential to encounter contaminated sediments and, if so, whether or not the proposed project would include one or more actions that could result in a release of existing contamination previously under the Bay floor that would now be exposed to the Bay in quantities sufficient to measurably increase the contamination within the project area. As determined in the Draft EIR, jetting and spudding both have the potential to expose contamination that is currently covered and contained, which could lead to re-suspension (see the discussion regarding Impact-HAZ-2). However, mitigation measure MM-HAZ-6 requires a pre-construction sampling of sediment in appropriate locations that will establish preconstruction conditions and a sampling of sediment in the same locations that will identify the post-construction conditions, which in turn will provide the net change of contamination as a result of construction activities. If no significant change to the pre-construction condition is observed, no further action for hazardous materials is required. If, however, contamination levels have increased, the project proponent is required to remediate the condition until it returns to pre-construction conditions or better. The commenter has presented no facts, data, or other scientifically supported evidence to suggest that the proposed project would not encounter and then release contamination into the Bay without mitigation measures identified in the Draft EIR. No changes to the Final EIR are warranted based on this comment.

Response to Comment H-6

The comment states that sediment contamination throughout San Diego Bay has been a concern for years, and summarizes recent sampling results and regulatory actions in the project vicinity. The commenter suggests that the presence of 303(d) listed pollutants at various levels of toxicity in the Bay sediment, south of the waterside portion of the project area, is due to the dynamism of this portion of the Bay with currents, storm drain outfalls, and propeller wash. The commenter states the opinion that, despite the dynamism of the environment, the Draft EIR identifies mitigation measures that would be disproportionately costly compared to the project's potential contribution to sediment contamination. The commenter asks that the District consider two factors when evaluating whether imposition of such a disproportionate burden on the project is good policy. The first point offered for District consideration is the commenter's opinion that operation and construction of the marina expansion would not introduce any pollutants or contaminants into the

project area and the applicant has indicated that it will use BMPs to minimize dispersion of existing sediments. The second point offered for District consideration is the commenter's opinion that the required mitigation may create precedent for similar measures on other District projects in the future because the existing conditions in the project area are similar to conditions around the San Diego Bay.

The Draft EIR identified significant impacts related to hazardous materials within the Bay because the proposed project has the potential to exacerbate an existing hazardous materials condition by re-suspending contaminated sediment from marina construction activities. The area has known sediment contamination in the project vicinity and there is potential to encounter contaminated sediment during jetting and spudding (Impact-HAZ-2). The Draft EIR identified significant impacts related to water quality because the proposed project has the potential to increase copper levels and other constituents above the Basin Plan's water quality objectives from operation of the proposed marina expansion (Impact-HWQ-1).

Therefore, the commenter's opinion that the proposed project would not introduce any pollutants or contaminants into the project area is not accurate. As disclosed in the Draft EIR, operation of the proposed marina expansion would have the potential to increase water quality constituents. Mitigation is required to ensure the proposed project would not cause an exceedance of the Basin Plan's water quality objectives. While the commenter indicates that the applicant would employ BMPs to minimize dispersion of existing sediments during pile driving and spudding, the Draft EIR provides evidence that there is the potential for existing contamination to be present that could be encountered during marina expansion construction activities. While it is important to implement BMPs during the construction phase, the Draft EIR concluded that additional monitoring of activities and reporting of conditions pre- and post-construction were required to ensure release of contaminated sediments did not occur and, if it did occur, to require appropriate remediation. No changes to the Final EIR are warranted as a result of this comment.

In regard to the commenter's estimate that testing alone would cost \$5 million dollars, no evidence has been provided to the District to indicate this is accurate and, more importantly, that the cost of the mitigation would make the project infeasible. No changes to the Final EIR are warranted as a result of this comment.

H-6 cont.

H-7

 Since the existing contamination of the Bay sediment within the Project area is similar to conditions around the Bay, the mitigation measures imposed on this Project will create precedent to impose similar measures on other Port projects in the future.

We request the Board of Port Commissioners be aware of the following in the consideration of these issues:

 Construction of the Marina Expansion will use "jetting" in pile installation while spuds will be used to stabilize the barge used in pile installation. Use of spuds (heavy vertical posts on the forward end and near the aft end of a barge, lowered into the sediment to stabilize the vessel) creates the possibility that subsurface sediment may adhere to the spud and be displaced when the spuds are extracted in pile

installation.
2. The applicant has proposed using silt curtains to surround the entire barge work area (as opposed to individual silt curtains around each pile) to minimize dispersion of turbidity. In addition, applicant has proposed using controlled extraction of spuds with intermittent halting of extraction to allow sediment to settle back into the Bay floor cavity created by the spud. Although applicant believes that these practices will minimize dispersion of contaminants, some displacement of sediment may occur.

3. We know from the sampling data contained in RWQCP Investigative Order R9-2017-0081 that sediment displaced from jetting and spud extraction may have concentrations of pollutants of concern at levels less than, equal to or greater than concentrations of such pollutants on the sediment surface. In the surface of the sediment may decrease present the

H-8

H-9

other words, spot concentrations of pollutants on the surface of the sediment may decrease, remain the same or increase but the total concentration of pollutants of concern within the Project area will not change as a result of construction of the Marina Expansion. The actual impact on the Bay floor sediment within the Project area will be as much a function of random chance as predictable cause and effect.

4. A simple calculation of the aggregate area of Bay floor impacted by construction of the Marina Expansion reveals that the impacted area is insignificant compared to the total waterside area of the Project. The following table reflects the calculation of that area:

Piles	
Pile size (octagonal)	24"
Area per pile	3.31 sf
Number of marina piles	188
Total area of marina piles	623 sf
Spuds	
Spud diameter	30"
Area per spud	4.91 sf
Number of spuds on pile driving barge	2
Total number of spud extractions during marina construction (50 barge positions)	100
Total spud coverage, sf	982 sf
Total marina area	560,987 sf
Percent of project area covered by piles	0.11%
Percent of project area covered by spuds	0.18%
Total percent of project area impacted by pile driving and spud retraction	0.29%

Based on the foregoing table, 1,605 square feet or less than .29% of the total waterside Project area (560,987 sf) will be impacted by displaced sediment.

Under California law, "significant effect on the environment" means a substantial, or potentially substantial adverse change in the environment. Cal. Pub. Res. Code §21068. In the context of cumulative Finally, the commenter's statement that precedence is created for future projects does not raise an issue under CEQA that requires a response. In general, where there is known contamination, the District would require mitigation for projects (as defined by CEQA) that have the potential to exacerbate the existing condition. No changes to the Final EIR are warranted as a result of this comment.

Response to Comment H-7

The commenter requests that the Board be aware of several factors when considering the aforementioned issues. Firstly, the comment states that construction of the marina expansion would use jetting in pile installation while spuds would be used to stabilize the barge. The comment also states that the use of spuds could result in subsurface sediment adhering to the spud and being displaced when the spuds are extracted. Secondly, the comment states that the applicant has proposed to use silt curtains around the entire work area, rather than for each individual pile, to minimize dispersion of turbidity and controlled extraction of spuds to allow sediment to settle back into the Bay floor cavity created by the spud. The comment further states that the applicant believes these practices would minimize dissemination of contaminants, but acknowledges that some displacement of sediment may occur.

The use of silt curtains, as suggested by the commenter, is one of the possible BMPs that would be required during the construction of the marina expansion in accordance with the California Water Act Section 401 Water Quality Certification (see Section 4.8, Hazards and Hazardous *Materials*, of the Draft EIR). The commenter indicates that the practices it is proposing to implement would minimize turbidity from jetting and allow sediment to settle back to the Bay floor cavity created by spudding. However, aside from the belief that these steps would minimize turbidity and re-suspension of contaminated sediments, no evidence is provided to support this position. Moreover, the commenter acknowledges that some displacement of sediment may occur. The Draft EIR identifies mitigation measures that attempt to further reduce the potential displacement of sediment, which may include contaminated sediment given the proximity to the Campbell Shipyard and the existing engineered cap. Mitigation measure MM-HAZ-6 requires a pre-construction sampling of sediment in appropriate locations to establish pre-construction conditions and a sampling of sediment in the same locations to identify the postconstruction conditions, which in turn will provide the net change of contamination as a result of construction activities. If no significant change

³

to the pre-construction condition is observed, no further action for hazardous materials is required. If, however, contamination levels have increased, the project proponent is required to remediate the condition until it returns to pre-construction conditions or better. No changes to the Final EIR are warranted as a result of this comment.

Response to Comment H-8

The commenter states the opinion that, based on sampling data contained in Investigative Order R9-2017-0081, spot concentrations of pollutants on the surface of the sediment may decrease, remain the same, or increase but the total concentration of pollutants of concern would not change as a result of the marina expansion construction. The commenter further states the opinion that the actual impact on sediment within the project area would be as much a function of random chance as predictable cause and effect.

Please see responses to H-5, H-6, and H-7. As indicated in those responses, there is known contamination in the project vicinity and construction activities, namely jetting and spudding, have the potential to encounter contaminated sediment. Sediment that is currently below the Bay floor would have the potential to be re-suspended from the exposure caused by jetting and spudding, which may in turn increase pollutant concentrations exposed to the Bay that would no longer be contained under the Bay floor. Mitigation (MM-HAZ-6) is required to establish pre-construction levels and post-construction levels to determine the net change caused by the marina expansion's construction. If contamination levels are above pre-construction levels, remediation is required. No changes to the Final EIR are warranted as a result of this comment.

Response to Comment H-9

The commenter states the opinion that the aggregate area of the Bay floor affected by construction of the marina expansion is insignificant compared to the total waterside area of the project. The commenter provides a table that reflects the calculation of that area and states that, based on the table, 1,605 square feet or less than 0.29% of the total waterside project area (560,987 square feet) would be affected by displaced sediment. The comment cites text from the California Public Resources Code related to significant effects on the environment and the State CEQA Guidelines related to cumulative impacts. The commenter states the opinion that the Board may reasonably determine, based on substantial evidence, and

following the imposition of mitigation measures proposed by the applicant, that pile installation and spud extraction would not have a significant effect on the environment and impacts would not be cumulatively considerable because the total area affected constitutes a *de minimis* portion of the waterside project area. The commenter suggests that the Board balance the region-wide benefits of current and future waterside construction in the Bay against its unavoidable *de minimis* environmental risk. The commenter further suggests that the Board may approve the project with the applicant's recommended mitigation measures by adopting a Statement of Overriding Considerations, if the Board concludes that the economic and other benefits of the project outweigh the unavoidable environmental adverse effects.

Comment H-5 is similar to comment H-9. Please see the response to H-5. The commenter has presented no scientifically supported evidence to suggest that the proposed project would not encounter and then release contamination into the Bay without the mitigation measures identified in the Draft EIR. No changes to the Final EIR are warranted based on this comment.

Additionally, the commenter provides reference to State CEQA Guideline Section 15130(a) and claims that the cumulative impacts of the project are *de minimis* and therefore less than cumulatively considerable. However, the courts have invalidated the use of *de minimis* as a determination of the significance of a project's cumulative contribution (*Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98 3). In addition, the courts have rejected the type of "ratio analysis" the comment employs (*Cleveland National Forest Foundation v. San Diego Association of Governments* (2017) 3 Cal.5th 497; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692). No changes to the Final EIR are warranted based on this comment.

The commenter concludes this comment by appealing to the Board to balance the region-wide benefits of the project against the environmental impacts. The commenter references State CEQA Guidelines Section 15093, which provides guidance on preparing a Statement of Overriding Considerations. As this last comment does not raise issue with the environmental analysis contained within the Draft EIR, no response is required. However, this comment has been included in the record for consideration by the Board. impacts, the Guidelines provide that, even though a project's impacts are individually limited, they may be "significant" if the project's cumulative effect is considerable when viewed in connection with the effects of past, current and probable future projects. Guidelines Section 15064(h)(1). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. Guidelines Section 15130(a).

Based on the foregoing, we believe that the Board of Port Commissioners may reasonably determine, based on substantial evidence, and following imposition of the mitigation measures proposed by

H-9 applicant, that pile installation and spud extraction will not have a significant effect on the environment cont and are not cumulatively considerable because the total area impacted by pile installation and spud extraction constitutes a de minimis portion of the waterside area of the Project.

However, due to the similarity of conditions within the Project area and rest of the Bay and the farreaching effects of imposing burdensome mitigation on the Marina Expansion, we suggest the Board balance the region-wide benefits of current and future waterside construction in San Diego Bay against its unavoidable de minimis environmental risk. If you conclude and that the economic and other benefits of the Project (and future waterside development in the Bay) outweigh the unavoidable environmental adverse effects, you may approve the Project with applicant's recommended mitigation measures by adopting a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093.

Section 4.12 / Transportation, Circulation and Parking

The Port's parking guidelines are nearly two decades old and the movement and transportation decisions of hotel guests have changed dramatically since that time. Visitors today rely less on private or rental

H-10 cars to arrive at their destinations. But because the Port has not taken the time to update its parking guidelines, all Port tenants and the Project are being held to an outdated standard. The Port should use a modern parking standard and then craft the appropriate mitigation requirements. For example, the City of San Diego uses a ratio of .3 parking space per key for hotels.

Chapter 7 / Alternatives to the Proposed Project

The EIR compares the visual impacts if the SDCCC Expansion to the FAL hotel and but fails to take into consideration its large bulk and scale. FAL project provides a much more visually appealing project than the Expansion project with substantially reduced aesthetic impacts. In its staff recommendation regarding SDUPD Master Plan Amendment No. 6-PSD-MAJ-45-13, dated September 27, 2013, pages 2-3, Coastal Commission staff highlighted the negative impacts of the SDCC Phase 3 Expansion:

"The proposed PMPA will result in significant impacts to views, visual quality and coastal recreation through the substantial loss of already limited waterfront area and open space. Specifically, constructing the 100-foot high, 1,000 foot long expanded SDCC building only 35 feet from the existing public promenade, 70 feet from the water's edge, will significantly diminish the spacious,

H-11 open feel of the existing public accessway, and will contribute to the sense that the shoreline is part of the Convention Center. Construction of a building of this size and width so close to the waterfront would be unprecedented in San Diego County, because setting back buildings a reasonable distance from the shoreline ensures that the public will have both visual and physical access to the waterfront. The SDCC expansion also will eliminate the 1.6 acre landscaped open space and public area located adjacent to Harbor Drive while were provided to mitigate the first expansion of the SDCC, and the existing 5.5 acre ground level waterfront grassy park, which was created in part to help offset the impacts to public access and recreation resulting from construction of the existing Hilton and (unbuilt) Spinnaker projects. The waterfront park is one of the few grassy waterfront park areas in downtown San Diego, along with the South Embarcadero Marina Park, which is already cut off downtown. These areas are used by the public for passive recreation such as picnicking and observing the Bay, as well as for events that draw the public down to the waterfront. The project

4

Response to Comment H-10

The comment states that the District's parking guidelines are nearly two decades old and that hotel guests' transportation decisions have changed over this time span. The commenter states the opinion that visitors rely less on private or rental cars and, as a result, all District tenants and the project are being held to an outdated standard. The comment suggests that the District use a modern parking standard such as the City's ratio of 0.3 parking space per hotel key and then craft the appropriate mitigation requirements.

The commenter is taking issue with the District's existing parking guidelines and provides an opinion about the guidelines' current applicability to existing transportation behaviors. The District is required to evaluate parking requirements based on the adopted parking standards. Until the parking standards undergo an update, the current parking requirements will remain the basis for evaluating sufficient parking for development projects located on District Tidelands. In addition, the current parking standards provide specific standards for adjusting the number of required spaces, which take into account a variety of site-specific characteristics, including proximity to transit, access to the airport, shared parking potential, employee trip reduction programs, and dedicated airport shuttle and water transportation service (Tidelands Parking Guidelines, Table 2). No changes to the Final EIR are warranted based on this comment; however, this comment is included in the record for consideration by the Board.

Response to Comment H-11

The comment states that the EIR compares the visual impacts of the SDCC Expansion to the Fifth Avenue Landing hotel but fails to take into consideration its large bulk and scale. The commenter states the opinion that the Fifth Avenue Landing project provides a more visually appealing project than the SDCC Expansion project, with substantially reduced aesthetics impacts. The comment cites text from pages 2 and 3 of the California Coastal Commission staff report for the SDCC Phase 3 Expansion related to the aesthetics impacts of that project. The commenter states that it views Coastal Commission Staff's comments as a complete summary of the reasons why the SDCC Phase 3 Expansion is an inappropriate bayfront use. The commenter states the opinion that Chapter 7, Alternatives to the Proposed Project, of the Draft EIR fails to adequately

compare the aesthetic impacts of the project versus the Phase 3 Expansion. The commenter states that a project proponent–supplied sideby-side analysis of several key observation points taken from the Draft EIR and the *San Diego Convention Center Phase III Expansion and Expansion Hotel Project and Port Master Plan Amendment Final Environmental Impact Report* is attached for the District's consideration.

The commenter's opinion that the SDCC expansion is an inappropriate bayfront use is contrary to the findings of the District in approving a PMPA for the SDCC Phase III Expansion Project; to the findings of the CCC, which certified the PMPA as being in conformance with the policies of the California Coastal Act; and to the judgment entered by the San Diego Superior Court in favor of the CCC and the District in a lawsuit challenging the CCC's certification of the PMPA (see San Diego Navy Broadway Complex *Coalition v. California Coastal Commission*. San Diego Superior Court Consolidated Cases Nos. 37-2013-00077213 and 37-2014-00006987). The CCC staff's comments referenced by the commenter did not address the modifications to the PMPA proposed by the District and approved by the CCC, which provide substantial additional improvements to public access and public views in the expansion area and were determined by the CCC to adequately address the staff's concerns. The issues raised by the commenter regarding the impact of the Phase III Expansion on public access and public views also were the subject of an unsuccessful appeal of the judgment in favor of the CCC and the District in the lawsuit concerning the PMPA for the Phase III Expansion (Court of Appeal, Fourth Appellate District, Division One, Case No. D072568). The commenter's opinion that the comparison of the aesthetics impacts of the project with the aesthetic impacts of the SDCC Phase III Expansion does raise a comment about the Draft EIR analysis and therefore the following response is provided.

The comment is in reference to the alternatives analysis for Alternative 2 – No Project/Port Master Plan Consistency Alternative. Under this alternative, the SDCC Phase III Expansion and Expansion Hotel would be constructed as entitled in the current PMP. The proposed Expansion Hotel would occur outside of the proposed project area and, therefore, the focus of this alternative is the portion of the SDCC Phase III Expansion that would occur within the project site. This analysis assumes that the City either obtains property rights to the site or constructs the expansion after the expiration of the Amended, Restated and Combined Lease term. Under the current PMP, the SDCC Phase III Expansion includes the expansion of the existing SDCC that would add approximately 220,150 square feet of exhibit hall space, approximately 101,500 square feet of meeting rooms,

H-11

cont

includes construction of a 5 acre rooftop park, but the park would not be visible from any surrounding inland streets, and it is unlikely that people would even be aware of the existence of the park, let alone be willing to travel around and up to the top of the SDC to stroll and recreate. The current SDCC has terraces and tables located on the waterside of the building which go used and unnoticed by the public, because they appear to be private amenities of the SDCC and it is likely that the proposed rooftop park would be similarly vacant, except for private functions held by the SDCC and the Hilton.

Furthermore, the SDCC and Hilton expansions will significantly reduce the view corridor between the two existing structures. This area is currently approximately 370 feet to 550 feet wilde, and is one of the few windows to the water in the solid mass of buildings along almost the entire length of Harbor Drive. The proposed expansion will reduce the distance between the buildings to approximately 270 feet, creating a tunnel effect and significantly reducing views, particularly from the pedestrian bridge spanning Harbor Drive at Park Boulevard.

Since the first Convention Center expansion was approved, Park Boulevard/Convention Center Way has been the only vehicular access to the public park at Embarcadero Marina Park South. In many ways, Park Boulevard/Convention Center Way currently functions mainly as back-of-house access to the SDCC. As proposed, Park Boulevard would be redesigned to provide valet parking to the SDCC, and operate as the main accessway to the Hilton. Only a narrow road behind the SDCC would remain for Embarcadero Marina Park access. By narrowing the corridor between the structures even further, and expanding the SDCC next to the water, the project would further isolate this major coastal recreational resource, essentially transforming it into a private amenity for SDCC visitors."

We view Coastal Commission Staff's comments as a complete summary of the reasons why the SDCC Phase 3 Expansion is an inappropriate bayfront use.

We also believe the Alternatives Section of the DEIR fails to adequately compare the aesthetic impacts of the Project versus the Phase 3 Expansion. To address this issue, the applicant commissioned Gensler, the Project architect, to do a side-by-side analysis of several of the key observation points ("KOPs") taken from the DEIR and from the San Diego Convention Center Phase III Expansion and Expansion Hotel Project and Port Master Plan Amendment Final Environmental Impact Report. That analysis is attached.

Thank you for the opportunity to address these issues. Please contact the undersigned or any member of the Project team if you have questions or need additional information.

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H-12 Sincerely,

Fifth Avenue Landing, LLC

RaCarpenter

R.A. Carpenter Member

Attachment: Gensler / Comparison of Key Observation Points; FAL Hotel Project vs. SDCC Phase III Expansion and approximately 78,470 square feet of ballroom space to the existing facility. Public amenities include a 5-acre rooftop park/plaza. It would be accessible to the public with lighted paths, seating areas, an open lawn/performance area, and several observation vistas. Spaces on the rooftop park/plaza would range from grand areas where events can take place to more intimate, contemplative areas. This alternative would not involve any in-water work.

As stated in Chapter 7 of the Draft EIR, development occurring under Alternative 2 would result in a substantially lower structure than what would occur under the proposed project and would involve implementation of an elevated 5-acre public park/plaza that would include the introduction of five new public vista areas to the project site. The Final EIR for the SDCC Phase III Expansion did not identify any significant and unavoidable aesthetic impacts. As such, development of the SDCC Phase III Expansion would not result in impacts on designated vista areas and scenic resources.

This less-than-significant impact determination of the SDCC Phase III Expansion is contrasted with the significant and unavoidable aesthetic impact identified with the proposed project's implementation. Specifically, the introduction of a high-rise market-rate hotel tower within the viewshed of vista areas at the SDCC's existing plaza and grand staircase would block or substantially obstruct existing expansive and uninterrupted views of the San Diego Bay, including views of the San Diego-Coronado Bay Bridge. Mitigation measures would reduce impacts on the views from the SDCC rooftop plaza, but not to less-than-significant levels. The aesthetic impact would remain significant and unavoidable.

Therefore, because no significant and unavoidable impacts were identified with the SDCC Phase III Expansion, but were identified with the proposed project, aesthetics impacts associated with the proposed project are considered more severe than the aesthetic impacts of the SDCC Phase III Expansion. No changes to the Final EIR are warranted based on this comment.

Response to Comment H-12

This comment concludes the comment letter and provides a contact name and information.

The District appreciates FAL's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.

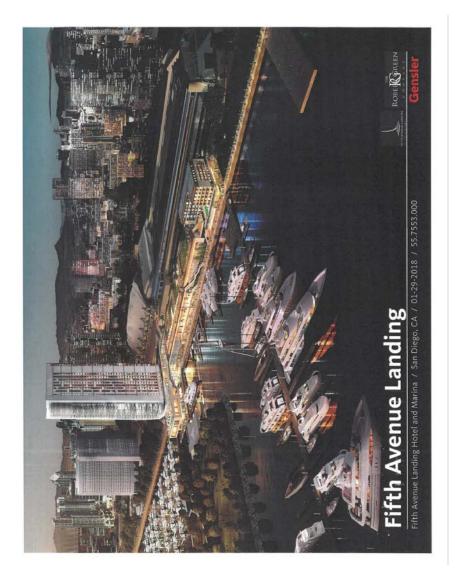


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Rontigraten L. Fifth Avenue Landing Hotel and Marina / San Dieeo. CA / 01-29-2018 / 55,7553.000	000

This study compares the proposed Fifth Avenue Landing (FAL) and San Diego Convention Center Expansion (SDCC) projects and their environmental impact to:

Viewsheds and sightlines

Site and surroundings

Publicly accessible open space

Quality of waterfront access and activation



Chapter 6. Comments Received and District Responses

ROBERT GREEN

Fifth Avenue Landing Hotel and Marina / San Diego, CA / 01-29-2018 / 55.7553.000



Key Observation Points (KOP) Location Map 4

Fifth Avenue Landing Hotel and Marina / San Diego, CA / 01-29-2018 / 55.7553.000

The following viewshed studies render the proposed Fifth Ave Landing (FAL) project from the same key observation points (KOP) as included within the San Diego Convention Center Expansion (SDCD EIR. Comparisons of the visual impact of the proposed SDCC Expansion and Fifth Ave Landing visual studies are shown opposite leaf for the following KOP:

KOP 1: Coronado Bayfront Viewshed Proposed SDCC Expansion obstructs us of Petco Park, East Village and istant landaccape topography. Proposed SDCC Expansion and FAL projects screen unsightly existing Convention Center service areas. The FAL proposal preserves East Village views.

KOP 2: Embarcadero Marina Park South Viewshed Proposed SDCC Expansion and FAL, projects screen unsightly existing concention Center service areas. The SDCC proposal completely obstructs views of East Village whereas the FAL proposal preserves East Village views.

KOP 3: Bayfront Promenade Viewshed Proposed SDCC Expansion fronts the Promenade with activated retail Proposed SDCC Expansion fronts the Promenade with activated retail within an impossing 80 - 110'H non-predestrain scaled strete wall with grand ramp ascending to an elevated rooftop open space. Whereas the FAL proposal fronts the Promenade with multiple buildings with varied pedestrian-scaled street walls, public staircase access to an elevated rooftop plaza and varied uses including; activating retail, water transportation center, hotel lobby and lounge, hotel conference lobby, low-cost visitor lodging food & bverage retail, as well as public parking access. The FAL tower bridges the Promenade with a 40'H celebrational arched gateway to the Central Embarcadero.

KOP 4: Harbor Drive Viewshed Proposed SDCC Expansion introduces a new pedestrian bridge over Practor Drive obstructing the sculptural mast of the Harbor Drive Pedestrian Bridge at Park BNd, whereas the FAL, proposal has no view shed impact on Harbor Drive.

KOP S: Downtown San Diego Viewshed (Park Blvd & Tony Gwynn) Proposed SDCC Expansion narrows the view shed of the San Diego Bay forn Park and Tony Gwynn Blvd, whereas the FAL proposal has no view shed impact.

KOP 6: Harbor Drive Pedestrian Bridge (middle of bridge) Proposed SDCC Expansion narrows the view shed of the San Diego Bay and Coronado Island beyond; whereas the FAL proposal has no view shed impact.

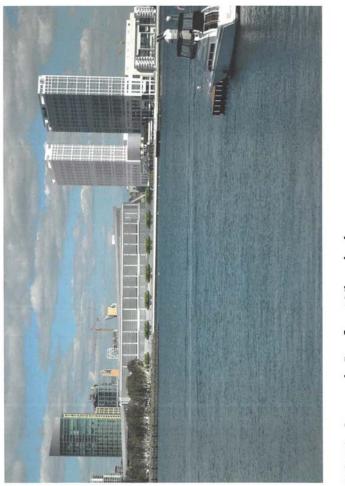
KOP 7: Harbor Drive Pedestrian Bridge (top of stairs) Proposed SDCC Expansion narrows the view shed of the San Diego Bay and Coronado Island beyond; whereas the FAL proposal has no view shed impact.

KOP 8: Petco Park Vlewshed Proposed SDCC Expansion narrows the view shed of the San Diego Bay and Coronado Island beyond; whereas the FAL proposal has no view shed impact.

has view

KOP 9: Downtown San Diego Viewshed (Park Blvd & 10th Ave) Proposed SDCC Expansion introduces a new hotel tower which little impact to the view shed; whereas the FAL proposal has no v impact. Propo ittle i shed i ROBERT GREEN / 01-29-2018 / 55.7553.000 A San Diego, Fifth Avenue Landing Hotel and Marina /

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San Diego Convention Center Expansion

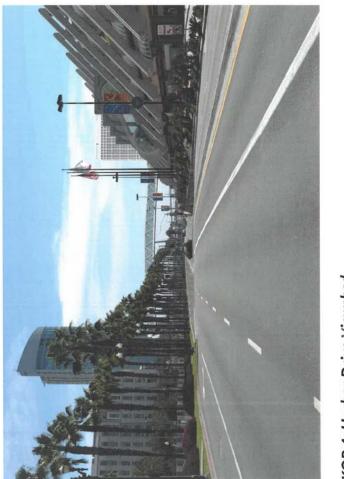














San Diego Convention Center Expansion











San Diego Convention Center Expansion KOP 6: Harbor Drive Pedestrian Bridge Viewshed (middle of bridge) 16 **CF**





San Diego Convention Center Expansion KOP 7: Harbor Drive Pedestrian Bridge Viewshed (top of stairs)

18 ICF



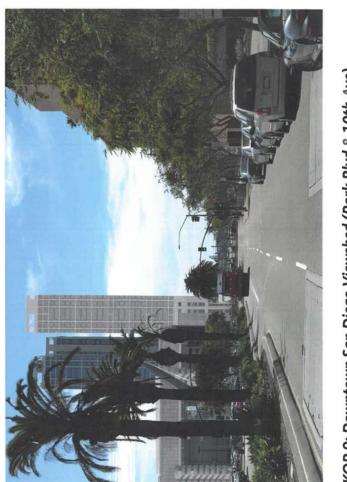


KOP 8: PETCO Park Viewshed

20 ICF

San Diego Convention Center Expansion





KOP 9: Downtown San Diego Viewshed (Park Blvd & 10th Ave)

San Diego Convention Center Expansion

²² ICF







The following site plans and diagrams for the proposed SDCC Expansion and Fifth Avenue Landing projects provide a comparison between each project's:

Proposed location on the site in relation to the existing Convention Center

Proposed footprint

Proximity to the waterfront

Proposed pedestrian access points from the Promenade













The following perspectives for the proposed SDCC Expansion and Fifth Avenue Landing projects provide a comparison of the proposed rooftop open space quality, accessibility and experience.

 Both the SDCC Expansion and the FAL projects propose activated rooftop open space with walkways, hardscape plazas, turfed lawn areas, trellis shade structures, and landscape planting. The SDCC Expansion proposes a continuously sloping open pare which will significantly limit practicality and use, whereas the FAL proposal includes spansive level plazas and lawns with multiple public access points inviting leisure, activity and events.

 The SDCC Expansion proposes an open space elevated at 80 -110' H over the Promenade connected to the waterfront via a long switchback ramp with passenger elevator, whereas FAL proposes an open space elevated at 42' H over the Promenade connected to the waterfront via a terraced grand staircase, two additional staircases, and passenger elevator.

 The SDCC Expansion rooftop open space continuously ascends via a series of switchback ramps from the Promenade to a 110'H dead-end rooftop viewing terrace. Whereas the FAL rooftop place with waterfront access provided by three staircases located at the mid-section, east and west terminuses - significantly improves public access and public safety. The SDCC Expansion and the FAL proposals propose connection to the existing 42'H Convention Center rootop plaza and Convention and stalrcase and inclinator. SDCC Expansion proposes a continuous addition and FAL proposes an optional pedestrian bridge over Convention Way.

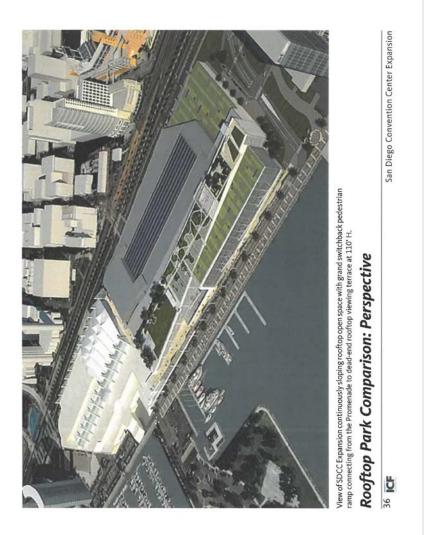
















The following site plans, activation diagram and proposed waterside activities for the proposed SDCC Expansion and Fifth Ave Landing projects provide a comparison of the proposed waterfront Promenade quality, access and experience.

Proposed SDCC Expansion fronts the Promenade with shallow depth activated retail; whereas the FAL proposal fronts the Promenade with a variety of mixed-uses including; activating retail, water transportation center, hotel lobby and lounge, hotel conference lobby, low-cost visitor lodging food & beverage retail, as well as public parking access.

Proposed SDCC Expansion proposes a 80 - 110th non-pedestrian scaled street wall adjacent to the Promenade; whereas the FAL proposal includes varied scale buildings with a 20 - 42th street wall.

Proposed SDCC Expansion proposes a grand scale switchback ramp ascending from the Promnade to the roottop open space; whereas the Lonposes as cantralized monumental terraced staticase and two additional east and west staricases with passenger elevator service.

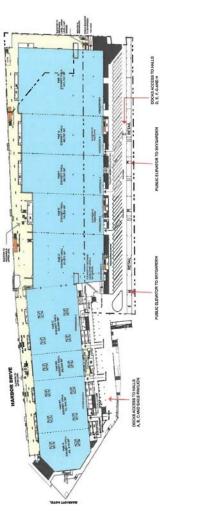


r transportation center with water taxi and ferry service rfront activating retail and food & beverage rfront public art installations and interactive digital water t waterfr waterfr display

viewing and observation terraces, points with binoculars
 linear recreation walkways for walking, running and cycling
 sopen space and turfed lawn areas for respite and recreatio
 hardscape plazas for events and social gatherings
 waterside mobile board games
 waterfront access and educational signage





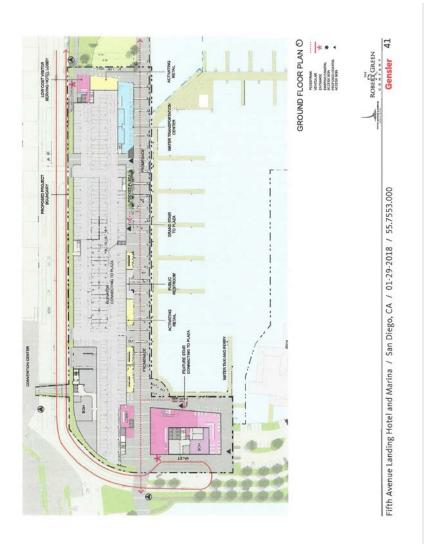


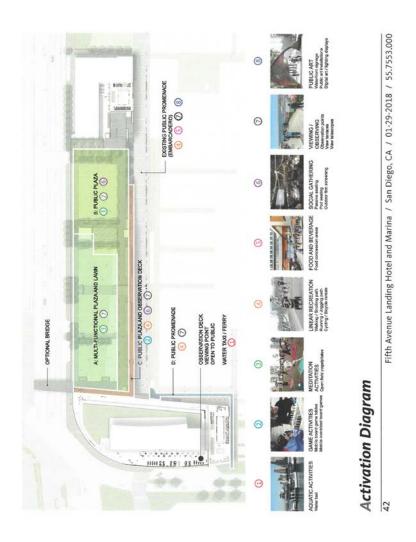
GROUND FLOOR PLAN O

Public Park and Waterfront Access and Activation Comparison

San Diego Convention Center Expansion

40 ICF













Volumetric Comparison

The following diagrams show the relative volume and dimensions of the proposed SDCC Expansion and FAL projects.

The FAL proposal is less than half the volume of the SDCC Expansion.







Volume: ~25, 600, 330 ft3

San Diego Convention Center Expansion

Volumetric Comparison

48 ICF

Fifth Avenue Landing Project & Port Master Plan Amendment Final Environmental Impact Report



6.3.10 Comment Letter I: Save Our Heritage Organisation (SOHO)

Comment Letter I StheRITAGE OFC Save Our Heritage Organisation Saving San Diego's Past for the Future OUNDED RECEIVED Tuesday, January 30, 2018 JAN 20 2018 San Diego Unified Port District SAN DIEGO UNIFIED Attn: Dana Sclar, Development Services Department REAL ESTATE 3165 Pacific Highway San Diego, CA 92101-1128 Re: Fifth Avenue Landing Project and Port Master Plan Amendment Ms. Sclar. Save Our Heritage Organisation (SOHO) has read the draft Environmental Impact Report for the Fifth Avenue Landing Project and Port Master Plan Amendment and has concern regarding the treatment and mitigation proposed for the archaeological deposit already recorded within the project site, CA-SDI-15118H 1-1 This site, CA-SAI-15118H, should be studied, a research design should be prepared and testing should occur. The research design should then be modified in accordance to the results of the testing, and there should be a full excavation as well as recovery of the contents found. Thank you for the opportunity to comment, Bruce Coons Executive Director Save Our Heritage Organisation BOARD OF DIRECTORS Jave MacAskill, President • David Goldberg, Vice President • Jessica McGee, Treasurer • John Eisenhart, Secretary M. Wayne Donaldson · Erik Hanson · Paul Johnson · Nancy Moors · John Rush · Scott Sandel · David Swarens · Kiley Wallace Bruce Coons, Executive Director

2476 San Diego Avenue · San Diego CA 92110 · www.SOHOsandiego.org · 619/297-9327

Response to Comment I-1

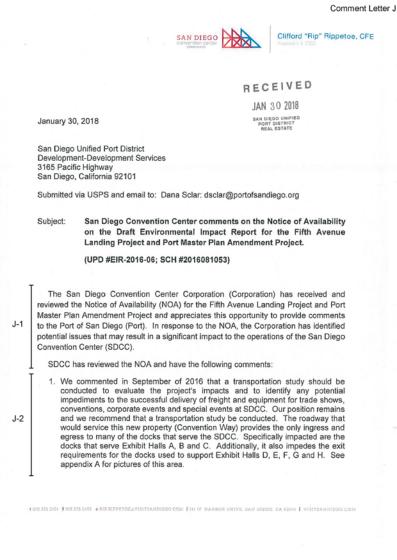
The comment indicates that SOHO has reviewed the Draft EIR and has concern regarding the treatment and mitigation proposed for archaeological deposit CA-SDI-15118H. The comment states that the site (CA-SAI-15118H) should be studied, a research design should be prepared, and testing should occur. The comment further states that the research design should then be modified in accordance with the results of the testing, and that there should be a full excavation and recovery of the contents found. The comment concludes by providing a contact name.

As stated in Section 4.4, *Cultural Resources*, CA-SDI-15118H is a large historic era trash dump located in the former tidelands that existed all along the edge of San Diego Bay in the vicinity of the project area. Monitoring conducted as part of the SDCC Phase I and Phase II construction concluded that the site was not significant, but subsequent monitoring for the Hilton San Diego Bayfront Hotel and associated parking structure concluded the site was significant (Pierson 2006). Due to the potential that portions of CA-SDI-15118H could be unearthed during excavation undertaken as part of proposed construction activities in this area, the Draft EIR included MM-CUL-1 that requires archaeological monitoring in areas of sensitivity.

ICF's project archaeologists, Karen Crawford (22 years of professional experience, MA in Anthropology) and Patrick McGinnis (22 years of professional experience. MA in Archaeology and Heritage) determined after reviewing all available records and conducting archival research that it is unlikely that any of the refuse discovered would be considered significant for the purposes of CEQA because the refuse is out of context, having been produced elsewhere, and then brought to the tidelands and dumped. There may be interesting materials and individual items of merit, though such materials or items would likely not allow for the types of analyses typically performed on historical archaeological collections. Most of the material would likely not be directly associated with specific homes or businesses, so there would be no way to look at population consumption patterns or consumer buying behavior, nor would it be able to address questions of ethnicity, age, or any other demographic factors. Therefore, archaeological testing through discrete and controlled excavation will not provide further contextual data that could provide information beyond the collection of diagnostic artifacts that would be

part of the monitoring program. Monitoring of construction and collection of diagnostic artifacts for further analysis or public display is adequate mitigation for any impacts that occur on this resource. As such, no changes to the Final EIR are required as a result of this comment.

6.3.11 Comment Letter J: San Diego Convention Center Corporation



Response to Comment J-1

This comment is an introductory comment indicating that the SDCCC has received and reviewed the Notice of Availability and makes a general statement that the SDCCC has identified potential issues that may result in a significant impact on SDCC operations. The commenter indicates that its specific comments follow.

The District appreciates SDCCC's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA. The specific comments that follow this introduction are listed separately below along with the District's individual responses.

Response to Comment J-2

The comment restates comments that were previously provided by the commenter in September 2016 regarding the preparation of a transportation study that evaluates the project's impacts and identifies any potential impediments to successful delivery of freight and equipment to SDCC. The commenter recommends that a transportation study should still be conducted. The commenter states the opinion that the proposed project would affect docks that serve Exhibit Halls A, B, and C, and would impede the exit requirements for docks used to support Exhibit Halls D, E, F, G, and H. The commenter provides pictures of this area. The comment also describes the process for coordinating freight deliveries to SDCC and the potential economic impacts of decreased activity at SDCC from limited ingress and egress at Convention Way.

The proposed project is located on a separate leasehold from SDCC and is separated by Convention Way. Other than offsite utility improvements and a portion of the optional connecting pedestrian bridge, all of the proposed improvements would occur entirely within boundaries of the Fifth Avenue Landing leasehold. Additionally, the project does not propose any physical modifications to Convention Way that could affect ingress and egress to SDCC or the project site and would not preclude access to public ROW. Specifically, Convention Way would remain open and access to the SDCC loading docks would continue. The Transportation Impact Analysis (Appendix K-1 of the Draft EIR) determined that the intersection of Harbor Drive/Convention Way/Park Boulevard, which provides access to the project site and the SDCC loading docks, would operate at acceptable J-2

cont

J-3

San Diego Unified Port District January 30, 2018 Page 2

> Customers and their contractors use these docks to bring in the millions of pounds of freight that become exhibits, audio-visual sets, decorations and products to be displayed at their event. The tractor/trailers are marshalled 12 miles away in a yard we lease, located in Chula Vista, as part of our EIR. This takes precise coordination to allay any major congestion and to prevent idling of the tractors per the EIR requirements we are committed to adhering to. Any alteration to this roadway must be coordinated with the SDCC, or else the conventions, trade shows, corporate events, and consumer shows would be severely impacted. This impact could also decrease the events held in SDCC annually; the more than 862,400 in annual attendance would go down correspondently, the direct spending of over \$724 million, and the over \$1.1 billion in regional impact would similarly decrease. This, in turn, could create a substantial decrease in hotel and sales tax revenue.

The hotel specific revenue, transient occupancy tax revenue, and sales tax revenue generated by the SDCC significantly contributes to the fiscal health of the Port of San Diego and the City of San Diego. The activity at the SDCC is expected to generate \$27.5 million in taxes during 2018. Return on investment is in danger of decreasing significantly if we erode the activity at the SDCC due to limited ingress and egress.

2. The SDCC presented access and safety concerns during the former comment period as well. Pedestrian access and safety is an everyday consideration at SDCC. The design of the plaza areas and the approaches to the project must take into consideration the more than 862,400 guests coming to the SDCC annually. Although every visitor to the convention center is a potential pedestrian, over 500,000 of our guests are from out of town. They take shuttles, taxis, Uber and Lyft to the SDCC. They then tend to explore the waterfront and the Gasamp District and walk to the more than 137 restaurants in the downtown area.

The SDCC requests that a formal study be conducted on pedestrian safety as part of the EIR for this project. We applaud efforts for pedestrian access and safety. We acknowledge the placement of a pedestrian bridge between the proposed project and the convention center. This takes into consideration the safety of our guests. However, we still have had no actual conversation regarding this access bridge with the Fifth Avenue Landing team. We have no agreement or understanding of the design, scope, security or use of the bridge. This includes understanding how the bridge will impact the access of the hundreds of tractortrailers that serve the dock area that is directly adjacent to the proposed project.

We look forward to receiving this information. We would welcome the opportunity to comment further once we have reviewed this information. However, until that time, we cannot endorse this element of the proposal.

levels of service with the proposed project, during both the AM and PM peak hours under both near-term and buildout conditions. Therefore, the proposed project would have no impacts on the docks that support Exhibit Halls D, E, F, G, and H. Moreover, while no impacts on Convention Way were identified, the potential economic impacts suggested by the commenter are not issues under the purview of CEQA unless they are attributed to a specific physical impact on the environment. As no physical impact was identified in the Transportation Impact Analysis related to traffic operations of the proposed project, no changes to the Final EIR are required as a result of this comment.

Response to Comment J-3

The comment states that access and safety concerns were presented by the commenter during the previous comment period (for the Notice of Preparation) as well. The commenter expresses a general concern over pedestrian access and safety at SDCC and states that the design of the plaza areas and the approaches to the project must take SDCC guests into consideration. The commenter requests that a formal study be conducted on pedestrian safety as part of the EIR, but does not identify any specific safety concern that may occur as a result of the proposed project. The comment acknowledges the proposed placement of the pedestrian bridge between the proposed project and SDCC, but indicates that the commenter would like to understand how it would affect access for the tractor-trailers that serve the dock area. The commenter indicates that it cannot endorse this element of the proposal without further information.

As discussed in the response to comment J-2 above, all of the proposed landside improvements would occur entirely within boundaries of the Fifth Avenue Landing leasehold with the exception of a portion of the optional connecting pedestrian bridge and the offsite utility improvements, the latter of which would be buried under the ROW. Additionally, the project does not propose any physical modifications to Convention Way, which provides primary ingress and egress to the project site and the adjacent SDCC loading docks. There are several existing designated pedestrian crosswalks in the project vicinity that provide pedestrian access between SDCC and the waterfront. These pedestrian crosswalks are located at the intersection of Gull Street and Park Boulevard, the intersection of Convention Way and the existing WTC parking lot driveway, and across Marina Park Way connecting two segments of the existing Embarcadero Promenade. The project does not propose any changes to these existing designated pedestrian crossings, 1-4

J-5

.1-6

San Diego Unified Port District January 30, 2018 Page 3

3. Previous EIRs conducted on this area included the proposed expansion of the SDCC. A requirement for any SDCC expansion resulting from that process included a requirement that solar voltaic systems be installed on our rooftop. Regardless of any expansion, the SDCC plans to proceed with a solar voltaic system sometime in the future. The system area is master planned for the West half of the existing convention center immediately adjacent to this proposed project. The hotel tower of this proposed project appears to be in the direct path of the sun rays that would feed the solar farm that would be installed. The almost 500-foot tower will potentially impact the usefulness, effectiveness, and the pavback of such an installation, possibly making it impractical to move forward.

Since the use of solar is a Port requirement for the SDCC, we request that any approvals for this project include a study that ensures the success of such an installation on another Port property (SDCC). Additionally, in the absence of such a study, we request that relief from this requirement be granted prior to any approval of this project.

4. We have been clear that an approval of this project prevents the current, approved contiguous expansion of the SDCC. The SDCC contends that the expansion is needed to retain the region's largest convention clients, including Comic-Con International. Comic-Con has endorsed a contiguous expansion and has publicly stated that no other alternatives are suitable. This project, as proposed, on the adjacent property will prevent the approved contiguous expansion of the SDCC.

5. The comments above describe real impacts on the SDCC. The resolution of the issues described will be necessary regardless of the project design, scope and use. The Corporation understands this from a unique point of view. The Corporation's public approval process for a project on this same property resulted in many of the same comments. That is where the requirements for a public plaza were determined and ultimately duplicated within this FAL proposed project. It is also where the requirement for the solar voltaic system was determined and issued

The Corporation acknowledges the potential for this site. The growth in visitor volume and the need for more hotel rooms is real. We see potential for this site that could be mutually beneficial to SDCC customers, visitors needing hotel rooms, the desired growth of tax revenue for essential City services, and other projects that benefit the citizens of the Region. nor does it include any design features that would create hazardous conditions for pedestrians. Moreover, it is assumed pedestrians would continue to use designated crosswalks and comply with applicable City pedestrian and traffic laws and regulations and follow applicable signage in the area.

The optional pedestrian bridge would be designed and constructed to safely carry pedestrians between the SDCC and the proposed project, in compliance with applicable City building and structural codes. However, as the commenter notes, no agreement between the project proponent (i.e., FAL) and the SDCCC or City has been made at this time. As such, the EIR identifies the pedestrian bridge as an optional project feature, and the analysis considers the environmental impacts with and without the bridge constructed and operational. The pedestrian bridge would not result in any additional impacts or reduce any impacts that would result with the implementation of the other components of the proposed project. However, a sentence has been added to Sections 4.1, Aesthetics and Visual Resources, 4.9, Land Use and Planning, and 4.11, Public Services and *Recreation*, to clarify that additional public access would be provided with the bridge and how public access would be maintained without the bridge. These changes are reflected in Chapter 5, Errata and Revisions, of the Final EIR.

Regarding the commenter's concerns surrounding the potential effects of the optional pedestrian bridge on tractor-trailer access, the pedestrian bridge would be designed to provide adequate clearance for delivery trucks and tractor-trailers. As shown on Figures ES-4, ES-8, 3-6, and 3-10 and detailed in Section 3.4.3, *Optional Connecting Bridge to the San Diego Convention Center*, of the Draft EIR, the optional pedestrian bridge would connect the proposed market-rate hotel tower rooftop public plaza and park area to the SDCC viewing deck, which is approximately 44 feet above ground level. As such, the proposed pedestrian bridge would provide sufficient clearance for delivery vehicles accessing the SDCC loading docks adjacent to the project site. Therefore, no changes to the Final EIR are required as a result of this comment.

Response to Comment J-4

The comment states that a requirement for any SDCC expansion from the previous EIRs for the site includes the installation of PV systems on the SDCC rooftop. The comment indicates that the SDCC plans to proceed with a PV system sometime in the future regardless of any expansion, and that

the system area is planned for the west half of the existing SDCC, immediately adjacent to the proposed project. The commenter expresses concern of the potential effects of the proposed hotel tower on the usefulness, effectiveness, and payback of the solar installation. As the rooftop PV system is a District requirement for the SDCC, the commenter requests that any approvals for the project include a study that ensures the success of a solar installation on another District property (SDCC), or, without a study, that relief from this requirement be granted prior to any approval of this project.

The installation of a PV system on the SDCC rooftop is a mitigation requirement of the SDCC Phase III Expansion EIR. As identified in that EIR, mitigation measure "MM-GHG-1c: Implement GHG Reduction Measures during Phase III Expansion Operations" requires the incorporation of a rooftop PV system to offset energy use. The system would include two separate PV systems, one on each of the east and west roofs. MM-GHG-1c was identified to mitigate "Impact-GHG-1: Emissions that Exceed Adopted GHG Thresholds during Construction and Operations (Phase III Expansion and Expansion Hotel)," which would result from emissions during combined project construction and operational activities that would exceed the threshold of 1,100 metric tons of carbon dioxide equivalent (MTCO₂e) per year. However, as identified in the Phase III Expansion EIR, this impact would remain significant and unavoidable, because even with the implementation of all of the GHG mitigation measures identified in the EIR, emissions would remain above the threshold level of 1,100 MTCO₂e per year and above the County of San Diego's 2,500 MTCO₂e per year threshold level.

The PV system is also described in Chapter 3, *Project Description*, of the Phase III Expansion EIR as a proposed sustainability feature for the proposed project to meet a LEED rating of Silver and possibly raise it to Gold. Although the installation of a PV system on the SDCC rooftop is a mitigation requirement of the SDCC Phase III Expansion EIR and would be reasonably foreseeable if the currently approved Phase III Expansion were to proceed rather than the proposed project, development of the proposed project would preclude development of the SDCC Phase III Expansion project as analyzed in the SDCC Phase III Expansion EIR because they would occupy the same space. As such, if the proposed project is approved and implemented, the mitigation measures included in the MMRP for the SDCC Phase III Expansion project would no longer be applicable, as

development of an expanded SDCC at the proposed project site would not occur.

In addition, the commenter suggests that it has considered moving forward with a PV system even if it was not a requirement of the MMRP for the Phase III Expansion. Such future speculative conditions are not within the purview of CEQA. Pursuant to State CEQA Guidelines Section 15064, the Lead Agency shall consider direct physical changes and reasonably foreseeable indirect changes in the environment that may be caused by the project. The commenter has not provided any evidence to indicate that the installation of a PV system on the SDCC rooftop, independent of any mitigation requirements of the SDCC Phase III Expansion EIR, is a reasonably foreseeable activity.

Importantly, it is not likely the proposed project would have a significant impact on the environment by potentially reducing the amount of sunlight that falls on nearby buildings that currently use PV systems, because the project site is located in a downtown setting where high-rise buildings are already in the immediate area. Because the SDCC does not currently have a PV system, construction and operation of the proposed project would have no effect on the baseline conditions, and the commenter has not provided evidence of how any potential partial shading of the SDCC would result in a significant environmental impact. Therefore, no changes to the Final EIR are required as a result of this comment.

Response to Comment J-5

The comment states that approval of this project prevents the current, approved contiguous expansion of the SDCC, and that the expansion is needed to retain the region's largest convention clients.

This comment does not raise an environmental issue with the adequacy of the Draft EIR. Therefore, no changes to the Final EIR are required and no further response is required pursuant to CEQA. However, this comment will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

Response to Comment J-6

The commenter states that the comments above describe real impacts on the SDCC, and that the resolution of issues described will be necessary regardless of the project design, scope, and use. The commenter acknowledges that the growth in visitor volume and the need for more J-7

J-8

San Diego Unified Port District January 30, 2018 Page 4

6. The Corporation formally recommends that a joint project be considered for this property that addresses all concerns. A combined contiguous expansion of the SDCC and hotel complex would change the landscape of this area. Specifically, we recommend a contiguous convention center expansion with a small hotel footprint adjacent to it. The two uses could be served by separate entrances and maintain the use of existing docks as well as new dock spaces. In FY 17, we conducted research that showed that 14 of the top 25 convention centers in the United States are either connected to a hotel, or immediately adjacent to a hotel. We have not identified any that have two immediately adjacent on the same footprint. We already enjoy that relationship with the Marriott Marquis. The destination appeal of a combined contiguous convention center and two hotels immediately adjacent will give us a unique advantage over many of our competitors.

The combined project would require the resolution of the issues stated above. It would also require public access to the waterfront, including the waterfront park, and the creation of a joint operating agreement.

The San Diego Convention Center Corporation is a public benefit corporation whose purpose is to provide a premier gathering place for trade shows, conventions, and events that generate economic benefits to the Region. Our promise is to provide world class service and create a desire for our customers and their guests to return repeatedly in order to invest further in our local economy. This mutually beneficial use could be accomplished with the support of the Port and a collaborative approach to the use of the property.

Thank you for considering our comments. We appreciate the opportunity to respond during this review process. We are available to answer any questions or to provide any additional information you may require.

Respectfully submitted,

Clifford "Rip" Rippetoe, CFE President & CEO

Cc. Mayor Kevin Falconer San Diego City Council Members Port of San Diego Commissioners San Diego Convention Center Corporation Board of Directors hotel rooms is real, and that it sees the potential for the site that could be mutually beneficial.

Please see responses to comments J-2, J-3 and J-4. This comment does not raise any specific environmental issues requiring a response pursuant to CEQA. Therefore, no changes to the Final EIR are required as a result of this comment. However, this comment will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

Response to Comment J-7

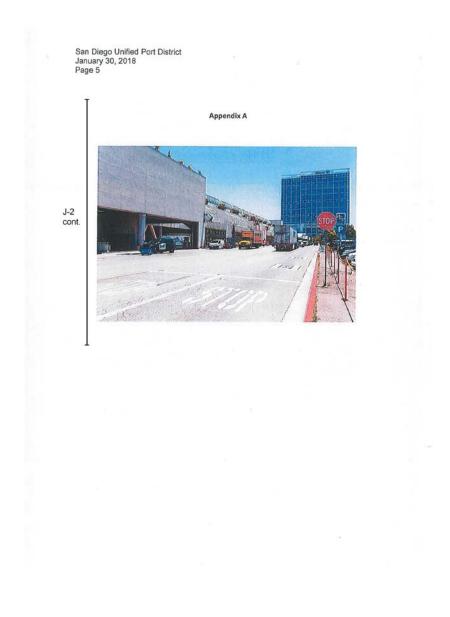
The comment states that the SDCCC formally recommends that a joint project be considered for the property that involves a contiguous convention center expansion with a small hotel footprint adjacent to it and provides its rationale for a joint project. The comment further states that the combined project would require resolution of the issues stated above and public access to the waterfront, including the waterfront park and the creation of a joint operating agreement.

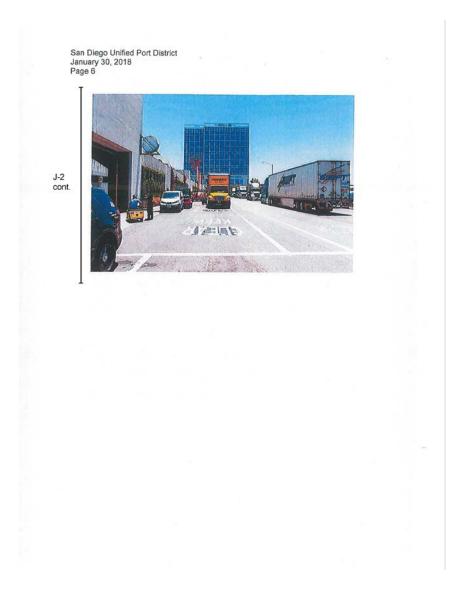
This comment does not raise an environmental issue that relates to the adequacy of the Draft EIR. Therefore, no changes to the Final EIR are required and no further response is required pursuant to CEQA. However, this comment raises policy and planning concerns that will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

Response to Comment J-8

The comment letter concludes by stating the purpose of the SDCCC, indicating that the mutually beneficial use could be accomplished with the support of the District and a collaborative approach to the use of the property, and also provides a contact name.

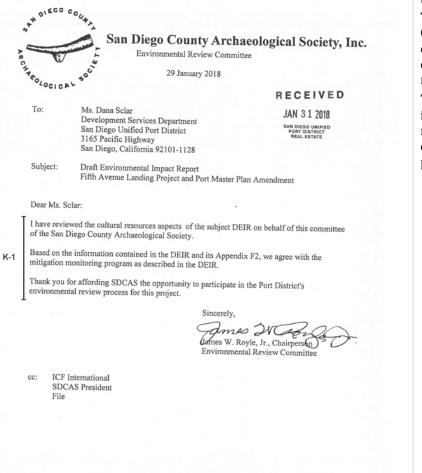
The District appreciates the SDCCC's interest in the proposed project. This comment does not raise any issues requiring a response pursuant to CEQA.





6.3.12 Comment Letter K: San Diego County Archaeological Society, Inc.

Comment Letter K



Response to Comment K-1

This comment is an introductory comment indicating that the San Diego County Archaeological Society has reviewed the cultural resources aspects of the Draft EIR and agrees with the mitigation monitoring program described in the Draft EIR. The comment concludes by providing a contact name.

The District appreciates the San Diego County Archaeological Society's interest in the proposed project. This comment will be included in the materials provided to the Board for its consideration prior to making a decision whether or not to certify the EIR and approve the proposed project.

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

6.3.13 Comment Letter L: Mark G. Stephens

Comment Letter L

January 29, 2018	RECEIVED
San Diego Unified Port District	JAN 29 2018
Attention: Dana Sclar	SAN DIEGO UNIFIED PORT DISTRICT
Development Services Department	REAL ESTATE
3165 Pacific Highway	
San Diego, CA 92101-1128	

Submitted via email to: dsclar@portofsandiego.org

RE: FIFTH AVENUE LANDING PROJECT & PORT MASTER PLAN AMENDMENT DRAFT ENVIRONMENTAL IMPACT REPORT (UPD #EIR-2016-06; SCH #2016081053) COMMENTS BY MARK G. STEPHENS, AICP

Dear Ms. Sclar:

L-1

1-2

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (EIR) for the proposed Fifth Avenue Landing Project and Port Master Plan Amendment. As related informally at the September 7, 2016 scoping meeting held early in the environmental review process, and elaborated through formal written comments submitted September 15, 2016 on the Notice of

Preparation NOP) for the Draft EIR, this proposal is inconsistent with existing plans and out of scale with development previously contemplated or foreseeably appropriate at this site. In its current form, this proposed project remains wholly unsuitable for the site, as are all of the project alternatives evaluated that would implement some form of the proposed project. The Draft EIR appropriately documents an array of project specific and cumulative impacts that cannot be mitigated to an insignificant level.

As noted in my NOP comments, terminology used by the project proponent attempts to disguise several adverse effects. Proposed "public access plazes" and a "public access bridge" would actually encroach on public access and public views. Building would occur over the top of the existing public promenade, turning a segment of it into essentially a tunnel. Describing an existing, open air, public promenade as being "activated" by enclosure in the shadow of a bridge and huge skyscraper is disingenuous at best. Any proposal that would build over the top of the narrow thread of waterfront promenade available to the public is a non-starter.

As also described in my NOP comments, a basic precept of urban design is that the tallest structures should be located in more inland locations, stepping down to lower scale development along the waterfront and enhancing connections to the coast. At 498 feet, the massive new hotel proposed would be the tallest structure along San Diego Bay, and would permanently block public views up and down the coast. The proposed location on a peninsula jutting into San Diego Bay well beyond the building line of other Downtown coastal high-rise hotels, such as the Hyatt, Marriott and Hilton, would be an awful

L-3 precedent. The existing Convention Center grand staircase from Harbor Drive leads to an imaginatively designed connection to a viewing platform offering outstanding vistas up and down the coast. The proposed project (especially the hotel tower) would severely compromise these public views. While a rooftop plaza is proposed on the upper level of some of the building area, potential benefits are largely negated by introducing multi-story structures towering directly above the narrow bayfront promenade, with shading impacts and loss of the open, expansive character of existing ground level views. In addition, the hotel tower would be right next to the historic Old Rowing Club structure, dwarfing and

1

Response to Comment L-1

The commenter indicates that he provided informal comments at the September 7, 2016 scoping meeting and submitted formal written comments during the scoping period for the Draft EIR. The commenter suggests that the project is inconsistent with existing plans and out of scale with development previously contemplated for the site. The commenter suggests that the project is unsuitable for the project site, as are all of the alternatives considered in the Draft EIR. The commenter states that the Draft EIR appropriately documents project-specific and cumulative impacts that cannot be mitigated to an insignificant level.

The District received the commenter's formal scoping letter during the 30day scoping period for the Draft EIR. That letter was included within Appendix B of the Draft EIR, as submitted for public review. While there is no requirement to respond to scoping comments received during the scoping period, the District elected to include a summary of all scoping comments received, including the commenter's. The summary is included in Chapter 1, *Introduction*, of the Draft EIR. The commenter raised issues associated with the following:

- Accurately reflect current circumstances, applicable plans, and adverse effects related to the public access components and existing views in the Draft EIR. Include analysis of visual impacts on the existing viewshed and the historic Old Rowing Club.
- Assess the project impacts in context of the California Coastal Act policies and the increasingly intensive development of onshore lease space.
- Assess project impacts on pending or ongoing projects in the general vicinity of the project site, including the Navy Broadway Complex, the District's Central Embarcadero Development Project (Seaport Village and surrounding area), SDCC Phase III Expansion (while not currently progressing, it is still an approved project) and second Hilton San Diego Bayfront tower, Tenth Avenue Marine Terminal redevelopment projects, the San Diego Chargers' proposed stadium and convention facilities in East Village, SDCC major maintenance repairs, a San Diego Symphony permanent facility at South Embarcadero Park (displacing more public park green space), Ballpark Village, Cisterra Development

Project, and many other projects, including numerous additional downtown hotels.

• Evaluate alternatives that address: substantially reducing building heights, footprints, and square footages; alternative locations, such as private land downtown (which would be far more appropriate for a major high-rise structure), or in the Chula Vista bayfront area (which has much more developable land available, reducing the need for such a tall structure, and the City of Chula Vista and the District have been trying to attract a significant hotel project there for many years); and alternative uses of this proposed site that would complement rather than clash with the surrounding community.

In addition to summarizing the comments, Chapter 1 of the Draft EIR lists where the topics raised are discussed in detail.

The commenter's first issue raised is discussed in Section 4.1, *Aesthetics and Visual Resources*, Section 4.4, *Cultural Resources*, Section 4.9, *Land Use and Planning*, and Section 4.11, *Public Services and Recreation*. Each of these sections includes a complete environmental and regulatory setting related to their respective resources. Specifically, Section 4.1, *Aesthetics and Visual Resources*, discusses the circumstances, applicable plans, and adverse effects on designated vistas (i.e., designated scenic views) and general aesthetics. Section 4.4, *Cultural Resources*, discusses the circumstances, discusses the circumstances, applicable plans, and adverse effects on cultural resources such as the San Diego Rowing Club. Section 4.9, *Land Use and Planning*, discusses the circumstances, applicable plans, and adverse effects on public access. Section 4.11, *Public Services and Recreation*, discusses the circumstances, applicable plans, and adverse effects on public access. Section 4.11, *Public Services and Recreation*, discusses the circumstances, applicable plans, and adverse effects on public access. Section 4.11, *Public Services and Recreation*, discusses the circumstances, applicable plans, and adverse effects on public access.

The commenter's second issue is discussed in Section 4.9, *Land Use and Planning.* This section provides a thorough consistency analysis with the California Coastal Act, including a table that lists all relevant policies and determines the project's consistency.

The commenter's third issue is discussed in Chapter 5, *Cumulative Impacts*. A list of relevant cumulative projects is included as Table 5-2. An extensive list of past and present projects is included in the cumulative project table. In addition, all reasonably foreseeable future projects that have sufficient detail about their potential development characteristics are included.

The commenter's fourth issue is discussed in Chapter 7, *Alternatives to the Proposed Project*. The Draft EIR compares the impacts of the proposed project with six project alternatives. In addition, four more alternatives

were considered, but did not undergo full comparison because specific considerations, as described in Chapter 7, made them unsuitable as CEQA alternatives. Alternatives that were carried through included reduced building height and square footage (Alternative #5). An alternative location was considered but rejected for reasons described in Section 7.5.1.1.

No changes to the Final EIR are required in response to this comment.

Response to Comment L-2

The commenter suggests that terminology used by the project proponent attempts to disguise several adverse effects and notes that "public access plazas" and a "public access bridge" would encroach on public access and public views. Specifically, the commenter notes that the project would build over the top of the existing public promenade, which would create a tunnel. The commenter states the opinion that the use of the term "activated" is disingenuous at best.

The commenter is taking issue with the terms used in the Draft EIR to describe the plazas and optional pedestrian bridge. The terms were used because that they would be available to the public either at all times or during the majority of the time, as noted in Chapter 3, *Project Description*. Because these facilities would provide public access, labeling them as public access plazas is an accurate description. Furthermore, the commenter provides the opinion that the proposed open-air pedestrian archway would create a tunnel effect and would not encourage activation. However, the open-air pedestrian archway would be designed extensively with glass to maximize the space and allow for distant views from the archway. Furthermore, it would rise to a height of 40 feet and would span a width of 43 feet, providing both high ceilings and a wide walkway. In addition, proposed retail spaces such as cafés or restaurants would be connected with the open-air pedestrian archway, reasonably leading to greater activation in the project area. No changes to the Final EIR are required in response to this comment.

Response to Comment L-3

The commenter believes the hotel tower is too tall for its location and indicates that the project would be the tallest building on the waterfront. The commenter suggests that the project would result in significant and unavoidable visual impacts and acknowledges appreciation for the

shading it with an entirely incompatible design motif. How detached this proposal is from reality is illustrated by the following statement relating to the project description on page S-S of the Draft EIR. "The market-rate hotel tower design is inspired by sail structures of the latest generation of America's Cup sailboats." A stationary 44-story glass, concrete, and steel block encompassing the better part of a

L-3 cont.

1-5

Cup sailboats." A stationary 44-story glass, concrete, and steel block encompassing the better part of a million square feet of enclosed building space and permanently obscuring public views and coastal access is evocative of a sail? I appreciate the DEIR documenting that adverse Aesthetic and Visual Resource impacts remain significant and unavoidable even after mitigation.

While the existing Port Master Plan Update is under way, the Port District continues to consider inconsistent proposals before completion of the update. Allowing such an incompatible and bad precedent setting project to proceed outside the context of an up-to-date overall plan would be extremely ill advised, and cause irreversible adverse impacts, as documented in the Draft EIR. Virtually the antire notice lass rance (and more) is proposed to be interviewed reviewed. This flins is to far

L-4 the entire onshore lease space (and more) is proposed to be intensively developed. This flies in the face of California Coastal Act policies and the fact that every square foot of land involved is <u>publicly owned</u>. In addition to blocking the approved Phase III Convention Center Expansion, the proposed project would in all likelihood preclude development and successful operation of the San Diego Symphony's Bayside Performance Park Enhancement Project recently granted preliminary approval by the Board of Port Commissioners.

During the most recent San Diego Auto Show at the Convention Center, I was reminded of how adversely the proposed Fifth Avenue Landing Project would affect the functionality of the project site and surrounding area. Specifically, this was the morning of the Holiday Bowl Parade and SK Run. Legions of people were running, jogging, and walking along the Embarcadero pathway that would no longer be able to function for this purpose. Much of the area behind the Convention Center was being used for activities supporting the Auto Show, a noteworthy annual event. Again, with the proposed project, this outdoor space would largely be gone.

As a Downtown San Diego resident and homeowner for over 15 years, development of this proposal with no apparent public input is extremely troubling. Alternatively, a reconceptualized plan could be developed through a process that reaches out to the surrounding community and other affected interests, and offers a much greater potential for obtaining public support and gaining approval. A location across Harbor Drive could more appropriately accommodate the type of high-rise development

L-6 currently proposed. Clearly, no objective basis exists to justify a statement of overriding considerations for the multiple adverse impacts that cannot be mitigated to a level of insignificance for the current proposal.

Please provide notification of any subsequent opportunities for public input regarding this proposal, via email to <u>msdesmtnsea@hotmail.com</u>, or sent to the address below. Thank you for your consideration!

2

Sincerely,

Mark G. Stephens

Mark G. Stephens, AICP 500 W. Harbor Dr., Unit 514 San Diego, CA 92101 significant and unavoidable aesthetic impact determination in the Draft EIR.

This comment expresses the commenter's opinion about the aesthetic impacts of the project but does not specifically raise issue with the adequacy of the Draft EIR. As noted by the commenter, the Draft EIR analyzes and discloses the proposed project's potential impacts on aesthetics and visual resources, and concludes that a significant and unavoidable impact related to vistas would occur. However, the proposed project would also provide eight additional scenic vistas, some as project features and some required as mitigation. Therefore, no changes to the Final EIR are required and no further response is warranted pursuant to CEQA. However, this comment will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

Response to Comment L-4

The commenter notes that the PMP Update is underway and suggests that the District continues to consider inconsistent proposals before completion of the update. The commenter suggests that this practice will cause irreversible adverse impacts, as documented in the Draft EIR. The commenter suggests this is contradictory to California Coastal Act policies and would potentially disrupt other land uses, such as the San Diego Symphony's Bayside Performance Park Enhancement Project.

As the commenter notes, the PMP Update is underway. The process has been a multi-year process and will not be complete for at least one more year. The District cannot place a moratorium on all development applications in the meantime and leave tenants without recourse for their tenancies. Rather, the District must provide due process to all applicants and review project proposals as they are submitted with the current regulations and plans in place. Furthermore, the project is analyzed for consistency with the California Coastal Act as document in Section 4.9, Land Use and Planning, of the Draft EIR and was found to be fully consistent with the California Coastal Act. Finally, the San Diego Symphony's Bayside Performance Park Enhancement Project was one of the cumulative projects analyzed in the Draft EIR. No specific impacts were identified that would preclude development and the successful operation of the San Diego Symphony's Bayside Performance Park Enhancement Project. Therefore, no changes to the Final EIR are required as a result of this comment.

Response to Comment L-5

The commenter mentions recent events at the convention center and the project site and is concerned about the inability to use the promenade for public events and the project site for expanded convention center shows such as the San Diego Auto Show.

The public promenade would remain publicly accessible at all times. Events that the commenter described would continue to be allowed. Regarding the loss of space for the SDCC, the SDCC currently subleases the land from the project applicant on an as-needed basis, subject to the applicant's permission. There is no guarantee in the SDCC lease to use the land adjacent to the SDCC and within the project applicant's tenancy. While it is uncertain how the SDCC may choose to handle future events, there has never been any guarantee that the project site could be used whenever needed by the SDCC. No changes to the Final EIR are required as a result of this comment.

Response to Comment L-6

The commenter notes he has been a downtown resident for 15 years and suggests that the project proposal has been developed with no public input. The commenter suggests that a re-conceptualized plan could be developed through a process that reaches out to the surrounding community to gain greater support. The commenter also suggests that a location across Harbor Drive could more appropriately accommodate the type of high-rise development proposed. The commenter suggests that no objective basis exists to justify a statement of overriding considerations for the significant impacts associated with the proposed project. The comment concludes by providing a contact name and information.

This comment expresses opposition to the proposed project and suggests a general alternative location for the proposed project along Harbor Drive. See comment L-1 and the corresponding response, which provides the rationale for an alternative project site being rejected. All potential impacts of the proposed project are analyzed and disclosed in the Draft EIR, as noted by the commenter. Therefore, no changes to the Final EIR are required and no further response is warranted pursuant to CEQA. However, this comment will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

6.3.14 Comment Letter M: Spencer Mosher

Comment Letter M

RECEIVED
JAN 30 2018
SAN DIEGO UNIFIED PORT DISTRICT

Hi Dana,

As someone who supports the best interest San Diego, the taxpayer, and the continued growth of our city, I want to show my support for Alternative 2. Alternative 2 of the EIR being the original lease agreement with the Fifth Avenue Landing, which would have allowed the Phase 3 Convention Center Expansion Project to continue and for the Robert Green Company to build their hotel on the smaller parcel next to Joe's Crab Shack. We desperately need to expand our Convention Center to keep conventions like Comic-Con and all the bigname medical conventions, etc... that our city hosts. By allowing the Robert Green company to build outside the confines of the original lease agreement, the port could run into more legal challenges from CEQA attorneys, such as Briggs. Considering that the Phase 3 project is already approved by the Coastal Commission, it would be prudent for the port to select Alternative 2. This could force the Robert Green Company to the context with the Convention Center and build to the original lease agreement. Also due to the fact that a citizens initiative is

M-1 being circulated to expand the Convention Center, it would be easier to go with Alternative 2 since there will be less red tape this way. Also one concern that could be raised with CEQA is the sediment cap that would be impacted by the Robert Green Company's current proposal for the property. Although I believe adding more docks would be good at some point, I believe that section of the property could be handled at a later date. Also with the new professional lacrosse team coming to San Diego, I believe some of the surrounding area, including but not limited to where the sediment cap is located, could be used for an arena. This arena would be attached to the Convention Center as a Phase 4 or Phase 5 expansion of the Convention Center. Imagine similar to the Staples Center in downtown LA. See attached link, from my 2011 plan for a new stadium/ Convadium, as an idea of potential future development. Note this was the original Convadium plan before the Chargers went with their East Village plan.

http://civicplanner.com/index.php/projects/county-of-san-diego/3-stadium-option-a http://civicplanner.com/index.php/projects/county-of-san-diego/5-phase-4-stadium-option-b

Thanks again for reviewing my comments and I urge the port to go with the original lease agreement and the Phase 3 Convention Center Expansion Project.

Sincerely, Spencer

Response to Comment M-1

The commenter expresses support for Alternative 2, which would allow the Phase 3 Convention Center Expansion Project and the development of a hotel on the smaller parcel next to Joe's Crab Shack. The commenter expresses concern regarding the sediment cap that would be affected by the current proposal for the property and suggests adding the docks at a later date. The commenter suggests that some of the surrounding area, including but not limited to where the sediment cap is located, could be used for an arena that would be attached to the SDCC as a Phase 4 or Phase 5 expansion. The comment provides two links to the commenter's 2011 plan for a new stadium/Convadium. The plans have been printed out and are included at the end of the comment letter. The comment letter concludes by supporting the original lease agreement and the Phase 3 Convention Center Expansion Project.

This comment expresses support for one of the alternatives identified in the Draft EIR. However, the comment does not specifically raise issue with the adequacy of the Draft EIR and the environmental analysis contained therein. Therefore, no changes to the Final EIR are required and no further response is required pursuant to CEQA. However, this comment will be included in the materials presented to the Board for consideration in whether to approve the proposed project.

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Phase 4 Stadium Option A



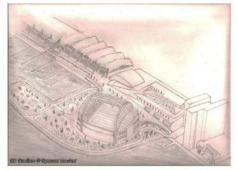
Option A was the original plan I presented to the Mayors office.

This plan is more constrained in land usage and does not expand the Phase 1 building initially. A Phase 5 expansion would be optional.

- Option A would landfill the area around the 5th Avenue Pier.
 - The stadium would be built on top of this reclaimed land.
- This plan will work with the new Convention Center Expansion Project (Phase 3).
 - The Stadium project will be Phase 4 of expansion.
- The design will not interfere with Phase 3 expansion.
- This design is contiguous and would add convention hall and conference room space for the convention center.
- You would still be able to tailgate at the Stadium.
- Tailgate parking is roughly 0.3 mi from the facility.
- The Trolley and other means of mass-transit are available nearby including the Coronado Ferry.

See pictures below:





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http://civicplanner.com/index.php/projects/county-of-san-diego/3-stadium-option-a

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Phase 4 Stadium Option B



Option B is slightly different than option A.

Option B is more proactive in expanding the Convention Center and allows for a greater increase in exhibit hall and conference room space. This is my preferred plan.

- This plan continues the Phase 3 theme of a rooftop park with the original (Phase 1) building.
 - The Stadium will be built behind the Marriot and Hyatt hotels.
 - The docks will be relocated to make room for the facility.
 - An expanded rooftop park should help with getting approval from the Coastal Commission.
 - This design will not interfere with the Phase 3 expansion.
- Option B is more proactive in expanding the Convention Center as opposed to Option A.
 - This allows for San Diego to attract bigger conventions such as E3 or CES.
 - Plus this ensures that Comic Con and other big conventions stay in San Diego.
- There are more transportation options available.
 - This includes more parking options and access points to the stadium.
 - Santa Fe depot is a half mile away from the proposed facility making it easier for people visiting from out of town to reach the stadium.
- The Marriot and Hyatt would be prime accommodations for visitors during game days.

You will notice on the map I label the site where the Skytower / Spire or Ferris Wheel will go. I prefer the Skyspire plan since it has the option of a restaurant on the top floor which will be a cool tourist attraction. Not only will it attract tourists, but it would provide a nice place to go out to dinner with a significant other, family, friends, etc..., due to the great views of the bay and stadium.

See pictures below:



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Attachment 1 Mitigation Monitoring and Reporting Program

1.1 Purpose

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to ensure that the Fifth Avenue Landing Project and Port Master Plan Amendment implements the environmental mitigation measures required by the Final Environmental Impact Report (EIR) for the proposed project. Those mitigation measures have been integrated into this MMRP. The MMRP provides a mechanism for monitoring and reporting implementation of the mitigation measures in compliance with the EIR, and general guidelines for the use and implementation of the monitoring program are described below.

This MMRP is written in accordance with California Public Resources Code 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. California Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to adopt a reporting or monitoring program for changes made to the project, or conditions of approval, adopted in order to mitigate or avoid significant effects on the environment and to monitor performance of the mitigation measures included in any environmental document to ensure that implementation takes place. The San Diego Unified Port District (District) is the designated Lead Agency for the MMRP. The Lead Agency is responsible for review of all monitoring reports, enforcement actions, and document disposition. The Lead Agency will rely on information provided by a monitor as accurate and up to date and will field check mitigation measure status as required.

The District may modify how it will implement a mitigation measure, as long as the alternative means of implementing the mitigation still achieves the same or greater impact reduction. Copies of the MMRP shall be distributed to the participants of the monitoring effort to ensure that all parties involved have a clear understanding of the mitigation monitoring measures adopted.

1.2 Format

Mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or requiring supplemental structural controls. Within this document, mitigation measures are organized and referenced by subject category. Each of the mitigation measures has a numerical reference. The following items are identified for each mitigation measure.

- Mitigation Measures
- Timing and Methods
- Responsible Parties

1.3 Mitigation Measures

Provides the language of the mitigation measure in its entirety along with the assigned number.

1.4 Timing and Methods

The mitigation measures required for the project will be implemented at various times before construction, during construction, prior to project completion, or during project operation. The procedures for implementing all mitigation measures as well as documenting and reporting mitigation implementation efforts are also included.

1.5 Responsible Parties

For each mitigation measure, the parties responsible for implementation, monitoring and reporting, and verifying successful completion of the mitigation measure are identified.

of fencing)

Mitigation Measures	Timing and Methods
Aesthetics and Visual Resources	
MM-AES-1: Construction Screening and Fencing. The project	Timing: Prior to issuance of demolition
proponent shall install construction-screening fencing around the	permits (confirmation on approved plans)

Table 1. Mitigation, Monitoring, and Reporting Program

MM-AES-1: Construction Screening and Fencing. The project proponent shall install construction-screening fencing around the entire perimeter of the project site that would shield construction activities from sight and prior to issuance of demolition permits, the District's Development Services Department shall confirm such fencing is depicted on the appropriate demolition and construction plans. Construction screening shall include, at a minimum, installation of 8-foot-tall fencing for the duration of the construction period that is covered with view-blocking materials, such as tarp or mesh in a color that blends in with the existing environment such as green or blue.

MM-AES-2: Install Wayfinding and Public Accessibility Signage. Prior to the issuance of occupancy permits, the project proponent shall post wayfinding signage and signage at the grand staircase, market-rate hotel tower staircase, public observation terrace. optional pedestrian bridge, and two locations along the existing Embarcadero Promenade, that directs visitors to the proposed public plaza and park areas on the rooftop of the parking structure and hotel ballrooms as well as the walkway around the market-rate hotel tower (the areas identified as Exterior Areas B, C, and D on Figure 3-12 in Chapter 3, *Project Description*, of the EIR), and designates the areas as available to the public with open hours listed (i.e., 6:00 a.m. to 10:30 p.m.). The project proponent shall submit the signage characteristics (e.g., size, color, materials) to the District's Development Services Department for review and approval. Photographic proof of the wayfinding signage and designation signage shall be submitted to the District's Development Services Department prior to issuance of the certificate of occupancy. In addition, the project proponent shall allow the District to conduct periodic inspections to ensure that this space remains publicly accessible. The wayfinding signage shall clearly direct the public to the public plaza and park areas and public observation terrace and

Timing: Prior to construction (signage
characteristics review) and prior to the
issuance of occupancy permits (installation of
wayfinding and public accessibility signage)Implementation: DistrictMethod: Submit signage characteristics forImplementation: Project
Proponent (prior to and during
construction), Construction
Manager (during
construction), and General
Contractor (during

review and install wayfinding and public accessibility signage

and during project construction (installation

Method: Depict fencing on the appropriate

construction screening and fencing

demolition and construction plans and install

Monitoring and Reporting: Project Proponent

Verification: District

construction)

Responsible Parties

Manager (during

Contractor (during

Project Proponent

construction)

Implementation: Project

construction), Construction

construction), and General

Monitoring and Reporting:

Proponent (prior to and during

Mitigation Measures	Timing and Methods	Responsible Parties
ndicate that the space is open to the public except during certain		
circumstances consistent with the PMP Amendment.		
MM-AES-3: Transparent Fencing Materials at Pool Deck. Prior to	Timing: Prior to issuance of a building	Implementation: Project
he issuance of the certification of occupancy for the market-rate	permit (confirmation of transparent fencing	Proponent
notel tower, the project proponent shall install transparent fencing in		
ront of the pool to separate the pool deck from the public observation terrace viewing point on the second floor of the west	certification of occupancy for the market-rate hotel tower (installation of transparent	Monitoring and Reporting:
ide of the market-rate hotel tower, using transparent materials such	fencing)	Project Proponent
is glass or cable rail. Prior to issuance of a building permit for the	lenengj	
narket-rate hotel tower, the District's Development Services	Method: Depict transparent fencing on	Verification: District
Department shall confirm such transparent fencing is depicted on the	building plans and install transparent fencing	
ppropriate building plans.	materials at pool deck	
MM-AES-4: Designated Public Vista Areas. To replace the five	Timing: Prior to issuance of the certificate of	Implementation: Project
ublic vista areas currently designated on the project site and/or the	occupancy	Proponent, District
DCC Expansion Rooftop park, the PMP Amendment shall include five		
ew public vista points as shown on Figure 3-19; four shall be located	Method Designation of public vista areas	Monitoring and Reporting:
long the public observation terrace on the rooftop public plaza and	and installation of signage	Project Proponent
bark areas and the fifth shall be located on the west end of the narket-rate hotel tower terrace (public observation terrace viewing		
point, Figure 3-12). These designated vista points shall be delineated		Verification: District
vith signage and open to the public at all times.		
IM-AES-5: Down-shield All Construction Security Lighting. The	Timing: During construction	Implementation: Project
roject proponent shall ensure that all overnight construction		Proponent, Construction
ecurity lighting used at the project site is down-shielded to prevent	Method: Ensure that all overnight	Manager, and General
ny light spillover off site consistent with City of San Diego	construction security lighting used at the	Contractor
egulations on glare and outdoor lighting (Municipal Code Sections 42.0730 and 142.0740).	project site is down-shielded	
+2.0750 and 1+2.07+0).		Monitoring and Reporting: Project Proponent
		riojett riopollellt
		Verification: District
AM-AES-6: Incorporate the Use of Reduced Glare Building	Timing: Prior to issuance of a building	Implementation: Project
faterials. The proposed market-rate hotel tower shall incorporate	permit	Proponent
on-reflective exterior building materials in its design, and any glass		
ncorporated into the façade of the building shall either be of low eflectivity or accompanied by a non-glare coating. Prior to issuance	Method: Incorporate the Use of Reduced	Monitoring and Reporting
f a building permit for the market-rate hotel tower, the District's	Glare Building Materials	Project Proponent
a bunding permit for the market-rate noter tower, the District's		

g and Methods	Responsible Parties
	Verification: District
ng: Prior to the San Diego Air Pollution ol District's next review of the RAQS od: Update the RAQS and SIP with new h projections.	Implementation: District in coordination with the San Diego Air Pollution Control District Monitoring and Reporting: District Verification: District
g: Prior to and during project uction od: Submittal of list of coatings to be vith VOC content and use of low-VOC gs for all interior and exterior coatings	Implementation: Project Proponent (prior to and during construction), Construction Manager (during construction), and General Contractor (during construction) Monitoring and Reporting: Project Proponent
	Verification: District
g: During project construction od: Limit Soil Hauling Truck Counts g Excavation to Reduce Daily ruction-Related Emissions and submit ruck counts	Implementation: Project Proponent, Construction Manager, General Contractor Monitoring and Reporting: Project Proponent Verification: District

Mitigation Measures	Timing and Methods	Responsible Parties
Biological Resources		
MM-BIO-1: Avoid California Least Tern Breeding Season or Implement Construction Measures to Eliminate Impacts on	Timing: During construction	Implementation: Project Proponent, Construction
California Least Tern Breeding. The project proponent shall	Method: Avoid California Least Tern	Manager, and General
schedule and complete all in-water construction activity outside of	breeding season or implement construction	Contractor
the nesting season for California least tern (generally between mid-	measures to eliminate impacts on California	
April and late September). Should in-water construction occur during the California least tern nesting season, the following construction	Least Tern Breeding	Monitoring and Reporting:
measures shall be implemented in accordance with regulations,		Qualified ornithologist,
including CWA Section 401, the NPDES permit, and Stormwater		approved by the District, Project Proponent
Management and Discharge Control Ordinance:		Project Proponent
• The contractor shall deploy a turbidity curtain around the pile driving areas to restrict the visible surface turbidity plume to the		Verification: District
area of construction and pile driving. It shall consist of a hanging		
weighted curtain with a surface float line and shall extend from		
the surface to 20 feet down into the water column. The goal of		
this measure is to minimize the area in which visibility of prey by		
terns is obstructed.		
• The contractor shall retain a qualified ornithologist (with		
knowledge of the species to be surveyed) approved by the		
District who shall conduct monitoring within 500 feet of construction activities to identify presence of terns displaying		
foraging behavior (e.g., searching and diving) and assess adverse		
impacts, if any, on California least terns. Should adverse impacts		
on terns occur (e.g., agitation or startling during foraging		
activities), construction shall cease until least terns have left the		
project site.		
 The contractor shall follow all regulatory requirements to 		
minimize reduction in water quality in San Diego Bay.		
Construction of the proposed project would include preparation		
and implementation of a SWPPP, and implementation of appropriate regulatory permits, including the CWA Section 401		
Water Quality Certification. A full explanation of these		
requirements can be found in Section 4.8, <i>Hydrology and Water</i>		
<i>Quality</i> , of the Draft EIR.		

Mitigation Measures	Timing and Methods	Responsible Parties
MM-BIO-2: Implement a Marine Mammal and Green Sea Turtle Monitoring Program During Pile Driving Activities. Prior to construction activities involving in-water pile driving, the project proponent shall prepare and implement a marine mammal and green sea turtle monitoring program. This monitoring program shall be approved by the District and shall include the following	Timing: Prior to construction activities involving in-water pile driving and during construction Method: Implement a marine mammal and green sea turtle monitoring program during pile driving activities	Implementation: Project Proponent, Construction Manager, and General Contractor Monitoring and Reporting: Qualified biologist, approved by the District, Project Proponent Verification: District
	Timing: Prior to construction	Implementation: Project
Preconstruction Nesting Surveys. To ensure compliance with the MBTA and similar provisions under Sections 3503 and 3503.5 of the		Proponent

Mitigation Measures	Timing and Methods	Responsible Parties
California Fish and Game Code, the project proponent shall conduct all vegetation removal (e.g., ornamental trees) during the non- breeding season between September 1 and February 14 or shall implement the following:	Method: Avoid nesting season of conduct nesting bird surveys	Monitoring and Reporting: Qualified ornithologist, approved by the District, Project Proponent
 If construction activities are scheduled between February 15 and August 31, the project proponent shall retain a qualified ornithologist (with knowledge of the species to be surveyed) who shall conduct a focused nesting bird survey within potential nesting habitat prior to the start of vegetation removal. The survey shall be submitted to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of vegetation removal on the project site. The nesting bird survey area shall include the entire limits of disturbance plus a 300-foot buffer for non-raptors and a 500-foot buffer for raptors to ensure indirect impacts would be avoided. The nesting surveys shall be conducted within 1 week prior to initiation of construction activities and shall consist of a thorough inspection of the project area by a qualified ornithologist(s). The survey shall occur between sunrise and 12:00 p.m., when birds are most active. If no active nests are detected during these surveys, only a letter report documenting the results shall be prepared. 		Verification: District
• If the survey confirms nesting within 300 feet of the disturbance footprint for non-raptors or within 500 feet for raptors, a no- disturbance buffer shall be established around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified ornithologist determines that the nest is no longer active. The size and constraints of the no- disturbance buffer shall be determined by the qualified biologist, in consultation with the California Department of Fish and Wildlife, at the time of discovery, but shall not be greater than 300 feet for non-raptors and 500 feet for raptors. If there is a delay of more than 7 days between when the nesting bird survey is performed and vegetation removal begins, the qualified biologist shall resurvey to confirm that no new nests have been established. In addition, if any subsequent reports are prepared, the reports shall be sent to the District and California Department of Fish and Wildlife.		

Mitigation Measures	Timing and Methods	Responsible Parties
MM-BIO-4: Implement Bird Strike Reduction Measures on New	Timing: Prior to issuance of any building	Implementation: Project
Structures. Prior to issuance of any building permits, building plans	permits	Proponent
shall be reviewed by an ornithologist familiar with local species,		
retained by the developer and approved by the District, to verify that	Method: Depict specific design strategies	Monitoring and Reporting
the proposed building has incorporated specific design strategies that	that avoid or reduce the potential for bird	Qualified ornithologist,
qualify for Leadership in Energy and Environmental Design (LEED) credits, as described in the American Bird Conservancy's <i>Bird</i> -	strikes on building plans and implement bird	approved by the District,
Friendly Building Design (Sheppard and Phillips 2015) or an	strike reduction measures on new structures	Project Proponent
equivalent guide to avoid or reduce the potential for bird strikes.		
Final building design must demonstrate to the satisfaction of the		Verification: District
ornithologist and the District that design strategies will be in		
accordance with the Bird-Friendly Building Design, and confirmed		
with USFWS and/or CDFW by incorporating strategies to minimize		
the threat to avian species, including but not limited to the following:		
Building Façade and Site Structures		
 Develop a building façade and site design that are visible as physical barriers to birds 		
• Incorporate elements like netting, screens, grilles, shutters, and		
exterior shades to preclude collisions		
• Incorporate materials that have a low threat potential based		
on the Bird Collision Threat Rating and the Bird Collision Threat Rating Calculation Spreadsheet to achieve a		
maximum total building Bird Collision Threat Rating of 15 or		
less.		
 High Threat Potential: Glass: Highly reflective and/or 		
completely transparent surface		
 Least Threat Potential: Opaque Surface 		
Exterior Lighting		
• Fixtures not necessary for safety, entrances, and circulation		
shall be automatically shut off from midnight until 6:00 a.m.		
• Exterior luminaires must meet these requirements for all		
exterior luminaires located inside project boundary based on		
the following:		
 Photometric characteristics of each luminaire when mounted in the same orientation and till as macified in 		
mounted in the same orientation and tilt as specified in the project design; and		
the project design, and		

Mitigation Measures	Timing and Methods	Responsible Parties
 The lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the <i>Illuminating Engineering Society and</i> <i>International Dark Sky Association (IES/IDA) Model</i> <i>Lighting Ordinance (MLO) User Guide</i> (2011). 		
Performance Monitoring Plan		
 Develop a 3-year post-construction monitoring plan to routinely monitor the effectiveness of the building and site design in preventing bird collisions. Include methods to identify and document locations where repeated bird strikes occur, the number of collisions, the date, the approximate time, and features that may be contributing to collisions. List potential design solutions and provide a process for voluntary corrective action. Provide a performance monitoring report demonstrating which design strategies have been incorporated and results of performance monitoring for review and approval by the District, USFWS and/or CDFW. 		
A full list and explanation of these design strategies can be found in Appendix E-4 of the Draft EIR.		
MM-BIO-5: Implement Overwater Coverage and Structural Fill Mitigation in Coordination with NMFS, CDFW, USFWS, RWQCB, USACE, CCC, and the District to Compensate for Loss of Open Water Habitat and Function. The project proponent shall implement the following:	Timing: Prior to issuance of a Coastal Development Permit and prior to commencement of construction activities for the marina expansion	Implementation: Project Proponent Monitoring and Reporting: Project Proponent
1. Prior to issuance of a Coastal Development Permit, the project proponent shall request and participate in stakeholder meetings with NMFS, CDFW, USFWS, RWQCB, USACE, CCC, and the District to identify locations within San Diego Bay or the San Diego region to mitigate impacts on both sensitive avian species and nearshore habitat associated with loss of beneficial uses associated with overwater coverage and loss of open water habitat function as a result of increased structural fill within the Bay.	Method: Implement overwater coverage and structural fill mitigation in coordination with NMFS, CDFW, USFWS, RWQCB, USACE, CCC, and the District to compensate for loss of open water habitat and function	Verification: District
 Prior to the commencement of construction activities of the marina expansion, the project proponent shall implement one of 		

itigation Measures	Timing and Methods	Responsible Parties
the following mitigation options, or a combination		
are listed below in order of preference; howe	ver, selection of 2.A,	
2.B, 2.C and 2.D, or an equivalent combination	n thereof, would	
successfully reduce Impact-BIO-5 to a level be	elow significance.	
A. Remove 58,319 square feet (1.34 acres) of	of overwater	
coverage and 13,623 square feet (0.31 ac		
within San Diego Bay or San Diego region		
replace the area affected by the proposed	project at a 1:1	
mitigation ratio, subject to the District's r	eview and approval.	
If evidence is presented that demonstrate	es that all or a	
portion of the required removal of overw	ater coverage or	
structural fill is infeasible, the project pro	ponent shall	
implement 2.B.		
B. Restore 71,942 square feet of eelgrass ha	bitat at the South	
Bay Power Plant cooling water intake cha		
which would offset 58,319 square feet (1	.34 acres) of	
overwater coverage and 13,623 square fe	eet (0.31 acre) of	
structural fill impacts. The project propo	nent may identify an	
alternative mitigation site of equivalent s	ize and value within	
San Diego Bay, subject to the District's re-		
Prior to the commencement of constructi		
marina expansion, the project proponent		
mitigation plan for review and approval b		
Services and Planning and Green Port (P&		
of the District. The mitigation plan at a m		
include a description of the transplant sit		
mitigation requirements, eelgrass plantin		
transplant sites, donor sites, reference sit		
methods (e.g., plant collection, transplant		
eelgrass units), timing of the restoration		
monitoring program (e.g., establishment		
mitigation success criteria). The project p		
secure all applicable permits for the mitig		
commencement of waterside constructio		
project proponent shall ensure that all fil		
proposed for discharge into San Diego Ba		
development of the mitigation site shall n		
requirements of the U.S. Army Corps of E	ngineers' Evaluation	

igation Measures		Timing and Methods	Responsible Parties
<i>U.S.</i> pre por	<i>Predged Material Proposed for Discharge in Waters of the</i> – <i>Testing Manual (Inland Testing Manual)</i> . If evidence is sented that demonstrates that restoration of all or a tion of the required 71,942 square feet of eelgrass habitat nfeasible, the project proponent shall implement 2.C.		
C. If a Coa the pro squ squ squ opt den pro	suitable in lieu fee program or mitigation bank within the stal Zone that is not yet available becomes available in future, prior to construction of the proposed marina, the ject proponent shall purchase credits to offset 58,319 are feet (1.34 acres) of overwater coverage and 13,623 are feet (0.31 acre) of structural fill, or the remaining are footage of the impacts if a combination of other above ions are selected. If evidence is presented that nonstrates that purchase of credits toward an in lieu fee gram or mitigation bank is infeasible, the project ponent shall implement 2.D.		
D. Sub find Dist boa the red	ject to the Board of Port Commissioners' approval and lings, the proposed project may purchase credits from the trict's shading credit program established pursuant to rd Policy 735 at a fair market value equivalent to that of proposed project's final shading total (i.e., less any uctions achieved by design modifications to the sfaction of NMFS, USFWS, RWQCB, CDFW, USACE, and		
squ	combination of the above that sufficiently offsets 58,319 are feet (1.34 acres) of overwater coverage and 13,623 are feet (0.31 acre) of structural fill impacts.		
F. This cov afor add nov req	s shall be the minimum mitigation for overwater erage and structural fill impacts. One or more of the rementioned state and federal agencies may require itional or greater mitigation. This mitigation measure in way supersedes mitigation measures that may be uired by state and federal agencies.		
	the project proponent only construct Phase 1 of the		
	expansion, the mitigation requirement shall be reduced		
proport	ionate to the overwater coverage and structural fill		

Mitigation Measures	Timing and Methods	Responsible Parties
impacts of the Phase I only expansion, consistent with a 1:1		
mitigation ratio.		
3. The project proponent shall secure all applicable permits for the mitigation of overwater coverage and structural fill prior to		
commencement of waterside construction.		
MM-BIO-6: Develop an Eelgrass Mitigation and Monitoring Plan	Timing: Prior to the start of any in-water	Implementation: Project
n Compliance with the California Eelgrass Mitigation Policy.	construction, during construction, and post-	Proponent
Prior to the start of any in-water construction, the project proponent	construction	-
shall retain a qualified marine biologist to develop an eelgrass		Monitoring and Reporting:
mitigation plan in compliance with the California Eelgrass Mitigation	Method: Develop and implement an eelgrass	Qualified marine biologist,
Policy (Appendix E-5). The mitigation plan shall be submitted to the	mitigation and monitoring plan in	approved by the District,
District and resource agencies for approval and shall be implemented	compliance with the California eelgrass	Project Proponent
to compensate for losses to eelgrass in the event that the surveys described below indicate the project has impacts on eelgrass. The	mitigation policy	
specific eelgrass mitigation plan elements shall include:		Verification: District
 Prior to the commencement of any in-water construction 		
activities, a qualified marine biologist retained by the project		
proponent and approved by the District shall conduct a		
preconstruction eelgrass survey. Surveys for eelgrass shall be		
conducted during the active eelgrass growing season (March-		
October), and results will be valid for 60 days, unless completed		
in September or October; if completed in September or October,		
results will be valid until resumption of the next growing season.		
The qualified marine biologist shall submit the results of the		
preconstruction survey to the District and resource agencies within 30 days.		
 Within 30 days. Within 30 days of completion of in-water construction activities, 		
a qualified marine biologist retained by the project proponent		
and approved by the District shall conduct a post-construction		
eelgrass survey during the active eelgrass growing season. The		
post-construction survey shall evaluate potential eelgrass		
impacts associated with construction. Upon completion of the		
post-construction survey, the qualified marine biologist shall		
submit the survey report to District and resource agencies within		
30 days.		
• Post-construction eelgrass surveys shall be conducted during the		
active eelgrass growing season to evaluate the potential for		

	ation Measures	Timing and Methods	Responsible Parties
or fo o o Sr sh in st D Ee th m	perational impacts on eelgrass. The survey monitoring shall illow the following monitoring schedule: Annual monitoring for years 1 through 5 Bi-annual monitoring for years 5 through 10 Monitoring every 5 years for years 10 to 30 pecifically, the surveys shall be designed to evaluate potential hading, vessels associated, and water circulation impacts noted the project's marine biological assessment (Appendix E-1). As boted above, the Eelgrass Mitigation and Monitoring Plan will be abmitted to the resource agencies and the District for review. uring this review and consultation, under the California elgrass Mitigation Policy (Section II.G.), agencies will determine the appropriate number of years of post-construction eelgrass nonitoring. In the event that impacts on eelgrass are detected, the project roponent shall implement the following: A qualified marine biologist retained by the project proponent and approved by the District shall develop a mitigation plan for in-kind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and resource agencies within 60 days following the post- construction survey. Mitigation for eelgrass impacts shall be at a ratio of 1.2:1 at the proposed mitigation site identified at the decommissioned South Bay Power Plant cooling water intak channel. Mitigation shall commence within 135 days of any noted impacts on eelgrass, such that mitigation commences within the same eelgrass growing season that impacts occur. Upon completing mitigation, the qualified biologist shall	e	Responsible Parties
0	Upon completing mitigation, the qualified biologist shall conduct mitigation performance monitoring at performance milestones of 0, 12, 24, 36, 48, and 60 months. The qualified biologist shall conduct all mitigation monitoring during the active eelgrass growing season and shall avoid the low growth season (November–February). Performance standards shall be in accordance with those prescribed in th California Eelgrass Mitigation Policy (Appendix E-5).	e	

Mitigation Measures	Timing and Methods	Responsible Parties
 The qualified biologist shall submit the monitoring reports and spatial data to the District and resource agencies within 30 days after the completion of each monitoring period. The monitoring reports shall include all of the specific requirements identified in the California Eelgrass Mitigation Policy (Appendix E-5). 		
MM-BIO-7: Avoid or Mitigate Impacts on Eelgrass Due to Anchored Barges, Boat Navigation, and Propeller Wash . Tug and barge operators shall ensure that anchored construction barges are located outside of eelgrass beds. The preconstruction and post-	Timing: Prior to and during project construction Method: Identify and demarcate the	Implementation: Project Proponent, Tug boat and barge operators
construction eelgrass surveys required under MM-BIO-6 shall also identify and demarcate the distribution of eelgrass to assist tug and barge operators and to assess any impacts on eelgrass that may	distribution of eelgrass and avoid or mitigate impacts on eelgrass	Monitoring and Reporting: Project Proponent
occur. Additionally, tug boat operators shall be instructed that propeller wash can damage eelgrass beds and the integrity of the sediment cap at the adjacent Campbell Shipyard Mitigation Cap Site. No anchoring (and other bottom-disturbing activities) shall occur within eelgrass beds, and propeller wash shall not be directed toward eelgrass beds. If an unanticipated impact on eelgrass occurs, this impact shall be mitigated by replacing the eelgrass at a ratio of 1.2:1, as specified in the California Eelgrass Mitigation Policy (Appendix E- 5), and included in the mitigation and monitoring plan identified under MM-BIO-6 .		Verification: District
MM-BIO-8: Implement Boater Education and Marina Lease Requirements, and Install Navigation Aids and Demarcate	Timing: Prior to operation of the marina	Implementation: Project Proponent
Eelgrass Adjacent to the Marina . Prior to operation of the proposed marina, the project proponent shall draft and implement marina ease requirements and a boater education program, and install havigation aids and a floating barrier to demarcate the eelgrass beds	Method: Implement boater education and marina lease requirements, and install navigation aids and demarcate eelgrass adjacent to the marina	Monitoring and Reporting: Project Proponent
and create a visible barrier to better protect the eelgrass mitigation site from being affected by negligent boating.		Verification: District
Cultural Resources		
MM-CUL-1: Archaeological Monitoring in Areas of Sensitivity . The project proponent shall retain a qualified archaeologist(s) who meets the Secretary of the Interior's Professional Qualifications Standards, as promulgated in 36 Code of Federal Regulations 61. The qualified archaeologist shall monitor all proposed grading and excavating for	Timing: Prior to construction, during earthwork activities, and within 60 days following completion of ground-disturbing activities	Implementation: Project Proponent, Construction Manager, and General Contractor

Mitigation Measures	Timing and Methods	Responsible Parties
the proposed project in the archaeologically sensitive portion of the project site. The sensitive portion of the project site, where it is possible that cultural materials associated with CA-SDI-15118H exist, consists of the northeastern section currently occupied by the paved parking lot along Convention Way (Figure 4.4-4 of the Draft EIR). The	Method: Monitoring conducted by a qualified archaeologist(s) for archaeological resources	Monitoring and Reporting: Qualified archaeologist(s), approved by the District, Project Proponent
following measures shall only apply to the archaeologically sensitive portion of the project site during earthwork activities, including, but not limited to, grading and excavation.		Verification: District
• The qualified archaeologist shall participate in a preconstruction meeting to inform all personnel of the potential for historical archaeological materials to be encountered during ground-disturbing activities.		
• If an isolated artifact or historic period deposit is discovered that requires salvaging, the qualified archaeologist shall have the authority to temporarily halt construction activities within 100 feet of the find and shall be given sufficient time to recover the item(s) and map its location with a global positioning system (GPS) device.		
• If buried cultural materials are discovered that require salvaging, the qualified archaeologist shall be empowered to divert construction activities away from the find, and be given sufficient time to recover the item(s) and map its location with a GPS device.		
• The qualified archaeologist shall treat recovered items in accordance with current professional standards by properly provenancing, cleaning, analyzing, researching, reporting, and curating them in a collection facility meeting the Secretary of the Interior's Standards, as promulgated in 36 CFR 79, such as the San Diego Archaeological Center.		
• Within 60 days after completion of the ground-disturbing activity, the qualified archaeologist shall prepare and submit a final report to the District's Development Services Department for review and approval, which shall discuss the monitoring program and its results, and provide interpretations about the recovered materials, noting to the extent feasible each item's class, material, function, and origin.		

Mitigation Measures	Timing and Methods	Responsible Parties
MM-CUL-2: Paleontological Monitoring in Areas of Sensitivity. To reduce potential impacts on paleontological resources, all proposed grading and excavating to depths greater than 10 feet shall be monitored by a qualified paleontologist(s), approved by the District's Development Services Department and paid for by the project	Timing: Prior to construction, during earthwork activities, and within 30 days following completion of ground-disturbing activities	Implementation: Project Proponent, Construction Manager, and General Contractor
 proponent. Specifically, the project proponent and/or its construction supervisor shall ensure the following measures are implemented. A qualified Paleontologist shall attend the preconstruction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified Paleontologist is defined as an individual with a M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the County for at 	Method: Monitoring conducted by a qualified paleontologist(s) for paleontological resources	Monitoring and Reporting: Qualified paleontologist(s), approved by the District, Project Proponent Verification: District
 least 1 year. A paleontological monitor shall be on site on a full-time basis during excavation and pile-driving activities that occur 10 feet or more below ground surface, to inspect exposures for contained fossils. The paleontological monitor shall work under the direction of the qualified Paleontologist. A paleontological monitor is defined as an individual selected by the qualified Paleontologist who has experience in the collection and salvage of fossil materials. 		
• If fossils are discovered, the Paleontologist shall recover them and temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner.		
 Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and catalogued. 		
• Prepared fossils, along with copies of all pertinent field notes, photos, and maps, shall be deposited (as a donation) in a scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum. Donation of the fossils shall be accompanied by financial support for initial specimen storage, paid for by the project proponent.		

Mitigation Measures	Timing and Methods	Responsible Parties
• Within 30 days after the completion of an excavation and pile- driving activities, a final data recovery report shall be completed by the qualified Paleontologist that outlines the results of the mitigation program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.		
Geology and Soils		
 MM-GEO-1: Demonstrate Compliance with Regulations, including CBC and City of San Diego Municipal Code, by Preparing a Geotechnical Investigation Report. To reduce potential impacts related to soil hazards, the project proponent shall conduct a geotechnical investigation for the project prior to the completion of the final design of the project. The geotechnical investigation shall be submitted to the District and the City of San Diego and be approved by the City of San Diego. The project proponent shall be required to implement the recommendations identified in the geotechnical report. The geotechnical report shall be prepared in compliance with CBC regulations and include the following: Site-specific geotechnical and fault evaluation. Suitability determination for construction within soil hazard areas. Recommendations for design and construction practices based on the suitability determination, such as: Temporary shoring Supporting structures on pile foundations Measures to protect structures against corrosion Ground improvement techniques, such as deep soil mixing 	Timing: Prior to the completion of final project design Method: Demonstrate compliance with regulations, including CBC and City of San Diego Municipal Code, by preparing a geotechnical investigation report and implement the identified recommendations	Implementation: Project Proponent, approval from City of San Diego Monitoring and Reporting: Project Proponent Verification: District, City of San Diego
and compaction grouting	1	
Greenhouse Gas Emissions and Climate Change MM-GHG-1: Implement Diesel Emission-Reduction Measures	Timing: During project construction	Implementation: Project
During Project Construction The project proponent shall implement the following measures during project construction and, where specified below, shall submit reports to the District's Development Services Department for its review and approval, evidencing compliance.	Method: Implement specific diesel-reduction measures during project construction	Proponent, Construction Manager, and General Contractor

Mitigation Measures	Timing and Methods	Responsible Parties
i. The project proponent shall limit all equipment and delivery truck idling times by shutting down equipment when not in use and reducing the maximum idling time to less than 3 minutes. The project proponent shall install clear signage regarding the limitation on idling time at the delivery driveway and loading areas and shall submit quarterly reports of violators to the District. This measure shall be enforced by the hotel and marina supervisors, and repeat violators shall be subject to penalties pursuant to California airborne toxics control measure 13 California Code of Regulations Section 2485. The project proponent shall submit evidence of the use of diesel reduction measures to the District's Development Services Department through annual reporting, with the first report due 1 year from the data of project appropriate.		Monitoring and Reporting: Project Proponent Verification: District
 the date of project completion. i. The project proponent shall verify that all construction equipment is maintained and properly tuned in accordance with manufacturers' specifications. Prior to the commencement of construction activities, using diesel-powered vehicles or equipment, the project proponent shall verify that all vehicles and equipment have been checked by a certified mechanic and determined to be running in proper condition prior to admittance into the delivery driveway and loading areas. The project proponent shall submit a report by the certified mechanic of the condition of the construction and operations vehicles and equipment to the District's Development Services Department prior to commencement of their use. 		
 MM-GHG-2: Comply with San Diego Unified Port District Climate Action Plan Measures. Effective opening day, the project proponent shall implement the following measures. No commercial drive-through shall be implemented. Reduce indoor water consumption by 20% lower than baseline buildings (defined by Leadership in Energy and Environmental Design [LEED] as indoor water use after meeting Energy Policy Act of 1992 fixture performance requirements) through use of low-flow fixtures in all hotel room and common area bathrooms. Compliance with Assembly Bill 939 and the City of San Diego's Recycling Ordinance shall be mandatory and shall include 	Timing: Prior to project operation Method: Implement specific measures designed to be consistent with the District's Climate Action Plan	Implementation: Project Proponent, District Monitoring and Reporting: Project Proponent Verification: District

Mitigation Measures	Timing and Methods	Responsible Parties
recycling at least 50% of solid waste; compliance with the City of		
San Diego's Construction and Demolition Debris Deposit		
Ordinance shall be mandatory and shall include recycling at least		
65% of all construction and demolition debris. This measure		
shall be applied during construction and operation of the		
proposed project.		
 Use only fluorescent, Light-Emitting Diodes (LEDs), Compact 		
Fluorescent Lights (CFLs), or the most energy-efficient lighting		
that meets required lighting standards and is commercially		
available. This measure also requires replacement of existing		
lighting on the project site if not already highly energy efficient.		
• Implement a parking management plan that incentivizes transit,		
provides bike racks and a bike share station, and provides shuttle		
programs to reduce worker trips and parking demand, as		
described in MM-TRA-8 .		
By December 31, 2029, the project proponent shall implement and		
have operational the following measure.		
• Install 29 electric car charging stations in the parking garage.		
MM-GHG-3: Implement Sustainability Features during Project	Timing: Prior to approval of the final design	Implementation: Project
Operations. Prior to approval of the final design plans, the project	plans	Proponent
proponent shall list all GHG-reducing measures and shall		
demonstrate in the plans where these measures will be located. The	Method: Depict all GHG reduction measures	Monitoring and Reporting
following shall be implemented by the project proponent. A report	on final design plans and implement	Project Proponent
shall be submitted to the District's Development Services Department	sustainability features during project	
evidencing compliance. The project has registered its intent to	operations	Verification: District
achieve certification under the Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems with		
the Green Building Certification Institute.		
The project proponent has proposed various sustainable design		
features equivalent to LEED v.3.0 Silver level. The following is a list of		
proposed sustainability measures that will be required and		
incorporated into the Coastal Development Permit for the project.		
 Incorporate indoor water-reduction measures, including high- 		
efficiency toilets, high-efficiency urinals, low-flow faucets, and		
low-flow showers (as applicable) into the design of all hotel room		
and common area bathrooms. The project shall achieve a		
minimum 20% water reduction compared to baseline buildings		

Install a high-efficiency lighting system that takes advantage of natural daylighting, augmented by daylighting controls and occupancy sensors that turn off the lights in unoccupied spaces. Install high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination. Install a "Cool Roof" with an R value of 30 or better. Install sun shading devices as appropriate. Install a stormwater retention and filtration system. Install low-water plantings and drip irrigation, and minimize domestic water demand from the City system for landscaping purposes. Implement onsite recycling. Install a high-performance chiller/heating plant. Work with San Diego Gas & Electric's "Savings by Design" program during the design and construction process and incorporate recommended suggestions where feasible. Utilize low-volatile organic compound materials to improve indoor air quality. Provide bicycle parking for 24 bicycles. Integrate light-colored paving at the rooftop plaza and park area to minimize the heat island effect. Provide education for hotel and marina guests and visitors on sustainability and Bay conservation using various media. Divert construction and demolition debris from disposal in landfills and incineration facilities by 65%.	Responsible Parties
 Install Energy Star rated appliances. Install a high-efficiency lighting system that takes advantage of natural daylighting, augmented by daylighting controls and occupancy sensors that turn off the lights in unoccupied spaces. Install high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination. Install a "Cool Roof" with an R value of 30 or better. Install a surnwater retention and filtration system. Install a stormwater retention and filtration system. Install low-water plantings and drip irrigation, and minimize domestic water demand from the City system for landscaping purposes. Implement onsite recycling. Install a high-performance chiller/heating plant. Work with San Diego Gas & Electric's "Savings by Design" program during the design and construction process and incorporate recommended suggestions where feasible. Utilize low-volatile organic compound materials to improve indoor air quality. Provide bicycle parking for 24 bicycles. Integrate light-colored paving at the rooftop plaza and park area to minimize the heat island effect. Provide education for hotel and marina guests and visitors on sustainability and Bay conservation using various media. Divert construction and demolition debris from disposal in landfills and incineration facilities by 65%. Use recycled, regional, and/or rapidly renewable materials where feasible. 	
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occupancy sensors that turn off the lights in unoccupied spaces. Install high-performance glazing with a low solar heat gain coefficient value that reduces the amount of solar heat allowed into the building, without compromising natural illumination. Install a "Cool Roof" with an R value of 30 or better. Install sun shading devices as appropriate. Install a stormwater retention and filtration system. Install low-water plantings and drip irrigation, and minimize domestic water demand from the City system for landscaping purposes. Implement onsite recycling. Install a high-performance chiller/heating plant. Work with San Diego Gas & Electric's "Savings by Design" program during the design and construction process and incorporate recommended suggestions where feasible. Utilize low-volatile organic compound materials to improve indoor air quality. Provide bicycle parking for 24 bicycles. Integrate light-colored paving at the rooftop plaza and park area to minimize the heat island effect. Provide education for hotel and marina guests and visitors on sustainability and Bay conservation using various media. Divert construction and demolition debris from disposal in landfills and incineration facilities by 65%. Use recycled, regional, and/or rapidly renewable materials where feasible.	
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Provide preferential carpool spaces within the proposed parking	
structure.	

Mitigation Measures	Timing and Methods	Responsible Parties
from a California Air Resources Board Approved Registry or a		
Locally Approved Equivalent Program.	Method: (1) Implement a renewable energy	Monitoring and Reporting
A. Options for Reducing GHG Emissions.	project on site, on tidelands, or within offsite	Project Proponent
To reach the waterside performance standard for 2025, the project proponent shall, in order of preference, considering availability of structures and feasibility, implement the following, which may be	tidelands adjacent to community or member city outside the District's jurisdiction that achieves the amount of MWh/year of	Verification: District
combined with consideration to the preference described below:	renewable energy identified in the measure	
1. Incorporate renewable energy		
a) on the project site;	And/Or	
b) within the District's jurisdiction; or		
c) within the adjacent community or member city outside of the District's jurisdiction.	(2) Undertake other verifiable actions or activities on Tidelands, approved by the	
2. Undertake other verifiable actions or activities on Tidelands, approved by the District, such as electrification of equipment	District	
including vehicles and trucks, financial contribution to a future	And/Or	
local or District GHG emission reduction program on Tidelands (locally approved equivalent program), or similar activities or		
actions that reduce operational GHG emissions;	(3) Purchase the equivalent amount of GHG offsets from a ARB approved registry, or a	
3. Purchase GHG emission offset credits that (1) are real, additional,	locally approved equivalent program	
permanent, quantifiable, verifiable, and enforceable as specified	locally approved equivalent program	
in California Health and Safety Code § 38562(d)(1) and (2) and		
as these terms are further defined in California Code of		
Regulations, Title 17, § 95802 (see below); (2) use a protocol		
consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and		
(3) are issued by an ARB-approved offset registry. ¹ Offset credits		
from projects outside California must be located in states within		
the United States of America that have laws equivalent to or		
stricter than California's laws and regulations ensuring the		
validity of offset credits.		
B. Required Annual GHG Emissions Reductions:		
To meet the 2025 waterside reduction target, GHG reductions must		

be equal to 1,411 MTCO₂e per year or 6,321 megawatt-hours per year

¹ Currently approved offset registries include the American Carbon Registry (ACR), Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: <u>https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm.</u>

Mitigation Measures	Timing and Methods	Responsible Parties
(MWh/year), which would amount to 6,321 MTCO2e over 5 years		
(between 2025 and 2030).		
C. Implementation of GHG Emissions Reduction Options.		
Prior to becoming operational, the project applicant shall notify the		
District with plans to achieve the annual GHG emissions reduction in		
the order of priority specified above:		
1. Develop a renewable energy project(s) or take other verifiable		
actions or activities identified by the District to meet or partially		
meet the required amount of MTCO ₂ e or MWh reductions		
specified above.		
a. If the project applicant develops a renewable energy		
project(s), or takes other verifiable actions or activities to		
reduce GHG emissions, the project applicant shall submit to		
the District's Energy Department/Team, for its review and		
approval, a report specifying the annual amount of MTCO ₂ e		
or MWh reduction achieved by the project(s), actions, or		
activities; submit evidence that the renewable energy		
project, actions, or activities are not being used to offset GHG		
emissions for any other project or entity; and submit any		
other information requested by the District's Energy		
Department/Team to verify the amount of GHG emissions		
reduction achieved by the project, actions or activities		
(collectively, "GHG Emission Reduction Report").		
b. If the GHG Emission Reduction Report is approved, a		
reduction to the required offsets shall be calculated by the		
District's Energy Department/Team, and the reduction of		
offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count		
towards the required GHG reduction for the proposed		
project ("GHG Reduction").		
2. Purchase GHG emission offsets in conformance with paragraph		
A(3) above in an amount sufficient to achieve the required		
reduction of MTCO ₂ e or MWh specified above, which may be		
decreased by the amount of annual MTCO ₂ e or MWh reduction		
that is achieved by any renewable energy project(s) or other		
verifiable action or activities if developed and/or implemented		

Mitigation Measures	Timing and Methods	Responsible Parties
pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO ₂ e or MWh shall occur as follows:		
a. Purchase offsets for the first 5 years of operation;		
 b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emission offset credits set forth in paragraph A(3) above, to the District's Energy Department/Team. D. Adjustments to Required GHG Emissions Reductions. 		
If the project applicant complies with paragraphs A(1) or A(2) above,		
in an amount that meets the total amount of MTCO ₂ e or MWh		
reductions specified above to meet the 2025 reduction target, or		
complies with paragraph A(3) above and purchases the requisite		
offsets for 5 years, through 2030, or does a combination of		
paragraphs A(1), (2), and (3) to meet the 2025 reduction target, then		
nothing further shall be required under this mitigation measure.		
1. Reduction of Emissions through Development of a Renewable Energy Project Requirement: Although none are identified at this time, the project applicant may be required by the District to develop a renewable energy project at any time during the life of the project (subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the development of a renewable energy project(s), the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1) above and required offsets shall be determined by the District and reduced.		
 Reduction of Emissions through Verifiable Actions or Activities on Tidelands Requirement: Although none are identified at this time, the project applicant may be required by the District to take other verifiable actions or activities at any time during the 		

Mitigation Measures	Timing and Methods	Responsible Parties
life of the project (subject to future approvals and the priorities listed above) and may request a reduction of required offsets. If any reduction in offsets is requested by the project applicant because of the other verifiable actions or activities on tidelands, the project applicant shall submit a GHG Emission Reduction Report for the District Energy Department's review pursuant to the process specified above in paragraph C(1), and required offsets shall be determined by the District and reduced.		
MM-GHG-5: Implement a Renewable Energy Project on Site, on Tidelands, or Within Offsite Tidelands Adjacent to Community or Member City, or Purchase the Equivalent Greenhouse Gas Offsets from a California Air Resources Board Approved Registry or a		Implementation: Project Proponent, District
Locally Approved Equivalent Program. A. Options for Reducing GHG Emissions	Method: (1) Implement a renewable energy project on site, on tidelands, or within offsite	Monitoring and Reporting: Project Proponent
To reach the landside and waterside reduction target for 2030 and 2050, the project proponent shall, in order of preference, considering availability of structures and feasibility, implement the following, which may be combined with consideration to the preference	tidelands adjacent to community or member city outside the District's jurisdiction that achieves the amount of MWh/year of renewable energy identified in the measure	Verification: District
described below:	And/Or	
1. Incorporate renewable energy	,	
 a) on the project site; b) within the District's jurisdiction; or c) within the adjacent community or member city outside of the District's jurisdiction 	(2) Undertake other verifiable actions or activities on Tidelands, approved by the District	
 Undertake other verifiable actions or activities on Tidelands, approved by the District, such as electrification of equipment including vehicles and trucks, financial contribution to a future local or District GHG emission reduction program on Tidelands (locally approved equivalent program), or similar activities or actions that reduce operational GHG emissions; 	And/Or (3) Purchase the equivalent amount of GHG offsets from a ARB approved registry, or a locally approved equivalent program	
 Purchase GHG emission offset credits that (1) are real, additional, permanent, quantifiable, verifiable, and enforceable as specified in California Health and Safety Code § 38562(d)(1) and (2) and as these terms are further defined in California Code of Regulations, Title 17, § 95802 (see below); (2) use a protocol 		

Mitigation Measures	Timing and Methods	Responsible Parties
 consistent with or as stringent as ARB protocol requirements under California Code of Regulations, Title 17, § 95972(a); and (3) are issued by an ARB-approved offset registry.² Offset credits from projects outside California must be located in states within the United States of America that have laws equivalent to or stricter than California's laws and regulations ensuring the validity of offset credits. B. Required Annual GHG Emissions Reductions: 		
The option(s) implemented pursuant to paragraph A above shall achieve the following required GHG reductions for the activities of the Proposed Project for years 2030 and 2050:		
1. To meet the 2030 landside and waterside reduction target, GHG reductions must be equal to 3,851 MTCO ₂ e per year or 17,258 MWh/year, which would amount to 77,021 MTCO ₂ e over 20 years (between 2030 and 2050).		
2. To meet the 2050 landside and waterside reduction target, GHG reductions must be equal to 5,703 MTCO ₂ e per year 25,556 MWh/year, which would amount to 211,004 MTCO ₂ e over 37 years (between 2050 and the end of the lease, 2087).		
C. Implementation of GHG Emissions Reduction Options.		
Prior to becoming operational, the project applicant shall notify the		
District with plans to achieve the annual GHG emissions reduction in		
the order of priority specified above:		
1. Develop a renewable energy project(s) or take other verifiable actions or activities identified by the District to meet or partially meet the required amount of MTCO ₂ e or MWh reductions		
specified above. a. If the project applicant develops a renewable energy		
project(s), or takes other verifiable actions or activities to		
reduce GHG emissions, the project applicant shall submit to		
the District's Energy Department/Team, for its review and		
approval, a report specifying the annual amount of MTCO ₂ e		

² Currently approved offset registries include the American Carbon Registry (ACR), Climate Action Reserve (CAR) and Verra (formerly the Verified Carbon Standard). See: <u>https://ww3.arb.ca.gov/cc/capandtrade/offsets/registries/registries.htm</u>

Mitigation Measures	Timing and Methods	Responsible Parties
 or MWh reduction achieved by the project(s), actions, or activities; submit evidence that the renewable energy project, actions, or activities are not being used to offset GHG emissions for any other project or entity; and submit any other information requested by the District's Energy Department/Team to verify the amount of GHG emissions reduction achieved by the project, actions or activities (collectively, "GHG Emission Reduction Report"). b. If the GHG Emission Reduction Report is approved, a reduction to the required offsets shall be calculated by the 	- ming und includus	
District's Energy Department/Team, and the reduction of offsets shall be transmitted to the project applicant in writing and the amount of GHG reduction shall count towards the required GHG reduction for the Proposed Project ("GHG Reduction").		
2. Purchase GHG emission offsets in conformance with paragraph A(3) above in an amount sufficient to achieve the required reduction of MTCO ₂ e or MWh specified above, which may be decreased by the amount of annual MTCO ₂ e or MWh reduction that is achieved by any renewable energy project(s) or other verifiable action or activities if developed and/or implemented pursuant to paragraph (1) above. The purchase of offsets to achieve the required reduction in MTCO ₂ e or MWh shall occur as follows:		
a. Purchase offsets for the 20 year period from 2030 to 2050 prior to 2030, then for the 37 year period from 2050 to 2087 prior to 2050;		
b. On or before the first year of operation of the proposed project and annually thereafter, the project applicant shall submit certificates for offsets purchased to achieve the required GHG emission reductions, including written verification by a qualified consultant approved by the District that the offsets meet the requirements for GHG emission offset credits set forth in paragraph A(3) above, to the District's Energy Department/Team.		
D. Adjustments to Required GHG Emissions Reductions.		

Mitigation Measures	Timing and Methods	Responsible Parties
If the project applicant complies with paragraphs $A(1)$ or $A(2)$ above,		
in an amount that meets the total amount of MTCO ₂ e or MWh		
reductions specified above to meet the 2030 and 2050 reduction		
target, or complies with paragraph A(3) above and purchases the		
requisite offsets, or does a combination of paragraphs A(1), (2), and		
(3) to meet the 2030 and 2050 reduction targets, then nothing		
further shall be required under this mitigation measure.		
1. Reduction of Emissions through Development of a Renewable		
Energy Project Requirement: Although none are identified at this		
time, the project applicant may be required by the District to		
develop a renewable energy project at any time during the life of		
the project (subject to future approvals and the priorities listed		
above) and may request a reduction of required offsets. If any		
reduction in offsets is requested by the project applicant because		
of the development of a renewable energy project(s), the project		
applicant shall submit a GHG Emission Reduction Report for the		
District Energy Department's review pursuant to the process specified above in paragraph C(1) above and required offsets		
shall be determined by the District and reduced.		
Reduction of Emissions through Verifiable Actions or Activities on		
Tidelands Requirement: Although none are identified at this time, the		
project applicant may be required by the District to take other		
verifiable actions or activities at any time during the life of the project		
(subject to future approvals and the priorities listed above) and may		
request a reduction of required offsets. If any reduction in offsets is		
requested by the project applicant because of the other verifiable		
actions or activities on tidelands, the project applicant shall submit a		
GHG Emission Reduction Report for the District Energy Department's		
review pursuant to the process specified above in paragraph C(1),		
and required offsets shall be determined by the District and reduced.		
Hazards and Hazardous Materials		
MM-HAZ-1: Prepare and Implement a Soil and Groundwater	Timing: Prior to the District's approval of the	Implementation: Project
Management Plan. Prior to the District's approval of the project's	project's landside working drawings and	Proponent, Licensed
landside working drawings, the project proponent shall retain a	during construction	Professional Geologist,
licensed Professional Geologist, Professional Engineering Geologist,		Professional Engineering
or Professional Engineer with experience in contaminated site		

Mitigation Measures	Timing and Methods	Responsible Parties
redevelopment and restoration, to prepare and submit a Soil and Groundwater Management Plan to the District's Development Services Department for review and approval. After the District's review and approval, the project proponent shall implement the Soil and Groundwater Management Plan. The Soil and Groundwater	Method: Prepare and implement a soil and groundwater management plan	Geologist, or Professional Engineer Monitoring and Reporting:
 and Groundwater Management Plan. The Soil and Groundwater Management Plan shall include the following: A Landside Site Contamination Characterization Report (Landside Characterization Report) delineating, throughout the landside project construction area, the vertical and lateral extent and concentration of landside residual contamination from the site's past use including, but not limited to, past use of the site as a fuel facility, municipal burn dump, and manufactured gas plant waste disposal area. The Landside Characterization Report shall include compilation of data based on historical records review and from prior reports and investigations and, where data gaps are found, include new soil and groundwater sampling to characterize the existing vertical and lateral extent and concentration of landside residual contamination. A complete soil vapor analysis will also be conducted during preparation of the Landside Characterization Report to Shall enroll in the Voluntary Assistance Program with the County of San Diego Department of Environmental Health and shall submit the results of the Landside Characterization Report to Department of Environmental Health or the environment, additional remedial actions shall be taken, in accordance with Department of Environmental Health or the environment, additional remedial actions shall include, but not be limited to, the removal of contaminated soils that pose a vapor intrusion risk and/or the incorporation of project design features that prevent vapor intrusion into the proposed new buildings and structures. In addition, a soil vapor analysis and an indoor air quality risk assessment the Department of Environmental Health oversight. These remedial actions shall be conducted with the Department of Environmental Health oversight. These remedial actions shall be conducted at the proposed new buildings and structures. In addition, a soil vapor analysis and an indoor air quality risk assessment for the remedial action is a sessment shall be conducted after		Monitoring and Reporting: Project Proponent, Licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer, California State Certified Industrial Hygienist Verification: District

itigation Measures	Timing and Methods	Responsible Parties
complete to confirm that no residual VOC contamination remains		
or that it is below applicable and relevant state guidelines.		
A Soil and Groundwater Testing and Profiling Plan (Testing and		
Profiling Plan) for those materials that will be imported to the		
project site and disposed of during construction. Testing shall		
occur for all potential contaminants of concern, including CA		
Title 22 metals, PAHs, volatile organic compounds, pesticides,		
PCBs, semi-volatile organic compounds, hydrocarbons, or any		
other potential contaminants. The Testing and Profiling Plan		
shall document compliance with CA Title 22 for proper		
identification and segregation of hazardous and solid waste as		
needed for acceptance at a CA Title 22-compliant offsite disposal		
facility. All excavation activities shall be actively monitored by a		
Registered Environmental Assessor for the potential presence of		
contaminated soils and for compliance with the Soil and		
Groundwater Sediment Testing and Profiling Plan.		
A Soil and Groundwater Disposal Plan (Disposal Plan), which shall		
describe the process for excavation, stockpiling, dewatering,		
treating, and loading and hauling of soil and groundwater from		
the site. This plan shall be prepared in accordance with the		
Testing and Profiling Plan (i.e., in accordance with CA Title 22		
and DOT Title 40 CFR Part 263, CAC Title 27), and current		
industry best practices for the prevention of cross contamination,		
spills, or releases, such as segregation into separate piles for		
waste profile analysis based on organic vapor, and visual and		
odor monitoring.		
In the event contaminated soil or groundwater is encountered, it		
shall be removed and disposed of in accordance with CA Title 22		
and DOT Title 40 CFR Part 263, CAC Title 27 and under the		
oversight of the County of San Diego Department of		
Environmental Health, which serves as the local regulatory		
agency responsible for oversight of hazardous materials issues in		
San Diego County. Hazardous waste shall be disposed of at three		
types of facilities, depending on the kind of waste, which will be		
identified in the Testing and Profiling Plan. Non-hazardous waste		
can be disposed of at a Class III landfill, such as the Otay Landfill.		
Waste that is considered hazardous in California but not in other		
states can be disposed of outside of California, including at the		

Mitigation Measures	Timing and Methods	Responsible Parties
South Yuma County Landfill or the Republic Services Copper Mountain Landfill in Arizona. RCRA hazardous waste must be disposed of at a Class I landfill, such as US Ecology in Nevada. A <i>Site Worker Health and Safety Plan</i> (Safety Plan) to ensure compliance with 29 CFR Part 120, Hazardous Waste Operations and Emergency Response regulations for site workers at uncontrolled hazardous waste sites. The Safety Plan shall be based on the Landside Characterization Report and the planned site construction activity to ensure that site workers potentially exposed to site contamination in soil and groundwater are trained, equipped, and monitored during site activity. The training, equipment, and monitoring activities shall ensure that workers are not exposed to contaminants above personnel exposure limits established by Table Z, 29 CFR Part 1910.1000. The Safety Plan shall be signed by and implemented under the		
Program. During and upon completion of landside construction, the project proponent shall prepare a Monitoring and Reporting Program and submit it to the District's Development Services Department for	Timing: During and upon completion of landside construction Method: Prepare and submit a monitoring and reporting program	Implementation: Project Proponent, Licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer Monitoring and Reporting: Licensed Professional Geologist, Professional Engineering Geologist, or Professional Engineer, Project Proponent Verification: District
Within 30 days of completion of landside construction, the project proponent shall prepare a Project Closeout Report and submit it to the District's Development Services Department for review and	Timing: Within 30 days of completion of landside construction Method: Prepare and submit a project closeout report	Implementation: Project Proponent Monitoring and Reporting: Project Proponent

Mitigation Measures	Timing and Methods	Responsible Parties
environmental activity at the site and document implementation of the Soil and Groundwater Management Plan, as required by MM- HAZ-1 , and the Monitoring and Reporting Program, as required by MM-HAZ-2 .		Verification: District
MM-HAZ-4: Develop and Implement a Site-Specific Community Health and Safety Program. Prior to the District's approval of the project's landside working drawings, the project proponent shall develop a site-specific Community Health and Safety Program (Program) that addresses the chemical constituents of concern for	Timing: Prior to the District's approval of the project's landside working drawings and during construction	Implementation: Project Proponent, Construction Manager, General Contractor
the project site. The guidelines of the Program shall be in accordance with the County of San Diego Department of Environmental Health's Site Assessment and Mitigation Manual (2009) and EPA's SW-846 Manual (1986). The Program shall include detailed plans on	Method: Develop and implement a site- specific community health and safety program	Monitoring and Reporting: Project Proponent California State Certified Industrial Hygienist
environmental and personal air monitoring, dust control, and other appropriate construction means and methods to minimize the public's exposure to the chemical constituents of concern. The Program shall be reviewed, approved, and monitored for compliance by the District. After the District's approval, the project proponent shall implement the Program. The contractor shall utilize a Certified Industrial Hygienist with significant experience with chemicals of concern on the project site to actively monitor compliance with the Program and ensure its proper implementation during project construction activities.		Verification: District
MM-HAZ-5: Avoidance of the Engineered Cap. During construction of the marina expansion, the project proponent shall avoid disturbance of the engineered cap and installation of all piles for the marina expansion shall occur outside of the engineered cap.	Timing: During construction of the marina expansion Method: Avoid disturbance of the engineered	Implementation: Project Proponent, Construction Manager, General Contractor
	cap	Monitoring and Reporting: Project Proponent,
		Verification: District
MM-HAZ-6: Conduct Sediment Sampling and Implement Measures to Mitigate Potential Cross-Contamination of Marine Sediment from Pile Driving and In-Water Construction. Prior to the District's approval of the project's in-water working drawings, the project proponent shall retain a licensed Professional Engineer with substantial experience (i.e., more than 5 years) in marine sediment	Timing: Prior to the District's approval of the project's in-water working drawings (sediment sampling and analysis), prior to project development-related marine-side sediment-disturbing activities (submittal of	Implementation: Project Proponent, Licensed Professional Engineer

Mitigation Measures	Timing and Methods	Responsible Parties
contamination, sediment sampling, and contamination remediation to perform all sediment sampling and analysis required by the Sampling and Analysis Plan (SAP) and Marine Sediment Contamination Characterization Report (Sediment Characterization Report)—both of which are discussed in detail within this mitigation measure. The results of all sediment sampling shall be documented in a report and submitted to the District prior to any project development- related marine-side sediment-disturbing activities. If remediation is required, the remediation shall be conducted with oversight from the appropriate local, State, or federal regulatory agency. In addition, documentation evidencing the remediation work and completion thereof shall be submitted to the District. The project proponent shall monitor the remediation for its effectiveness for a period of time consistent with guidance from the regulatory agency with	report), and during in-water construction (implementation of measures) Method: Conduct sediment sampling and implement measures to mitigate potential cross-contamination of marine sediment from pile driving and in-water construction	Monitoring and Reporting: Project Proponent, RWQCB, and any other appropriate regulatory agencies. Verification: District, RWQCB
jurisdiction, but for no less than 1 year. A monitoring report shall be submitted to the District and the RWQCB for their review on a monthly basis, or at a frequency determined appropriate by relevant agencies having jurisdiction over the remediation. Additional details of this mitigation measure are provided below.		
The project proponent and the professionally licensed Professional Engineer retained by the project proponent shall complete the following requirements, which shall be reviewed and approved by the District's Development Services Department, the RWQCB, and any other appropriate regulatory agencies.		
 Develop a SAP and perform sediment sampling in area(s) of potential disturbance for in-water construction activities that are located outside of the engineered cap. Sampling shall be conducted in accordance with the <i>Water Quality Control Plan for</i> <i>Enclosed Bays and Estuaries Plan</i> (August 2009). Specifically, the samples shall include analysis of (1) grain size analysis, (2) 		
physical parameters, (3) total organic carbon, (4) Target Analyte List metals, (5) pesticides, (6) PAHs, (7) total PCBs (all 209 individual PCB congeners), as analyzed and reported by EPA Method 1668, (8) total polychlorinated terphenyls, (9) TPHs, and (10) TBT. The sampling area shall encompass the waterside		
project footprint and sample locations shall be representative of areas of potential project disturbance. Areas of potential		

itigation Measures	Timing and Methods	Responsible Parties
disturbance include, but are not limited to, proposed pile		
locations for the marina expansion; the locations of construction		
equipment, including without limitation to the location of any		
proposed spudding or other anchoring systems that will be		
utilized during construction of the marina expansion; potential		
deposition areas within the proposed silt curtain footprint; and		
any other areas where the Bay floor will be disturbed.		
Prepare a Sediment Characterization Report delineating the		
vertical and lateral extent and concentration of the project site's		
sediment contamination outside the engineered cap (Sediment		
Characterization). The Sediment Characterization Report shall be		
based on the sediment sampling results and shall rely on the		
Effects Range – Low (ER-L) and Effects Range – Median (ER-M)		
guideline values of the National Oceanic and Atmospheric		
Administration's Sediment Quality Guidelines (1999) as the basis		
for characterizing the sediment. The project proponent shall		
disclose the results of the Sediment Characterization Report to		
the RWQCB and the District (and any other appropriate		
regulatory agencies), and consult with the RWQCB on the		
contamination characterization of the sediment.		
If contaminated sediment is identified in the Sediment		
Characterization Report, the project proponent shall prepare a		
Contaminated Sediment Management Plan (Sediment		
Management Plan) for the District's, RWQCB's, and any other		
appropriate regulatory agencies' review and approval, if		
applicable. Once approved, the Sediment Management Plan shall		
be implemented by the project proponent subject to oversight by		
the District, RWQCB, and any other appropriate regulatory		
agencies, if applicable. The Sediment Management Plan shall		
describe in detail the methods to be employed to prevent		
waterside construction activity from adversely affecting or		
exposing the contaminated sediment outside the engineered cap		
as identified in the Sediment Characterization Report and the		
monitoring that will occur post-construction, including, at a		
minimum:		
• Pile Construction Options. Piles shall be constructed using:		
(1) Impact Hammer Pile Driving. At the conclusion of the		

pile driving, the project applicant shall conduct sediment

Mitigation Measures	Timing and Methods	Responsible Parties
sampling of representative areas of potential		
disturbance near the location of piles consistent	with the	
sampling approach set forth in the SAP, above. If	the	
sediment samples show concentrations of sedim	ent	
contamination above the Sediment Characteriza	tion, the	
project proponent shall delineate the extent of c	ross-	
contamination and propose remediation approa	ches	
(subject to approval by the District and any othe	r	
agencies with jurisdiction over site contamination	on) that	
may include, but are not limited to, dredging, pla	cement	
of sand cover, or Enhanced Monitored Natural R	ecovery	
(EMNR) sand containing active carbon. The resu	lts of the	
sampling and remediation approaches shall be		
documented in a report to be reviewed and appr	oved by	
the District, RWQCB, and any other appropriate		
regulatory agencies.		
OR		
(2) Internal Jetting. This method includes a jet pipe	running	
the length of the pile where the water exits at a s		
diameter port at the bottom of the pile and a hig		
pressure water line is attached near the top tip of		
pile. The high-pressure water shall reduce the sl		
friction between the pile and the marine sedime	nts and	
avoid the creation of a large hole and a significar		
amount of turbidity. Turbidity curtains shall con		
surround each pile from the top of the pile to the	Bay	
floor and be placed no more than 2 feet from the	pile. At	
the conclusion of the internal jetting, the project	-	
proponent shall conduct sediment sampling of		
representative areas of potential disturbance ne	ar the	
locations of the piles, consistent with the sampli		
approach set forth in the SAP, above. If the sedin		
samples show concentrations of sediment conta		
above the Sediment Characterization, the projec		
proponent shall delineate the extent of cross-		
contamination and propose remediation approa	ches	
(subject to approval by the District and any othe		
agencies with jurisdiction over site contamination		

Mitigation Measu	ires	Timing and Methods	Responsible Parties
	nclude, but are not limited to, dredging, placement		
	d cover, or EMNR sand containing active carbon.		
	esults of the sampling and remediation approaches		
	be documented in a report to be reviewed and		
	oved by the District, RWQCB, and any other		
	opriate regulatory agencies.		
	If spuds are used, then when lifted during in-water		
	ion, they shall be lifted slowly at least a quarter of		
	they are lifted during normal operation of spuds.		
	e spud reaches the subsurface of the Bay floor		
	ployment, the operator shall pause the spud lift for nute intervals to reduce the disturbance of Bay		
	At the conclusion of the marina construction, the		
	oponent shall conduct sediment sampling of		
	ative areas of potential disturbance from spudding		
	construction activities that may have disturbed the		
	within the project footprint, consistent with the		
	approach set forth in the SAP, above. If the		
	samples show concentrations of sediment		
	ation above the Sediment Characterization, the		
project pi	oponent shall delineate the extent of cross-		
contamin	ation and propose remediation approaches (subject		
to approv	al by the District and any other agencies with		
jurisdictio	on over site contamination) that may include, but		
	nited to, dredging, placement of sand cover, or		
	nd containing active carbon. The results of the		
	and remediation approaches shall be documented		
	t to be reviewed and approved by the District,		
RWQCB, a	nd any other appropriate regulatory agencies.		
	pliance with Federal and State Permits: No	Timing: Prior to in-water construction and	Implementation: Project
-	vestigative Order No. R9-2017-0081. Prior to in-	during in-water construction	Proponent
	n, the project proponent shall obtain all federal and		
	ired for in-water construction activities and	Method: Obtain and comply with all federal	Monitoring and Reporting:
	e District compliance with all permit conditions	and state permits required for in-water	Project Proponent
	onstruction. In addition, the project proponent shall	construction activities and ensure in-water	
	strict's compliance with Investigative Order No. R9-	construction activities do not impede the	Verification: District
2017-0081 as it p	ertains to the project site.		

Mitigation Measures	Timing and Methods	Responsible Parties
	District's compliance with Investigative Order No. R9-2017-0081	
MM-HAZ-8: Obtain FAA Approval and ALUC Formal Review and Determination. Prior to the Board of Port Commissioners taking inal action to adopt the PMPA in accordance with 14 California Code	Timing: Prior to Board of Port Commissioners taking final action to adopt the PMPA	Implementation: Project Proponent
of Regulations Section 13632(e), the project proponent shall obtain		Monitoring and Reporting:
FAA approval and ALUC review and determination for construction equipment and operational structures.	Method: Obtain FAA approval and ALUC formal review and determination	Project Proponent
		Verification: District
Hydrology and Water Quality		
MM-HWQ-1: Marina Best Management Practice Plan and Copper Reduction Measures. To reduce potential impacts on water quality, the project proponent shall prepare a Marina Best Management	Timing: Prior to marina operations	Implementation: Project Proponent
Practice Plan that shall be reviewed and approved by the District specifically identifying best management practices that will be used within the Marina to (1) minimize the pollutant load of runoff,	Method: Prepare a Marina Best Management Practice Plan and implement Copper Reduction Measures	Monitoring and Reporting: District, Project Proponent
ncluding measures to prevent, eliminate, and/or otherwise effectively protect water quality of the Bay and (2) reduce inputs of cotal and dissolved copper resulting from increased berthing of boats. The Marina Best Management Practice Plan and Copper Reduction Measures shall be reviewed and approved by the District prior to the opening of marina operations. The Marina Operator shall be responsible for implementation and maintenance of the Marina Best Management Practice Plan and Copper Reduction Measures. At a minimum, the Marina Best Management Practice Plan shall include, but not be limited to, the following:		Verification: District
Use of educational materials to be provided to boat owners and their crews that specify types of activities that shall be avoided or types of BMPs that shall be implemented in order to protect water quality, such as emptying of septic tanks and refueling only at approved locations, respectively. Recommendations to reduce oil leaks include conducting periodic maintenance of all fuel lines, hoses, and gaskets; putting an oil-absorbent pad in the bilge; and installing a filtration system to remove oil from bilge water.		
Docking agreements containing specific use restrictions to prevent degradation of water quality, such as restricting boat		

Mitigation Measures	Timing and Methods	Responsible Parties
repairs and cleaning operations within the marina. These specific use restrictions shall be similar to the recommendations from the <i>San Diego Bay Boaters Guide</i> (District 2006) and the California State Parks Division of Boating and Waterways and the California Coastal Commission Boating Clean and Green Program (California DBW 2017), both of which promote environmentally sound boating practices to marine business and boaters in California. Implementation and monitoring of the District-adopted in-water hull cleaning regulations. Ordinance No. 2681 requires the use of BMPs for businesses doing in-water hull cleaning. The In-Water Hull Cleaning Permit is a Bay-wide permit to reduce or eliminate copper pollution caused by in-water hull cleaning activities. No fueling on site.		
MM-HWQ-2: Water Quality Sampling for Total and Dissolved	Timing: Prior to the commencement of	Implementation: Project
Copper. Prior to the commencement of marina development, the	marina construction (water quality	Proponent
project proponent shall conduct water quality sampling to develop an		
 pdated baseline for total and dissolved copper as follows: Develop a sampling and analysis plan that will be reviewed and approved by the District prior to sampling. The plan shall identify 	(ongoing water quality monitoring and testing), within 30 days after the end of each calendar year during marina operations	Monitoring and Reporting Project Proponent
a minimum of three points, denoting edges and midpoint of marina footprint.	(ongoing water quality monitoring and testing)	Verification: District
• Sample for total and dissolved copper. The project proponent shall use an Environmental Laboratory Accreditation Program	Method: Conduct water quality sampling to	
(ELAP)-certified laboratory for all analytical testing.	develop an updated baseline for total and	
Compare dissolved copper levels to Basin Plan water quality objectives.	dissolved copper and conduct ongoing water quality monitoring and testing	
• The project proponent shall submit the baseline monitoring report to the District for its review and approval.		
The project proponent shall conduct ongoing water quality monitoring and testing for total and dissolved copper, following the		
process outlined above for the updated baseline sampling, over the		
course of marina development/occupancy at the following frequency		
for each phase of marina development:		
• After 50% occupancy,		
After 75% occupancy, and		
• After full occupancy (95% slips under rental agreements).		

Mitigation Measures	Timing and Methods	Responsible Parties
Reports of all monitoring and testing results shall be prepared and		
paid for by the project proponent (i.e., tenant) and submitted to the		
District's Development Services Department for review and approval		
within 30 days after the occupancy milestones identified above.		
If at any time during monitoring the water quality equals or exceeds		
or the Basin Plan water quality objectives and comparison with the		
updated baseline indicated that the exceedance is a result of the		
proposed project, the project proponent shall immediately notify the		
District's Development Services Department and shall immediately		
cease further development and/or occupancy until additional BMPs		
addressing the issue are employed and reduce the copper levels.		
Water quality testing shall occur every year following full occupancy		
of the marina or until the marina is fully occupied by non-copper		
hulled boats. The project proponent shall prepare written reports of		
the water quality testing results annually and submit the reports to		
the District's Development Services Department for review and		
approval within 30 days after the end of each calendar year. Any		
exceedance attributed to the proposed project (based on a		
comparison with the updated baseline assessment) shall require additional BMPs if determined necessary to reduce total and		
dissolved copper to below the Basin Plan water quality objectives.		
BMPs that must be considered include, but are not limited to:		
• Implementation of an incentive structure within the docking		
agreements' rent rates for occupants with non-copper hull paint		
boats.		
• Identification of copper-free zones within the innermost portions		
of the marina, or limitation of copper hull paint boats to only well-flushed zones of the marina.		
Hull bottom scraping and the use of toxic detergents to clean		
vessels would be prohibited, and no overwater repairs would be allowed.		
Limitations on in-slip hull cleaning (restrict or limit number of cleaning per user)		
cleanings per year).		
If the project proponent (i.e., tenant) finds that one or more are		
infeasible, the tenant must provide written proof of infeasibility,		
which shall be subject to District review and concurrence. BMPs that		

Mitigation Measures	Timing and Methods	Responsible Parties
are implemented must reduce total and dissolved copper to levels below the Basin Plan water quality objectives.		
MM-HWQ-3: Marina Design Measures to Promote Tidal Flushing.	Timing: Prior to marina construction	Implementation: Project
To reduce potential impacts on water quality, prior to the		Proponent, a qualified
commencement of any construction of the marina, the project proponent shall design the marina so that structures do not significantly restrict the natural circulation of water caused by tidal	Method: Conduct a marina flushing analysis and implement marina design measures to promote tidal flushing	engineer approved by the District
action.	promote tidal nushing	Monitoring and Reporting:
• The expanded marina shall be designed to promote water circulation within the basin. The degree of flushing necessary to maintain water quality in a marina shall be balanced with safety, vessel protection, and sedimentation.		Project Proponent, a qualified engineer approved by the District
• Flushing rates shall be maximized by proper design of the marina entrance channel and basin.		Verification: District
• Prior to marina construction, a qualified engineer shall conduct a marina flushing analysis using an applicable tidal or hydrodynamic model to determine if sufficient flushing is provided by the proposed design or if forced flushing is necessary to enhance the flushing rate of the marina to meet Basin Plan water quality objectives. The engineer shall provide recommendations for forced flushing if determined necessary. The analysis methodologies and results shall be reviewed and approved by the District prior to marina construction.		
Land Use and Planning		
MM-LU-1: Smart Design Decisions, Future Adaptation Strategies,	Timing: Prior to issuance of building	Implementation: Project
and Operational Strategies. To reduce potential impacts related to	permits, during project operations	Proponent
bulkhead overtopping in mid-century during extreme storms, the project proponent shall implement the following into building design and construction, and during operation. Prior to the issuance of building permits for the project, the project applicant shall submit	Method: Incorporate smart design decisions, future adaptation strategies, and operational strategies into building design and	Monitoring and Reporting: Project Proponent
design plans and operational strategies to the District's Development Services Department for its review and approval.	construction and during operation	Verification: District
Smart Design Decisions – to be incorporated into building design and as part of construction:		
• Place mechanical and electrical equipment at least 2 feet above the design flood elevation to reduce risk of flood damage. If		

Mitigation Measures	Timing and Methods	Responsible Parties
equipment must be placed in lower areas, elevate base or ensure assets are composed of flood damage-resistant materials.		-
• Design water supply, sanitary sewage, and stormwater systems to minimize or eliminate infiltration of flood waters into systems and vice versa. For example, this may include installing backwater valves at building connections or at outfalls, increasing outfall elevations when replacing them, installing forced mains, or increasing pump capacity.		
• Ensure that all building exterior walls are composed of materials that have an impermeable and waterproof membrane.		
• Contribute a "fair share" payment in an amount to be determined by the District based on an analysis for the cost of construction of future bulkhead improvements that would offer direct flood mitigation benefits to the project site.		
Future Adaptation Strategies – to be incorporated into building design and as part of construction:		
 Ensure that building foundations are capable of supporting future flood walls or temporary flood barriers. 		
 Design building openings (e.g., doors, windows, utility penetrations) to be capable of future retrofitting to make them watertight and resistant to flood loads. 		
• If replacing or constructing additional bulkheads, design key structural elements to allow future increases in the elevation of the bulkhead crest.		
• Upon receipt of the operational strategies report (see below), the District's Development Services Department shall determine, if given the most up-to-date sea level rise projections, the current coastal protection features (e.g., the existing bulkheads) would be overtopped if a 100-year storm surge were to occur in the		
next 10 years. If so, within the next 5 years, the project proponent, in consultation with and approved by the District's		
Development Services, must either install onsite protections (e.g., flood walls and flood-proof openings) to protect the buildings		
from a high sea level rise scenario and a 100-year storm surge through the end of the Port lease (2082) or, as mentioned above,		
contribute a "fair share" to future bulkhead improvements that would offer the same or a greater level of protection.		

Mitigation Measures	Timing and Methods	Responsible Parties
Operational Strategies – to be implemented during operation and		
updated every 5 years using the best available science:		
• Establish an early warning system to monitor the risk of flooding.		
An early warning system should consist of:		
• Protocols for obtaining information on local weather alerts,		
and established levels at which additional action (e.g.,		
sandbagging) will be taken.		
• Protocols for monitoring water levels at nearby storm		
gauges prior to the storm arrival, and regularly checking the		
water levels along the project bulkhead as the storm		
progresses.		
Establish emergency evacuation procedures for people to		
relocate to higher ground on short notice.		
• Obtain or execute on-call contracts for backup power generators		
for critical functions, such as the operation of one elevator and		
emergency lighting systems. Also obtain or execute on-call		
contracts for portable pumps, and ensure that there is sufficient		
fuel to operate these. Establish protocols for operating said		
generators and pumps during storm events or other such events.		
 Before a storm that is forecasted to overtop the bulkheads, 		
deploy sandbags or inflatable barriers. Over time, monitor and		
track the rainfall amounts and storm projections that result in		
localized flooding and update the deployment protocol to		
account for this experience.		
 Before a storm that is forecasted to result in localized flooding, 		
test emergency power sources and pumps and ensure that there		
is sufficient fuel to run these, and inspect building exterior to		
ensure that there are no penetrations that lack flood proofing. If		
cracks or leaks are identified, seal them or temporarily cover		
with a flood-proof material, to the extent feasible, prior to the		
storm. Over time, monitor and track the rainfall amounts and		
storm projections that result in localized flooding and update the		
deployment protocol to account for this experience.		
Restrict public access during storms or flooding events if water		
levels are forecasted to rise to unsafe levels.		

Attachment 1. Mitigation Monitoring and Reporting Program

Mitigation Measures	Timing and Methods	Responsible Parties
Noise and Vibration		
MM-NOI-1: Avoid or Reduce Construction Noise from Impact- Type Pile Driving During Both Landside and Marina Construction. The project proponent and its construction contractor	Timing: During landside and marina construction	Implementation: Project Proponent, Construction Manager, General Contractor
shall prohibit all pile driving activities outside the hours of 7:00 a.m. to 7:00 p.m. on Monday through Saturday. No associated activity shall occur at any time on Sundays or legal holidays. Construction personnel shall not be permitted on the project site (including	Method: (1) Prohibit all pile driving activities, construction personnel on the project site, and material or equipment deliveries and collections outside the hours	Monitoring and Reporting: Project Proponent
laydown and storage areas), and material or equipment deliveries and collections shall not be permitted during the prohibited hours. In addition, impact pile driving shall be avoided by using alternative,	of 7:00 a.m. to 7:00 p.m. on Monday through Saturday.	Verification: District
quieter installation methods such as press-in piles or drilled pile techniques (e.g., cast-in-drilled-hole, poured-in-place). If the project	And	
proponent and its construction contractor determine that alternative pile installation methods are infeasible at some or all areas of the project site and that such areas require impact pile driving, then an acoustical shroud shall be utilized, as described below. Alternative pile installation methods shall only be considered infeasible if the	(2) Avoid impact pile driving by using alternative, quieter installation methods such as press-in piles or drilled pile techniques.	
project proponent and its construction contractor provide sufficient	0r	
evidence, to the satisfaction of District Development Services Department, that such methods are infeasible based on technical, structural, geological, safety, and/or cost considerations. Wherever impact pile driving is required for landside or waterside construction, it shall be conducted only with the use of an acoustical shroud to reduce noise levels. The shroud shall enclose the pile and hammer on all sides and shall extend from the water or ground surface to a point at least 5 feet above the top of the pile to be driven. The acoustical shroud, held in place by a crane, shall surround the pile driving assembly during pile driving activities, and shall be constructed as follows.	(3) Wherever impact pile driving is required for landside or waterside construction, conduct it only with the use of an acoustical shroud to reduce noise levels.	
a. A metal framework (cylindrical or square/rectangular) shall be constructed for the shroud to support the weight of the attached acoustical blankets. The framework shall be centered on the pile to be driven.		
b. Acoustical blankets shall be firmly secured to the outside of the framework with the sound-absorptive side of the blankets		

oriented toward the interior of the shroud (i.e., toward the pile).

Μ	itigation Measures	Timing and Methods	Responsible Parties
	The blankets shall be overlapped by at least 6 inches at seams and taped to eliminate gaps. The largest blankets available shall be used to form the shroud in order to minimize the number of seams. The blankets shall be draped to the water or ground surface to eliminate any gaps at the base of the shroud.		
c.	The number and size of gaps needed for the safe operation of the pile driver shall be kept to a minimum.		
d.	The acoustical blankets shall provide a minimum sound transmission class of 28 and a minimum noise reduction coefficient of 1.00.		
e.	The acoustical blankets shall be waterproof, oil- and UV-resistant, anti-fungal, and flame retardant.		
f.	If necessary, a view window may be incorporated into the acoustical blankets in order to facilitate the operation of the pile driver. The window shall be constructed of clear vinyl material that weighs at least 1 pound per square foot. The seams where the window attaches to the acoustical blankets shall be tightly sealed to eliminate gaps. The size of the window shall be kept to the minimum required for safe operation of the pile driver. At all times the window shall be oriented away from the nearby parks (Embarcadero Marina Park North and South, and Fifth Avenue Landing Park).		
ty pi no w re Av	M-NOI-2: Notify Users of Nearby Recreational Areas. If impact- pe pile driving construction techniques cannot be avoided, the roject proponent or its construction contractor shall post public oticing not less than 48 hours prior to initiating landside or aterside pile driving activities within 700 feet of a public ccreational area (e.g., Embarcadero Marina Park South and Fifth venue Landing Park). The project proponent shall include this	Timing: Prior to issuance of the construction specification documents for bid (submittal of construction specification documents and proposed public notice sign) and no less than 48 hours prior to initiating landside or waterside pile driving activities (public noticing)	Implementation: Project Proponent, Construction Manager, General Contractor Monitoring and Reporting: Project Proponent
pı do co si; Pı	easure in the construction specification documents for the roposed project. Prior to issuance of the construction specification ocuments for bid, the project proponent shall submit a copy of the onstruction specification documents and the proposed public notice gn to the District's Development Services Department for approval. rior to the commencement of impact-type pile driving activities, the roject proponent shall submit documentation (including	Method: Submit copy of construction specification documents and post public noticing not less than 48 hours prior to initiating landside or waterside pile driving activities within 700 feet of a public recreational area	Verification: District

Attachment 1. Mitigation Monitoring and Reporting Program

Mi	tigation Measures	Timing and Methods	Responsible Parties
	otographs) to the District's Development Services Department		
de	monstrating compliance with this measure.		
Dı	M-NOI-3: Reduce Construction Noise from Other (Non-Pile riving) Activities. During all construction activity, the project	Timing: During landside and waterside construction	Implementation: Project Proponent, Construction
	oponent and its construction contractor shall implement the		Manager, General Contractor
	lowing techniques and best practices to reduce noise levels from	Method: Implement specific techniques and	
	n-pile driving construction activities.	best practices to reduce noise levels from	Monitoring and Reporting:
a.	Prohibit all construction activities outside the hours of 7:00 a.m. to 7:00 p.m. on Monday through Saturday. No construction	non-pile driving construction activities	Project Proponent
	activity shall occur at any time on Sundays or legal holidays. Construction personnel shall not be permitted on the project site (including laydown and storage areas), and material or equipment deliveries and collections shall not be permitted during the prohibited hours.		Verification: District
b.	Ensure that all construction equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency complies with such regulation while in the course of project activity and use on site.		
с.	Properly maintain all construction equipment used during project construction and remove any equipment from service, until it is properly repaired, that generates increased noise levels because of any defect or damage.		
d.	Equip all construction equipment, where applicable, with properly operating and maintained mufflers, air-inlet silencers, and any other shrouds, shields, or other noise-reducing features that meet or exceed original factory specifications.		
e.	Operate construction equipment only when necessary, and switch off powered equipment when not in use. Prohibit the idling of inactive construction equipment for more than 2 minutes.		
f.	Restrict the use of noise-producing signals, including horns, whistles, alarms, and bells, for safety warning purposes only.		
g.	Install temporary noise barriers around the project site during the demolition, site preparation (including dewatering and shoring), excavation, and foundation phases of construction, to the extent practicable. For periods (if any) when these construction activities are restricted to a smaller portion of the		

Nitigation Measures	Timing and Methods	Responsible Parties
 whole site, barriers may be installed around that smaller portion of the site. Alternatively, if a site perimeter barrier cannot be constructed, a localized barrier shall be installed around any noisy stationary construction equipment such as generators or dewatering pumps. For barriers to be effective, they should break the line of sight between the construction equipment and any noise-sensitive receiver. These barriers may be constructed as follows: From commercially available acoustical panels lined with sound-absorbing material (the sound-absorptive faces of the 		
panels should face the construction equipment).		
• From common construction materials such as plywood and lined with sound-absorptive material (the sound-absorptive material should face the construction equipment).		
• From acoustical blankets hung over or from a supporting frame. The blankets should provide a minimum sound transmission class rating of 28 and a minimum noise reduction coefficient of 0.80 and should be firmly secured to the framework with the sound-absorptive side of the blankets oriented toward the construction equipment. The		
blankets should be overlapped by at least 6 inches at seams and taped so that no gaps exist. The largest blankets available should be used in order to minimize the number of seams. The blankets shall be draped to the ground to eliminate any gaps at the base of the barrier.		
Train all construction employees in the proper operation and use		
of the equipment they use during the course of their work.		.
M-NOI-4: Design and Construct Project Facilities to Control Dise from All Onsite Mechanical Equipment. The project oponent shall design and construct all building systems and echanical equipment proposed as part of the project to ensure their	Timing: During the architectural and engineering design phase and prior to the issuance of building permits	Implementation: Project Proponent, Acoustical Consultant
mpliance with the City of San Diego noise ordinance (Municipal de section 59.5.0401). To achieve this performance standard, iring the architectural and engineering design phase of each ement of the proposed project (e.g., market-rate hotel tower, lower-	Method: Design and construct all building systems and mechanical equipment in compliance with the City of San Diego noise	Monitoring and Reporting Project Proponent
ist visitor-serving hotel, retail, marina), and prior to the issuance of by building permits for the proposed project, the project proponent	ordinance (Municipal Code section 59.5.0401)	Verification: District

Mitigation Measures	Timing and Methods	Responsible Parties
shall retain an acoustical consultant to evaluate the design and provide recommendations, as necessary, to ensure that all aspects of the proposed project, including without limitation the mechanical equipment and other onsite stationary sources (e.g., trash compactors, loading docks), shall be constructed so as to comply with the City of San Diego noise ordinance (Municipal Code section 59.5.0401). Such recommendations may include, but are not limited to, changes in equipment locations; sound power limits or specifications; rooftop parapet walls; acoustical absorption, louvers, screens, or enclosures; or intake and exhaust silencers.		
 MM-NOI-5: Incorporate Operational/Contract Specifications to Minimize Exterior Special Event Noise. The project proponent and any future owner/operator of the proposed project shall observe the following requirements and/or incorporate them into the contract specifications for outdoor events: Any exterior special event associated with the proposed project shall not exceed 65 dBA Leq at the proposed project's property line between the hours of 7:00 a.m. and 7:00 p.m. as mandated by the City of San Diego Municipal Code 59.5.0401. Any concert associated with the proposed project's property line between the hours of 7:00 p.m. and 7:00 p.m. and 7:00 a.m. as mandated by the City of San Diego Municipal Code 59.5.0401. Any concert associated with the proposed project shall not exceed 60 dBA Leq at the project's property line between the hours of 7:00 p.m. and 7:00 a.m. as mandated by the City of San Diego Municipal Code 59.5.0401. Any event that fails to comply with requirement 1, above, shall only be permitted if an applicable event permit, or variance or exemption from the code, has been sought and granted by the appropriate agency (City or District). The project shall comply with all City and District requirements related to hosting outdoor events. 	Timing: During project operation Method: Incorporate operational requirements into contract specifications to minimize exterior special event noise	Implementation: Project Proponent, future owner/operator of the proposed project Monitoring and Reporting: Project Proponent Verification: District, City of San Diego
Public Services and Recreation		
 MM-PS-1: Operation Requirements for the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace Areas. Under no circumstances shall the closure of the public plaza and park areas for private hotel events be more than the following percentages. Multifunctional Plaza and Lawn (40,414 square feet): 50% private access (50% public access). This area would be available 	Timing: During project operation Method: Compliance with operation requirements for the Multifunctional Plaza and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace Areas	Implementation: Project Proponent Monitoring and Reporting: Project Proponent

Mitigation Measures	Timing and Methods	Responsible Parties
 for private events 50% of the year, which is defined as the equivalent of 182.5 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 50% of the year (182.5 days). For clarification purposes, if a private event occupies the Multifunctional Plaza and Lawn for part of a day, it shall count as occupying the Multifunctional Plaza and Lawn for an entire day when calculating the 182.5-day private event limit. Public Park Plaza (45,062 square feet): 15% private access (85% public access). This area would be available for private events 15% of the year, which is defined as the equivalent of 55 days per year, inclusive of event setup and breakdown time. When not in use for private events, this area would be accessible for use by the public at no cost 85% of the year (310 days). For clarification purposes, if a private event occupies the Public Park Plaza for part of a day, it shall count as occupying the Public Park Plaza for an entire day when calculating the 55-day private event limit. Public Park Plaza and Public Observation Terrace (9,782 square feet): 0% private access (100% public access). This area would be open to the public at no cost 100% of the year. Public Promenade (3,190 square feet): shall be an approximate 10-foot-wide walkay along the southeast portion of the marketrate hotel tower and shall be 0% private access (100% of the year. f the private event area is blocked off from the public usable area, such barriers shall not be solid materials but shall be a material like opes. To ensure the private event area is restored for the public use, 	Timing and Methods	Responsible Parties Verification: District
year. If the private event area is blocked off from the public usable area, such barriers shall not be solid materials but shall be a material like ropes. To ensure the private event area is restored for the public use, all trash and debris shall be immediately picked up and disposed of		
appropriately during and after the private event. During times when the Multifunctional Plaza and Lawn area or Public Park Plaza area is open to the public (i.e., during non-private event times), the hours of operation shall be the same as the District's park hours of operation.		

Mitigation Measures	Timing and Methods	Responsible Parties
During all private events, clear signage shall be placed in publicly		
<i>v</i> isible locations (i.e., not posted inside the hotel) at the grand		
staircase, market-rate hotel tower staircase, public observation		
errace, optional pedestrian bridge (if developed), and two locations		
along the existing Embarcadero Promenade, that indicate the		
Multifunctional Plaza and Lawn area and/or the Public Park Plaza		
areas, if applicable, are open to the public. Clear signage shall be		
placed at the Public Park Plaza and Public Observation Terrace that		
indicates it is open to the public.		
After project construction is complete, on January 31 of each year, the		
project proponent shall submit an annual public access usage report		
to the District's Development Services Department that		
demonstrates, for the preceding year, that the Multifunctional Plaza		
and Lawn, Public Park Plaza, and Public Park Plaza and Public Observation Terrace are being used for public access and private		
access (for private events) as follows and consistent with this MM -		
PS-1:		
• Multifunctional Plaza and Lawn (50% public access/50% private access)		
 Public Park Plaza (85% public access/15% private access) 		
• Public Park Plaza and Public Observation Terrace (100% public access)		
The report shall be broken down by the Multifunctional Plaza and		
Lawn and Public Park Plaza areas and shall list the date, private		
event, start and end times, duration of each event, setup and		
breakdown time, and total number of days and percentage of private		
use for that year. Furthermore, the report shall contain confirmation,		
such as photographs or a signature by the hotel manager, that for		
each private event, signage indicating public use of the remaining		
area (if applicable) was placed consistent with this MM-PS-1 . For the		
Public Park Plaza and Public Observation Terrace area, the report		
shall confirm that this area was accessible to the public 100% of the		
year and contained signage indicating such.		
MM-PS-2: Low-Cost or No-Cost Boat Slip. The project proponent	Timing: During project operation	Implementation: Project
shall provide at least one boat slip for a vessel of a maximum size of		Proponent
30 feet at low cost or no cost for public use. To ensure sufficient	Method: Provide at least one low-cost or no-	
availability to the public, berthing at the low-cost or no-cost slip shall	cost boat slip, provide signage, and post	

Mitigation Measures	Timing and Methods	Responsible Parties
be a maximum of 6 hours. Signage shall be provided and availability of the low-cost or no-cost slip shall be posted on the project proponent's website.	availability of low-cost or no-cost slip on project proponent's website	Monitoring and Reporting: Project Proponent
		Verification: District
Transportation, Circulation, and Parking		
MM-TRA-1: Transportation Demand Management Plan. Prior to commencing any construction or demolition activities, the project proponent shall provide a Transportation Demand Management	Timing: Prior to commencing construction or demolition activities and during construction	Implementation: Project Proponent
(TDM) Plan to the San Diego Unified Port District, City of San Diego, and Caltrans for approval that shall limit the number of construction worker trips that travel through the affected intersections during	Method: Prepare and implement a Transportation Demand Management Plan	Monitoring and Reporting: Project Proponent
peak periods to 50 trips. The TDM plan shall incorporate TDM strategies to be implemented during construction, including, but not limited to:	Transportation Demana Management Fran	Verification: District, City of San Diego, Caltrans
• Implementation of a ride-sharing program to encourage carpooling among the workers.		
• Adjustment of work schedules (e.g., arrive before 7 a.m. or after 9 a.m.; leave before 4 p.m. or after 6 p.m.) so that workers do not access the site during peak hours.		
• Provision of offsite parking locations for workers outside of the area with shuttle services to bring them on site, as identified in MM-TRA-7 .		
• Provision of subsidized transit passes for construction workers.		
In addition, for impacts on the I-5 southbound/Boston Avenue intersection during construction, prior to commencing construction or demolition activities, the project proponent shall provide a Traffic Control Plan in accordance with Caltrans policies to the San Diego Unified Port District and Caltrans for approval.		
MM-TRA-2: Signalization of the 15 th Street/F Street Intersection.	Timing: Prior to issuance of occupancy	Implementation: Project
Prior to issuance of occupancy permits, the project proponent shall pay for or directly install a traffic signal at the intersection of 15 th	permits	Proponent
Street and F Street. Installation of the traffic signal will require approval from the City of San Diego. After installation is complete, the project proponent shall provide proof of signalization to the District for verification before issuance of the occupancy permits may occur.	Method: Pay for or directly install a traffic signal at the intersection of 15 th Street and F Street	Monitoring and Reporting: Project Proponent

Mitigation Measures	Timing and Methods	Responsible Parties		
		Verification: District, City of San Diego (approval of the improvement)		
MM-TRA-3: Signalization of the 17th Street/G Street Intersection. Prior to issuance of occupancy permits, the project proponent shall pay for or directly install a traffic signal at the intersection of 17 th	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
Street and G Street. Installation of the traffic signal will require approval from the City of San Diego. After the required payment or installation is complete, the project proponent shall provide proof of	Method: Pay for or directly install a traffic signal at the intersection of 17 th Street and G Street	Monitoring and Reporting: Project Proponent		
completion to the District for verification before issuance of the occupancy permits may occur.		Verification: District, City of San Diego (approval of the improvement)		
MM-TRA-4: Restriping of Northbound Left-Turn Lane at 19th Street/J Street Intersection. Prior to the issuance of occupancy permits, the project proponent shall pay for or directly implement	Timing: Prior to the issuance of occupancy permits	Implementation: Project Proponent		
restriping the northbound left-turn lane into a northbound left-turn and through-share lane at the intersection of 19 th Street and J Street. Restriping lanes will require approval from the City of San Diego and	Method: Pay for or directly implement restriping the northbound left-turn lane into a northbound left-turn and through-share	Monitoring and Reporting: Project Proponent		
coordination with Caltrans. The project proponent shall provide proof of payment or completion to the District for verification before issuance of the occupancy permits may occur	lane at the intersection of 19 th Street and J Street	Verification: District, City of San Diego (approval of the improvement)		
MM-TRA-5: Compliance with San Diego Forward: The Regional Plan, I-5 Operational Improvements. Prior to the issuance of occupancy permits, the project proponent shall enter into a Traffic	Timing: Prior to the issuance of occupancy permits	Implementation: Project Proponent		
Mitigation Agreement with Caltrans for I-5 operational improvements for the segment of northbound I-5 between Grape Street and First Avenue, in compliance with <i>San Diego Forward: The</i>	Method: Coordinate with Caltrans to install I- 5 operational improvements in compliance with <i>San Diego Forward: The Regional Plan</i>	Monitoring and Reporting: Project Proponent		
<i>Regional Plan</i> prepared by SANDAG (SANDAG 2015) and provide proof of this agreement shall be provided to the District. The installation of the I-5 operational improvements is under Caltrans jurisdiction.		Verification: District, Caltrans (approval of the agreement and jurisdictional authority over installation of improvements)		
MM-TRA-6: Maintain Public Access Along Embarcadero Promenade During Construction. The project proponent, in coordination with the District, shall ensure that public access is	Timing: During project construction	Implementation: Project Proponent, District		

Mitigation Measures	Timing and Methods	Responsible Parties		
maintained along the Embarcadero Promenade during construction by providing reduced or replacement points of public access. The project proponent shall install and maintain clear wayfinding and public access signage in publicly visible locations (i.e., not posted	Method: Install and maintain clear wayfinding and public access signage to	Monitoring and Reporting: Project Proponent Verification: District		
inside the hotel) adjacent to and at the public entrances to the reduced or replacement public access areas.				
MM-TRA-7: Provide Offsite Parking and Shuttle Transportation and Require Incentives for Transit Use and Wayfinding Signage for Visitors. Prior to the commencement of any construction activity,	Timing: Prior to construction (parking, incentives for construction workers) and during construction (signage for visitors)	Implementation: Project Proponent		
the project proponent shall provide an offsite parking location at the R.E. Staite property at 2145 East Belt Street, San Diego, CA for construction workers and shall provide shuttle service from the	Method: Provide offsite parking and shuttle transportation and require incentives for	Monitoring and Reporting: Project Proponent		
offsite parking location to the project site and back. In addition, the project proponent shall provide incentives for construction workers to use public transit. Workers who cannot commute by transit and must use personal vehicles shall be required to park at the offsite parking facility. The parking requirements for the workers shall be detailed in their contract with the project proponent. Moreover, during the construction phase, the project proponent shall provide conspicuous on-street signage to direct waterfront visitors to available parking facilities throughout the duration of the construction period	transit use for construction workers and wayfinding signage for visitors	Verification: District		
MM-TRA-8: Implement a Parking Management Plan that Provides Parking Management Strategies. Prior to the issuance of he certificate of occupancy for market-rate hotel operations, the	Timing: Prior to the issuance of the certificate of occupancy for market-rate hotel operations (submittal of Parking	Implementation: Project Proponent		
project proponent shall submit a Parking Management Plan to the District for approval. Upon approval and during project operations, the project proponent shall provide a quarterly report on the Parking	Management Plan) and during project operations (submittal of quarterly reports and implementation of parking management	Monitoring and Reporting: Project Proponent		
Management Plan to the District's Development Services Department, which shall be subject to verification by District staff. The project	strategies)	Verification: District		
proponent shall implement the following parking management strategies and any other strategies identified in the Parking Management Plan to mitigate the projected parking deficiency:	Method: Implementation of a Parking Management Plan that provides parking management strategies			
• <i>Valet Parking</i> – Secure 189 parking spaces (Secured Parking) at one or more offsite parking lots and provide a valet service that allows guests to utilize the secured spots, in order to avoid overflow in the immediate surrounding parking areas. Prior to				

Mitigation Measures	Timing and Methods	Responsible Parties
 commencement of hotel operations, the project proponent will enter into a contract or agreement with a parking operator or equivalent entity securing the Secured Parking and provide the agreement to the District's Development Services Department. The agreement shall be updated and submitted to the District's Development Services Department on an annual basis to provide proof of maintaining said agreement. Until a long-term parking solution is identified for the area, after project construction is complete, on January 15 of each year the project proponent shall submit an annual parking implementation report to the District's Development Services Department for its review, which shall include the following 		
components: A specific peak parking implementation program, broken down into morning, afternoon, and evening timeframes, in its annual submittal.		
Evidence in the form of parking utilization counts that show that sufficient valet spaces are available to meet the project's overflow parking demand from the parking lot or valet vendor. The parking counts shall be conducted at times throughout the day on both weekdays and weekends, during both the summer and winter, and shall be compared to projected and actual valet use at the project site.		
The location of the lots available for valet use and the number of spaces available in each lot based upon recent parking utilization counts.		
The dates, times, and duration of any period the valet was closed due to no available parking spaces.		
In the event that the District establishes a long-term parking program for the area, the project proponent shall contribute a fair share to the analysis, design, and construction and operating costs associated with the program.		
<i>Transportation Network Companies</i> – The project proponent shall coordinate with transportation companies (such as Lyft and Uber) and shall provide designated pick-up/drop-off locations to encourage hotel patrons to utilize this mode of transportation as an alternative to driving their personal vehicles.		

Mitigation Measures	Timing and Methods	Responsible Parties
• <i>Water Taxi</i> – The project proponent shall provide a direct path and wayfinding signage from the Water Taxi Landing to the hotel facilities, and provide brochures and other materials in the hotel lobbies to inform hotel guests of the water taxi service and the destinations that can be reached.		
• <i>Bike Racks</i> – The project proponent shall provide bike racks to accommodate a minimum of 24 bicycle parking spaces on the project site or adjacent thereto on the Embarcadero Promenade to encourage employees/patrons to bike to the proposed project.		
• <i>Bike Share Stations</i> – The project proponent shall coordinate with companies like DECOBIKE to ensure a bike share station is maintained within walking distance (approximately 1,000 feet) to the proposed project. If a third-party bikeshare service cannot be provided, the project proponent shall provide bikes for its guests to rent.		
 Public Transit – On its website, the project proponent shall promote and encourage employees and patrons to utilize alternative modes of transportation as an alternative to driving their personal vehicles. 		
• Public Transit Subsidies for Employees – The project proponent shall provide reimbursement or subsidies for public transportation costs for all employees. The level of transit reimbursements and subsidies shall be based on the standards set forth by the California Air Pollution Control Officers Association resource document <i>Quantifying Greenhouse Gas</i> <i>Mitigation Measures</i> (August 2010) to achieve a reduction in project vehicle miles traveled by 20%.		
 Port of San Diego (formerly Big Bay) Shuttle – The project proponent shall participate in the Port of San Diego Shuttle system as a condition precedent to issuance of a certificate of occupancy for the market-rate hotel or lower-cost visitor-serving hotel, whichever hotel is completed first. Participation may include: collection of fares, advertising, voluntary tenant participation, mandatory tenant participation at the time of issuance of coastal development permits for District tenant projects within the South Embarcadero, and other forms of participation as identified by the District. 		

Mitigation Measures	Timing and Methods	Responsible Parties		
• <i>Airport Shuttle</i> – The project proponent shall provide a shuttle to and from the airport for hotel guests.				
• <i>SANDAG-operated iCommute Program</i> – The project proponent shall participate in SANDAG's iCommute Program.				
• <i>Employee Carpool and Vanpool Parking Spaces</i> – The project proponent shall provide designated parking spaces for employee carpool and vanpool parking spaces onsite.				
 Onsite Employee Alternative Commute Options Coordinator – The project proponent shall designate an onsite employee coordinator to provide inform employees of alternative commute options. 				
MM-C-TRA-1: Signalization of Logan Avenue/I-5 Southbound Off- Ramp . Prior to issuance of occupancy permits, the project proponent shall enter into a Traffic Mitigation Agreement with the California		Implementation: Project Proponent		
Department of Transportation (Caltrans) for the payment of a fair- share contribution of 22 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound	Method: Pay fair-share contribution of 22 percent of the improvement costs to install a traffic signal at the intersection of Logan	Monitoring and Reporting: Project Proponent		
I-5 off-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from Caltrans.	Avenue and the southbound I-5 off-ramp	Verification: District, Caltrans (approval of the improvement)		
MM-C-TRA-2: Signalization of Logan Avenue/I-5 Southbound On- Ramp. Prior to issuance of occupancy permits, the project proponent shall enter into a Traffic Mitigation Agreement with the California	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
Department of Transportation (Caltrans) for the payment of a fair- share contribution of 6 percent of the improvement costs to install a traffic signal at the intersection of Logan Avenue and the southbound	Method: Pay fair-share contribution of 6 percent of the improvement costs to install a traffic signal at the intersection of Logan	Monitoring and Reporting: Project Proponent		
I-5 on-ramp and provide proof of this agreement to the District. Installation of the traffic signal will require approval from Caltrans.	Avenue and the southbound I-5 on-ramp	Verification: District, Caltrans (approval of the improvement)		
MM-C-TRA-3: New Travel Lane on G Street (3 Percent Fair-Share) . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
share contribution of 3 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of 14 th and G Streets, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval	Method: Pay fair-share contribution of 3 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street	Monitoring and Reporting: Project Proponent		

Mitigation Measures	Timing and Methods	Responsible Parties		
from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.		Verification: District, City of San Diego (approval of the improvement)		
MM-C-TRA-4: Signalization of the Intersection of 15th Street and F Street . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair- share contribution of 4 percent of the improvement costs to install a traffic signal at the intersection of 15 th Street and F Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Timing: Prior to issuance of occupancy permits Method: Pay fair-share contribution of 4 percent of the improvement costs to install a traffic signal at the intersection of 15 th Street and F Street			
MM-C-TRA-5: New Travel Lane on G Street (2 Percent Fair Share) . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair- share contribution of 2 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Timing: Prior to issuance of occupancy permits Method: Pay fair-share contribution of 2 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street	Implementation: Project Proponent Monitoring and Reporting: Project Proponent Verification: District, City of San Diego (approval of the improvement)		
MM-C-TRA-6: Signalization of the Intersection of 16th Street and Island Avenue . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair- share contribution of 18 percent of the improvement costs to install a traffic signal at the intersection of 16 th Street and Island Avenue, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Installation of the traffic signal will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project	Timing: Prior to issuance of occupancy permits Method: Pay fair-share contribution of 18 percent of the improvement costs to install a traffic signal at the intersection of 16 th Street and Island Avenue	Implementation: Project Proponent Monitoring and Reporting: Project Proponent Verification: District, City of San Diego (approval of the improvement)		

Mitigation Measures	Timing and Methods	Responsible Parties		
proponent must supply evidence to the District's satisfaction to allow				
the project to proceed to occupancy.				
MM-C-TRA-7: Signalization of the Intersection of 16th Street and K Street . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
share contribution of 9 percent of the improvement costs to install a traffic signal at the intersection of 16 th Street and K Street. Installation of the traffic signal will require approval from the City of	Method: Pay fair-share contribution of 9 percent of the improvement costs to install a	Monitoring and Reporting: Project Proponent		
San Diego. Should this mitigation measure be determined infeasible	traffic signal at the intersection of 16 th Street and K Street			
after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.		Verification: District, City of San Diego (approval of the improvement)		
MM-C-TRA-8: Signalization of 17th Street and G Street Intersection. Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
proponent shall provide proof to the District of payment of a fair- share contribution of 2 percent of the improvement costs to install a traffic signal at the intersection of 17 th Street and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR.	Method: Pay fair-share contribution of 2 percent of the improvement costs to install a traffic signal at the intersection of 17 th Street	Monitoring and Reporting Project Proponent		
Installation of the traffic signal will require approval from the City of San Diego.	and G Street	Verification: District, City of San Diego (approval of the improvement)		
MM-C-TRA-9: Restriping Left-Turn Lane on J Street . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-share contribution of 20	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
percent of the improvement costs to restripe the northbound left- turn lane along J Street at its intersection with 19 th Street into a northbound left-turn and through-shared lane, per the	Method: Pay fair-share contribution of 20 percent of the improvement costs to restripe	Monitoring and Reporting: Project Proponent		
recommendations in the Downtown Mobility Plan Supplemental EIR. Restriping of J Street will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	the northbound left-turn lane along J Street at its intersection with 19 th Street	Verification: District, City of San Diego (approval of the improvement)		
MM-C-TRA-10: New Travel Lane on G Street (1 Percent Fair Share) . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		

Mitigation Measures	Timing and Methods	Responsible Parties	
share contribution of 1 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts occurring at the intersection of 11 th Avenue and G Streets, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Method: Pay fair-share contribution of 1 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street	Monitoring and Reporting: Project Proponent Verification: District, City of San Diego (approval of the improvement)	
MM-C-TRA-11: New Travel Lane on G Street (2 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent	
share contribution of 2 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts	Method: Pay fair-share contribution of 2 percent of the improvement costs to convert the on-street parking to a travel lane on G	Monitoring and Reporting: Project Proponent	
occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Street between 11 th Avenue and 17 th Street	Verification: District, City of San Diego (approval of the improvement)	
MM-C-TRA-12: New Travel Lane on G Street (1 Percent Fair Share). Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent	
share contribution of 1 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts	Method: Pay fair-share contribution of 1 percent of the improvement costs to convert the on-street parking to a travel lane on G	Monitoring and Reporting: Project Proponent	
occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Street between 11 th Avenue and 17 th Street	Verification: District, City of San Diego (approval of the improvement)	

Mitigation Measures	Timing and Methods	Responsible Parties		
MM-C-TRA-13: New Travel Lane on G Street (3 Percent Fair Share) . Prior to issuance of occupancy permits, the project proponent shall provide proof to the District of payment of a fair-	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
share contribution of 3 percent of the improvement costs to convert the on-street parking to a travel lane on G Street between 11 th Avenue and 17 th Street during the PM peak hour for impacts	Method: Pay fair-share contribution of 3 percent of the improvement costs to convert the on-street parking to a travel lane on G	Monitoring and Reporting: Project Proponent		
occurring at the intersection of Park Boulevard and G Street, per the recommendations in the Downtown Mobility Plan Supplemental EIR. Conversion of on-street parking to a travel lane will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	Street between 11 th Avenue and 17 th Street	Verification: District, City of San Diego (approval of the improvement)		
MM-C-TRA-14: Restripe Northbound and Southbound Approaches to Imperial and 16 th Street. Prior to issuance of occupancy permits, the project proponent shall provide proof to the	Timing: Prior to issuance of occupancy permits	Implementation: Project Proponent		
District of payment of a fair-share contribution of 18 percent of the mprovement costs to restripe the northbound and southbound pproaches to the intersection of Imperial Avenue and 16 th Street to	Method: Pay fair-share contribution of 18 percent of the improvement costs to restripe the northbound and southbound approaches	Monitoring and Reporting: Project Proponent		
nclude an exclusive right-turn lane in each direction. Restriping of he intersection will require approval from the City of San Diego. Should this mitigation measure be determined infeasible after consultation with the City of San Diego, the project proponent must supply evidence to the District's satisfaction to allow the project to proceed to occupancy.	to the intersection of Imperial Avenue and 16 th Street to include an exclusive right-turn lane in each direction	Verification: District, City of San Diego (approval of the improvement)		
Jtilities and Energy				
MM-UTIL-1: Upsize the Existing West Harbor Drive Trunk Sewer Main to Accommodate Project-Generated Wastewater. Prior to occupancy and operation of the proposed market-rate hotel tower or	Timing: Prior to occupancy and operation of the proposed market-rate hotel tower or the lower-cost visitor-serving hotel, whichever is	Implementation: Project Proponent		
he lower-cost visitor-serving hotel, whichever is first, the project proponent shall upsize the existing 15-inch trunk sewer main located at the intersection of West Harbor Drive and Park Boulevard to a 30-	first	Monitoring and Reporting: Project Proponent		
nch trunk sewer main. The financing of the upsizing may include a cost-sharing agreement with one or more parties, or any other alternative means of financing to ensure that the upsizing occurs. Alternatively, the project proponent may wait until the upgrades are completed by another entity to operate the market-rate hotel tower	Method: Upsize, or show proof that, the existing West Harbor Drive trunk sewer main has been upsized	Verification: District, City of San Diego (approval of the improvement)		

Attachment 1. Mitigation Monitoring and Reporting Program

Mitigation Measures	Timing and Methods	Responsible Parties
or the lower-cost visitor-serving hotel, whichever is ready for operation first. At no point shall the project proponent operate one or both prior to the trunk sewer main being upsized.		
 MM-C-UTIL-1: Prepare a Waste Management Plan. Prior to issuance of the construction permits, the project proponent shall prepare a waste management plan and submit the plan to the City's Environmental Services Department for approval. The plan shall address the demolition, construction, and operation phases of the proposed project as applicable, and shall include the following. A timeline for each of the main phases of the proposed plan and near-term improvements (construction and operation). 	Timing: Prior to issuance of construction permits, during project construction, during project operationMethod: Prepare and implement a Waste Management Plan	Implementation: Project Proponent Monitoring and Reporting: Project Proponent Verification: District, City of
 Tons of waste anticipated to be generated (construction and operation). Type of waste to be generated (construction and operation). Description of how the proposed project will reduce the 		San Diego (approval of the plan)
 generation of construction and demolition (C&D) debris. 5. Description of how C&D material will be reused on site. 6. The name and location of recycling, reuse, and landfill facilities where recyclables and waste will be taken if not reused on site. 		
 Description of how the C&D waste will be separated if a mixed C&D facility is not used for recycling. Description of how the waste reduction and recycling goals will 		
be communicated to subcontractors.Description of how a "buy recycled" program for green construction products will be incorporated into the proposed		
project. 10. Description of any ISO or other certification, if any.		

Attachment 2 Air Quality and Greenhouse Gas Emissions Memo



Memorandum

То:	San Diego Unified Port District
From:	Matthew McFalls and Sarah Halterman Air Quality and Climate Change Specialists, ICF
Date:	October 28, 2020
Re:	Air Quality and Greenhouse Gas Updates to the <i>Fifth Avenue Landing Project & Port</i> <i>Master Plan Amendment</i> EIR

The purpose of this memorandum is to outline changes to the air quality and greenhouse gas (GHG) analysis for the *Fifth Avenue Landing Project & Port Master Plan Amendment* project (project). Changes to the project description, project timing, and regulatory background have necessitated updates to the air quality and GHG analysis that was included in the Draft Environmental Impact Report (Draft EIR) for the Final EIR. Below is a summary of the analysis changes made to address the project changes, as well as updates to key regulatory information since the publication of the Draft EIR. Changes to the project description are based on conversations with District staff and counsel.

Overview of Updates

The below section provides an overview of the changes incorporated into the analysis. The changes include changes to the project description, changes to the regulatory background, including both CEQA case law and applicable laws and regulations, as well emission inventorying updates, specifically related to emission factors. Operational emissions modeling accounts for the new opening year of 2025.

Project Description

Changes to the proposed project require analysis to determine if the proposed changes, including increases in square footage for the market-rate hotel and retail space, as well as decreases in the square footage for the lower-cost, visitor serving hotel and water transportation center, would affect the impacts and mitigation measures from the Draft EIR. For example, the Draft EIR includes a potential air quality impact on volatile organic compounds (VOC) due to painting (architectural coatings), specifically during hotel construction. Mitigation in the form of low-VOC coatings was proposed to mitigate emissions below thresholds. The amount of VOCs emitted during painting is based on the amount (square footage) of painting that could occur in a given day. Increasing the

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total hotel square footage could increase VOC emissions under both unmitigated and mitigated conditions. This warranted further analysis.

The change in square-footage of project elements would also result in a change in utility use during operation, including electricity, natural gas, indoor and outdoor water use, and solid waste. The updated utility usage was reported in the *Revised EIR Reporting Needs - Energy, Water, Noise Memorandum*, and *Fifth Avenue Landing—Estimated Waste Calculations,* provided by the Project Architect.^{1,2} Overall, due to the changes to square footage, there would be a decrease in electricity, water use, and solid waste generation, and an increase in natural gas use, with these project changes, which results in revisions to the air quality and GHG emission calculations. These updated emissions estimates are summarized below.

Regulatory Background

Several relevant elements of the existing conditions have changed. In Chapter 4.2, *Air Quality and Health Risk*, these updates include minor changes to the federal and state attainment statuses, and more recent ambient background concentrations of criteria air pollutants in proximity to the project site. Given that the significance of emissions related to project implementation require context of existing air quality conditions, these changes were necessary to include with the Final EIR. In addition, since 2017, case law relevant to regional emissions of criteria air pollutants (*Sierra Club v. County of Fresno* [226 Cal.App.4th 704]) has necessitated the addition of specific background on the human health and environmental effects of criteria air pollutants.

Several Air Quality and GHG related regulations have been implemented at the state and federal level. As summarized in Chapter 4.2, *Air Quality and Health Risk* and Chapter 4.6, *Greenhouse Gas Emissions and Climate Change*, of the Final EIR, the National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency have amended the fuel efficiency standards for passenger cars and light trucks and established new standards (SAFE Vehicles Rule). These changes have implications for mobile emissions of both criteria air pollutants and GHGs during operation of the proposed project. The analysis includes SAFE adjustment factors produced by the California Air Resources Board (CARB). Chapter 4.2, *Air Quality and Health Risk* also includes a discussion of Assembly Bill 617.

Chapter 4.6, *Greenhouse Gas and Climate Change*, of the Final EIR includes information on the 2017 Climate Change Scoping Plan Update, which was adopted by CARB after the completion of the Draft EIR. Because this plan formally adopts CARB's plan that addresses strategies for meeting the statewide 2030 GHG emissions reduction goal, the update is relevant to the analysis of the project's consistency with regulatory programs designed to reduce GHG emissions. This plan was only in draft form at the time of the Draft EIR analysis.

Additionally, in Chapter 4.6, one state regulation, Senate Bill (SB) 100, and one Executive Order (EO), EO B-55-18, were adopted to support the state's goal of carbon neutrality by 2045. These new goals accelerate the state's GHG reduction efforts beyond what was assumed in the Draft EIR.

¹ Glumac. 2020. Revised EIR Reporting Needs - Energy, Water, Noise Memorandum. September 4.

² Lerch Bates. 2020. Fifth Avenue Landing—Estimated Waste Calculations. October 14.

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Modeling Changes

The opening day year assumed in the Draft EIR was 2021. Given the scheduling delays, the opening day is now assumed to be 2025. Operational emission estimates have been revised to assume a 2025 opening day. Modeling reflect lower emission rates for this later date (2025 versus 2021), particularly for electricity consumption and motor vehicles, which are assumed to emit less (on a per kilowatt-hour or per mile traveled) over time.

On the electricity side, the GHG emission factor for San Diego Gas & Electric (SDG&E) has decreased due to further implementation of renewable energy goals. The analysis in the Draft EIR was based on the assumption that the opening day (2021) emission factor would be 241 grams per kilowatt hour (g/kwh) of electricity consumed. The analysis in the Final EIR is based on the assumption that the opening day (2025) emission factor would be lower, at 195 g/kwh. The decrease in GHG emissions intensity from electricity consumption results in a change (decrease) in emissions associated with project components that consume electricity, including hotel and other landside uses, as well as cold ironing of yachts at berth.

For motor vehicles, the SAFE rule mentioned above went into effect in 2019. This rule increases emission rates beyond what is assumed in CARB's modeling. Adjustment factors from CARB were applied to the updated emissions modeling for opening year 2025, and future years 2030 and 2050.

Analysis Update

Air Quality

As discussed above, the changes to the square-footage of several project elements would have implications for the emissions of air quality pollutants during construction. The new estimate of construction emissions prior to mitigation is outlined in Table 1, which is similar to Table 4.2-9 of the EIR.

As shown, emissions during construction would be above the VOC threshold prior to mitigation. Mitigation measure **MM-AQ-2**, which requires use of low-VOC coatings, would still apply, and would be necessary to reduce VOC emissions. As shown in Table 2 (EIR Table 4.2-11), construction-related VOC emissions would be reduced to below the VOC threshold after implementation of mitigation. While VOC emissions during unmitigated and mitigated conditions would be slightly higher under the revised project, the impacts are unchanged from the Draft EIR. As such, consistent with the findings in the Draft EIR, construction of the revised project would be below thresholds and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

As shown in Table 3 (EIR Table 7-3), construction-related emissions associated with Alternative 6 would be above the VOC threshold prior to mitigation. Implementation of **MM-AQ-2** would be necessary to reduce VOC emissions. As shown in Table 4 (EIR Table 7-4), construction-related VOC emissions would be reduced to below the VOC threshold after implementation of mitigation. Consistent with the findings in the Draft EIR, after mitigation, construction of Alternative 6 would be below thresholds and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

Construction Dhoos	VOC	NO	60	60	PM10	PM10	PM10	PM2.5	PM2.5	PM2.5
Construction Phase	VOC	NOx	CO	SOx	Exhaust	Dust	Total	Exhaust	Dust	Total
Phase 1: Mobilization and Site Preparation										
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas										
Excavation and Foundation	5	83	31	2	2	16	18	2	6	7
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	79	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	7	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	37	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	129	123	163	<1	3	29	32	3	9	12
San Diego County SLTs	75	250	550	150			100			55
Exceed Significant Threshold?	Yes	No	No	No			No			No

Table 1 (EIR 4.2-9). Estimate of Construction Emissions Prior to Mitigation (pounds per day)

Table 2 (EIR Table 4.2-11). Estimate of Construction Emissions after	Mitigation	(pounds per	· dav)

Construction Phase	VOC	NOx	CO	SOx	PM10 Exhaust	PM10	PM10	PM2.5 Exhaust	PM2.5	PM2.5
Phase 1: Mobilization and Site Preparation	VUL	NUX	ιυ	50x	Exhaust	Dust	Total	Exhaust	Dust	Total
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas	-	10	0		-			-	-	
Excavation and Foundation	5	83	31	2	2	16	18	2	6	7
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	24	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	2	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	13	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	46	123	163	1<1	3	29	32	3	9	12
San Diego County SLTs	75	250	550	150	-	-	100	-	-	55
Exceed Significant Threshold?	No	No	No	No	-	-	No	-	-	No
Source: ICF Emissions Modeling .										

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Table 3 (EIR Table 7-3). Estimate of Construction Emissions Under Alternative 6 Below Grade Parking Alternative Prior to Mitigation (pounds per day)

Construction Phase	VOC	NOx	CO	SOx	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total
Phase 1: Mobilization and Site Preparation	VUL	NOX	tu	30x	Exilausi	Dust	TOLAT	Exilausi	Dust	Total
*	1	19	8	<1	1	11	12	1	4	5
Mobilization/Demolition	1	19	0 6	<1	<1	2	3	<1	4	1
Dewatering/Shoring	1	18	0	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas	0	207		2	2	20	42	2	10	14
Excavation and Foundation	8	206	44	3	3	39	42	3	12	14
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	79	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	7	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	38	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	129	247	163	1	4	44	48	4	13	17
San Diego County SLTs	75	250	550	150			100			55
Exceed Significant Threshold?	Yes	No	No	No			No			No
Source: ICF Emissions Modeling .										

Source: ICF Emissions Modeling.

Table 4 (EIR Table 7-4). Estimate of Construction Emissions Under the Below Grade Parking Alternative after Mitigation (pounds per day)

		NO	60	00	PM10	PM10	PM10	PM2.5	PM2.5	PM2.5
Construction Phase	VOC	NOx	CO	SOx	Exhaust	Dust	Total	Exhaust	Dust	Tota
Phase 1: Mobilization and Site Preparation										
Mobilization/Demolition	1	19	8	<1	1	11	12	1	4	5
Dewatering/Shoring	1	18	6	<1	<1	2	3	<1	1	1
Phase 2: Market-Rate Hotel Tower & Meeting Areas										
Excavation and Foundation	8	185	42	3	3	35	38	2	11	13
Structural Frame	2	18	18	1	1	4	5	1	1	2
Exterior Closure and Roofing	1	9	13	<1	<1	3	3	<1	1	1
Interior Rough-In (Elev./MEP/Framing)	<1	1	5	<1	<1	5	5	<1	1	1
Interior Construction/Finishes	24	8	10	<1	<1	2	2	<1	<1	1
MEP Systems	1	8	14	<1	<1	5	5	<1	1	2
Phase Completion Work	0	1	5	<1	<1	5	5	<1	1	1
Phase 3: Lower-Cost Visitor-Serving Hotel										
Foundations	1	8	6	<1	<1	1	1	<1	<1	<1
Structural Frame	1	4	5	<1	<1	1	1	<1	<1	<1
Exterior Closure	<1	5	6	<1	<1	<1	1	<1	<1	<1
Interior Construction/Finishes	2	6	7	<1	<1	1	1	<1	<1	<1
Phase Completion Work	0	6	7	<1	<1	1	1	<1	<1	<1
Phase 4: Site Work										
Offsite Demolition/Grading/Utilities	2	19	15	<1	1	8	8	1	4	4
Site Improvements	13	32	31	<1	2	3	4	2	1	2
Phase 5: Waterside Work										
Marina Construction	5	14	64	<1	<1	<1	<1	<1	<1	<1
Maximum Daily Construction	46	225	163	1	4	40	44	4	12	16
San Diego County SLTs	75	250	550	150	-	-	100	-	-	55
Exceed Significant Threshold?	No	No	No	No	-	-	No	-	-	No

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Table 5 summarizes operational emission estimates reflecting changes to the project description and the later opening day. Updates to operational modeling include use of SAFE Rule adjustment factors for mobile emissions, 2025 emission factor assumptions for vehicles and electricity, and updated utility consumption. As shown, emissions would be below thresholds prior to mitigation. Thus, similar to the Draft EIR, operation of the project with the proposed changes would not result in a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.

Element	Source	VOC	NOx	CO	SOx	PM10	PM2.5
	Visitors (Vehicles)	13	36	99	<1	35	10
	Natural Gas	1	11	9	<1	1	1
Market-Rate Hotel Tower	Consumer Products	20	0	0	<1	<1	<1
	Architectural Coatings	3	0	0	<1	<1	<1
	Subtotal	37	47	108	<1	36	10
	Visitors (Vehicles)	1	3	7	<1	3	1
	Natural Gas	0	1	1	<1	<1	<1
Lower-Cost Visitor- Serving Hotel	Architectural Coatings	1	<1	<1	<1	<1	<1
Serving noter	Consumer Products	<1	<1	<1	<1	<1	<1
	Subtotal	3	3	8	<1	3	1
	Visitors (Vehicles)	<1	1	3	<1	1	<1
	Natural Gas	<1	3	2	<1	<1	<1
	Consumer Products	1	<1	<1	<1	<1	<1
Marina	Architectural Coatings	<1	<1	<1	<1	<1	<1
	Ferry Service	2	13	12	<1	<1	<1
	Recreational Boating	9	125	34	<1	6	6
	Subtotal	14	142	52	<1	8	7
Public Open	Visitors (Vehicles)	<1	<1	1	<1	<1	<1
Space	Subtotal	<1	<1	1	<1	<1	<1
Existing Plus I	Project Daily	53	192	164	1	44	17
Existing Daily ¹		6	44	19	<1	3	2
Net New Over I	Existing	47	148	145	1	42	15
Significance Th	reshold	75	250	550	150	100	55
Exceed Significe	ant Threshold?	No	No	No	No	No	No

Table 5 (EIR Table 4.2-10). Estimate of Operational Emissions Prior to Mitigation (pounds per day)

Source: ICF Emissions Modeling.

¹ Existing daily emissions shown in Table 4.2-6 of the EIR.

Notes: Totals may not add exactly due to rounding.

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Greenhouse Gas Emissions

The changes to the project description would have only minor implications on construction GHG emissions. GHG emissions from construction are minor and analyzed together with operational emissions. Since there were no impacts from construction GHG emissions in the Draft EIR, construction GHG emissions estimates were not revised. The focus herein is on operational GHG estimates.

Landside

Table 6 (EIR Table 4.2-9) summarizes the revised landside GHG emission estimates. Updates to the modeling that affect GHG emission estimates include the SAFE Rule adjustment factors for mobile emissions, 2025 emission factor assumptions for vehicles and electricity, and updated utility usage estimates.

As shown in Table 6, similar to the analysis in the Draft EIR, operation of the project's landside components with the proposed changes would not exceed the significance threshold for Opening Year prior to mitigation, but would exceed the targets for future years 2030 and 2050, prior to mitigation. The same mitigation measures (**MM-GHG-1** through **MM-GHG-5**) from the Draft EIR would be necessary to reduce operational GHG emissions to below thresholds. As shown in Table 7, after implementation of these mitigation measures, landside GHG emissions during operation of the proposed project would be below the efficiency targets for future years 2030 and 2050. However, as with the analysis in the Draft EIR, the impact for years 2030 and 2050 would remain significant and unavoidable as it cannot be stated with certainty that the project would result in emissions that would represent a fair share of the requisite reductions to achieve post-2020 targets.

As shown in Table 8 (EIR Table 7-6), similar to the analysis in the Draft EIR, Alternative 6 operational emissions would be similar to the proposed project and would meet the efficiency target for 2025 after including site design (VMT) reductions, but would exceed the efficiency target for future years 2030 and 2050 prior to mitigation. The same mitigation measures necessary for the proposed project would be necessary to reduce operational GHG emissions associated with Alternative 6. As shown in Table 9 (EIR Table 7-7), operational emissions after mitigation, which would meet the efficiency targets for future years 2030 and 2050. However, as with the proposed project and the analysis in the Draft EIR, the impact of Alternative 6 emissions in years 2030 and 2050 would remain significant and unavoidable as it cannot be stated with certainty that the project would result in emissions that would represent a fair share of the requisite reductions to achieve post-2020 targets.

Element	Source	2025	2030	2050
	Visitors (Vehicles)	6,305	5,592	5,225
	Electricity	2,006	1,738	0
Market-Rate	Natural Gas	2,253	2,253	2,253
Hotel Tower	Water	104	90	0
	Wastewater	1	1	1
	Solid Waste	209	209	209

Table 6 (EIR Table 4.6-9). Estimate of Hotel-Related GHG Emissions with State Measures (metric tons per year)

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Element	Source	2025	2030	2050
	Subtotal	10,878	9,883	7,689
	Visitors (Vehicles)	189	168	157
	Electricity	139	121	0
	Natural Gas	154	154	154
Lower-Cost	Water	9	8	0
Visitor-Serving Hotel	Wastewater	<1	<1	<1
	Solid Waste	24	24	24
	Subtotal	517	475	335
	Visitors (Vehicles)	214	190	177
	Electricity	3	3	0
	Natural Gas	562	562	562
Marina (Buildinga Only) ²	Water	<1	<1	<1
(Buildings Only) ²	Wastewater	<1	<1	<1
	Solid Waste	93	93	93
	Subtotal	873	848	832
Dublis On an Grand	Visitors (Vehicles)	84	74	69
Public Open Space	Subtotal	84	74	69
Total Operations		12,351	11,281	8,926
Amortized Construction		208	208	208
Reductions	VMT Reductions from Site Location and Other			
	Project Features	-1,825	-1,610	-1,484
Total Project Landsid		10,735	9,879	7,650
Existing Landside Annu	lal ¹	625	625	625
Net New Over Existing		10,110	9,255	7,025
Service Population (roo	oms)	1,071	1,071	1,071
Project Efficiency (MT/	room)	9.44	8.6	6.6
Significance Threshold	(MT/room)	9.54	6.3	1.4
Exceed Target?		No	Yes	Yes

Source: ICF Emissions Modeling.

¹ Existing GHG emissions shown in EIR Table 4.6-6.

 2 Marina electricity consumption associated with recreating boating cold ironing is included in the waterside calculations in EIR Table 4.6-10.

Notes: Totals may not add exactly due to rounding.

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Element	Source	2025	2030	2050
	Visitors (Vehicles)	6,305	5,592	5,225
	Electricity	2,006	1,738	0
	Natural Gas	2,253	2,253	2,253
Market-Rate Hotel Tower	Water	104	90	0
noter rower	Wastewater	1	1	1
	Solid Waste	209	209	209
	Subtotal	10,878	9,883	7,689
	Visitors (Vehicles)	189	168	157
	Electricity	139	121	0
	Natural Gas	154	154	154
Lower-Cost	Water	9	8	0
Visitor-Serving Hotel	Wastewater	<1	<1	<1
	Solid Waste	24	24	24
	Subtotal	517	475	335
	Visitors (Vehicles)	214	190	177
	Electricity	3	3	0
	Natural Gas	562	562	562
Marina (Buildings Only) ¹	Water	<1	<1	<1
Ulliy	Wastewater	<1	<1	<1
	Solid Waste	93	93	93
	Subtotal	873	848	832
Dublia Quant Crana	Visitors (Vehicles)	84	74	69
Public Open Space	Subtotal	84	74	69
Total Operations		12,351	11,281	8,926
Amortized Construction	1	208	208	208
	VMT Reductions from			
	Design	-1,825	-1,610	-1,484
Reductions ²	MM-GHG-2/3 CAP and Sustainability Measures	-	-271	-252
	MM-GHG-4 PV/Offsets		-2,276	-5,280
Total Project Landsid	e	10,735	7,332	2,118
Existing Landside Annı	ıal ³	625	625	625
Net New Over Existing		10,110	6,708	1,493
Service Population (roo	oms)	1,071	1,071	1,071
Project Efficiency (MT/	′room)	9.44	6.3	1.4
Significance Threshold	(MT/room)	9.54	6.3	1.4
Exceed Target?		No	No	No

Table 7 (EIR Table 4.6-13). Estimate of Project-Related Landside GHG Emissions after Mitigation (metric tons per year)

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Element	Source	2025	2030	2050

Source: ICF Emissions Modeling .

¹ Marina electricity consumption associated with recreating boating cold ironing is included in the waterside calculations in EIR Table 4.6-14.

² VMT Reductions from Design are the same as shown in EIR Table 4.6-9.

³ Existing GHG emissions are shown in EIR Table 4.6-6.

Note: Totals may not add exactly due to rounding.

Table 8 (EIR Table 7-6). Estimate of Alternative 6 Landside GHG Emissions with State Measures (metric tons per year)

Element		2025	2030	2050
Total Operations		12,351	11,281	8,936
Amortized Cor	istruction	303	303	303
Reductions	VMT Reductions from Site Location and other project features	-1,825	-1,610	-1,484
Total Project	Landside	10,829	9,974	7,744
Existing Lands	side Annual ¹	625	625	625
Net New Over	Existing	10,204	9,349	7,119
Service Popula	ation (rooms)	1,071	1,071	1,071
Project Efficie	ncy (MT/room)	9.53	8.7	6.6
Significance T	hreshold (MT/room)	9.54	6.3	1.4
Exceed Target	?	No	Yes	Yes

Table 9 (EIR Table 7-7). Estimate of Alternative 6 Landside GHG Emissions after Mitigation (metric tons per year)

Element		2025	2030	2050
Total Operation	Fotal Operations		11,281	8,936
Amortized Con	struction	303	303	303
	VMT Reductions from Design	-1,825	-1,610	-1,484
Reductions ²	MM-GHG-2/3 CAP and Sustainability Measures	-	-271	-252
	MM-GHG-4 PV/Offsets		-2,370	-5,374
Total Project	Landside	10,829	7,332	2,118
Existing Lands	ide Annual ³	625	625	625
Net New Over	Existing	10,204	6,708	1,493
Service Popula	tion (rooms)	1,071	1,071	1,071
Project Efficier	ncy (MT/room)	9.53	6.3	1.4
Significance Th	nreshold (MT/room)	9.54	6.3	1.4
Exceed Target?)	No	No	No

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Waterside

Table 10 (EIR Table 4.6-10) summarizes the waterside revised GHG emission estimates associated with operation of the project in Opening Year 2025 and future years 2030 and 2050. Updates to the waterside GHG emission estimates are limited to the electricity emission factor related to cold ironing of yachts at berth, as that emission factor is different for the 2025 operational year than assumed for the 2021 operational year in the Draft EIR. This lowers GHG emissions estimates for yachts while at berth. Emission estimate for other recreational boating modes (e.g., travel within the bay) and ferry activity are unchanged from the Draft EIR.

As shown in Table 10, prior to mitigation, waterside GHG emissions associated with the marina expansion under would still exceed percent reductions for Opening Year 2025 (**Impact-GHG-1**), and for future years 2030 and 2050 (**Impact-GHG-2**), which is consistent with the analysis in the Draft EIR. To address this, mitigation measures **MM-GHG-1** through **MM-GHG-5** from Draft EIR would be necessary to reduce waterside operation GHG emissions to below the relevant percent reductions. As shown in Table 11, after implementation of the relevant mitigation measures, waterside GHG emissions during operation of the proposed project would be below the reduction targets for Opening Year 2025, and future years 2030 and 2050. For GHG emissions in Opening Year 2025, the impact related to operational GHG emissions (**Impact-GHG-1**) would be less than significant after mitigation. However, as with landside operations, the impact related to waterside operational GHG emissions in future years 2030 and 2050 (**Impact-GHG-2**), would remain significant and unavoidable as it cannot be stated with certainty that the project would result in emissions that would represent a fair share of the requisite reductions to achieve post-2020 targets.

Element	Source	2025	2030	2050
	Ferry Service	539	539	539
Business as Usual 1	Recreational Boating	7,315	7,315	7,315
	Waterside BAU Total	7,854	7,854	7,854
	Ferry Service	287	287	287
Project Conditions ²	Recreational Boating	4,833	3,968	919
	Waterside Project Total	5,120	4,256	1,206
Percentage Reduction wit	h Project Design	35%	46%	85%
Reduction Target		53%	66%	90%
Exceed Significant Thresho	old?	Yes	Yes	Yes

Table 10 (EIR Table 4.6-10). Estimate of Project-Related Waterside GHG Emissions at the Project Site with Design Features and State Measures (metric tons per year)

¹ BAU includes the larger existing ferry, the same BAU electricity emission factor assumed in the CAP, and no LCFS reductions. BAU is specific to the site and geographic location of the Port.

² Project conditions are specific to the site and geographic location of the Port, and include the smaller new ferry, estimated SDG&E emission factor in 2025, estimated SDG&E emission factor in 2030 (60 percent RPS) and 2050 (100% carbon free) per SB 100, and LCFS adjustments (similar to the 2020 CAP).

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Element	Source	2025	2030	2050
	Ferry Service	539	539	539
Business as Usual ¹	Recreational Boating	7,315	7,315	7,315
	Waterside BAU Total	7,854	7,854	7,854
	Ferry Service	287	287	287
Project Conditions ²	Recreational Boating	4,833	3,968	919
	Waterside Project Subtotal	5,120	4,256	1,206
Reductions	MM-GHG-3 PV/Offsets	-1,411	-1,575	-423
	Waterside Project Total	3,710	2,680	784
Percentage Reduction wit	h Project Design and Mitigation	53%	66%	90%
Reduction Target		53%	66%	90%
Exceed Target?		No	No	No

Table 11 (EIR Table 4.6-14). Estimate of Project-Related Waterside GHG Emissions at the Project Site after Mitigation (metric tons per year)

¹ BAU includes the larger existing ferry, the same BAU electricity emission factor in the CAP, and no LCFS reductions. BAU is specific to the site and geographic location of the Port.

² Project conditions are specific to the site and geographic location of the Port, and include the smaller new ferry, projected SDG&E emission factor in 2025, estimated SDG&E emission factor in 2030 (60 percent RPS) and 2050 (100% carbon free) per SB 100, and LCFS adjustments (similar to the 2020 CAP).

Greenhouse Gas Targets

Hotel Efficiency Metric

2006 and 2020 SF, Rooms, and MT from Lodging/Hotels from CAP and Appendices 2030 SF, Rooms, and MT extrapoled linearly from 2020 MT/Room calculated

	Metrics i	n CAP	CAP Lodging	Calculated	Efficiency	Relative to
	sf	rooms	MTCO2e	MT/Room	Performance	Base Case
2006 base	5,082,371	4,793	137,429	28.67	-	-
2020 bau	9,382,830	8,927	249,852	27.99	-	2%
2020 target	9,382,830	8,927	124,004	13.89	50%	52%
2021 bau	9,690,006	9,222	257,882	27.96	-	2%
2021 target	9,690,006	9,222	119,043	12.91	54%	55%
2025 bau	10,918,708	10,403	290,003	27.88	-	3%
2025 target	10,918,708	10,403	99,203	9.54	66%	67%
2030 BAU	12,454,586	11,880	330,154	27.79	-	3%
2030 target	12,454,586	11,880	74,402	6.26	77%	78%
2050 BAU	18,598,099	17,786	490,758	27.59	-	4%
2050 target	18,598,099	17,786	24,801	1.39	95%	95%

Operation Emission Calculation Sheets

Boating Calc

			GHG Emis	sions Summar	y by Category and	d Activity Type	2	Percent F	Reductions
Catagory	Activity	2006	2020 BAU	2020 with state	2035 with state	2050 with state	2020 target (1990)	Below Existing	Below 2020 BAU
Category	Activity								
Port Operations		37,164	38,930	30,044	27,411	27,097	33,533	10%	14%
Maritime	Ocean Going Vessels	55,162	72,786	62,365	100,018	109,280	49,773	10%	32%
	Recreational Boating	80,441	118,252	106,391	120,247	132,252	72,583	10%	39%
	Other Terminal Activity	89,242	109,859	92,000	119,751	124,213	80,524	10%	27%
	Total Maritime	224,845	300,897	260,756	340,016	365,745	202,880	10%	33%
Other	Industrial	137,426	138,258	131,725	130,960	130,869	124,001	10%	10%
	Shipbuilding	123,725	123,545	90,187	88,776	88,608	111,638	10%	10%
	Lodging	137,429	249,852	197,750	186,684	185,365	124,004	10%	<i>50%</i>
	Other	165,840	188,217	145,025	133,331	131,945	149,639	10%	20%
	Total Other	564,420	699,872	564,687	539,751	536,787	509,282	10%	27%
	TOTAL	826,429	1,039,699	855,487	907,178	929,629	745,695	10%	28%
Remove LC	FS 10	1% (CAP only present	s emissions beyond	d 2020 with LCFS r	eductions. Removed	for purposes of e	stimating a true BAU)		
rate per yr, N	/IT 93	35							
	for FAL								
		Recreational	Boating BAU				Targets		
20	16 2020	2035	2050	2025	2030 (interpolated)	2020 1990 levels	2025	2030 40% below 1990	2050 80% below 1990
114,513	118,252	132,272	145,477	122,925	127,598	72,583	58,066	43,550	14,517

reduction target

-39%

-53%

-66%

-90%

ADT	lookup c	ol 5				ĺ						Pounds per Day	Y						Metric tons	per year	
Element	Source	Year	ADT	VMT per	VMT/day	VMT/year	ROG	NOX	со	PM10E	PM2.5E	PM10 D	PM2.5 D	SO2	CO2	CH4	N2O	CO2	CH4	N2O	CO2e
Marina	Motor Vehicle	2016	48	5.95	286	104,308	0.16	0.45	1.27	0.04	0.02	0.04	0.02	0.00	297.16	0.02	0.02	49.20	0.00	0.00	50.20
Hotel Tower	Motor Vehicle	2025	7587	5.95	45,170	16,487,136	13.36	35.67	97.73	5.28	2.25	29.14	7.31	0.35	37593.94	1.83	1.48	6224.10	0.30	0.25	6304.88
Low-cost Hotel	Motor Vehicle	2025	228	5.95	1,356	494,898	0.40	1.07	2.93	0.16	0.07	0.87	0.22	0.01	1128.57	0.05	0.04	186.85	0.01	0.01	189.27
Marina	Motor Vehicle	2025	200	7.82	1,565	571,123	0.42	1.07	3.17	0.18	0.08	1.01	0.25	0.01	1277.75	0.06	0.04	211.55	0.01	0.01	214.00
Park	Motor Vehicle	2025	94	6.43	604	220,504	0.17	0.46	1.28	0.07	0.03	0.39	0.10	0.00	499.88	0.02	0.02	82.76	0.00	0.00	83.80
Retail	Motor Vehicle	2025	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Motor Vehicle	2030	7587	5.95	45,170	16,487,136	11.02	31.31	79.73	5.19	2.17	29.14	7.31	0.31	33345.30	1.59	1.30	5520.69	0.26	0.22	5591.53
Low-cost Hotel	Motor Vehicle	2030	228	5.95	1,356	494,898	0.33	0.94	2.39	0.16	0.07	0.87	0.22	0.01	1001.03	0.05	0.04	165.73	0.01	0.01	167.86
Marina	Motor Vehicle	2030	200	7.82	1,565	571,123	0.35	0.93	2.59	0.18	0.08	1.01	0.25	0.01	1132.11	0.05	0.04	187.43	0.01	0.01	189.56
Park	Motor Vehicle	2030	94	6.43	604	220,504	0.14	0.40	1.05	0.07	0.03	0.39	0.10	0.00	443.24	0.02	0.02	73.38	0.00	0.00	74.29
Retail	Motor Vehicle	2030	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Motor Vehicle	2050	7587	5.95	45,170	16,487,136	7.59	30.49	61.89	5.13	2.09	29.12	7.29	0.29	31147.89	1.42	1.27	5156.88	0.24	0.21	5225.35
Low-cost Hotel	Motor Vehicle	2050	228	5.95	1,356	494,898	0.23	0.92	1.86	0.15	0.06	0.87	0.22	0.01	935.07	0.04	0.04	154.81	0.01	0.01	156.87
Marina	Motor Vehicle	2050	200	7.82	1,565	571,123	0.24	0.89	2.02	0.18	0.07	1.01	0.25	0.01	1054.60	0.05	0.04	174.60	0.01	0.01	176.62
Park	Motor Vehicle	2050	94	6.43	604	220,504	0.10	0.39	0.81	0.07	0.03	0.39	0.10	0.00	413.68	0.02	0.02	68.49	0.00	0.00	69.36
Retail	Motor Vehicle	2050	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Electricity	lookup co	l 6				Ροι	unds per Da	у		Metric tons	per year	
Element	Source	yr	Kwh/year	kwh/day		CO2	CH4	N2O	CO2	CH4	N2O	CO2e
Marina	Electricity	2016	1,342,558	3,678	2016Electricity	2069.49	0.25	0.05	342.63	0.04	0.01	345.94
Hotel Tower	Electricity	2025	10,114,312	27,710	2025Electricity	11923.18	0.00	0.00	1974.02	0.00	0.00	1974.02
Low-cost Hotel	Electricity	2025	714,493	1,958	2025Electricity	842.27	0.00	0.00	139.45	0.00	0.00	139.45
Marina	Electricity	2025	16,995	47	2025Electricity	20.03	0.00	0.00	3.32	0.00	0.00	3.32
Park	Electricity	2025	0	0	2025Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Electricity	2025	165,186	453	2025Electricity	194.73	0.00	0.00	32.24	0.00	0.00	32.24
Hotel Tower	Electricity	2030	10,114,312	27,710	2030Electricity	10331.89	0.00	0.00	1710.56	0.00	0.00	1710.56
Low-cost Hotel	Electricity	2030	714,493	1,958	2030Electricity	729.86	0.00	0.00	120.84	0.00	0.00	120.84
Marina	Electricity	2030	16,995	47	2030Electricity	17.36	0.00	0.00	2.87	0.00	0.00	2.87
Park	Electricity	2030	0	0	2030Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Electricity	2030	165,186	453	2030Electricity	168.74	0.00	0.00	27.94	0.00	0.00	27.94
Hotel Tower	Electricity	2050	10,114,312	27,710	2050Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-cost Hotel	Electricity	2050	714,493	1,958	2050Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marina	Electricity	2050	16,995	47	2050Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Electricity	2050	0	0	2050Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Electricity	2050	165,186	453	2050Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Natural Gas	lookup col	7								Pounds per Da	ау						Metric tons	per year	
Element	Source	yr	kbtu/yr	kbtu/day	ROG	NOX	со	PM10E	PM2.5E	PM10 D	PM2.5 D	SO2	CO2	CH4	N2O	CO2	CH4	N2O	CO2e
Marina	Natural Gas	2016	2,403,608	6,585.2	0.07	0.65	0.54	0.05	0.05	0.00	0.00	0.00	774.73	0.01	0.01	128.27	0.00	0.00	129.03
Hotel Tower	Natural Gas	2025	41,840,598	114,631.8	1.24	11.24	9.44	0.85	0.85	0.00	0.00	0.07	13486.09	0.26	0.25	2232.77	0.04	0.04	2246.04
Low-cost Hotel	Natural Gas	2025	2,876,125	7,879.8	0.08	0.77	0.65	0.06	0.06	0.00	0.00	0.00	927.03	0.02	0.02	153.48	0.00	0.00	154.39
Marina	Natural Gas	2025	10,474,609	28,697.6	0.31	2.81	2.36	0.21	0.21	0.00	0.00	0.02	3376.18	0.06	0.06	558.97	0.01	0.01	562.29
Park	Natural Gas	2025	0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Natural Gas	2025	136,691	374.5	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	44.06	0.00	0.00	7.29	0.00	0.00	7.34
Hotel Tower	Natural Gas	2030	41,840,598	114,631.8	1.24	11.24	9.44	0.85	0.85	0.00	0.00	0.07	13486.09	0.26	0.25	2232.77	0.04	0.04	2246.04
Low-cost Hotel	Natural Gas	2030	2,876,125	7,879.8	0.08	0.77	0.65	0.06	0.06	0.00	0.00	0.00	927.03	0.02	0.02	153.48	0.00	0.00	154.39
Marina	Natural Gas	2030	10,474,609	28,697.6	0.31	2.81	2.36	0.21	0.21	0.00	0.00	0.02	3376.18	0.06	0.06	558.97	0.01	0.01	562.29
Park	Natural Gas	2030	0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Natural Gas	2030	136,691	374.5	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	44.06	0.00	0.00	7.29	0.00	0.00	7.34
Hotel Tower	Natural Gas	2050	41,840,598	114,631.8	1.24	11.24	9.44	0.85	0.85	0.00	0.00	0.07	13486.09	0.26	0.25	2232.77	0.04	0.04	2246.04
Low-cost Hotel	Natural Gas	2050	2,876,125	7,879.8	0.08	0.77	0.65	0.06	0.06	0.00	0.00	0.00	927.03	0.02	0.02	153.48	0.00	0.00	154.39
Marina	Natural Gas	2050	10,474,609	28,697.6	0.31	2.81	2.36	0.21	0.21	0.00	0.00	0.02	3376.18	0.06	0.06	558.97	0.01	0.01	562.29
Park	Natural Gas	2050	0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Natural Gas	2050	136,691	374.5	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	44.06	0.00	0.00	7.29	0.00	0.00	7.34

Water-Indoor	lookup col 9	9				l	Ро	unds per Da	у		Metric tons	per year	
Element	Source	yr	MG/Yr	kwh/MG	Kwh/year	kwh/day	CO2	CH4	N2O	CO2	CH4	N2O	CO2e
Marina	Water-Indoor	2016	1.8	13,021	23,395	64	36.06	0.00	0.00	5.97	0.00	0.00	6.03
Hotel Tower	Water-Indoor	2025	40.8	13,021	530,803	1,454	625.73	0.00	0.00	103.60	0.00	0.00	103.60
Low-cost Hotel	Water-Indoor	2025	3.7	13,021	48,147	132	56.76	0.00	0.00	9.40	0.00	0.00	9.40
Marina	Water-Indoor	2025	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Water-Indoor	2025	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Water-Indoor	2025	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Water-Indoor	2030	40.8	13,021	530,803	1,454	542.22	0.00	0.00	89.77	0.00	0.00	89.77
Low-cost Hotel	Water-Indoor	2030	3.7	13,021	48,147	132	49.18	0.00	0.00	8.14	0.00	0.00	8.14
Marina	Water-Indoor	2030	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Water-Indoor	2030	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Water-Indoor	2030	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Water-Indoor	2050	40.8	13,021	530,803	1,454	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-cost Hotel	Water-Indoor	2050	3.7	13,021	48,147	132	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marina	Water-Indoor	2050	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Water-Indoor	2050	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Water-Indoor	2050	0	13,021	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water-Outdoor	lookup col 8							Po	ounds per Day	/		Metric tons	per year	
Element	Source	vr	MG/Yr	kwh/MG	Kwh/year	kwh/day		CO2	CH4	N2O	CO2	CH4	N2O	CO2e
Marina	Water-Outdoor	2016	0.0	13,021	_	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
				,	0	-	•							
Hotel Tower	Water-Outdoor	2025	0.0	13,021	0	0	•	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-cost Hotel	Water-Outdoor	2025	0.0	13,021	0	0	·	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marina	Water-Outdoor	2025	0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Water-Outdoor	2025	2	13,021	19,770	54		23.31	0.00	0.00	3.86	0.00	0.00	3.86
Retail	Water-Outdoor	2025	0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Water-Outdoor	2030	0.0	13,021	0	0	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-cost Hotel	Water-Outdoor	2030	0.0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marina	Water-Outdoor	2030	0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Water-Outdoor	2030	2	13,021	19,770	54		20.20	0.00	0.00	3.34	0.00	0.00	3.34
Retail	Water-Outdoor	2030	0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Water-Outdoor	2050	0.0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Low-cost Hotel	Water-Outdoor	2050	0.0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marina	Water-Outdoor	2050	0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park	Water-Outdoor	2050	2	13,021	19,770	54		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail	Water-Outdoor	2050	0	13,021	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00

Wastewater	lookup col	9			Pounds per	Metric to	ons per year
Element	Source	yr	gallons/day	gallons/Yr	CH4	CH4	CO2e
Marina	Wastewater	2016	4,922	1796696.0	0.01 -	0.002	0.05
Hotel Tower	Wastewater	2025	111,685	40765185	0.30 ·	0.050	1.24
Low-cost Hotel	Wastewater	2025	10,131	3697650	0.03 -	0.005	0.11
Marina	Wastewater	2025	0	0	0.00 ·	0.000	0.00
Park	Wastewater	2025	0	0	0.00	0.000	0.00
Retail	Wastewater	2025	0	0	0.00 -	0.000	0.00
Hotel Tower	Wastewater	2030	111,685	40765185	0.30 ·	0.050	1.24
Low-cost Hotel	Wastewater	2030	10,131	3697650	0.03 -	0.005	0.11
Marina	Wastewater	2030	0	0	0.00 -	0.000	0.00
Park	Wastewater	2030	0	0	0.00	0.000	0.00
Retail	Wastewater	2030	0	0	0.00 -	0.000	0.00
Hotel Tower	Wastewater	2050	111,685	40765185	0.30 ·	0.050	1.24
Low-cost Hotel	Wastewater	2050	10,131	3697650	0.03 -	0.005	0.11
Marina	Wastewater	2050	0	0	0.00 -	0.000	0.00
Park	Wastewater	2050	0	0	0.00 -	0.000	0.00
Retail	Wastewater	2050	0	0	0.00 ·	0.000	0.00

Solid Waste	lookup o	col 10		I	Pounds per Day	Metric to	ons per year
Element	Source	yr	ton/day	tons/yr	CH4	CH4	CO2e
Marina	Waste	2016	0.9	311	22.55	3.734	93.34
Hotel Tower	Waste	2025	1.1	385	27.86	4.612	115.31
Low-cost Hotel	Waste	2025	0.2	80	5.82	0.963	24.07
Marina	Waste	2025	0.9	311	22.55	3.734	93.34
Park	Waste	2025	0.0	0	0.00	0.000	0.00
Retail	Waste	2025	0.9	311	22.55	3.734	93.34
Hotel Tower	Waste	2030	1.1	385	27.86	4.612	115.31
Low-cost Hotel	Waste	2030	0.2	80	5.82	0.963	24.07
Marina	Waste	2030	0.9	311	22.55	3.734	93.34
Park	Waste	2030	0.0	0	0.00	0.000	0.00
Retail	Waste	2030	0.9	311	22.55	3.734	93.34
Hotel Tower	Waste	2050	1.1	385	27.86	4.612	115.31
Low-cost Hotel	Waste	2050	0.2	80	5.82	0.963	24.07
Marina	Waste	2050	0.9	311	22.55	3.734	93.34
Park	Waste	2050	0.0	0	0.00	0.000	0.00
Retail	Waste	2050	0.9	311	22.55	3.734	93.34

Consumer Products	lookup col 1		Pounds per Day	
Element	Source	yr	SF	ROG
Marina	Consumer Products	2016	50,000	1.07
Hotel Tower	Consumer Products	2025	911,736	19.51
Low-cost Hotel	Consumer Products	2025	62,000	1.33
Marina	Consumer Products	2025	57,696	1.23
Park	Consumer Products	2025	106,999	2.29
Retail	Consumer Products	2025	7,749	0.17
Hotel Tower	Consumer Products	2030	911,736	19.51
Low-cost Hotel	Consumer Products	2030	62,000	1.33
Marina	Consumer Products	2030	57,696	1.23
Park	Consumer ProductsPark	2030	106,999	0.01
Retail	Consumer Products	2030	7,749	0.17
Hotel Tower	Consumer Products	2050	911,736	19.51
Low-cost Hotel	Consumer Products	2050	62,000	1.33
Marina	Consumer Products	2050	57,696	1.23
Park	Consumer Products	2050	106,999	2.29
Retail	Consumer Products	2050	7,749	0.17

Architectural Coatings	lookup co	l 16				Pounds
Element	Source	yr	SF/total	SF/Year	SF/Daily	ROG
Marina	Architectural Coatings	2016	50,000	5000	13.70	0.16
Hotel Tower	Architectural Coatings	2025	911,736	91,173.6	249.79	2.96
Low-cost Hotel	Architectural Coatings	2025	62,000	6,200.0	16.99	0.20
Marina	Architectural Coatings	2025	57,696	5,769.6	15.81	0.19
Park	Architectural Coatings	2025	106,999	10,699.9	29.31	0.35
Retail	Architectural Coatings	2025	7,749	774.9	2.12	0.03
Hotel Tower	Architectural Coatings	2030	911,736	91,173.6	249.79	2.96
Low-cost Hotel	Architectural Coatings	2030	62,000	6,200.0	16.99	0.20
Marina	Architectural Coatings	2030	57,696	5,769.6	15.81	0.19
Park	Architectural Coatings	2030	106,999	10,699.9	29.31	0.35
Retail	Architectural Coatings	2030	7,749	774.9	2.12	0.03
Hotel Tower	Architectural Coatings	2050	911,736	91,173.6	249.79	2.96
Low-cost Hotel	Architectural Coatings	2050	62,000	6,200.0	16.99	0.20
Marina	Architectural Coatings	2050	57,696	5,769.6	15.81	0.19
Park	Architectural Coatings	2050	106,999	10,699.9	29.31	0.35
Retail	Architectural Coatings	2050	7,749	774.9	2.12	0.03

Relevant CalEEMod operational metrics

Relevant GallEmou C	perational methos										
Table 4.1 Road Characteristics											
		Average		Percent of F	Paved Roads						
Location Type	Name	Vehicle Weight	Construction Worker	Construction Hauling	Construction Vendor	Operational Mobile					
Counties	San Diego	2.4	100	100	100	100					

	Table 4.2 Mobile Trip Characteristics Dependent on Location															
												Residential				
															Trip Type	
Location Type	Name			Rural Trip Le	ength (miles)			Urban Trip Length (miles)					Percentage			
		C-C	C-NW	C-W	H-O	H-S	H-W	C-C	C-NW	C-W	H-O	H-S	H-W	H-W	H-S	H-O
Counties	San Diego	6.6	6.6	14.7	7.9	7.1	16.8	7.3	7.3	9.5	7.5	7.3	10.8	41.6	18.8	39.6

Table 4.3 Mobile Trip Rates, Trip Purpose, Trip Type by Land Use

Land Use Type	Land Use Sub Type	Size Metric	Trip Rate			Primary %	Diverted %	verted % PassBv %		Trip Type		
Land Ose Type	Land Ose Type		Week day	Saturday	Sunday	Tilliary 70	Diverted 70	1 assby 70	C-C %	C-W %	C-NW %	
Recreational	City Park	Acre	1.89	22.75	16.74	66	28	6	48	33	19	
Recreational	Hotel	Room	8.17	8.19	5.95	58	38	4	61.6	19.4	19	
Recreational	Motel	Room	5.63	5.63	5.63	58	38	4	62	19	19	
	Marina		-	-	-	100	0	0	57.2	23.8	19	

Table 6.1 Architectural Coating Emission Factors

Name	EMFAC_ID	CoatingTyp e	Start Date	End Date	ROG, g/L	Rule Name	Amended Date
	SDAB	esidential Ext	1/1/1900	12/31/3000	250	Default	NULL
	SDAB	residential Int	1/1/1900	12/31/3000	250	Default	NULL
San Diego	SDAB	Parking	1/1/1900	12/31/3000	250	Default	NULL
	SDAB	sidential Exte	1/1/1900	12/31/3000	250	Default	NULL
	SDAB	sidential Inter	1/1/1900	12/31/3000	250	Default	NULL
	SDAPCD	residential Ext	1/1/1900	12/31/3000	250	Default	NULL
	SDAPCD	residential Int	1/1/1900	12/31/3000	250	Default	NULL
San Diego County APCD	SDAPCD	Parking	1/1/1900	12/31/3000	250	Default	NULL
-	SDAPCD	sidential Exte	1/1/1900	12/31/3000	250	Default	NULL
	SDAPCD	sidential Inter	1/1/1900	12/31/3000	250	Default	NULL

 Table 7.1 Number of Snow and Summer Days

 Default: 0 Snow Days and 180 Summer Days

Location Type	Name	Number Snow Days	Number Summer Days
	San Diego	0	180

Table 7.2 Landscape Equipment Running Emission Factors

Equipment Type	Year	Engine Type	Commercial or Residential	Low Hp	High Hp	TOG g/bhp-hr	ROG g/bhp-hr	CO, g/bhp-hr	NOX, g/bhp-hr	SO2, g/bhp-hr	PM10, g/bhp-hr	PM2_5, g/bhp-hr	CO2, g/bhp-hr	CH4, g/bhp-hr
	Chainsaws					356.698	725.905	1571.385	13.911	0.174	2.633	2.633	4229.982	45.118
	Chainsaws Preempt					118.899	149.069	412.763	3.386	0.044	0.687	0.687	1069.305	9.265
	Front Mowers					10.2	7.641	543.13	5.471	0.024	0.37	0.37	858.879	0.429
	Lawn & Garden Tractors					9.652	6.775	543.056	4.799	0.024	0.324	0.324	858.879	0.381
	Lawn Mowers					9.704	16.284	387.332	4.034	0.035	2.501	2.501	858.879	1.012
	Leaf Blowers/Vacuums					72.62	96.221	480.736	2.987	0.035	1.861	1.861	858.88	5.98
	Other Lawn & Garden Equ	ipment				279.469	71.211	545.911	4.893	0.035	1.97	1.97	858.879	4.426
	Rear Engine Riding Mower	rs				12.769	7.641	543.131	5.471	0.024	0.37	0.37	858.88	0.429
	Shredders					10.954	17.348	454.545	7.516	0.035	7.199	7.199	858.879	0.975
	Snowblowers					104.069	50.166	601.586	4.97	0.035	1.647	1.647	858.88	3.118
	Tillers					7.779	14.021	417.224	3.555	0.029	2.199	2.199	858.879	0.788
	Trimmers/Edgers/Brush Cu	utters				47.193	77.75	380.309	8.589	0.031	0.449	0.449	858.879	4.832
	Wood Splitters					8.873	13.11	450.835	3.337	0.029	2.026	2.026	858.879	0.737

Table 7.3 Landscape Equipment Usage

Worst case 2

Land Use Type	Landscape Equipment Ty	Usage	Units
	Chainsaws	2.47E-05	hr/sqft/day
	Chainsaws Preempt	2.47E-05	hr/sqft/day
	Front Mowers	1.81E-06	hr/sqft/day
	Lawn & Garden Tractors	4.04E-07	hr/sqft/day
	Lawn Mowers	2.49E-05	hr/sqft/day
	Leaf Blowers/Vacuums	9.54E-06	hr/sqft/day
Non-Residential	Other Lawn & Garden Equi	1.43E-05	hr/sqft/day
	Rear Engine Riding Mower	1.81E-06	hr/sqft/day
	Shredders	8.60E-06	hr/sqft/day
	Snowblowers	1.41E-07	hr/sqft/day
	Tillers	1.07E-06	hr/sqft/day
	Trimmers/Edgers/Brush Cu	1.96E-05	hr/sqft/day
	Wood Splitters	7.18E-06	hr/sqft/day

92101 = climate zone 13

Table 8.1 Energy Use by Climate Zone and Land Use Type

Land Use Sub Type	Climate Zone	Historical	T24 Electricity		5 5	Natural Gas		
			KW	hr per DU or S	SQFT	kBtu per D	U or SQFT	
Health Club	13	N	1.27	4.27	2.91	4	7	for marina
City Park	13	N	0.00	0.00	0.00	0	0	
Hotel	13	N	5.01	3.67	4.61	48	11	
Motel	13	N	5.01	3.67	4.61	48	11	
Strip Mall	13	N	3.34	3.16	6.39	1	1	

Table 8.2 Natural Gas Emission Factors

Land Use Type	TOG, Ib/MMBTU	ROG, Ib/MMBTU	SO2, Ib/MMBTU	NOX, Ib/MMBTU	PB, Ib/MMBTU	PM10, Ib/MMBTU	PM2_5, Ib/MMBT U	CO, Ib/MMBT U	CO2_NBI O, Ib/MMBT U	CH4, Ib/MMBT U	N2O, Ib/MMBT U
Nonresidential	0.010784314	0.01078431	0.000588235	0.09803922	4.90196E-07	0.00745098	0.007451	0.082353	117.6471	0.002255	0.002157

Table 9.1 Water Use Rates

Land Use Sub Type		Indoor	Outdoor
	Size Metric	Water, gal/size/yea	Water, gal/size/year
		r ¹	1

not needed

Table 9.2 Water and Wastewater Electricity Intensity

Location Type	Name	Source	Supply Water	Treat Water		Wastewater Treatment			
Counties	San Diego	2	9727	111	1272	1911	13021 indoor		
Table 9.3 Percent of Wastewater Distribution Types									

Location Type	Name	Source	Septic Tank	Aerobic	Anaerobic, Facultative Lagoons	Anaerobic, Combustio n of Gas	Anaerobi c, Cogenera tion of Gas	
	San Diego County APCD	1	10.33	87.46	2.21	100	0	(did not see SD County)
		0	100%	0	100		for hotel downtown	
Table 9.4 Wa	stewater Treatment Direct	Emissions						

CH4 emissions (MT) = Wastewater x Digester Gas x

Wastewater =		variable in calcs - gallons
Digester Gas =	0.01	
Fch4	0.65	
pch4 DE	662 0.99	

Table 9.4 Wastewater Treatment Direct Emissions

Wastewater Treatment Type	CO2 Biogenic, ton/gal	CO2 Non- Biogenic, ton/gal	CH4, ton/gal	N2O, ton/gal	
Septic	0	0	2.50362E-07	8.4812E-10	

Aerobic	3.89999E-07	0	1.34234E-09	8.4812E-10
Anaerobic Facultative	3.89999E-07	0	4.01921E-07	8.4812E-10
Digester Burn	0	0	0	0
Digester Cogen	0	0	0	0

Note:

Digester combustion emissions are estimated using water intensity emission factors.

Table 10.1 Solid Waste Disposal Rates

			Rate,
Location Type	Name	d Use Sub T Size Metric	ton/size/yea
			r

not needed

Table 10.2 Support for Solid Waste Emission Factors

MSW Category	Fraction Total Organic Degradable Carbon per Waste Type ^a	Default Decomposa ble Anaerobic Fraction ^b	Waste Stream Compostion Fraction ^c	Fraction of Carbon Emissions
Newspaper	0.465	0.161	0.013	0.00049
Office Paper	0.398	0.874	0.019	0.00330
Corrugated Boxes	0.405	0.383	0.048	0.00372
Coated paper	0.405	0.21	0.094	0.00400
Food	0.117	0.828	0.155	0.00751
Grass	0.192	0.322	0.025333333	0.00078
Leaves	0.478	0.1	0.012666667	0.00030
Branches	0.279	0.176	0.033	0.00081
Lumber	0.43	0.233	0.145	0.00726
textiles	0.24	0.5	0.054	0.00324
diapers	0.24	0.5	0.043	0.00258
construction demolition	0.04	0.5	0.146	0.00146
medical waste	0.15	0.5	0	0.00000
sludge/manure	0.05	0.5	0.001	0.00001

Generation	mass carbon	0.03547
Fraction	mass CH4	0.04730
riaction	mass CO2	0.13006

Emission Factors

Description	Collection Efficiency	Destruction Fraction	Oxidation Fraction	CO2 Emissions, ^d ton/ton waste	CH4 Emissions, ^e ton/ton waste			
No LFG Collection	0	0	0.1	0	0			
LFG Collect and Combust	0.75	0.98	0.1	0	0			
Cogen	waste*(0.2289 - 6.3382E-0							

a) California Air Resources Board, the California Climate Action

c) CARB, 2008, Table 9.7 Default Decomposable Anaerobic Fraction (DANF)of the TDOC per waste type
 c) California Integrated Waste Management Board, California 2008

d) CO2 emission factor, ton/ton waste = generation fraction x

e) CH4 emission factor, ton/ton waste = generation fraction x

Table 12.1 Diesel Emergency Generator and Fire Pump Emission Factors

Equipment Type	Low HP	High HP	TOG	ROG	CO	NOX	SO2	PM10	PM2.5	CO2	CH4
			lb/hp-hr	lb/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	lb/hp-hr	g/hp-hr
Emergency Generator	0	11	0.00247	0.00225	5.97	5.32	0.00494	0.60	0.60	1.15	0.073
Emergency Generator	11	25	0.00247	0.00225	4.93	5.32	0.00494	0.60	0.60	1.15	0.073
Emergency Generator	25	50	0.00247	0.00225	4.10	5.32	0.00494	0.45	0.45	1.15	0.073
Emergency Generator	50	75	0.00247	0.00225	3.70	3.33	0.00494	0.15	0.15	1.15	0.073
Emergency Generator	75	100	0.00247	0.00225	3.70	3.33	0.00494	0.15	0.15	1.15	0.073
Emergency Generator	100	175	0.00247	0.00225	3.70	2.85	0.00494	0.15	0.15	1.15	0.073
Emergency Generator	175	300	0.00247	0.00225	2.60	2.85	0.00494	0.15	0.15	1.15	0.073
Emergency Generator	300	600	0.00247	0.00225	2.60	2.85	0.00494	0.15	0.15	1.15	0.073
Emergency Generator	600	750	0.00247	0.00225	2.60	2.85	0.00494	0.15	0.15	1.15	0.073
Emergency Generator	750	9999	0.00247	0.00225	2.60	4.56	0.00494	0.15	0.15	1.15	0.073
Fire Pump	0	11	0.00247	0.00225	6.00	5.32	0.00494	0.30	0.30	1.15	0.073

0.0283 conversion conversion 0.001 0.001 conversion 1.21775E-09 multiplier

Fire Pump	11	25	0.00247	0.00225	4.90	5.32	0.00494	0.30	0.30	1.15	0.073
Fire Pump	25	50	0.00247	0.00225	4.10	5.32	0.00494	0.22	0.22	1.15	0.073
Fire Pump	50	75	0.00247	0.00225	3.70	3.33	0.00494	0.30	0.30	1.15	0.073
Fire Pump	75	100	0.00247	0.00225	3.70	3.33	0.00494	0.30	0.30	1.15	0.073
Fire Pump	100	175	0.00247	0.00225	3.70	2.85	0.00494	0.22	0.22	1.15	0.073
Fire Pump	175	300	0.00247	0.00225	2.60	2.85	0.00494	0.15	0.15	1.15	0.073
Fire Pump	300	600	0.00247	0.00225	2.60	2.85	0.00494	0.15	0.15	1.15	0.073
Fire Pump	600	750	0.00247	0.00225	2.60	2.85	0.00494	0.15	0.15	1.15	0.073
Fire Pump	750	9999	0.00247	0.00225	2.60	4.56	0.00494	0.15	0.15	1.15	0.073

Table 12.2 Natural Gas Emergency Generator Emission Factors

Equipment Type	Low HP	High HP	TOG	ROG	CO	NOX	SO2	PM10	PM2.5	CO2	CH4
			lb/MMBtu	ppmv	ppmv	ppmv	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu
Emergency Generator	0	500	0.358	250	2000	45	0.0006	0.0095	0.0095	110	0.23
Emergency Generator	500	9999	0.358	250	2000	36	0.0006	0.0095	0.0095	110	0.23

Table 12.3 Diesel Boiler Emission Factors

Equipment Type	Rated Heat Input		TOG	ROG	CO	NOX	SO2	PM10	PM2.5	CO2	CH4
	Low	High	lb/10 ^{^3} gal	lb/10 ^{^3} gal	lb/10 ^{^3} gal	lb/MMBtu	lb/10 ^{^3} gal				
Boiler	0	9999	0.556	0.340	5.00	0.05	0.225	1.00	0.25	25000	0.216

Table 12.4 Natural Boiler Emission Factors

Equipment Type	Rated Heat Inp	TOG	ROG	CO	NOX	SO2	PM10	PM2.5	CO2	CH4	
	Low	High	lb/10 ^{^6} scf	lb/10 ^{^6} scf	lb/10 ^{^6} scf	lb/MMBtu	lb/10 ^{^6} scf	lb/10 ^{^6} scf	lb/10 ⁷⁶ scf	lb/10 ^{^6} scf	lb/10 ^{^6} scf
Boiler	0	2	11	5.5	98	0.024	0.6	7.6	7.6	120000	2.3
Boiler	2	5	11	5.5	98	0.011	0.6	7.6	7.6	120000	2.3
Boiler	5	75	11	5.5	98	0.011	0.6	7.6	7.6	120000	2.3
Boiler	75	9999	11	5.5	98	0.0062	0.6	7.6	7.6	120000	2.3

General Assumpti	ions				
General	wind	2.	6 m/s		
	precip	4	0 days		
	climate zone	1	3		
	N2O_NOX Gasoline	0.04160	0 ARB EMFAC	-AQs'	
Consumer ROG	consumer products-general	2.14E-0	5 lb ROG/sf/da	у	
	consumer products-park	5.152E-0	8 lb ROG/sf/da	y	0.0024075
Coatings ROG	coatings	109	% reapplication	rate	
-	coating EF	25	0 g/L		
Conversions	lbs/gram	0.00220462	3		
	kg/mt	100	0		
	mt/gram	0.00000	1		
	mt/lbs	0.00045359	2		
	ton/lbs	0.000	5		
	MT/gram	0.000001			
	ton/gram	0.000001			
	days/yr	36			
GWP	CH4	2	5 AR4		https://www.ipcc.ch/publications and data/ar4/wg1/en/ch2s2-10-2.html
	N2O	29	8 AR4		
	SF6	22,80	0 AR4		
	million	1,000,00			
Project Info	Service Pop	107	1 rooms+beds		
		Annu	al Consumptio	n	
		Electricity	Natural Gas	Water	Waste
	ADT	kWh	Therms	Gallons	Tons
Hotel Tower					
Low-cost Hotel					
Marina					
Park					
Retail					
	CH4	N2O			
lbs/GWh	31.:	12 5.6	7 CAMX, CR 20	16	
lbs/MWh	0.0312	L2 0.0056	7		

Site Location and Mitigation Reductions for FAL

Reductions		reduction	CAPCOA Measure	source
	Mobile to	tal Mobile 29.3%		
	Transit access	9.19%	LUT-5	CAPCOA, based on 0.4 miles (see below)
	Walkability	21.3%	LUT-8, 3.1.9	CAPCOA, max reduction (calculated to be 46.3%), based on 175 intersections/mi2 from Chen Ryan
	Electric charging station	0.5%	SDT-8	CAPCOA, min reduction, citing SMAQMD Recommended Reductions
			LUT-8, 3.1.8	CAPCOA, min reduction, citing CCAP guiidebook that attributes a 1% to 5% reduction in VMT to the use of bicycles and 0.625% from bike parking alone
	Bike Facility	0.625%		
	Indoor Water water reduction = GHG reduction	20%		
	Solid Wate detailed utility consumption showed abou waste to be recycled or composted	t 60% of 60%		

Calculation details

Calculation	detalls		
	Transit access		
	LUT-5	% VMT = Transit * B [not to exceed 30%]	
		B=	0.67
		Transit=	11.2%
		based on X distance to transit center=	0.4
		max reduction =	30.0%
		estimate of trips reduction applies to	82.1%

0.4 for 12th&Imperial; Gaslamp trolley stop about 0.15 mi away, but only trolley, no buses not using; calculated reduction lower only visitors and workers affected by transit; other trips not affected (weighted by trip lengths)

Walkability		
LUT-8	% VMT Reduction = Intersections * B	38.0%
	Avg Intersections per square mile	36
	intersections per square mile	175
	B =	0.12
	max reduction =	21.3%
	estimate of trips reduction applies to	82.1%

higher than max allowed; not using from CAPCOA, LUT-8 Chen Ryan: Rough Calculation: There are 300+ intersections downtown, downtown is about 1.7 square miles, so conservatively there is around 175 intersections per square mile downtown.

olies to 82.1% only visitors and workers affected by walkingt; other trips not affected

ADT	lookup	col 5	With Design F	eatures				Pounds per Day						Metric tons per year							
Element	Source	Year	ADT	VMT per	VMT/day	VMT/year	ROG	NOX	со	PM10E	PM2.5E	PM10 D	PM2.5 D	SO2	CO2	CH4	N2O	CO2	CH4	N2O	CO2e
Marina	Motor Vehicle	2016	48	5.95	286	104,308	0.16	0.45	1.27	0.04	0.02	0.04	0.02	0.00	297.16	0.02	0.02	49.20	0.00	0.00	50.20
Hotel Tower	Motor Vehicle	2025	7587	5.95	31,921	11,651,241	10.82	30.92	76.76	3.74	1.60	20.61	5.18	0.26	27435.86	1.41	1.29	4542.31	0.23	0.21	4611.63
Low-cost Hotel	Motor Vehicle	2025	228	5.95	958	349,738	0.32	0.93	2.30	0.11	0.05	0.62	0.16	0.01	823.65	0.04	0.04	136.36	0.01	0.01	138.45
Marina	Motor Vehicle	2025	200	7.82	1,106	403,605	0.34	0.91	2.44	0.13	0.06	0.71	0.18	0.01	925.87	0.05	0.04	153.29	0.01	0.01	155.34
Park	Motor Vehicle	2025	94	6.43	427	155,827	0.14	0.39	1.00	0.05	0.02	0.28	0.07	0.00	364.02	0.02	0.02	60.27	0.00	0.00	61.15
Retail	Motor Vehicle	2025	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Motor Vehicle	2030	7587	5.95	31,921	11,651,241	8.86	27.64	62.49	3.68	1.55	20.60	5.17	0.23	24379.03	1.22	1.15	4036.22	0.20	0.19	4098.01
Low-cost Hotel	Motor Vehicle	2030	228	5.95	958	349,738	0.27	0.83	1.88	0.11	0.05	0.62	0.16	0.01	731.89	0.04	0.03	121.17	0.01	0.01	123.03
Marina	Motor Vehicle	2030	200	7.82	1,106	403,605	0.28	0.80	1.99	0.13	0.05	0.71	0.18	0.01	821.51	0.04	0.03	136.01	0.01	0.01	137.82
Park	Motor Vehicle	2030	94	6.43	427	155,827	0.11	0.35	0.82	0.05	0.02	0.28	0.07	0.00	323.32	0.02	0.01	53.53	0.00	0.00	54.32
Retail	Motor Vehicle	2030	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel Tower	Motor Vehicle	2050	7587	5.95	31,921	11,651,241	6.00	27.54	48.22	3.63	1.48	20.58	5.16	0.21	22875.49	1.09	1.15	3787.29	0.18	0.19	3848.34
Low-cost Hotel	Motor Vehicle	2050	228	5.95	958	349,738	0.18	0.83	1.45	0.11	0.04	0.62	0.15	0.01	686.76	0.03	0.03	113.70	0.01	0.01	115.53
Marina	Motor Vehicle	2050	200	7.82	1,106	403,605	0.19	0.78	1.54	0.13	0.05	0.71	0.18	0.01	768.04	0.04	0.03	127.16	0.01	0.01	128.91
Park	Motor Vehicle	2050	94	6.43	427	155,827	0.08	0.35	0.63	0.05	0.02	0.28	0.07	0.00	303.04	0.01	0.01	50.17	0.00	0.00	50.95
Retail	Motor Vehicle	2050	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Ferry Emisisons Annual

		Total	Load	Annual		Tons per year									MT/yr	•	
Vessel	Engine	HP	Factor	Hours	NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O	CO2	CH4	N2O	CO2e
	Propulsion	780	0.42	2190	5.32	0.27	0.26	0.43	1.67	0.00	465	0.008	0.017	421.95	0.01	0.02	426.81
Old Ferry	Auxiliary	100	0.43	4380	1.37	0.11	0.11	0.34	1.13	0.00	122	0.006	0.005	110.77	0.01	0.00	112.14
	Total				6.69	0.38	0.37	0.78	2.79	0.01	587	0.014	0.022	532.72	0.01	0.02	538.95
	Propulsion	460	0.42	2190	1.76	0.03	0.03	0.23	1.74	0.00	274	0.005	0.010	248.84	0.00	0.01	251.71
New Ferry	Auxiliary	60	0.43	4380	0.63	0.02	0.02	0.19	0.46	0.00	73	0.004	0.003	66.46	0.00	0.00	67.29
	Total				2.39	0.06	0.05	0.42	2.20	0.00	348	0.008	0.013	315.30	0.01	0.01	318.99

Daily

		Total	Load	Daily	lbs per day								
Vessel	Engine	HP	Factor	Hours	NOx	DPM	PM2.5	ROG	CO	SOx			
	Propulsion	780	0.42	6	29.15	1.48	1.44	2.38	9.13	0.02			
Old Ferry	Auxiliary	100	0.43	12	7.50	0.61	0.59	1.88	6.19	0.01			
	Total				36.66	2.09	2.02	4.25	15.31	0.03			
	Propulsion	460	0.42	6	9.67	0.17	0.17	1.25	9.53	0.01			
New Ferry	Auxiliary	60	0.43	12	3.44	0.13	0.12	1.05	2.55	0.00			
	Total				13.11	0.30	0.29	2.30	12.08	0.02			

Ferry Info

-		Propu	ulsion	Auxiliary				
	MY	No.	HP	No.	HP			
Old Ferry	2003	2	390	2	50			
New Ferry	2017	2	230	2	30			
California Harbor Craft Su	irvey			ARB, Statev	vide Com	mercial Harbo	or Craft Survey , Fi	nal
	Average Ho	rsepower						
	Propulsion	Auxiliary	Ratio	aux from Ta	able 5, Fe	rry Boats		
Ferry	733	94	0.128	Main from	Table 6, F	erry Boats		
	Load Fa	actors		ARB, Harbo	r			
	Propulsion	Auxiliary						
Ferry	0.42	0.43	3			290.901	37.295	
						171.557	22.377	
	Annual Opera	ating Hours	Daily O	perating				
	Propulsion	Auxiliary	Propulsior	n Auxiliary				
Ferry	2,190	4,380	6	5 12				

HC Survey 2004	https://www.arb.ca.gov/ports/marinevess/documents/hcsurveyrep0304.pdf
HC Methods 2010	https://www.arb.ca.gov/regact/2010/chc10/appc.pdf

Ferry Emission Factor

				Zer	o Hour Emi	ssion Facto	ors (g/hp-h	r)		
Vessel	Engine	NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O
	Propulsion	7.31	0.36	0.35	0.68	1.97	0.13	588	0.013	0.023
Old Ferry	Auxiliary	6.90	0.64	0.62	2.14	5.15	0.13	588	0.043	0.023
Now Forny	Propulsion	3.99	0.08	0.08	0.68	3.73	0.13	588	0.013	0.023
New Ferry	Auxiliary	5.32	0.22	0.21	2.14	3.73	0.13	588	0.043	0.023

	Harborcraft ULSD Correction Factors												
Years	NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O				
Pre-1995	0.930	0.720	0.720	0.720	1.000	0.043	1.000	0.720	0.930				
1996-2010	0.948	0.800	0.800	0.720	1.000	0.043	1.000	0.720	0.948				
2011 +	0.948	0.852	0.852	0.720	1.000	0.043	1.000	0.720	0.948				

				ULSD Er	nission Fac	tors (g/kW	h)			
Vessel	Engine	NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O
Old Ferry	Propulsion	6.36	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
	Auxiliary	6.54	0.51	0.50	1.54	5.15	0.01	588	0.031	0.022
New Ferry	Propulsion	3.78	0.07	0.07	0.49	3.73	0.01	588	0.010	0.022
New Ferry	Auxiliary	5.04	0.19	0.18	1.54	3.73	0.01	588	0.031	0.022

	Useful	Annual	Deter
Engine	Life	Hours	Сар
Propulsion	20	2,190	5.48
Auxiliary	20	4,380	2.74

	Deteriora	ation Facto	rs	
Engine	NOx	PM	HC	СО
Propulsion	0.21	0.67	0.44	0.25
Auxiliary	0.06	0.31	0.51	0.41

Ferry Emission Factors (g/kWh)

Vessel	Engine	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O
Old Ferry	Propulsion	6.73	0.34	0.33	0.55	2.11	0.01	588	0.010	0.022
Old Ferry	Auxiliary	6.59	0.53	0.52	1.65	5.44	0.01	588	0.031	0.022
New Ferry	Propulsion	3.78	0.07	0.07	0.49	3.73	0.01	588	0.010	0.022
New Ferry	Propulsion Auxiliary	5.04	0.19	0.18	1.54	3.73	0.01	588	0.031	0.022

Recreational Boating Emissions Baseline Emissions (2016)

		Calls for							Emiss	ions (tons/	year)				Cold Iron			Emission	s (Ibs/avera	ige day)				MT/year		Cold Iron		project	bau
Slip Size	Engine	yachts/slips for smaller	HP	UF	Hrs	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O	CO2e	-	NOX	PM10	PM2.5	ROG	со	SO2	C02	CH4	N2O	CO2	_	CO2e	CO2e
50	All	1			49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		1	0.00019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0	0
100	Propulsion Auxiliary	0.00	1,024 102	0.45	11.55 11.55	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-		-	-				-
	Propulsion	6.64	2.949	0.43	9.85	0.76	0.040	0.039	0.06	0.22	0.001	56.24	0.001	0.002		I	4.16	0.22	0.21	0.33	1 21	0.00	51.0	0.00	0.00			52	
150	Auxiliary	6.64	295	0.43	9.85	0.06	0.002	0.002	0.01	0.03	0.000	5.37	0.000	0.000	233.10		0.35	0.01	0.01	0.03	0.15	0.00	4.9	0.00	0.00	211		216	-
175	Propulsion	6.64	3,489	0.45	3.15	0.25	0.010	0.009	0.02	0.11	0.000	21.29	0.000	0.001			1.39	0.05	0.05	0.13	0.59	0.00	19.31	0.00	0.00			20	
	Auxiliary	6.64	349	0.43	3.15	0.03	0.001	0.001	0.00	0.01	0.000	2.03	0.000	0.000	276	_	0.15	0.01	0.01	0.01	0.04	0.00	1.85	0.00	0.00	250		252	
		Total				1.10	0.05	0.05	0.09	0.36	0.00	84.94	0.00	0.00	508.90		6.05	0.30	0.29	0.50	2.00	0.00	77.05	0.00	0.00	461.67		539.61	
Phase 1 Emis	ions (2025)														2025 RPS	2025 BAU 2030 RPS 2050 RPS	1]	2025 RPS	2025 BAU 2030 RPS 2050 RF		
															Cold	Cold Cold Cold										Cold		2025 RPS	2025 BAU

									Emis	sions (tons/	year)				Iron	Iron	Iron	Iron		Emission	s (Ibs/avera	ge day)				MT/year		Iron	Iron	Iron	Iron				
		Calls for																																	
an	Engine	yachts/slips for smaller	ыр	IF	Hrs	NOx	DPM			~~	SOx	602	сна	N2O	CO2e	CO2e	CO2e	C02e	NOX	PM10	PM2.5	ROG	co	SO2	CO2	CH4	N2O	CO2e	CO2e	CO2e	CO2e	CO2e	CO2e		
Slip Size	All	smaller	HP	UF	49.21	0.00	0.000	0.000	0.00	0.00	0.000	0.00256	0.000	0.000	COZe	COZe	CO2e	COZe	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	COZe	COZe	LUZe	COZe	COZe	COZe		0
50	All	8			53.85	0.00	0.000	0.000	0.00	0.00	0.000	0.00230	0.000	0.000					0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00					0		0	
75	All	2			59.26	0.00	0.000	0.000	0.00	0.00	0.000	0.00	0.000	0.000					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					0		0	, in the second s
	Propulsion	46.45	1,024	0.45	11.55	2.85	0.115	0.112	0.17	0.63	0.002	160.29	0.003	0.006					15.63	0.63	0.61	0.95	3.45	0.01	145	0.00	0.01					147	163	163	163
100	Auxiliary	46.45	102	0.43	11.55	0.22	0.013	0.012	0.02	0.10	0.000	15.32	0.000	0.001	433	788	375	0	1.20	0.07	0.07	0.13	0.55	0.00	13.9	0.00	0.00	393	714	341		407	730	356	16
175	Propulsion	6.64	3,109	0.45	9.68	0.79	0.042	0.041	0.06	0.23	0.001	58.29	0.001	0.002					4.31	0.23	0.22	0.35	1.26	0.00	52.88	0.00	0.00					53	59	59	59
1/5	Auxiliary	6.64	311	0.43	9.68	0.07	0.003	0.002	0.01	0.03	0.000	5.57	0.000	0.000	188	342	163	0	0.36	0.01	0.01	0.03	0.15	0.00	5.05	0.00	0.00	171	310	148	-	176	316	153	6
200	Propulsion	6.64	3,489	0.45	9.82	0.89	0.048	0.046	0.07	0.26	0.001	66.30	0.001	0.002					4.90	0.26	0.25	0.39	1.43	0.00	60.15	0.00	0.00					61	68	68	68
200	Auxiliary	6.64	349	0.43	9.82	0.05	0.001	0.001	0.01	0.04	0.000	6.34	0.000	0.000	211	383	183	0	0.29	0.01	0.01	0.04	0.24	0.00	5.75	0.00	0.00	191	348	166		197	354	172	6
		Total				4.87	0.221	0.215	0.35	1.30	0.003	312.11	0.005	0.012	832	1513	721	0	26.70	1.213	1.177	1.90	7.11	0.016	283	0.005	0.011	755	1,372	654		1,041	1,690	972	318
																			r																
Phase Z Er	nissions (2032)															2025 BAU		2050 RPS									2		2025 BAU						
										sions (tons/					Cold	Cold	Cold	Cold		Production of the second s						MT/year		Cold	Cold	Cold		2025.005	2025 BAU	2020.000	2050.005
		Calls for							Emis	sions (tons/	year)				Iron	Iron	Iron	Iron		Emission	s (Ibs/averaj	ge day)				wii/year		Iron	Iron	Iron		2025 RPS	2025 BAU	2030 KPS	2050 RPS
		yachts/slips for																																	
Slip Size	Engine	smaller	HP	LF	Hrs	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O	CO2e	CO2e	CO2e	CO2e	NOx	DPM	PM2.5	ROG	co	SOx	CO2	CH4	N2O	CO2	CO2			CO2e	CO2e		
50	All	0			49.21		-		-	-	-	-		-					-	-	-	-	-	-	-	-	-					-	-		-
60	All	0			53.85		-		-	-	-	-	-	-					-	-				-	-	-	-					-		-	
75	IIA	0			59.26	-	-		-	-	-	-	-	-					-		-	-	-	-	-	-	-					-		-	
100	Propulsion	126.09	1,024	0.45	11.55	7.74	0.313	0.303	0.47	1.71	0.004	435.07	0.007	0.016					42.43	1.71	1.66	2.59	9.37	0.02	395	0.01	0.01					399	443	443	443
	Auxiliary	126.09	102	0.43	11.55	0.59	0.035	0.034	0.07	0.27	0.000	41.57	0.001	0.002	1176	2138	1019	0	3.25	0.19	0.18	0.36	1.49	0.00	37.7	0.00	0.00	1,067	1,939	925		1,105	1,982	967	42
150	Propulsion	59.73	2,949	0.45	9.85	6.83	0.364	0.353	0.55	1.99	0.005	506.18	0.008	0.019					37.43	1.99	1.93	3.01	10.90	0.03	459.20	0.01	0.02					464	516	516	516
	Auxiliary	59.73	295	0.43	9.85	0.58	0.022	0.022	0.05	0.25	0.000	48.37	0.001	0.002	1604	2916	1390	0	3.16	0.12	0.12	0.29	1.35	0.00	43.88	0.00	0.00	1,455	2,645	1,261		1,500	2,695	1,310	49
240	Propulsion	6.64	4,402	0.45	9.52	1.09	0.058	0.057	0.09	0.32	0.001	81.12	0.001	0.003					6.00	0.32	0.31	0.48	1.75	0.00	73.59	0.00	0.00					74	83	83	83
	Auxiliary	6.64	440	0.43	9.52	0.06	0.002	0.002	0.01	0.05	0.000	7.75	0.000	0.000	266	484	231	0	0.35	0.01	0.01	0.05	0.29	0.00	7.03	0.00	0.00	241	439	209		249	447	217	8
		Total				16.90	0.793	0.769	1.24	4.59	0.011	1,120	0.019	0.042	3047	5538	2640	0	92.62	4.347	4.216	6.77	25.15	0.058	1,016	0.017	0.038	2,764	5,024	2,395		3,792	6,164	3,536	1,141

SEASON CY ANNUAI	COUNTY CATEGOR 2016 San Diego Inboard	Y STRK-FU Diesel	EL STATUS active	HPGRP MY 15			SumOf_HC Su 3.7E-07 6					nOf_HC Si 0	umOf_HC Sur 0	mOf_HC Sun 0				umOf_TH S 3 7E-07			mOf_TO S 5.33F-07					SumOf_PN S 2.54E-08	SumOf_Fu Sum(0 0.010			
ANNUAL	2016 San Diego Inboard	Diesel	active	15			3.61E-07 6					0	0	0	0 0.41	0.5	345812 3.33684 3	5.72 07	5.19E-07		5.33E-07 5.19E-07					2.54E-08 2.48E-08		0 0.010			
ANNUAL	2016 San Diego Inboard	Diesel	active	15			4.08E-07 7					Ő	0	Ő			381186 4		5.87E-07		5.87E-07					2.8E-08		0 0.011			
ANNUAL	2016 San Diego Inboard	Diesel	active	15	1959	43.97227	6.52E-07 1	1.18E-06	2.66E-06	6.59E-08	0.000178	0	0	0	0 0.73	2871 0.	0.60918 6	6.52E-07	9.39E-07	0 9	9.39E-07	7.89E-07	0 7.8	9E-07	5.93E-08	4.48E-08	0.018947	0 0.018	€47 1.7 [,]	4E-09 2	2.01E-09
ANNUAL		Diesel	active	15	1960		6.66E-07					0	0	0			622498 6		9.59E-07		9.59E-07					4.58E-08		0 0.019			2.05E-09
ANNUAL		Diesel	active active	15 15			5.27E-07 9 7.4E-07 1					0	0	0			492553 5 691458		7.59E-07 1.07E-06		7.59E-07 L.07E-06				4.8E-08	3.62E-08 5.09E-08	0.01532	0 0.01			1.62E-09 2.28E-09
ANNUAL	•	Diesel Diesel	active	15	1901		7.02E-07 1					0	0	0			655491 7		1.07E-06		L.01E-06					4.82E-08		0 0.021			
ANNUAL	2016 San Diego Inboard	Diesel	active	15			9.88E-07 1					Ő	0	Ő			922756 9		1.42E-06		L.42E-06				8.98E-08		0.0287		287 2.63		3.04E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			9.56E-07 1					0	0	0	0 1.07	1538 0.8	893181 9	9.56E-07	1.38E-06	0 1	L.38E-06	1.16E-06	0 1.1	6E-06	8.7E-08	6.57E-08	0.02778	0 0.02	/78 2.5	5E-09 2	2.95E-09
ANNUAL		Diesel	active	15			1.08E-06 1					0	0	0				1.08E-06			L.55E-06					7.41E-08		0 0.031			
ANNUAL		Diesel	active	15			9.21E-07 1					0	0	0			860664 9		1.33E-06		L.33E-06					6.33E-08		0 0.026			2.84E-09
ANNUAL	-	Diesel Diesel	active active	15 15			1.1E-06 1 1.21E-06 2					0	0	0				1.1E-06 1.21E-06			L.59E-06 L.74E-06		0 1.3			7.58E-08 8.29E-08		0 0.032			3.4E-09 3.72E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			1.02E-06 1					0	0	0 0				1.02E-06			L.47E-06					6.99E-08		0 0.029			3.14E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			1.07E-06 1					0	0	0				1.07E-06			L.55E-06					7.38E-08		0 0.031			3.31E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			1.62E-06 2					0	0	0				1.62E-06			2.34E-06					1.11E-07		0 0.047			5E-09
ANNUAL		Diesel	active	15			2.27E-06					0	0	0				2.27E-06			3.26E-06					1.56E-07		0 0.065			6.99E-09
ANNUAL	2016 San Diego Inboard	Diesel	active active	15 15			2.02E-06 3 1.91E-06 3					0	0	0				2.02E-06 1.91E-06			2.92E-06 2.75E-06		0 2.0	52 00	1.0412 07	1.39E-07 1.31E-07	0.050057	0 0.058			6.24E-09 5.89E-09
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active	15			2.41E-06 4					0	0	0			254206 2		2.75E-06 3.47E-06		3.47E-06					1.51E-07 1.66E-07		0 0.055			7.44E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			3.04E-06 5					0	0	0			839143 3		4.38E-06		1.38E-06					2.09E-07		0 0.088			9.36E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15	1978	245.5269	3.64E-06 6	6.58E-06	1.49E-05	3.68E-07	0.000992	0	0	0	0 4.09	2114 3.4	401462 3	3.64E-06	5.24E-06	0 5	5.24E-06	4.4E-06	0 4	4E-06	3.31E-07	2.5E-07	0.105795	0 0.105	795 9.7	1E-09 1	1.12E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15			3.64E-06 6					0	0	0			401679 3		5.24E-06		5.24E-06					2.5E-07		0 0.105			1.12E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15			2.36E-06 4					0	0	0			209396		3.41E-06		3.41E-06					1.63E-07		0 0.068			7.29E-09
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	15 15		135.2096	2E-06 3			2.03E-07		0	0	0	0 2.25		873157 905502 2		2.89E-06 2.94E-06		2.89E-06 2.94E-06				1.82E-07 1.86E-07	1.38E-07 1.4E-07	0.05826	0 0.05			6.18E-09 6.29E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			2.04E-00 3					0	0	0			265262 2		3.49E-06		3.49E-06					1.4E-07		0 0.039			7.47E-09
ANNUAL		Diesel	active	15			3.34E-06 6				0.00091	0	0	0			120196		4.81E-06		1.81E-06					2.3E-07		0 0.097			1.03E-08
ANNUAL		Diesel	active	15			3.54E-06 6					0	0	0			303062		5.09E-06		5.09E-06					2.43E-07		0 0.102			1.09E-08
ANNUAL		Diesel	active	15			3.69E-06 6					0	0	0				3.69E-06			5.32E-06					2.54E-07		0 0.107			1.14E-08
ANNUAL	•	Diesel	active	15			4.22E-06 7					0	0	0			939597 4		6.07E-06		5.07E-06					2.9E-07		0 0.122			1.3E-08
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	15 15			5.28E-06 9 7.11E-06 1					0	0	0				5.28E-06 7.11E-06			7.61E-06 L.02E-05					3.63E-07 4.89E-07		0 0.153			1.63E-08 2 19E-08
ANNUAL		Diesel	active	15			7.56E-06 1					0	0	0				7.56E-06			L.09E-05					5.2E-07		0 0.219			
ANNUAL		Diesel	active	15	1991	395.1633	5.86E-06 1	1.06E-05	2.39E-05	5.92E-07	0.001597	0	0	0	0 6.58	5054 5.4	474483 5	5.86E-06	8.44E-06	0 8	3.44E-06	7.09E-06	0 7.0	9E-06	5.33E-07	4.03E-07	0.170271	0 0.170	271 1.5	6E-08 1	1.81E-08
ANNUAL		Diesel	active	15			6.02E-06 1					0	0	0				6.02E-06			8.68E-06					4.14E-07		0 0.175			
ANNUAL	-	Diesel	active active	15 15			6.77E-06 1				0.001846	0	0	0				6.77E-06 8.03E-06			9.75E-06					4.65E-07 5.52E-07		0 0.196			
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active	15			8.03E-06 1 8.6E-06 1					0	0	0	0 9.02			8.6E-06			L.16E-05 L.24E-05					5.91E-07		0 0.233			
ANNUAL	2016 San Diego Inboard	Diesel	active	15	1996							0	0	0		3206 8.3		8.92E-06			L.29E-05					6.13E-07		0 0.259			
ANNUAL	2016 San Diego Inboard	Diesel	active	15	1997	533.2575	7.91E-06 1	1.43E-05	3.23E-05	7.99E-07	0.002155	0	0	0				7.91E-06		0 1	L.14E-05	9.57E-06	0 9.5	7E-06	7.19E-07	5.43E-07	0.229774	0 0.229	774 2.1	1E-08 2	2.44E-08
ANNUAL		Diesel	active	15			7.29E-06 1					0	0	0				7.29E-06			L.05E-05					5.01E-07		0 0.211			
ANNUAL		Diesel Diesel	active active	15 15	1000		7.35E-06 1 9.26E-06 1	1.552 05		7.43E-07		0	0	0			870405	7.35E-06 9.26E-06	1.06E-05		L.06E-05 L.33E-05					5.05E-07 6.37E-07		0 0.213			
ANNUAL	2016 San Diego Inboard	Diesel	active	15			1.01E-05 1					0	0	0			457176 1		1.46E-05		L.46E-05					6.96E-07		0 0.294			
ANNUAL	2016 San Diego Inboard	Diesel	active	15			8.49E-06 1					0	0	0	0 9.5	3906 7.9	929091 8	8.49E-06	1.22E-05	0 1	L.22E-05	1.03E-05	0 1.0	3E-05	7.72E-07	5.83E-07	0.246616	0 0.246			2.62E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15			8.96E-06 1					0	0	0			375083 8		1.29E-05		L.29E-05					6.16E-07		0 0.260			2.76E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15 15			9.96E-06 1.11E-05 2					0	0	0			303361 9 0.39917 1		1.43E-05 1.6E-05		L.43E-05 1.6E-05	1.2E-05				6.84E-07 7.65E-07		0 0.28			3.07E-08 3.43E-08
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	15			1.11E-05 2 1.17E-05 2					0	0	0			0.39917 1 0.91724 1		1.68E-05		1.68E-05					7.65E-07 8.03E-07		0 0.323			3.6F-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15			1.05E-05 1					0	0	0	0 11.				1.52E-05		L.52E-05					7.25E-07		0 0.306			3.25E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15		350.9063	5.2E-06 9					0	0	0		3439 4.			7.49E-06		7.49E-06					3.58E-07		0 0.151			1.6E-08
ANNUAL		Diesel	active	15								0	0	0		1507 1.1			1.82E-06		L.82E-06					8.71E-08		0 0.036			3.91E-09
ANNUAL		Diesel Diesel	active active	15 15			1.26E-06 2 1.64E-06 2					0	0	0			174412 1 534595 1		1.81E-06 2.37E-06		L.81E-06 2.37E-06					8.64E-08 1.13E-07		0 0.036			3.87E-09 5.06E-09
ANNUAL	-	Diesel	active	15			2.14E-06 3					0	0	0			995949 2		3.08E-06		3.08E-06					1.47E-07		0 0.062			6.58E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15	2013	155.9987	2.31E-06 4	4.18E-06	9.44E-06	2.34E-07	0.00063	0	0	0				2.31E-06	3.33E-06	0 3	3.33E-06	2.8E-06	0 2	8E-06	2.1E-07	1.59E-07	0.067218	0 0.067			7.13E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	15			4.59E-06 8				0.00125	0	0	0			285053 4		6.6E-06		6.6E-06					3.15E-07		0 0.133			1.41E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	15			7.33E-06 1					0	0	0			851521		1.06E-05		L.06E-05					5.04E-07		0 0.213			2.26E-08
ANNUAL		Diesel Diesel	active active	15 25			7.71E-06 1 8.43E-07 1				0.0021	0	0	0			199817 7 345812 8		1.11E-05 1.21E-06		L.11E-05 L.21E-06					5.3E-07 5.79E-08		0 0.223			2.3/E-08 2.6E-09
ANNUAL	-	Diesel	active	25			8.21E-07 1					0	0	0			343684 8		1.18F-06		L.18E-06					5.64E-08		0 0.024			2.53E-09
ANNUAL		Diesel	active	25			9.29E-07 1					0	0	ō				9.29E-07			L.34E-06					6.39E-08		0 0.027			
ANNUAL	2016 San Diego Inboard	Diesel	active	25			1.49E-06 2					0	0	0				1.49E-06			2.14E-06					1.02E-07		0 0.043			4.58E-09
ANNUAL		Diesel	active	25	1960		1.52E-06 2					0	0	0				1.52E-06			2.19E-06					1.04E-07		0 0.044			4.68E-09
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel	active active	25 25			1.2E-06 2 1.69E-06 3					0	0	0				1.2E-06 1.69E-06			L.73E-06 2.43E-06					8.25E-08 1.16E-07		0 0.034			3.7E-09 5.2E-09
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard		active	25			1.69E-06 3					0	0	0				1.69E-06 1.6E-06			2.3E-06					1.16E-07 1.1E-07		0 0.048			
ANNUAL	2016 San Diego Inboard		active	25			2.25E-06 4					õ	0	õ				2.25E-06			3.24E-06					1.55E-07		0 0.065			6.93E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	25	1965	64.47225	2.18E-06 3	3.94E-06	8.89E-06	2.2E-07	0.000593	0	0	0	0 1.07	1538 0.8	893181 2	2.18E-06	3.14E-06	0 3	3.14E-06	2.63E-06	0 2.6	3E-06	1.98E-07	1.5E-07	0.063277	0 0.063	277 5.8	1E-09 6	
ANNUAL	2016 San Diego Inboard	Diesel	active	25			2.46E-06 4			2.48E-07		0	0	0				2.46E-06			3.54E-06					1.69E-07		0 0.071			
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	25 25			2.1E-06 3 2.51E-06 4					0	0	0				2.1E-06 2.51E-06			3.02E-06 3.62E-06					1.44E-07 1.73E-07		0 0.060			
ANNUAL		Diesel	active	25			2.75E-06 4					0	0	0				2.75E-06			3.95E-06					1.89E-07		0 0.073			
ANNUAL	-	Diesel	active	25			2.32E-06 4					0	0	0				2.32E-06			3.34E-06					1.59E-07		0 0.067			
ANNUAL	2016 San Diego Inboard	Diesel	active	25			2.44E-06 4					0	0	0				2.44E-06			3.52E-06					1.68E-07		0 0.071			7.53E-09
ANNUAL		Diesel	active	25			3.69E-06 6					0	0	0				3.69E-06			5.32E-06					2.54E-07		0 0.107			1.14E-08
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	25 25			5.16E-06 9					0	0	0				5.16E-06 4.61E-06			7.43E-06 5.64E-06					3.55E-07 3.17E-07		0 0.150			
ANNUAL		Diesel	active	25			4.61E-06 8 4.35E-06 7					0	0	0				4.61E-06 4.35E-06			5.26E-06					3.1/E-0/ 2.99E-07		0 0.134			
ANNUAL	-	Diesel	active	25			5.5E-06 9					0	0	0				5.5E-06			7.91E-06		0 6.6			3.78E-07		0 0.159			
ANNUAL		Diesel	active	25			6.92E-06 1				0.001887	0	0	0				6.92E-06			9.97E-06					4.76E-07	0.201139	0 0.201			
ANNUAL	2016 San Diego Inboard	Diesel	active	25			8.29E-06					0	0	0				8.29E-06				1E-05				5.7E-07		0 0.240			
ANNUAL		Diesel	active	25			8.29E-06					0	0	0				8.29E-06				1E-05				5.7E-07		0 0.240			
ANNUAL	-	Diesel Diesel	active active	25 25			5.39E-06 9					0	0	0				5.39E-06 4.57E-06			7.76E-06 5.58E-06					3.7E-07 3.14E-07		0 0.156			
ANNUAL	-	Diesel	active	25			4.65E-06					0	0	0				4.65E-06			5.69E-06					3.14E-07 3.19E-07		0 0.132			
ANNUAL		Diesel	active	25			5.52E-06 9					0	0	0				5.52E-06			7.95E-06					3.8E-07		0 0.160			
ANNUAL	2016 San Diego Inboard		active	25			7.61E-06 1					0	0	0				7.61E-06			1.1E-05					5.23E-07		0 0.22			
ANNUAL	2016 San Diego Inboard	Diesel	active	25	1985	238.4241	8.05E-06 1	1.46E-05	3.29E-05	8.14E-07	0.002195	0	0	0	0 3.97	3/36 3.3	303062 8	8.05E-06	1.16E-05	0 1	L.16E-05	9.74E-06	0 9.7	4E-06	7.33E-07	5.53E-07	0.234006	0 0.234	JUG 2.15	5E-08 2	.48E-08

																											/-		
SEASON CY ANNUAI	COUNTY CATEGOR 2016 San Diego Inboard		EL STATUS active	HPGRP MY 25			umOf_HC Si 8.41E-06					10f_HC Su 0	umOf_HC Sun 0	1Of_HC Sum 0			nOf_Po Su 451112 8				Df_TO Sur 1E-05 1.			tO SumOf_PN 5 7.65E-07		SumOf_Fu SumOf_	0 0.244494		
ANNUAL	•	Diesel	active	25	1987 28		9.6E-06					0	0	0			939597				BE-05 1.			5 9.03E-07			0 0.279101		
ANNUAL	2016 San Diego Inboard	Diesel	active	25	1988 35	56.4317	1.2E-05	2.18E-05	4.91E-05	1.22E-06	0.003281	0	0	0	0 5.940				1.73E-05	0 1.7	3E-05 1	46E-05	0 1.46E-0		8.27E-07		0 0.349826	3.21E-08	
ANNUAL		Diesel	active	25			1.62E-05					0	0	0			642278 1		2.33E-05		3E-05 1.			5 1.47E-06			0 0.470573		4.99E-08
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	25 25			1.72E-05 1.33E-05					0	0	0			067745 1 474483 1		2.48E-05 1.92E-05		BE-05 2. 2E-05 1.			5 1.57E-06			0 0.500715 0 0.38784		5.31E-08 4.11E-08
ANNUAL	-	Diesel	active	25			1.33E-05 1.37E-05					0	0	0			474485 1 628946 1		1.92E-05		2E-05 1. BE-05 1.			5 1.21E-06			0 0.398783		
ANNUAL		Diesel	active	25			1.54E-05					ō	0	õ			327497 1				2E-05 1.			5 1.4E-06			0 0.448272		
ANNUAL	2016 San Diego Inboard	Diesel	active	25	1994 54	41.7954	1.83E-05	3.31E-05	7.47E-05	1.85E-06	0.004987	0	0	0	0 9.029	9924 7.5	505885 1	1.83E-05	2.63E-05		3E-05 2		0 2.21E-0	5 1.66E-06	1.26E-06	0.531755	0 0.531755	4.88E-08	5.64E-08
ANNUAL		Diesel	active	25			1.96E-05			1.98E-06		0	0	0			037852 1				2E-05 2			5 1.78E-06			0 0.569442		6.04E-08
ANNUAL		Diesel	active	25			2.03E-05					0	0	0			338887 2		2.93E-05		3E-05 2.			5 1.85E-06			0 0.590769		
ANNUAL		Diesel Diesel	active active	25 25		33.2575 91.4975 ·	1.8E-05			1.82E-06 1.68E-06		0	0	0			387602 809071 1		2.59E-05		9E-05 2. 9E-05 2.			5 1.64E-06			0 0.523375		
ANNUAL		Diesel	active	25			1.67E-05					0	0	0			870405 1				1E-05 2.			5 1.51E-00			0 0.486734		5.16E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25	2000 62	24.8091	2.11E-05	3.81E-05	8.61E-05	2.13E-06	0.005752	0	0	0			655934 2		3.04E-05		4E-05 2.		0 2.55E-0	5 1.92E-06	1.45E-06	0.61323	0 0.61323	5.63E-08	6.5E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25			2.31E-05					0	0	0			457176 2		3.32E-05		2E-05 2			5 2.1E-06			0 0.669994		7.11E-08
ANNUAL	•	Diesel	active	25			1.93E-05 2.04E-05					0	0	0			929091 1				BE-05 2.			5 1.76E-06			0 0.561737		5.96E-08
ANNUAL		Diesel Diesel	active active	25 25			2.04E-05 2.27E-05					0	0	0			375083 2 303361 2		2.94E-05 3.27E-05		4E-05 2. 7E-05 2.			5 1.86E-06			0 0.593333 0 0.659097		6.99E-08
ANNUAL	-	Diesel	active	25			2.54E-05					0	0	0).39917 2		3.65E-05		5E-05 3.			5 2.31E-06			0 0.73673		7.81E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25	2006 78	38.0364	2.66E-05	4.81E-05	0.000109	2.69E-06	0.007254	0	0	0	0 13.13	3394 10	0.91724 2	2.66E-05	3.83E-05		3E-05 3.			5 2.42E-06			0 0.773432		8.2E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25	2007 71		2.4E-05					0	0	0			853907		3.46E-05		6E-05 2			5 2.19E-06			0 0.698101		7.4E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25			1.19E-05				0.00323	0	0	0			1.86136 1		1.71E-05		1E-05 1.			5 1.08E-06			0 0.344403		3.65E-08
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	25 25			2.89E-06 2.86E-06				0.000787	0	0	0			184084 2 174412 2		4.16E-06 4.12E-06		6E-06 3. 2E-06 3.			6 2.63E-07			0 0.083886 0 0.083201	7.7E-09	8.9E-09 8.82E-09
ANNUAL	-	Diesel	active	25			3.74E-06				0.00102	0	0	0			534595 3		5.39E-06		9E-06 4.			6 2.0E-07			0 0.108718		1.15E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25			4.87E-06				0.001326	0	0	0			995949 4		7.01E-06		1E-06 5.		0 5.89E-0	6 4.43E-07	3.34E-07	0.141403	0 0.141403		1.5E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	25	2013 15	5.9987	5.27E-06	9.52E-06	2.15E-05	5.33E-07	0.001436	0	0	0	0 2.599	9978 2.1	161162 5	5.27E-06	7.59E-06	0 7.59	9E-06 6.	37E-06	0 6.37E-0	6 4.79E-07	3.62E-07	0.153108	0 0.153108	1.4E-08	1.62E-08
ANNUAL	-	Diesel	active	25			1.04E-05					0	0	0			285053 1		1.5E-05		5E-05 1.		0 1.26E-0		7.18E-07		0 0.303575		3.22E-08
ANNUAL		Diesel Diesel	active active	25 25			1.67E-05 1.76E-05					0	0	0			851521 1 199817 1		2.41E-05 2.53E-05		1E-05 2. 3E-05 2.			5 1.52E-06			0 0.485396 0 0.510071		5.15E-08 5.41E-08
ANNUAL	-	Diesel	active	50			1.56E-06					0	0	0			345812 1		2.25E-05		5E-05 2.			6 1.42E-00			0 0.041298		4.38F-09
ANNUAL		Diesel	active	50			1.52E-06					0	0	0			0.33684 1		2.19E-06		9E-06 1.			6 1.38E-07			0 0.040227		4.27E-09
ANNUAL		Diesel	active	50			1.72E-06					0	0	0			381186 1				BE-06 2			6 1.57E-07			0 0.045523		4.83E-09
ANNUAL		Diesel	active	50			2.75E-06					0	0	0			0.60918 2		3.96E-06		6E-06 3.			6 2.5E-07			0 0.07275		7.72E-09
ANNUAL		Diesel Diesel	active active	50 50			2.81E-06 2.23E-06					0	0	0			622498 2 492553 2		4.05E-06 3.21E-06		5E-06 1 1E-06 2			6 2.56E-07 6 2.02E-07			0 0.074341 0 0.058822		7.88E-09
ANNUAL	-	Diesel	active	50			3.12E-06					0	0	0			492333 2 691458 3		4.5E-06		5E-06 3.			6 2.84F-07			0 0.038822		
ANNUAL		Diesel	active	50			2.96E-06					0	0	0	0 0.788	3585 0.6	655491 2	2.96E-06	4.27E-06		7E-06 3.		0 3.58E-0	6 2.69E-07	2.04E-07	0.078281	0 0.078281		8.3E-09
ANNUAL	2016 San Diego Inboard	Diesel	active	50			4.17E-06					0	0	0	0 1.110	0118 0.9	922756 4	4.17E-06	6E-06	0 0	6E-06 5.	05E-06	0 5.05E-0	6 3.79E-07	2.87E-07	0.110199	0 0.110199	1.01E-08	1.17E-08
ANNUAL		Diesel	active	50			4.04E-06					0	0	0			893181 4		5.81E-06		1E-06 4.			6 3.67E-07			0 0.106667		1.13E-08
ANNUAL		Diesel Diesel	active active	50 50			4.55E-06 3.89E-06					0	0	0			007082 4 860664 3		6.55E-06 5.6E-06		5E-06 5. 6E-06 4.			6 4.14E-07 6 3.54E-07			0 0.120269 0 0.102784		
ANNUAL		Diesel	active	50			4.66E-06					0	0	0			030716 4		5.0E-00 6.71E-06		1E-06 5.			6 4.24E-07			0 0.102784		
ANNUAL	-	Diesel	active	50			5.09E-06					ō	0	õ			126538 5				3E-06 6.			6 4.63E-07			0 0.134535		1.43E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50	1970 68		4.3E-06					0	0	0			950775		6.19E-06		9E-06			6 3.91E-07			0 0.113545		1.2E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50			4.53E-06					0	0	0			002854 4		6.53E-06		3E-06 5.			6 4.12E-07			0 0.119764		1.27E-08
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	50 50			6.85E-06 9.57E-06					0	0	0			515228 6 117783 9		9.86E-06 1.38E-05		6E-06 8. BE-05 1.			6 6.23E-07			0 0.180954 0 0.252913		1.92E-08 2.68E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50			8.55E-06					0	0	0			891685 8		1.23E-05		3E-05 1.			5 7.78E-07			0 0.232513		2.08E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50			8.06E-06					0	0	0			1.78423 8		1.16E-05		6E-05 9.			6 7.34E-07			0 0.213079		2.26E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50	1976 16	j2.7148	1.02E-05	1.84E-05	4.16E-05	1.03E-06	0.002518	0	0	0	0 2.71	1913 2.2	254206 1	1.02E-05	1.47E-05	0 1.4	7E-05 1	23E-05	0 1.23E-0	5 9.27E-07	7E-07	0.269205	0 0.269205	2.47E-08	2.85E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50			1.28E-05			1.3E-06		0	0	0			839143 1		1.85E-05		5E-05 1.			5 1.17E-06			0 0.33906		3.6E-08
ANNUAL		Diesel Diesel	active active	50 50			1.54E-05 1.54E-05					0	0	0			401462 1 401679 1		2.21E-05 2.21E-05		1E-05 1. 1E-05 1.		0 1.86E-0		1.06E-06 1.06E-06		0 0.406214		4.31E-08 4.31E-08
ANNUAL		Diesel	active	50			9.98E-06					0	0	0			209396 9		1.44E-05		4E-05 1.			5 9.08E-07			0 0.263854		4.31E-08
ANNUAL	-	Diesel	active	50			8.46E-06					0	0	0			873157 8				2E-05 1.			5 7.7E-07			0 0.223699		2.37E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50	1982 13	37.5444	8.61E-06	1.56E-05	3.51E-05	8.7E-07	0.002128	0	0	0	0 2.292	2407 1.9	905502 8	8.61E-06	1.24E-05	0 1.24	4E-05 1	04E-05	0 1.04E-0	5 7.83E-07	5.92E-07	0.227562	0 0.227562	2.09E-08	2.41E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50			1.02E-05					0	0	0			265262 1				7E-05 1			5 9.31E-07			0 0.270525		
ANNUAL		Diesel Diesel	active active	50 50			1.41E-05 1.49E-05					0	0	0			120196 1 303062 1				3E-05 1. 5E-05 1.			1.28E-06			0 0.372625		
ANNUAL	•	Diesel	active	50			1.49E-05					0	0	0			451112 1				5E-05 1.			5 1.30E-00			0 0.412144		
ANNUAL	-	Diesel	active	50			1.78E-05				0.0044	0	0	0			939597 1				6E-05 2.			5 1.62E-06			0 0.47048		
ANNUAL	2016 San Diego Inboard	Diesel	active	50	1988 35	56.4317	2.23E-05	4.03E-05	9.11E-05	2.26E-06	0.005515	0	0	0	0 5.940	0528 4.9	937906 2	2.23E-05	3.21E-05		1E-05		0 2.7E-0	5 2.03E-06	1.53E-06	0.589702	0 0.589702	5.41E-08	6.25E-08
ANNUAL	•	Diesel	active	50	1989 47					3.03E-06		0	0	0	0 7.990			3E-05			2E-05 3			5 2.73E-06			0 0.793244		
ANNUAL		Diesel Diesel	active active	50 50			3.19E-05 2.47E-05					0	0	0			067745 3 474483 2		4.6E-05 3.56E-05		6E-05 3. 6E-05 2.			5 2.91E-06 5 2.25E-06			0 0.844055 0 0.653782		8.95E-08 6 93E-08
ANNUAL	2016 San Diego Inboard		active	50			2.47E-05 2.54E-05					0	0	0			474483 2 628946 2				6E-05 2.			5 2.25E-06			0 0.653782		
ANNUAL	2016 San Diego Inboard		active	50			2.86E-05					0	0	0			327497 2				2E-05 3.		0 3.46E-0	5 2.6E-06	1.97E-06	0.755652	0 0.755652		
ANNUAL	2016 San Diego Inboard	Diesel	active	50	1994 54	41.7954	3.39E-05	6.13E-05	0.000138	3.43E-06	0.008383	0	0	0	0 9.029	9924 7.5	505885 3	3.39E-05	4.88E-05		BE-05			5 3.09E-06			0 0.896379		
ANNUAL		Diesel	active	50			3.63E-05					0	0	0			037852 3				3E-05 4.			5 3.3E-06			0 0.959908		
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel Diesel	active active	50 50			3.77E-05 3.34E-05					0	0	0			338887 3 387602 3				3E-05 4. 1E-05 4.			5 3.43E-06 5 3.04E-06			0 0.995859 0 0.882253		
ANNUAL	2016 San Diego Inboard	Diesel	active	50			3.08E-05					0	0	0			809071 3				3E-05 3.			5 3.04E-00			0 0.813163		8.62E-08
ANNUAL		Diesel	active	50			3.1E-05					0	0	0			870405				7E-05 3.			5 2.82E-06			0 0.820488		8.7E-08
ANNUAL	2016 San Diego Inboard	Diesel	active	50			3.91E-05					0	0	0			655934 3				3E-05 4			5 3.56E-06			0 1.033722		1.1E-07
ANNUAL	2016 San Diego Inboard	Diesel	active	50			4.27E-05					0	0	0			457176 4		6.15E-05		5E-05 5.			5 3.89E-06			0 1.129409		1.2E-07
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard	Diesel	active active	50 50			3.58E-05 3.78E-05					0	0	0			929091 3 375083 3		5.16E-05		6E-05 4. 5E-05 4.			5 3.26E-06 5 3.44E-06			0 0.94692		1E-07 1.06E-07
ANNUAL	2016 San Diego Inboard 2016 San Diego Inboard		active	50			4.2E-05					0	0	0			375083 3 303361				5E-05 4. 5E-05 5.			5 3.44E-06			0 1.000182 0 1.11104		
ANNUAL	2016 San Diego Inboard		active	50			4.7E-05					0	0	0).39917				7E-05 5.			5 4.28E-06			0 1.241906		
ANNUAL	-	Diesel	active	50	2006 78	88.0364 4	4.93E-05	8.92E-05	0.000201	4.99E-06	0.012193	0	0	0			0.91724 4				1E-05 5			5 4.49E-06			0 1.303775		
ANNUAL		Diesel	active	50			4.45E-05					0	0	0			853907 4				1E-05 5.			5 4.05E-06			0 1.176788		
ANNUAL	2016 San Diego Inboard	Diesel	active active	50 50			2.2E-05					0	0	0			1.86136 184084 5				6E-05 2. 1E-06 6		0 2.66E-0	15 2E-06 16 4.87E-07	1.51E-06		0 0.580561		
ANNUAL		Diesel Diesel	active	50 50			5.35E-06 5.31E-06					0	0	0			184084 5 174412 5				1E-06 6. 4E-06 6.			6 4.87E-07			0 0.141407 0 0.140252		
ANNUAL	-	Diesel	active	50			6.93E-06					0	0	0			534595 6				9E-06 8.			6 6.31E-07			0 0.140232		
ANNUAL	-	Diesel	active	50	2012 14	44.0731	9.02E-06	1.63E-05	3.68E-05	9.12E-07	0.002229	0	0	0	0 2.40	1218 1.9	995949 9	9.02E-06	1.3E-05		3E-05 1			5 8.21E-07			0 0.238363		
ANNUAL	2016 San Diego Inboard		active	50			9.77E-06					0	0	0			161162 9				1E-05 1			5 8.88E-07			0 0.258094		
ANNUAL	2016 San Diego Inboard		active	50			1.94E-05					0	0	0			285053 1				9E-05 2.			5 1.76E-06			0 0.511736		
ANNUAL	2016 San Diego Inboard	Diesel	active	50	2015 49	14.561/	3.1E-05	5.0E-05	0.000126	3.13E-06	0.007652	0	0	0	U 8.242	2095 6.8	851521	5.1E-05	4.40E-05	U 4.46	6E-05 3.	/3E-05	U 3./5E-0	5 2.82E-06	2.13E-06	0.618253	0 0.818233	7.51E-08	6.68E-08

SEASON CY	COUNTY CATEGORY STRK-FUEL STATUS	HPGRP MY	SumOf_Aci SumOf_HC SumOf_CO SumOf_NC SumO	_PN SumOf_CO SumOf_	_HC SumOf_HC SumOf_HC SumO	_Po SumOf_Po SumOf_TH SumOf_TO SumOf_TO SumOf_TO SumOf_RO SumOf_RO SumOf_RO SumOf_PN SumOf_PN Sur	mOf_Fu: SumOf_Fu: SumOf_Fu: SumOf_NH SumOf_SO>
ANNUAL	2016 San Diego Inboard Diesel active	50	2016 519.7026 3.25E-05 5.88E-05 0.000133 3.29	-06 0.008041	0 0 0	171 7.199817 3.25E-05 4.69E-05 0 4.69E-05 3.94E-05 0 3.94E-05 2.96E-06 2.24E-06 0.4	
ANNUAL	2016 San Diego Inboard Diesel active	120	1956 24.96167 3.52E-06 6.36E-06 1.43E-05 3.55		0 0 0	028 0.345812 3.52E-06 5.06E-06 0 5.06E-06 4.25E-06 0 4.25E-06 3.2E-07 2.42E-07 0.1 234 0.33684 3.42E-06 4.93E-06 0 4.93E-06 4.14E-06 0 4.14E-06 3.12E-07 2.35E-07 0.1	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	1957 24.31406 3.42E-06 6.19E-06 1.4E-05 3.46 1958 27.51507 3.88E-06 7.01E-06 1.58E-05 3.92		0 0 0	234 0.33684 3.42E-06 4.93E-06 0 4.93E-06 4.14E-06 0 4.14E-06 3.12E-07 2.35E-07 0.1 585 0.381186 3.88E-06 5.58E-06 0 5.58E-06 0 4.69E-06 0 4.69E-07 0.1	
ANNUAL	2016 San Diego Inboard Diesel active	120	1959 43.97227 6.19E-06 1.12E-05 2.53E-05 6.26		0 0 0	871 0.60918 6.19E-06 8.92E-06 0 8.92E-06 7.49E-06 0 7.49E-06 5.63E-07 4.26E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1960 44.9336 6.33E-06 1.14E-05 2.58E-05 6.4	-07 0.001456	0 0 0	893 0.622498 6.33E-06 9.11E-06 0 9.11E-06 7.66E-06 0 7.66E-06 5.76E-07 4.35E-07 0.	156044 0 0.156044 1.43E-08 1.65E-08
ANNUAL	2016 San Diego Inboard Diesel active	120	1961 35.55385 5.01E-06 9.05E-06 2.04E-05 5.06		0 0 0	564 0.492553 5.01E-06 7.21E-06 0 7.21E-06 6.06E-06 0 6.06E-06 4.56E-07 3.44E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1962 49.91137 7.03E-06 1.27E-05 2.87E-05 7.11		0 0 0	856 0.691458 7.03E-06 1.01E-05 0 1.01E-05 8.51E-06 0 8.51E-06 6.4E-07 4.83E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	1963 47.31513 6.66E-06 1.2E-05 2.72E-05 6.74 1964 66.60706 9.38E-06 1.7E-05 3.83E-05 9.48		0 0 0	585 0.6555491 6.66E-06 9.6E-06 0 9.6E-06 8.06E-06 0 8.06E-06 6.06E-07 4.58E-07 0. 118 0.922756 9.38E-06 1.35E-05 0 1.14E-05 0 1.14E-05 8.54E-07 6.45E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1964 66.60706 9.382-06 1.72-05 3.632-05 9.48 1965 64.47225 9.08E-06 1.64E-05 3.71E-05 9.18		0 0 0	110 0.922756 9.585-06 1.555-05 0 1.555-05 1.145-05 0 1.145-05 8.5455-07 6.455-07 0. 538 0.893181 9.085-06 1.315-05 0 1.315-05 1.15-05 0 1.155 8.265-07 6.2455-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1966 72.69395 1.02E-05 1.85E-05 4.18E-05 1.04		0 0 0	566 1.007082 1.02E-05 1.47E-05 0 1.47E-05 1.24E-05 0 1.24E-05 9.32E-07 7.04E-07 0	
ANNUAL	2016 San Diego Inboard Diesel active	120	1967 62.1251 8.75E-06 1.58E-05 3.57E-05 8.85		0 0 0	418 0.860664 8.75E-06 1.26E-05 0 1.26E-05 1.06E-05 0 1.06E-05 7.96E-07 6.02E-07 0.	215747 0 0.215747 1.98E-08 2.29E-08
ANNUAL	2016 San Diego Inboard Diesel active	120	1968 74.39989 1.05E-05 1.89E-05 4.28E-05 1.06	-06 0.002411	0 0 0	998 1.030716 1.05E-05 1.51E-05 0 1.51E-05 1.27E-05 0 1.27E-05 9.53E-07 7.2E-07 0.	258374 0 0.258374 2.37E-08 2.74E-08
ANNUAL	2016 San Diego Inboard Diesel active	120	1969 81.31661 1.15E-05 2.07E-05 4.67E-05 1.16		0 0 0	277 1.126538 1.15E-05 1.65E-05 0 1.65E-05 1.39E-05 0 1.39E-05 1.04E-06 7.87E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1970 68.62955 9.67E-06 1.75E-05 3.95E-05 9.77		0 0 0	826 0.950775 9.67E-06 1.39E-05 0 1.39E-05 1.17E-05 0 1.17E-05 8.79E-07 6.64E-07 0. 479 1.002854 1.02E-05 1.47E-05 0 1.23E-05 0 1.23E-05 <t< td=""><td></td></t<>	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	1971 72.38876 1.02E-05 1.84E-05 4.16E-05 1.03 1972 109.3733 1.54E-05 2.78E-05 6.29E-05 1.56		0 0 0	479 1.002854 1.02E-05 1.47E-05 0 1.47E-05 1.23E-05 0 1.23E-05 9.28E-07 7.01E-07 C 888 1.515228 1.54E-05 2.22E-05 0 2.22E-05 0 1.86E-05 0 1.86E-05 1.4E-06 1.06E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1973 152.8674 2.15E-05 3.89E-05 8.79E-05 2.18		0 0 0	779 2.117783 2.15E-05 3.1E-05 0 3.1E-05 0 3.1E-05 0 2.61E-05 0 2.61E-05 1.96E-06 1.48E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1974 136.547 1.92E-05 3.48E-05 7.85E-05 1.94	-06 0.004425	0 0 0	784 1.891685 1.92E-05 2.77E-05 0 2.77E-05 2.33E-05 0 2.33E-05 1.75E-06 1.32E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1975 128.7906 1.81E-05 3.28E-05 7.4E-05 1.83		0 0 0	651 1.78423 1.81E-05 2.61E-05 0 2.61E-05 2.2E-05 0 2.2E-05 1.65E-06 1.25E-06 0	
ANNUAL	2016 San Diego Inboard Diesel active	120	1976 162.7148 2.29E-05 4.14E-05 9.35E-05 2.32		0 0 0	913 2.254206 2.29E-05 3.3E-05 0 3.3E-05 2.77E-05 0 2.77E-05 2.09E-06 1.58E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1977 204.9372 2.89E-05 5.22E-05 0.000118 2.92		0 0 0	562 2.839143 2.89E-05 4.16E-05 0 4.16E-05 3.49E-05 0 3.49E-05 2.63E-06 1.98E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	1978 245.5269 3.46E-05 6.25E-05 0.000141 3.5 1979 245.5426 3.46E-05 6.25E-05 0.000141 3.5			114 3.401462 3.46E-05 4.98E-05 0 4.98E-05 4.18E-05 0 4.18E-05 3.15E-06 2.38E-06 0 4.98E-05 4.18E-05 0 4.18E-05 3.15E-06 2.38E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1980 159.4803 2.25E-05 4.06E-05 9.17E-05 2.27		0 0 0	005 2.209396 2.25E-05 3.23E-05 0 3.23E-05 2.72E-05 0 2.72E-05 2.04E-06 1.54E-06 0	
ANNUAL	2016 San Diego Inboard Diesel active	120	1981 135.2096 1.9E-05 3.44E-05 7.77E-05 1.93		0 0 0	493 1.873157 1.9E-05 2.74E-05 0 2.74E-05 2.3E-05 0 2.3E-05 1.73E-06 1.31E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1982 137.5444 1.94E-05 3.5E-05 7.91E-05 1.96	-06 0.004457	0 0 0	407 1.905502 1.94E-05 2.79E-05 0 2.79E-05 2.34E-05 0 2.34E-05 1.76E-06 1.33E-06 0.4	477661 0 0.477661 4.38E-08 5.07E-08
ANNUAL	2016 San Diego Inboard Diesel active	120	1983 163.5128 2.3E-05 4.16E-05 9.4E-05 2.33		0 0 0	214 2.265262 2.3E-05 3.32E-05 0 3.32E-05 2.79E-05 0 2.79E-05 2.1E-06 1.58E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1984 225.2243 3.17E-05 5.73E-05 0.000129 3.21		0 0 0	739 3.120196 3.17E-05 4.57E-05 0 4.57E-05 3.84E-05 0 3.84E-05 2.89E-06 2.18E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	1985 238.4241 3.36E-05 6.07E-05 0.000137 3.39 1986 249.1107 3.51E-05 6.34E-05 0.000143 3.55		0 0 0	736 3.303062 3.36E-05 4.84E-05 0 4.06E-05 0 4.06E-05 3.06E-06 2.31E-06 0. 846 3.451112 3.51E-05 5.05E-05 0 5.05E-05 0 4.25E-05 0 4.25E-05 3.19E-06 2.41E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120	1986 249.1107 3.51E-05 6.54E-05 0.000143 3.55 1987 284.3709 4.01E-05 7.24E-05 0.000163 4.05		0 0 0	516 3.939597 4.01E-05 5.77E-05 0 5.77E-05 4.25E-05 0 4.25E-05 0 4.25E-05 3.64E-06 2.75E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1988 356.4317 5.02E-05 9.08E-05 0.000205 5.08		0 0 0	528 4.937906 5.02E-05 7.23E-05 0 7.23E-05 6.07E-05 0 6.07E-05 4.57E-06 3.45E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1989 479.4579 6.75E-05 0.000122 0.000276 6.83		0 0 0	965 6.642278 6.75E-05 9.73E-05 0 9.73E-05 8.17E-05 0 8.17E-05 6.14E-06 4.64E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1990 510.1693 7.19E-05 0.00013 0.000293 7.26		0 0 0	821 7.067745 7.19E-05 0.000103 0 0.000103 8.7E-05 0 8.7E-05 6.54E-06 4.94E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1991 395.1633 5.57E-05 0.000101 0.000227 5.63		0 0 0	054 5.474483 5.57E-05 8.02E-05 0 8.02E-05 6.74E-05 0 6.74E-05 5.06E-06 3.83E-06 1.	
ANNUAL ANNUAL	2016 San Diego Inboard Diesel active	120 120	1992 406.3128 5.72E-05 0.000103 0.000234 5.79 1993 456.7362 6.43E-05 0.000116 0.000263 6.5		0 0 0	188 5.628946 5.72E-05 8.24E-05 0 8.24E-05 6.93E-05 0 6.93E-05 5.21E-06 3.93E-06 1. 227 6.327497 6.43E-05 9.26E-05 0 9.26E-05 7.78E-05 0 7.78E-05 5.85E-06 4.42E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120	1993 436.7362 6.43E-05 0.000116 0.000263 6.5 1994 541.7954 7.63E-05 0.000138 0.000311 7.71		0 0 0	227 0.327497 0.43E-05 9.26E-05 0 9.26E-05 7.76E-05 0 7.78E-05 5.85E-06 4.42E-06 1. 924 7.505885 7.63E-05 0.00011 0 0.00011 9.23E-05 0 9.23E-05 6.94E-06 5.25E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1995 580.1943 8.17E-05 0.000148 0.000334 8.26		0 0 0	904 8.037852 8.17E-05 0.000118 0 0.000118 9.89E-05 0 9.89E-05 7.44E-06 5.62E-06 2.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1996 601.9238 8.48E-05 0.000153 0.000346 8.57		0 0 0	206 8.338887 8.48E-05 0.000122 0 0.000122 0.000103 0 0.000103 7.71E-06 5.83E-06 2.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1997 533.2575 7.51E-05 0.000136 0.000307 7.59	-06 0.017279	0 0 0	625 7.387602 7.51E-05 0.000108 0 0.000108 9.09E-05 0 9.09E-05 6.83E-06 5.16E-06 1.	851885 0 1.851885 1.7E-07 1.96E-07
ANNUAL	2016 San Diego Inboard Diesel active	120		-06 0.015926	0 0 0	625 6.809071 6.92E-05 9.97E-05 0 9.97E-05 8.38E-05 0 8.38E-05 6.3E-06 4.76E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120	1999 495.9248 6.99E-05 0.000126 0.000285 7.06		0 0 0	413 6.870405 6.99E-05 0.000101 0 0.000101 8.45E-05 0 8.45E-05 6.36E-06 4.8E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120 120	2000 624.8091 8.8E-05 0.000159 0.000359 8.9		0 0 0	349 8.6555934 8.8E-05 0.000127 0 0.000106 0 0.000106 8.01E-06 6.05E-06 2. 742 9.457176 9.62E-05 0.000138 0 0.000116 0 0.000116 8.75E-06 6.61E-06 2.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120	2001 682.645 9.62E-05 0.000174 0.000392 9.72 2002 572.3436 8.06E-05 0.000146 0.000329 8.15		0 0 0	742 9.457176 9.52E-05 0.000138 0 0.000138 0.000116 0 0.000116 8.75E-05 0.51E-06 2. 906 7.929091 8.06E-05 0.000116 0 0.000116 9.75E-05 0 9.75E-05 7.33E-06 5.54E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	120	2003 604.5365 8.52E-05 0.000154 0.000348 8.61		0 0 0	561 8.375083 8.52E-05 0.000123 0 0.000123 0.000103 0 0.000103 7.75E-06 5.85E-06 2.0	
ANNUAL	2016 San Diego Inboard Diesel active	120	2004 671.5422 9.46E-05 0.000171 0.000386 9.56	-06 0.02176	0 0 0	237 9.303361 9.46E-05 0.000136 0 0.000136 0.000114 0 0.000114 8.61E-06 6.5E-06 2.	332117 0 2.332117 2.14E-07 2.47E-07
ANNUAL	2016 San Diego Inboard Diesel active	120	2005 750.6409 0.000106 0.000191 0.000432 1.07	-05 0.024323	0 0 0	068 10.39917 0.000106 0.000152 0 0.000152 0.000128 0 0.000128 9.62E-06 7.27E-06 2.	606809 0 2.606809 2.39E-07 2.76E-07
ANNUAL	2016 San Diego Inboard Diesel active	120	2006 788.0364 0.000111 0.000201 0.000453 1.12		0 0 0	394 10.91724 0.000111 0.00016 0 0.00016 0.000134 0 0.000134 1.01E-05 7.63E-06 2.	
ANNUAL	2016 San Diego Inboard Diesel active	120	2007 711.2821 0.0001 0.000181 0.000409 1.01 2008 350.9063 4.94E-05 8.94E-05 0.000202 5	-05 0.023048 -06 0.01137	0 0 0	547 9.853907 0.0001 0.000144 0 0.000144 0.000121 0 0.000121 9.11E-06 6.89E-06 2. 439 4.86136 4.94E-05 7.12E-05 0 7.12E-05 5.98E-05 0 5.98E-05 4.5E-06 3.4E-06 1	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	2008 350.9063 4.94E-05 8.94E-05 0.000202 5 2009 85.47042 1.2E-05 2.18E-05 4.91E-05 1.22			439 4.86136 4.94E-05 7.12E-05 0 7.12E-05 5.98E-05 0 5.98E-05 4.5E-06 3.4E-06 1 507 1.184084 1.2E-05 1.73E-05 0 1.73E-05 1.46E-05 0 1.46E-05 1.1E-06 8.28E-07 0	
ANNUAL	2016 San Diego Inboard Diesel active	120	2010 84.77229 1.19E-05 2.16E-05 4.87E-05 1.21		0 0 0	872 1.174412 1.19E-05 1.72E-05 0 1.72E-05 1.44E-05 0 1.44E-05 1.09E-06 8.21E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	2011 110.7713 1.56E-05 2.82E-05 6.37E-05 1.58	-06 0.003589	0 0 0	189 1.534595 1.56E-05 2.25E-05 0 2.25E-05 1.89E-05 0 1.89E-05 1.42E-06 1.07E-06 0.	384684 0 0.384684 3.53E-08 4.08E-08
ANNUAL	2016 San Diego Inboard Diesel active	120	2012 144.0731 2.03E-05 3.67E-05 8.28E-05 2.05		0 0 0	218 1.995949 2.03E-05 2.92E-05 0 2.92E-05 2.46E-05 0 2.46E-05 1.85E-06 1.39E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	120	2013 155.9987 2.2E-05 3.97E-05 8.97E-05 2.22		0 0 0	978 2.161162 2.2E-05 3.16E-05 0 3.16E-05 2.66E-05 0 2.66E-05 2E-06 1.51E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	120 120	2014 309.3069 4.36E-05 7.88E-05 0.000178 4.4 2015 494.5617 6.97E-05 0.000126 0.000284 7.04	-06 0.010023	0 0 0	115 4.285053 4.36E-05 6.27E-05 0 6.27E-05 5.27E-05 0 5.27E-05 3.96E-06 2.99E-06 1.1 695 6.851521 6.97E-05 0.0001 0 0.0001 8.43E-05 0 8.43E-05 6.34E-06 4.79E-06 1.1	
ANNUAL	2016 San Diego Inboard Diesel active	120	2016 519.7026 7.32E-05 0.000132 0.000299 7.4		0 0 0	171 7.199817 7.32E-05 0.000105 0 0.000105 8.86E-05 0 8.86E-05 0.66E-06 5.03E-06 1.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1956 24.96167 6.09E-06 1.1E-05 2.48E-05 6.15	-07 0.001274	0 0 0	028 0.345812 6.09E-06 8.76E-06 0 8.76E-06 7.36E-06 0 7.36E-06 5.54E-07 4.18E-07 0.	137006 0 0.137006 1.26E-08 1.45E-08
ANNUAL	2016 San Diego Inboard Diesel active	175	1957 24.31406 5.93E-06 1.07E-05 2.42E-05 5.99	-07 0.001241	0 0 0	234 0.33684 5.93E-06 8.54E-06 0 8.54E-06 7.17E-06 0 7.17E-06 5.39E-07 4.07E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1958 27.51507 6.71E-06 1.21E-05 2.74E-05 6.78		0 0 0	585 0.381186 6.71E-06 9.66E-06 0 9.66E-06 8.12E-06 0 8.12E-06 6.1E-07 4.61E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1959 43.97227 1.07E-05 1.94E-05 4.38E-05 1.08		0 0 0	871 0.60918 1.07E-05 1.54E-05 0 1.54E-05 1.3E-05 0 1.3E-05 9.75E-07 7.37E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	1960 44.9336 1.1E-05 1.98E-05 4.47E-05 1.11 1961 35.55385 8.67E-06 1.57E-05 3.54E-05 8.76		0 0 0	893 0.622498 1.1E-05 1.58E-05 0 1.58E-05 1.33E-05 0 1.33E-05 9.97E-07 7.53E-07 0. 564 0.492553 8.67E-06 1.25E-05 0 1.25E-05 1.05E-05 0 1.05E-05 7.89E-07 5.96E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1962 49.91137 1.22E-05 2.2E-05 4.97E-05 1.23		0 0 0	856 0.691458 1.22E-05 1.75E-05 0 1.75E-05 1.47E-05 0 1.47E-05 0 1.47E-05 1.11E-06 8.37E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1963 47.31513 1.15E-05 2.09E-05 4.71E-05 1.17		0 0 0	585 0.655491 1.15E-05 1.66E-05 0 1.66E-05 1.4E-05 0 1.4E-05 1.05E-06 7.93E-07 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1964 66.60706 1.62E-05 2.94E-05 6.63E-05 1.64	-06 0.0034	0 0 0	118 0.922756 1.62E-05 2.34E-05 0 2.34E-05 1.97E-05 0 1.97E-05 1.48E-06 1.12E-06 0.	365583 0 0.365583 3.35E-08 3.88E-08
ANNUAL	2016 San Diego Inboard Diesel active	175	1965 64.47225 1.57E-05 2.84E-05 6.42E-05 1.59		0 0 0	538 0.893181 1.57E-05 2.26E-05 0 2.26E-05 1.9E-05 0 1.9E-05 1.43E-06 1.08E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1966 72.69395 1.77E-05 3.2E-05 7.23E-05 1.79		0 0 0	566 1.007082 1.77E-05 2.55E-05 0 2.55E-05 2.14E-05 0 2.14E-05 1.61E-06 1.22E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1967 62.1251 1.51E-05 2.74E-05 6.18E-05 1.53		0 0 0	418 0.860664 1.51E-05 2.18E-05 0 2.18E-05 1.83E-05 0 1.83E-05 1.38E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	1968 74.39989 1.81E-05 3.28E-05 7.4E-05 1.83 1969 81.31661 1.98E-05 3.58E-05 8.09E-05 2		0 0 0	998 1.030716 1.81E-05 2.61E-05 0 2.61E-05 2.19E-05 0 2.19E-05 1.65E-06 1.25E-06 0. 277 1.126538 1.98E-05 2.86E-05 0 2.86E-05 2.4E-05 0 2.4E-05 1.8E-06 1.36E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1970 68.62955 1.67E-05 3.02E-05 6.83E-05 1.69		0 0 0	277 1.120338 1.562-05 2.862-05 0 2.862-05 2.422-05 0 2.422-05 1.622-06 1.1522-06 0. 826 0.950775 1.672-05 2.412-05 0 2.412-05 0 2.422-05 0 2.022-05 1.522-06 1.1522-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1971 72.38876 1.77E-05 3.19E-05 7.2E-05 1.78		0 0 0	479 1.002854 1.77E-05 2.54E-05 0 2.54E-05 2.14E-05 0 2.14E-05 1.61E-06 1.21E-06 0	
ANNUAL	2016 San Diego Inboard Diesel active	175	1972 109.3733 2.67E-05 4.82E-05 0.000109 2.7	-06 0.005583	0 0 0	888 1.515228 2.67E-05 3.84E-05 0 3.84E-05 3.23E-05 0 3.23E-05 2.43E-06 1.83E-06 0.4	600313 0 0.600313 5.51E-08 6.37E-08
ANNUAL	2016 San Diego Inboard Diesel active	175	1973 152.8674 3.73E-05 6.74E-05 0.000152 3.77		0 0 0	779 2.117783 3.73E-05 5.37E-05 0 5.37E-05 4.51E-05 0 4.51E-05 3.39E-06 2.56E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1974 136.547 3.33E-05 6.02E-05 0.000136 3.37		0 0 0	784 1.891685 3.33E-05 4.79E-05 0 4.79E-05 4.03E-05 0 4.03E-05 3.03E-06 2.29E-06 0 651 1.78423 3.14E-05 4.52E-05 0 4.52E-05 3.8E-05 0 3.8E-05 2.86E-06 2.16E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	1975 128.7906 3.14E-05 5.68E-05 0.000128 3.17 1976 162.7148 3.97E-05 7.17E-05 0.000162 4.01		0 0 0	651 1.78423 3.14E-05 4.52E-05 0 4.52E-05 3.8E-05 0 3.8E-05 2.86E-06 2.16E-06 0. 913 2.254206 3.97E-05 5.71E-05 0 5.71E-05 4.8E-05 0 4.8E-05 3.61E-06 2.73E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1977 204.9372 5E-05 9.03E-05 0.000204 5.05		0 0 0	562 2.839143 5E-05 7.2E-05 0 7.2E-05 0 7.2E-05 0 6.05E-05 0 6.05E-05 4.55E-06 3.43E-06 1	
ANNUAL	2016 San Diego Inboard Diesel active	175	1978 245.5269 5.99E-05 0.000108 0.000244 6.05		0 0 0	114 3.401462 5.99E-05 8.62E-05 0 8.62E-05 7.24E-05 0 7.24E-05 5.45E-06 4.11E-06 1.	347613 0 1.347613 1.24E-07 1.43E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	1979 245.5426 5.99E-05 0.000108 0.000244 6.05	-06 0.012534	0 0 0	376 3.401679 5.99E-05 8.62E-05 0 8.62E-05 7.24E-05 0 7.24E-05 5.45E-06 4.12E-06 1.	347699 0 1.347699 1.24E-07 1.43E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	1980 159.4803 3.89E-05 7.03E-05 0.000159 3.93		0 0 0	005 2.209396 3.89E-05 5.6E-05 0 5.6E-05 4.71E-05 0 4.71E-05 3.54E-06 2.67E-06 0.	
ANNUAL ANNUAL	2016 San Diego Inboard Diesel active	175	1981 135.2096 3.3E-05 5.96E-05 0.000135 3.33		0 0 0	493 1.873157 3.3E-05 4.75E-05 0 4.75E-05 3.99E-05 0 3.99E-05 3E-06 2.27E-06 0. 407 1.905502 3.35E-05 4.83E-05 0 4.83E-05 4.06E-05 0 4.06E-05 3.05E-06 2.31E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	1982 137.5444 3.35E-05 6.06E-05 0.000137 3.39 1983 163.5128 3.99E-05 7.21E-05 0.000163 4.03		0 0 0	407 1.905502 3.35E-05 4.83E-05 0 4.83E-05 0 4.06E-05 0 4.06E-05 3.05E-06 2.31E-06 0. 214 2.265262 3.99E-05 5.74E-05 0 5.74E-05 4.82E-05 0 4.82E-05 3.63E-06 2.74E-06 0.	
ANNUAL	2016 San Diego Inboard Diesel active	175	1984 225.2243 5.49E-05 9.93E-05 0.000224 5.55		0 0 0	739 3.120196 5.49E-05 7.91E-05 0 7.91E-05 0 6.64E-05 0 6.64E-05 5E-06 3.77E-06 1.	

SEASON CY	COUNTY CATEGORY STRK-FUEL STATUS	HPGRP MY	SumOf Ac SumOf HC SumOf CO SumOf NC Su	ImOf PN SumOf CO SumC	of HC SumOf HC SumOf HC Sum	nOf HC SumOf Po S	umOf Po SumOf TH SumOf TO Sum	Of TO SumOf TO SumOf RO Sum	Of RO SumOf RO SumOf PN SumOf PN SumOf Fu SumO	f Fu: SumOf Fu: SumOf NH SumOf SO>
ANNUAL	2016 San Diego Inboard Diesel active	175	1985 238.4241 5.81E-05 0.000105 0.000237		0 0 0		3.303062 5.81E-05 8.37E-05	0 8.37E-05 7.03E-05	0 7.03E-05 5.29E-06 4E-06 1.308628	0 1.308628 1.2E-07 1.39E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	1986 249.1107 6.07E-05 0.00011 0.000248 1987 284.3709 6.93E-05 0.000125 0.000283		0 0 0		3.451112 6.07E-05 8.75E-05 3.939597 6.93E-05 9.98E-05	0 8.75E-05 7.35E-05 0 9.98E-05 8.39E-05	0 7.35E-05 5.53E-06 4.18E-06 1.367284 0 8.39E-05 6.31E-06 4.77E-06 1.560815	0 1.367284 1.25E-07 1.45E-07 0 1.560815 1.43E-07 1.66E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	1988 356.4317 8.69E-05 0.000123 0.000285		0 0 0		4.937906 8.69E-05 0.000125	0 0.000125 0.000105	0 0.000105 7.91E-06 5.97E-06 1.956331	0 1.956331 1.79E-07 2.07E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	1989 479.4579 0.000117 0.000211 0.000477		0 0 0		6.642278 0.000117 0.000168	0 0.000168 0.000141	0 0.000141 1.06E-05 8.04E-06 2.63158	0 2.63158 2.41E-07 2.79E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	1990 510.1693 0.000124 0.000225 0.000508 1991 395.1633 9.64E-05 0.000174 0.000393		0 0 0		7.067745 0.000124 0.000179 5.474483 9.64E-05 0.000139	0 0.000179 0.000151 0 0.000139 0.000117	0 0.000151 1.13E-05 8.55E-06 2.800145 0 0.000117 8.77E-06 6.62E-06 2.168916	0 2.800145 2.57E-07 2.97E-07 0 2.168916 1.99E-07 2.3E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	1992 406.3128 9.91E-05 0.000179 0.000404	1E-05 0.02074	0 0 0	0 6.77188	5.628946 9.91E-05 0.000143	0 0.000143 0.00012	0 0.00012 9.01E-06 6.81E-06 2.230112	0 2.230112 2.05E-07 2.37E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175		L.13E-05 0.023314 L.34E-05 0.027656	0 0 0		6.327497 0.000111 0.00016 7.505885 0.000132 0.00019	0 0.00016 0.000135 0 0.00019 0.00016	0 0.000135 1.01E-05 7.65E-06 2.506869 0 0.00016 1.2E-05 9.08E-06 2.97373	0 2.506869 2.3E-07 2.66E-07 0 2.97373 2.73E-07 3.15E-07
ANNUAL	2016 San Diego Inboard Diesel active	175		L43E-05 0.029616	0 0 0		8.037852 0.000141 0.000204	0 0.000204 0.000171	0 0.000171 1.29E-05 9.72E-06 3.184488	0 3.184488 2.92E-07 3.38E-07
ANNUAL	2016 San Diego Inboard Diesel active	175		L48E-05 0.030725	0 0 0		8.338887 0.000147 0.000211	0 0.000211 0.000178	0 0.000178 1.34E-05 1.01E-05 3.303754	0 3.303754 3.03E-07 3.5E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175		L.31E-05 0.02722 L.21E-05 0.025089	0 0 0	0 8.887625 0 8.191625		0 0.000187 0.000157 0 0.000173 0.000145	0 0.000157 1.18E-05 8.94E-06 2.926868 0 0.000145 1.09E-05 8.24E-06 2.697662	0 2.926868 2.69E-07 3.1E-07 0 2.697662 2.47E-07 2.86E-07
ANNUAL	2016 San Diego Inboard Diesel active	175		L.22E-05 0.025315	0 0 0		6.870405 0.000121 0.000174	0 0.000174 0.000146	0 0.000146 1.1E-05 8.31E-06 2.721961	0 2.721961 2.5E-07 2.89E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175		1.54E-05 0.031894 1.68E-05 0.034846	0 0 0		8.655934 0.000152 0.000219 9.457176 0.000166 0.00024	0 0.000219 0.000184 0 0.00024 0.000201	0 0.000184 1.39E-05 1.05E-05 3.429363 0 0.000201 1.51E-05 1.14E-05 3.746805	0 3.429363 3.15E-07 3.64E-07 0 3.746805 3.44E-07 3.97E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	2002 572.3436 0.00014 0.000252 0.00057	L.41E-05 0.029216	0 0 0	0 9.53906	7.929091 0.00014 0.000201	0 0.000201 0.000169	0 0.000169 1.27E-05 9.59E-06 3.141398	0 3.141398 2.88E-07 3.33E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175		1.49E-05 0.030859 1.66E-05 0.034279	0 0 0	0 10.07501	8.375083 0.000147 0.000212 9.303361 0.000164 0.000236	0 0.000212 0.000178	0 0.000178 1.34E-05 1.01E-05 3.318094 0 0.000198 1.49E-05 1.13E-05 3.685866	0 3.318094 3.04E-07 3.52E-07 0 3.685866 3.38E-07 3.91E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	2005 750.6409 0.000183 0.000331 0.000747		0 0 0		10.39917 0.000183 0.000264	0 0.000264 0.000221	0 0.000221 1.67E-05 1.26E-05 4.120011	0 4.120011 3.78E-07 4.37E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	2006 788.0364 0.000192 0.000347 0.000784 2007 711.2821 0.000173 0.000314 0.000708		0 0 0		10.91724 0.000192 0.000277 9.853907 0.000173 0.00025	0 0.000277 0.000232 0 0.00025 0.00021	0 0.000232 1.75E-05 1.32E-05 4.325262 0 0.00021 1.58E-05 1.19E-05 3.903984	0 4.325262 3.97E-07 4.59E-07 0 3.903984 3.58E-07 4.14E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175	2007 711.2821 0.000173 0.000314 0.000708 2008 350.9063 8.56E-05 0.000155 0.000349		0 0 0		4.86136 8.56E-05 0.000123	0 0.000123 0.00021	0 0.000104 7.78E-06 5.88E-06 1.926005	0 1.926005 1.77E-07 2.04E-07
ANNUAL	2016 San Diego Inboard Diesel active	175		2.11E-06 0.004363	0 0 0		1.184084 2.08E-05 3E-05	0 3E-05 2.52E-05	0 2.52E-05 1.9E-06 1.43E-06 0.469118	0 0.469118 4.3E-08 4.97E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	2010 84.77229 2.07E-05 3.74E-05 8.44E-05 2011 110.7713 2.7E-05 4.88E-05 0.00011	2.09E-06 0.004327 2.73E-06 0.005654	0 0 0	0 1.412872 0 1.846189	1.174412 2.07E-05 2.98E-05 1.534595 2.7E-05 3.89E-05	0 2.98E-05 2.5E-05 0 3.89E-05 3.27E-05	0 2.5E-05 1.88E-06 1.42E-06 0.465286 0 3.27E-05 2.46E-06 1.86E-06 0.607986	0 0.465286 4.27E-08 4.93E-08 0 0.607986 5.58E-08 6.45E-08
ANNUAL	2016 San Diego Inboard Diesel active	175	2012 144.0731 3.51E-05 6.35E-05 0.000143	3.55E-06 0.007354	0 0 0	0 2.401218	1.995949 3.51E-05 5.06E-05	0 5.06E-05 4.25E-05	0 4.25E-05 3.2E-06 2.41E-06 0.790768	0 0.790768 7.25E-08 8.39E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 175	2013 155.9987 3.8E-05 6.88E-05 0.000155 2014 309.3069 7.54E-05 0.000136 0.000308	3.84E-06 0.007963 7.62E-06 0.015789	0 0 0	0 2.599978	2.161162 3.8E-05 5.48E-05 4.285053 7.54E-05 0.000109	0 5.48E-05 4.6E-05 0 0.000109 9.13E-05	0 4.6E-05 3.46E-06 2.61E-06 0.856223 0 9.13E-05 6.86E-06 5.18E-06 1.69768	0 0.856223 7.85E-08 9.08E-08 0 1.69768 1.56E-07 1.8E-07
ANNUAL	2016 San Diego Inboard Diesel active	175	2015 494.5617 0.000121 0.000218 0.000492		0 0 0		6.851521 0.000121 0.000174	0 0.000174 0.000146	0 0.000146 1.1E-05 8.29E-06 2.71448	0 2.71448 2.49E-07 2.88E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	175 250	2016 519.7026 0.000127 0.000229 0.000517 1956 24.96167 1.03E-05 1.86E-05 4.2E-05	1.28E-05 0.026528 L.04E-06 0.002085	0 0 0		7.199817 0.000127 0.000182 0.345812 1.03E-05 1.48E-05	0 0.000182 0.000153 0 1.48E-05 1.24E-05	0 0.000153 1.15E-05 8.71E-06 2.85247 0 1.24E-05 9.35E-07 7.07E-07 0.22446	0 2.85247 2.62E-07 3.03E-07 0 0.22446 2.06E-08 2.38E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	1957 24.31406 1E-05 1.81E-05 4.09E-05		0 0 0	0 0.405234		0 1.44E-05 1.21E-05	0 1.21E-05 9.11E-07 6.88E-07 0.218636	0 0.218636 2.01E-08 2.32E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1958 27.51507 1.13E-05 2.05E-05 4.62E-05 1959 43.97227 1.81E-05 3.27E-05 7.39E-05	L.15E-06 0.002298	0 0 0		0.381186 1.13E-05 1.63E-05 0.60918 1.81E-05 2.61E-05	0 1.63E-05 1.37E-05	0 1.37E-05 1.03E-06 7.79E-07 0.24742 0 2.19E-05 1.65E-06 1.24E-06 0.395406	0 0.24742 2.27E-08 2.62E-08 0 0.395406 3.63E-08 4.19E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250	1959 43.97227 1.81E-05 3.27E-05 7.59E-05 1960 44.9336 1.85E-05 3.35E-05 7.55E-05		0 0 0		0.60918 1.81E-05 2.61E-05 0.622498 1.85E-05 2.66E-05	0 2.61E-05 2.19E-05 0 2.66E-05 2.24E-05	0 2.19E-05 1.65E-06 1.24E-06 0.395406 0 2.24E-05 1.68E-06 1.27E-06 0.404051	0 0.404051 3.71E-08 4.28E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	1961 35.55385 1.46E-05 2.65E-05 5.98E-05		0 0 0		0.492553 1.46E-05 2.11E-05	0 2.11E-05 1.77E-05	0 1.77E-05 1.33E-06 1.01E-06 0.319706	0 0.319706 2.93E-08 3.39E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1962 49.91137 2.06E-05 3.72E-05 8.39E-05 1963 47.31513 1.95E-05 3.52E-05 7.95E-05		0 0 0		0.691458 2.06E-05 2.96E-05 0.655491 1.95E-05 2.81E-05	0 2.96E-05 2.49E-05 0 2.81E-05 2.36E-05	0 2.49E-05 1.87E-06 1.41E-06 0.448811 0 2.36E-05 1.77E-06 1.34E-06 0.425466	0 0.448811 4.12E-08 4.76E-08 0 0.425466 3.9E-08 4.51E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	1964 66.60706 2.74E-05 4.96E-05 0.000112	2.77E-06 0.005564	0 0 0	0 1.110118	0.922756 2.74E-05 3.95E-05	0 3.95E-05 3.32E-05	0 3.32E-05 2.5E-06 1.89E-06 0.598942	0 0.598942 5.49E-08 6.35E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1965 64.47225 2.66E-05 4.8E-05 0.000108 1966 72.69395 2.99E-05 5.41E-05 0.000122	2.68E-06 0.005385 3.03E-06 0.006072	0 0 0		0.893181 2.66E-05 3.82E-05 1.007082 2.99E-05 4.31E-05	0 3.82E-05 3.21E-05 0 4.31E-05 3.62E-05	0 3.21E-05 2.42E-06 1.83E-06 0.579745 0 3.62E-05 2.72E-06 2.06E-06 0.653676	0 0.579745 5.32E-08 6.15E-08 0 0.653676 6E-08 6.93E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	1967 62.1251 2.56E-05 4.63E-05 0.000104		0 0 0		0.860664 2.56E-05 3.68E-05	0 3.68E-05 3.1E-05	0 3.1E-05 2.33E-06 1.76E-06 0.558639	0 0.558639 5.12E-08 5.92E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1968 74.39989 3.06E-05 5.54E-05 0.000125 1969 81.31661 3.35E-05 6.05E-05 0.000137		0 0 0		1.030716 3.06E-05 4.41E-05 1.126538 3.35E-05 4.82E-05	0 4.41E-05 3.71E-05 0 4.82E-05 4.05E-05	0 3.71E-05 2.79E-06 2.11E-06 0.669016 0 4.05E-05 3.05E-06 2.3E-06 0.731213	0 0.669016 6.14E-08 7.09E-08 0 0.731213 6.71E-08 7.75E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	1970 68.62955 2.83E-05 5.11E-05 0.000115		0 0 0		0.950775 2.83E-05 4.07E-05	0 4.07E-05 3.42E-05	0 3.42E-05 2.57E-06 1.94E-06 0.617129	0 0.617129 5.66E-08 6.54E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	1971 72.38876 2.98E-05 5.39E-05 0.000122		0 0 0		1.002854 2.98E-05 4.29E-05	0 4.29E-05 3.61E-05	0 3.61E-05 2.71E-06 2.05E-06 0.650932	0 0.650932 5.97E-08 6.9E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1972 109.3733 4.5E-05 8.14E-05 0.000184 1973 152.8674 6.3E-05 0.000114 0.000257		0 0 0 0 0 0	0 1.822888 0 2.54779		0 6.49E-05 5.45E-05 0 9.07E-05 7.62E-05	0 5.45E-05 4.1E-06 3.1E-06 0.983503 0 7.62E-05 5.73E-06 4.33E-06 1.374609	0 0.983503 9.02E-08 1.04E-07 0 1.374609 1.26E-07 1.46E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1974 136.547 5.62E-05 0.000102 0.00023		0 0 0		1.891685 5.62E-05 8.1E-05	0 8.1E-05 6.8E-05	0 6.8E-05 5.12E-06 3.87E-06 1.227854	0 1.227854 1.13E-07 1.3E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1975 128.7906 5.3E-05 9.59E-05 0.000216 1976 162.7148 6.7E-05 0.000121 0.000273		0 0 0	0 2.14651 0 2.711913		0 7.64E-05 6.42E-05 0 9.65E-05 8.11E-05	0 6.42E-05 4.83E-06 3.65E-06 1.158107 0 8.11E-05 6.1E-06 4.61E-06 1.463159	0 1.158107 1.06E-07 1.23E-07 0 1.463159 1.34E-07 1.55E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1977 204.9372 8.44E-05 0.000153 0.000344	3.53E-06 0.017119	0 0 0	0 3.41562	2.839143 8.44E-05 0.000122	0 0.000122 0.000102	0 0.000102 7.68E-06 5.8E-06 1.84283	0 1.84283 1.69E-07 1.95E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1978 245.5269 0.000101 0.000183 0.000413 1979 245.5426 0.000101 0.000183 0.000413		0 0 0		3.401462 0.000101 0.000146 3.401679 0.000101 0.000146	0 0.000146 0.000122 0 0.000146 0.000122	0 0.000122 9.2E-06 6.95E-06 2.207819 0 0.000122 9.2E-06 6.95E-06 2.20796	0 2.207819 2.03E-07 2.34E-07 0 2.20796 2.03E-07 2.34E-07
ANNUAL	2016 San Diego Inboard Diesel active	250		5.64E-06 0.013322	0 0 0		2.209396 6.57E-05 9.46E-05	0 9.46E-05 7.95E-05	0 7.95E-05 5.98E-06 4.51E-06 1.434074	0 1.434074 1.32E-07 1.52E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1981 135.2096 5.57E-05 0.000101 0.000227 1982 137.5444 5.66E-05 0.000102 0.000231		0 0 0		1.873157 5.57E-05 8.02E-05 1.905502 5.66E-05 8.16E-05	0 8.02E-05 6.74E-05 0 8.16E-05 6.85E-05	0 6.74E-05 5.07E-06 3.83E-06 1.215828 0 6.85E-05 5.15E-06 3.89E-06 1.236822	0 1.215828 1.12E-07 1.29E-07 0 1.236822 1.13E-07 1.31E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1983 163.5128 6.73E-05 0.000122 0.000275		0 0 0		2.265262 6.73E-05 9.7E-05	0 9.7E-05 8.15E-05	0 8.15E-05 6.13E-06 4.63E-06 1.470335	0 1.470335 1.35E-07 1.56E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1984 225.2243 9.28E-05 0.000168 0.000379		0 0 0		3.120196 9.28E-05 0.000134	0 0.000134 0.000112 0 0.000141 0.000119	0 0.000112 8.44E-06 6.38E-06 2.025255	0 2.025255 1.86E-07 2.15E-07 0 2.14395 1.97E-07 2.27E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1985 238.4241 9.82E-05 0.000178 0.000401 1986 249.1107 0.000103 0.000185 0.000419	0.0393E-06 0.019916 L.04E-05 0.020808	0 0 0 0 0 0		3.303062 9.82E-05 0.000141 3.451112 0.000103 0.000148	0 0.000141 0.000119 0 0.000148 0.000124	0 0.000119 8.93E-06 6.75E-06 2.14395 0 0.000124 9.33E-06 7.05E-06 2.240046	0 2.14395 1.9/E-07 2.2/E-07 0 2.240046 2.06E-07 2.38E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1987 284.3709 0.000117 0.000212 0.000478	L.18E-05 0.023754	0 0 0	0 4.739516	3.939597 0.000117 0.000169	0 0.000169 0.000142	0 0.000142 1.07E-05 8.05E-06 2.557112	0 2.557112 2.35E-07 2.71E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1988 356.4317 0.000147 0.000265 0.000599 1989 479.4579 0.000197 0.000357 0.000806	1.48E-05 0.029773 2E-05 0.040049	0 0 0		4.937906 0.000147 0.000211 6.642278 0.000197 0.000284	0 0.000211 0.000178 0 0.000284 0.000239	0 0.000178 1.34E-05 1.01E-05 3.205094 0 0.000239 1.8E-05 1.36E-05 4.311366	0 3.205094 2.94E-07 3.4E-07 0 4.311366 3.96E-07 4.57E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1990 510.1693 0.00021 0.00038 0.000858	2.12E-05 0.042615	0 0 0	0 8.502821	7.067745 0.00021 0.000303	0 0.000303 0.000254	0 0.000254 1.91E-05 1.44E-05 4.587528	0 4.587528 4.21E-07 4.87E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1991 395.1633 0.000163 0.000294 0.000664 1992 406.3128 0.000167 0.000303 0.000683		0 0 0		5.474483 0.000163 0.000234 5.628946 0.000167 0.000241	0 0.000234 0.000197 0 0.000241 0.000202	0 0.000197 1.48E-05 1.12E-05 3.553375 0 0.000202 1.52E-05 1.15E-05 3.653633	0 3.553375 3.26E-07 3.77E-07 0 3.653633 3.35E-07 3.87E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1993 456.7362 0.000188 0.00034 0.000768	1.9E-05 0.038152	0 0 0	0 7.61227	6.327497 0.000188 0.000271	0 0.000271 0.000228	0 0.000228 1.71E-05 1.29E-05 4.107049	0 4.107049 3.77E-07 4.36E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1994 541.7954 0.000223 0.000403 0.000911 1995 580.1943 0.000239 0.000432 0.000975		0 0 0		7.505885 0.000223 0.000321 8.037852 0.000239 0.000344	0 0.000321 0.00027 0 0.000344 0.000289	0 0.00027 2.03E-05 1.53E-05 4.871916 0 0.000289 2.17E-05 1.64E-05 5.217205	0 4.871916 4.47E-07 5.17E-07 0 5.217205 4.79E-07 5.53E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	1996 601.9238 0.000248 0.000448 0.001012	2.51E-05 0.050279	0 0 0	0 10.03206	8.338887 0.000248 0.000357	0 0.000357 0.0003	0 0.0003 2.26E-05 1.7E-05 5.412601	0 5.412601 4.97E-07 5.74E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	1997 533.2575 0.00022 0.000397 0.000896 1998 491.4975 0.000202 0.000366 0.000826		0 0 0		7.387602 0.00022 0.000316 6.809071 0.000202 0.000291	0 0.000316 0.000266 0 0.000291 0.000245	0 0.000266 2E-05 1.51E-05 4.795142 0 0.000245 1.84E-05 1.39E-05 4.419629	0 4.795142 4.4E-07 5.09E-07 0 4.419629 4.05E-07 4.69E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250	1998 491.4975 0.000202 0.000366 0.000826 1999 495.9248 0.000204 0.000369 0.000834		0 0 0		6.870405 0.000202 0.000291	0 0.000291 0.000245	0 0.000247 1.86E-05 1.4E-05 4.459439	0 4.419629 4.05E-07 4.89E-07 0 4.459439 4.09E-07 4.73E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2000 624.8091 0.000257 0.000465 0.00105		0 0 0		8.655934 0.000257 0.000371	0 0.000371 0.000311	0 0.000311 2.34E-05 1.77E-05 5.618389	0 5.618389 5.15E-07 5.96E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	2001 682.645 0.000281 0.000508 0.001147 2002 572.3436 0.000236 0.000426 0.000962		0 0 0 0 0 0		9.457176 0.000281 0.000405 7.929091 0.000236 0.000339	0 0.000405 0.00034 0 0.000339 0.000285	0 0.00034 2.56E-05 1.93E-05 6.138459 0 0.000285 2.14E-05 1.62E-05 5.146611	0 6.138459 5.63E-07 6.51E-07 0 5.146611 4.72E-07 5.46E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2003 604.5365 0.000249 0.00045 0.001016	2.52E-05 0.050497	0 0 0	0 10.07561	8.375083 0.000249 0.000359	0 0.000359 0.000301	0 0.000301 2.27E-05 1.71E-05 5.436095	0 5.436095 4.99E-07 5.76E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	2004 671.5422 0.000277 0.0005 0.001129 2005 750.6409 0.000309 0.000559 0.001262		0 0 0		9.303361 0.000277 0.000398 10.39917 0.000309 0.000445	0 0.000398 0.000335 0 0.000445 0.000374	0 0.000335 2.52E-05 1.9E-05 6.038621 0 0.000374 2.81E-05 2.13E-05 6.74989	0 6.038621 5.54E-07 6.4E-07 0 6.74989 6.19E-07 7.16E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2006 788.0364 0.000325 0.000587 0.001325	3.28E-05 0.065825	0 0 0	0 13.13394	10.91724 0.000325 0.000467	0 0.000467 0.000393	0 0.000393 2.95E-05 2.23E-05 7.086157	0 7.086157 6.5E-07 7.51E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	2007 711.2821 0.000293 0.00053 0.001196 2008 350.9063 0.000145 0.000261 0.00059		0 0 0		9.853907 0.000293 0.000422 4.86136 0.000145 0.000208	0 0.000422 0.000354 0 0.000208 0.000175	0 0.000354 2.67E-05 2.01E-05 6.395969 0 0.000175 1.31E-05 9.93E-06 3.155409	0 6.395969 5.87E-07 6.78E-07 0 3.155409 2.89E-07 3.35E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2009 85.47042 3.52E-05 6.36E-05 0.000144	3.56E-06 0.007139	0 0 0		4.86136 0.000145 0.000208 1.184084 3.52E-05 5.07E-05	0 5.07E-05 4.26E-05	0 4.26E-05 3.2E-06 2.42E-06 0.768564	0 0.768564 7.05E-08 8.15E-08
ANNUAL	2016 San Diego Inboard Diesel active	250	2010 84.77229 3.49E-05 6.31E-05 0.000142		0 0 0		1.174412 3.49E-05 5.03E-05	0 5.03E-05 4.22E-05	0 4.22E-05 3.18E-06 2.4E-06 0.762287	0 0.762287 6.99E-08 8.08E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	250 250	2011 110.7713 4.56E-05 8.25E-05 0.000186 2012 144.0731 5.93E-05 0.000107 0.000242	6E-06 0.012035	0 0 0 0 0 0		1.534595 4.56E-05 6.57E-05 1.995949 5.93E-05 8.54E-05	0 6.57E-05 5.52E-05 0 8.54E-05 7.18E-05	0 5.52E-05 4.15E-06 3.14E-06 0.996074 0 7.18E-05 5.4E-06 4.08E-06 1.295529	0 0.996074 9.14E-08 1.06E-07 0 1.295529 1.19E-07 1.37E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2013 155.9987 6.43E-05 0.000116 0.000262	5.49E-06 0.013031	0 0 0		2.161162 6.43E-05 9.25E-05	0 9.25E-05 7.77E-05	0 7.77E-05 5.85E-06 4.42E-06 1.402766	0 1.402766 1.29E-07 1.49E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2014 309.3069 0.000127 0.00023 0.00052	L.29E-05 0.025837	0 0 0	U 5.155115	4.285053 0.000127 0.000183	0 0.000183 0.000154	0 0.000154 1.16E-05 8.76E-06 2.78134	0 2.78134 2.55E-07 2.95E-07

SEASON CY	COUNTY CATEGORY STRK-FUEL STATUS	HPGRP M		of NC sumof BN sumof CO sur	nof HC sumof HC sumof HC sum	Of HC SumOf Bo Si		TO SumOf TO SumOf BO Su	nOf RO SumOf RO SumOf PN SumOf PN SumOf Fu SumOf	
ANNUAL	2016 San Diego Inboard Diesel active	250	2015 494.5617 0.000204 0.000368 0.00		0 0 0		5.851521 0.000204 0.000293	0 0.000293 0.000246	0 0.000246 1.85E-05 1.4E-05 4.447182	0 4.447182 4.08E-07 4.72E-07
ANNUAL	2016 San Diego Inboard Diesel active	250	2016 519.7026 0.000214 0.000387 0.00		0 0 0		7.199817 0.000214 0.000308	0 0.000308 0.000259	0 0.000259 1.95E-05 1.47E-05 4.673254	0 4.673254 4.29E-07 4.96E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1956 24.96167 1.64E-05 2.97E-05 6.7 1957 24.31406 1.6E-05 2.9E-05 6.5	1E-05 1.66E-06 0.003323 4E-05 1.62E-06 0.003237	0 0 0	0 0.416028 0 0 0.405234	0.345812 1.64E-05 2.37E-05 0.33684 1.6E-05 2.31E-05	0 2.37E-05 1.99E-05 0 2.31E-05 1.94E-05	0 1.99E-05 1.5E-06 1.13E-06 0.357804 0 1.94E-05 1.46E-06 1.1E-06 0.348522	0 0.357804 3.28E-08 3.79E-08 0 0.348522 3.2E-08 3.7E-08
ANNUAL	2016 San Diego Inboard Diesel active	500	1958 27.51507 1.81E-05 3.28E-05 7.4	4E-05 1.83E-06 0.003663	0 0 0	0 0.458585 0	0.381186 1.81E-05 2.61E-05	0 2.61E-05 2.19E-05	0 2.19E-05 1.65E-06 1.25E-06 0.394405	0 0.394405 3.62E-08 4.18E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1959 43.97227 2.9E-05 5.24E-05 0.00 1960 44.9336 2.96E-05 5.35E-05 0.00	00118 2.93E-06 0.005854	0 0 0	0 0.732871	0.60918 2.9E-05 4.17E-05 0.622498 2.96E-05 4.26E-05	0 4.17E-05 3.51E-05 0 4.26E-05 3.58E-05	0 3.51E-05 2.64E-06 1.99E-06 0.630305 0 3.58E-05 2.69E-06 2.04E-06 0.644085	0 0.630305 5.78E-08 6.68E-08 0 0.644085 5.91E-08 6.83E-08
ANNUAL	2016 San Diego Inboard Diesel active	500	1960 444.9336 2.962-03 3.352-03 0.00 1961 35.55385 2.34E-05 4.24E-05 9.50		0 0 0		0.492553 2.34E-05 3.37E-05	0 3.37E-05 2.83E-05	0 2.83E-05 2.13E-06 1.61E-06 0.509634	0 0.509634 4.68E-08 5.4E-08
ANNUAL	2016 San Diego Inboard Diesel active	500	1962 49.91137 3.29E-05 5.95E-05 0.00		0 0 0		0.691458 3.29E-05 4.74E-05	0 4.74E-05 3.98E-05	0 3.98E-05 2.99E-06 2.26E-06 0.715437	0 0.715437 6.56E-08 7.59E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1963 47.31513 3.12E-05 5.64E-05 0.00 1964 66.60706 4.39E-05 7.93E-05 0.00		0 0 0 0 0 0		0.655491 3.12E-05 4.49E-05 0.922756 4.39E-05 6.32E-05	0 4.49E-05 3.77E-05 0 6.32E-05 5.31E-05	0 3.77E-05 2.84E-06 2.14E-06 0.678222 0 5.31E-05 3.99E-06 3.02E-06 0.954756	0 0.678222 6.22E-08 7.19E-08 0 0.954756 8.76E-08 1.01E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1965 64.47225 4.25E-05 7.68E-05 0.00		0 0 0		0.893181 4.25E-05 6.12E-05	0 6.12E-05 5.14E-05	0 5.14E-05 3.87E-06 2.92E-06 0.924155	0 0.924155 8.48E-08 9.8E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500		00195 4.84E-06 0.009678 00167 4.14E-06 0.008271	0 0 0		1.007082 4.79E-05 6.9E-05 0.860664 4.09E-05 5.9E-05	0 6.9E-05 5.8E-05 0 5.9E-05 4.95E-05	0 5.8E-05 4.36E-06 3.29E-06 1.042006 0 4.95E-05 3.72E-06 2.81E-06 0.890511	0 1.042006 9.56E-08 1.11E-07 0 0.890511 8.17E-08 9.44E-08
ANNUAL	2016 San Diego Inboard Diesel active	500		.0002 4.96E-06 0.009905	0 0 0	0 1.239998 1		0 7.06E-05 5.93E-05	0 5.93E-05 4.46E-06 3.37E-06 1.06646	0 1.06646 9.78E-08 1.13E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1969 81.31661 5.36E-05 9.69E-05 0.00 1970 68.62955 4.52E-05 8.18E-05 0.00	00219 5.42E-06 0.010826 00185 4.57E-06 0.009137	0 0 0	0 1.355277 1	1.126538 5.36E-05 7.72E-05 0.950775 4.52E-05 6.51E-05	0 7.72E-05 6.48E-05 0 6.51E-05 5.47E-05	0 6.48E-05 4.88E-06 3.68E-06 1.165605 0 5.47E-05 4.11E-06 3.11E-06 0.983747	0 1.165605 1.07E-07 1.24E-07 0 0.983747 9.02E-08 1.04E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1971 72.38876 4.77E-05 8.62E-05 0.00	00195 4.82E-06 0.009637	0 0 0	0 1.206479 1	1.002854 4.77E-05 6.87E-05	0 6.87E-05 5.77E-05	0 5.77E-05 4.34E-06 3.28E-06 1.037632	0 1.037632 9.52E-08 1.1E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1972 109.3733 7.21E-05 0.00013 0.00 1973 152.8674 0.000101 0.000182 0.00	00294 7.29E-06 0.014561			1.515228 7.21E-05 0.000104 2.117783 0.000101 0.000145	0 0.000104 8.72E-05 0 0.000145 0.000122	0 8.72E-05 6.56E-06 4.95E-06 1.567774 0 0.000122 9.16E-06 6.92E-06 2.191225	0 1.567774 1.44E-07 1.66E-07 0 2.191225 2.01E-07 2.32E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1974 136.547 9E-05 0.000163 0.00		0 0 0	0 2.275784 1		0 0.00013 0.000109	0 0.000109 8.19E-06 6.19E-06 1.957286	0 1.957286 1.8E-07 2.08E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1975 128.7906 8.49E-05 0.000153 0.00 1976 162.7148 0.000107 0.000194 0.00		0 0 0		1.78423 8.49E-05 0.000122	0 0.000122 0.000103 0 0.000154 0.00013	0 0.000103 7.72E-06 5.83E-06 1.846105 0 0.00013 9.76E-06 7.37E-06 2.332379	0 1.846105 1.69E-07 1.96E-07 0 2.332379 2.14E-07 2.47E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500	1976 182.7148 0.000107 0.000194 0.00 1977 204.9372 0.000135 0.000244 0.00		0 0 0		2.254206 0.000107 0.000154 2.839143 0.000135 0.000194	0 0.000194 0.000163	0 0.000163 1.23E-05 9.28E-06 2.937601	0 2.937601 2.69E-07 3.12E-07
ANNUAL	2016 San Diego Inboard Diesel active	500		00066 1.64E-05 0.032688	0 0 0		3.401462 0.000162 0.000233	0 0.000233 0.000196	0 0.000196 1.47E-05 1.11E-05 3.51942	0 3.51942 3.23E-07 3.73E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500		00066 1.64E-05 0.03269 00429 1.06E-05 0.021232	0 0 0		3.401679 0.000162 0.000233 2.209396 0.000105 0.000151	0 0.000233 0.000196 0 0.000151 0.000127	0 0.000196 1.47E-05 1.11E-05 3.519646 0 0.000127 9.56E-06 7.22E-06 2.286015	0 3.519646 3.23E-07 3.73E-07 0 2.286015 2.1E-07 2.42E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1981 135.2096 8.91E-05 0.000161 0.00	00364 9.01E-06 0.018001	0 0 0	0 2.253493 1	L.873157 8.91E-05 0.000128	0 0.000128 0.000108	0 0.000108 8.11E-06 6.12E-06 1.938116	0 1.938116 1.78E-07 2.06E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500		00037 9.16E-06 0.018312 00044 1.09E-05 0.021769			1.905502 9.06E-05 0.000131 2.265262 0.000108 0.000155	0 0.000131 0.00011 0 0.000155 0.00013	0 0.00011 8.25E-06 6.23E-06 1.971583 0 0.00013 9.8E-06 7.41E-06 2.343818	0 1.971583 1.81E-07 2.09E-07 0 2.343818 2.15E-07 2.49E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1984 225.2243 0.000148 0.000268 0.00	00606 1.5E-05 0.029985	0 0 0	0 3.753739 3	3.120196 0.000148 0.000214	0 0.000214 0.00018	0 0.00018 1.35E-05 1.02E-05 3.2284	0 3.2284 2.96E-07 3.42E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1985 238.4241 0.000157 0.000284 0.00 1986 249.1107 0.000164 0.000297 0.0	00641 1.59E-05 0.031743 00067 1.66E-05 0.033165	0 0 0		3.303062 0.000157 0.000226 3.451112 0.000164 0.000236	0 0.000226 0.00019 0 0.000236 0.000199	0 0.00019 1.43E-05 1.08E-05 3.417609 0 0.000199 1.49E-05 1.13E-05 3.570792	0 3.417609 3.14E-07 3.62E-07 0 3.570792 3.28E-07 3.79E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1987 284.3709 0.000187 0.000339 0.00		0 0 0		3.939597 0.000187 0.00027	0 0.000230 0.000133	0 0.000227 1.7E-05 1.29E-05 4.076217	0 4.076217 3.74E-07 4.32E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1988 356.4317 0.000235 0.000425 0.00 1989 479.4579 0.000316 0.000571 0.00		0 0 0		4.937906 0.000235 0.000338 5.642278 0.000316 0.000455	0 0.000338 0.000284 0 0.000455 0.000382	0 0.000284 2.14E-05 1.61E-05 5.109147 0 0.000382 2.87E-05 2.17E-05 6.872624	0 5.109147 4.69E-07 5.42E-07 0 6.872624 6.3E-07 7.29E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500	1989 479.4579 0.000316 0.000571 0.00		0 0 0		7.067745 0.000336 0.000484	0 0.000484 0.000382	0 0.000382 2.87E-05 2.17E-05 6.872624 0 0.000407 3.06E-05 2.31E-05 7.312846	0 7.312846 6.71E-07 7.76E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1991 395.1633 0.00026 0.000471 0.00		0 0 0		5.474483 0.00026 0.000375	0 0.000375 0.000315	0 0.000315 2.37E-05 1.79E-05 5.664332	0 5.664332 5.2E-07 6.01E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1992 406.3128 0.000268 0.000484 0.00 1993 456.7362 0.000301 0.000544 0.00		0 0 0		5.628946 0.000268 0.000386 5.327497 0.000301 0.000433	0 0.000386 0.000324 0 0.000433 0.000364	0 0.000324 2.44E-05 1.84E-05 5.824151 0 0.000364 2.74E-05 2.07E-05 6.546928	0 5.824151 5.34E-07 6.18E-07 0 6.546928 6.01E-07 6.94E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1994 541.7954 0.000357 0.000645 0.00	01457 3.61E-05 0.072132	0 0 0	0 9.029924 7	7.505885 0.000357 0.000514	0 0.000514 0.000432	0 0.000432 3.25E-05 2.45E-05 7.76618	0 7.76618 7.12E-07 8.24E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1995 580.1943 0.000382 0.000691 0.0 1996 601.9238 0.000397 0.000717 0.00	00156 3.86E-05 0.077244 01619 4.01E-05 0.080137			3.037852 0.000382 0.000551 3.338887 0.000397 0.000571	0 0.000551 0.000463 0 0.000571 0.00048	0 0.000463 3.48E-05 2.63E-05 8.316595 0 0.00048 3.61E-05 2.73E-05 8.62807	0 8.316595 7.63E-07 8.82E-07 0 8.62807 7.92E-07 9.15E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	1997 533.2575 0.000351 0.000635 0.00	01434 3.55E-05 0.070995	0 0 0	0 8.887625 7	7.387602 0.000351 0.000506	0 0.000506 0.000425	0 0.000425 3.2E-05 2.42E-05 7.643796	0 7.643796 7.01E-07 8.11E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	1998 491.4975 0.000324 0.000585 0.00 1999 495.9248 0.000327 0.000591 0.00		0 0 0		5.809071 0.000324 0.000466 5.870405 0.000327 0.000471	0 0.000466 0.000392 0 0.000471 0.000395	0 0.000392 2.95E-05 2.23E-05 7.045202 0 0.000395 2.97E-05 2.25E-05 7.108663	0 7.045202 6.46E-07 7.47E-07 0 7.108663 6.52E-07 7.54E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	2000 624.8091 0.000412 0.000744 0.0		0 0 0		3.655934 0.000412 0.000593	0 0.000593 0.000498	0 0.000498 3.75E-05 2.83E-05 8.956111	0 8.956111 8.22E-07 9.5E-07
ANNUAL	2016 San Diego Inboard Diesel active	500		01836 4.55E-05 0.090884	0 0 0		9.457176 0.00045 0.000648	0 0.000648 0.000544	0 0.000544 4.09E-05 3.09E-05 9.78514	0 9.78514 8.98E-07 1.04E-06
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	2002 572.3436 0.000377 0.000682 0.00 2003 604.5365 0.000398 0.00072 0.00	01626 4.03E-05 0.080485	0 0 0 0 0 0		7.929091 0.000377 0.000543 3.375083 0.000398 0.000574	0 0.000543 0.000456 0 0.000574 0.000482	0 0.000456 3.43E-05 2.59E-05 8.204063 0 0.000482 3.62E-05 2.74E-05 8.665521	0 8.204063 7.53E-07 8.7E-07 0 8.665521 7.95E-07 9.19E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	2004 671.5422 0.000443 0.0008 0.00		0 0 0		9.303361 0.000443 0.000637	0 0.000637 0.000535	0 0.000535 4.03E-05 3.04E-05 9.625991	0 9.625991 8.83E-07 1.02E-06
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	2005 750.6409 0.000495 0.000894 0.00 2006 788.0364 0.000519 0.000939 0.00		0 0 0 0 0 0		10.39917 0.000495 0.000712 10.91724 0.000519 0.000748	0 0.000712 0.000599 0 0.000748 0.000628	0 0.000599 4.5E-05 3.4E-05 10.7598 0 0.000628 4.72E-05 3.57E-05 11.29584	0 10.7598 9.87E-07 1.14E-06 0 11.29584 1.04E-06 1.2E-06
ANNUAL	2016 San Diego Inboard Diesel active	500	2007 711.2821 0.000469 0.000847 0.00		0 0 0		9.853907 0.000469 0.000675	0 0.000675 0.000567	0 0.000567 4.26E-05 3.22E-05 10.19563	0 10.19563 9.35E-07 1.08E-06
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	2008 350.9063 0.000231 0.000418 0.00 2009 85.47042 5.63E-05 0.000102 0.0	00944 2.34E-05 0.046718 00023 5.69E-06 0.011379	0 0 0 0 0 0		4.86136 0.000231 0.000333 1.184084 5.63E-05 8.11E-05	0 0.000333 0.00028 0 8.11E-05 6.82E-05	0 0.00028 2.1E-05 1.59E-05 5.029946 0 6.82E-05 5.12E-06 3.87E-06 1.225146	0 5.029946 4.61E-07 5.33E-07 0 1.225146 1.12E-07 1.3E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	2010 84.77229 5.59E-05 0.000101 0.00		0 0 0		1.174412 5.59E-05 8.04E-05	0 8.04E-05 6.76E-05	0 6.76E-05 5.08E-06 3.84E-06 1.215139	0 1.215139 1.11E-07 1.29E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	2011 110.7713 7.3E-05 0.000132 0.00 2012 144.0731 9.49E-05 0.000172 0.00		0 0 0	0 1.846189 1	1.534595 7.3E-05 0.000105 1.995949 9.49E-05 0.000137	0 0.000105 8.83E-05 0 0.000137 0.000115	0 8.83E-05 6.64E-06 5.02E-06 1.587813 0 0.000115 8.64E-06 6.53E-06 2.065166	0 1.587813 1.46E-07 1.68E-07 0 2.065166 1.89E-07 2.19E-07
ANNUAL	2016 San Diego Inboard Diesel active	500	2013 155.9987 0.000103 0.000186 0.0	00042 1.04E-05 0.020769	0 0 0	0 2.599978 2	2.161162 0.000103 0.000148	0 0.000148 0.000124	0 0.000124 9.35E-06 7.07E-06 2.236109	0 2.236109 2.05E-07 2.37E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500 500	2014 309.3069 0.000204 0.000368 0.00 2015 494.5617 0.000326 0.000589 0.0	00832 2.06E-05 0.041179 00133 3.29E-05 0.065843	0 0 0		4.285053 0.000204 0.000294 5.851521 0.000326 0.000469	0 0.000294 0.000247 0 0.000469 0.000394	0 0.000247 1.85E-05 1.4E-05 4.433653 0 0.000394 2.96E-05 2.24E-05 7.089124	0 4.433653 4.07E-07 4.7E-07 0 7.089124 6.5E-07 7.52E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	500	2015 494.5817 0.000328 0.000589 0.0		0 0 0		7.199817 0.000342 0.000493	0 0.000493 0.000394	0 0.000394 2.966-05 2.246-05 7.089124 0 0.000414 3.126-05 2.356-05 7.449498	0 7.449498 6.83E-07 7.9E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1956 24.96167 3.08E-05 5.58E-05 0.00 1957 24.31406 3E-05 5.43E-05 0.00	00126 3.12E-06 0.006205 00123 3.04E-06 0.006044	0 0 0 0 0 0		0.345812 3.08E-05 4.44E-05 0.33684 3E-05 4.33E-05	0 4.44E-05 3.73E-05 0 4.33E-05 3.64E-05	0 3.73E-05 2.81E-06 2.12E-06 0.668216 0 3.64E-05 2.73E-06 2.07E-06 0.65088	0 0.668216 6.13E-08 7.09E-08 0 0.65088 5.97E-08 6.9E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750		00123 3.04E-06 0.006044 00139 3.44E-06 0.00684	0 0 0	0 0.405234 0 0.458585 0		0 4.33E-05 3.64E-05 0 4.9E-05 4.11E-05	0 3.64E-05 2.73E-06 2.07E-06 0.65088 0 4.11E-05 3.09E-06 2.34E-06 0.73657	0 0.73657 6.76E-08 6.9E-08 0 0.73657 6.76E-08 7.81E-08
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750		0222 5.49E-06 0.010931 0227 5.61E-06 0.01117	0 0 0		0.60918 5.43E-05 7.82E-05 0.622498 5.55E-05 7.99E-05	0 7.82E-05 6.57E-05 0 7.99E-05 6.72E-05	0 6.57E-05 4.94E-06 3.73E-06 1.177124 0 6.72E-05 5.05E-06 3.82E-06 1.202858	0 1.177124 1.08E-07 1.25E-07 0 1.202858 1.1E-07 1.28E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1960 44.9336 5.55E-05 0.0001 0.00 1961 35.55385 4.39E-05 7.94E-05 0.00		0 0 0		0.622498 5.55E-05 7.99E-05 0.492553 4.39E-05 6.33E-05	0 7.99E-05 6.72E-05 0 6.33E-05 5.32E-05	0 6.72E-05 5.05E-06 3.82E-06 1.202858 0 5.32E-05 4E-06 3.02E-06 0.951765	0 1.202858 1.1E-0/ 1.28E-0/ 0 0.951765 8.73E-08 1.01E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1962 49.91137 6.17E-05 0.000111 0.00		0 0 0		0.691458 6.17E-05 8.88E-05	0 8.88E-05 7.46E-05	0 7.46E-05 5.61E-06 4.24E-06 1.336112	0 1.336112 1.23E-07 1.42E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1963 47.31513 5.85E-05 0.000106 0.00 1964 66.60706 8.23E-05 0.000149 0.00		0 0 0 0 0 0		0.655491 5.85E-05 8.42E-05 0.922756 8.23E-05 0.000119	0 8.42E-05 7.07E-05 0 0.000119 9.96E-05	0 7.07E-05 5.32E-06 4.02E-06 1.266611 0 9.96E-05 7.49E-06 5.66E-06 1.78305	0 1.266611 1.16E-07 1.34E-07 0 1.78305 1.64E-07 1.89E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1965 64.47225 7.97E-05 0.000144 0.00	00325 8.05E-06 0.016028	0 0 0		0.893181 7.97E-05 0.000115	0 0.000115 9.64E-05	0 9.64E-05 7.25E-06 5.48E-06 1.725902	0 1.725902 1.58E-07 1.83E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1966 72.69395 8.98E-05 0.000162 0.00 1967 62.1251 7.68E-05 0.000139 0.00		0 0 0 0 0 0		1.007082 8.98E-05 0.000129 0.860664 7.68E-05 0.000111	0 0.000129 0.000109 0 0.000111 9.29E-05	0 0.000109 8.17E-06 6.17E-06 1.945994 0 9.29E-05 6.98E-06 5.28E-06 1.663069	0 1.945994 1.79E-07 2.06E-07 0 1.663069 1.53E-07 1.76E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1968 74.39989 9.19E-05 0.000166 0.00	00375 9.29E-06 0.018496	0 0 0	0 1.239998 1	1.030716 9.19E-05 0.000132	0 0.000132 0.000111	0 0.000111 8.36E-06 6.32E-06 1.991661	0 1.991661 1.83E-07 2.11E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1969 81.31661 0.0001 0.000182 0.0 1970 68.62955 8.48E-05 0.000153 0.00	00041 1.02E-05 0.020215 00346 8.57E-06 0.017061	0 0 0 0 0 0		1.126538 0.0001 0.000145 0.950775 8.48E-05 0.000122	0 0.000145 0.000122 0 0.000122 0.000103	0 0.000122 9.14E-06 6.91E-06 2.17682 0 0.000103 7.71E-06 5.83E-06 1.837191	0 2.17682 2E-07 2.31E-07 0 1.837191 1.69E-07 1.95E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1971 72.38876 8.94E-05 0.000162 0.00	00365 9.04E-06 0.017996	0 0 0	0 1.206479 1	1.002854 8.94E-05 0.000129	0 0.000129 0.000108	0 0.000108 8.14E-06 6.15E-06 1.937824	0 1.937824 1.78E-07 2.06E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1972 109.3733 0.000135 0.000244 0.00 1973 152.8674 0.000189 0.000341 0.00		0 0 0		1.515228 0.000135 0.000195 2.117783 0.000189 0.000272	0 0.000195 0.000164 0 0.000272 0.000229	0 0.000164 1.23E-05 9.29E-06 2.927889 0 0.000229 1.72E-05 1.3E-05 4.092211	0 2.927889 2.69E-07 3.11E-07 0 4.092211 3.75E-07 4.34E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1974 136.547 0.000169 0.000305 0.00	00689 1.71E-05 0.033945	0 0 0	0 2.275784 1	1.891685 0.000169 0.000243	0 0.000243 0.000204	0 0.000204 1.53E-05 1.16E-05 3.655321	0 3.655321 3.35E-07 3.88E-07
ANNUAL	2016 San Diego InboardDieselactive2016 San Diego InboardDieselactive	750 750	1975 128.7906 0.000159 0.000288 0.00 1976 162.7148 0.000201 0.000363 0.0		0 0 0 0 0 0		1.78423 0.000159 0.000229 2.254206 0.000201 0.00029	0 0.000229 0.000193 0 0.00029 0.000243	0 0.000193 1.45E-05 1.09E-05 3.447684 0 0.000243 1.83E-05 1.38E-05 4.355823	0 3.447684 3.16E-07 3.66E-07 0 4.355823 4E-07 4.62E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750	1976 162.7148 0.000201 0.000363 0.0 1977 204.9372 0.000253 0.000458 0.00		0 0 0		2.839143 0.000253 0.000365	0 0.000365 0.000306	0 0.000243 1.83E-05 1.36E-05 4.355823 0 0.000306 2.3E-05 1.74E-05 5.486103	0 4.353823 4E-07 4.82E-07 0 5.486103 5.03E-07 5.82E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1978 245.5269 0.000303 0.000548 0.00		0 0 0		3.401462 0.000303 0.000437	0 0.000437 0.000367	0 0.000367 2.76E-05 2.09E-05 6.572676	0 6.572676 6.03E-07 6.97E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1979 245.5426 0.000303 0.000548 0.00 1980 159.4803 0.000197 0.000356 0.00		0 0 0 0 0 0		3.401679 0.000303 0.000437 2.209396 0.000197 0.000284	0 0.000437 0.000367 0 0.000284 0.000238	0 0.000367 2.76E-05 2.09E-05 6.573097 0 0.000238 1.79E-05 1.35E-05 4.269237	0 6.573097 6.03E-07 6.97E-07 0 4.269237 3.92E-07 4.53E-07
ANNUAL	2016 San Diego Inboard Diesel active	750	1981 135.2096 0.000167 0.000302 0.00		0 0 0		1.873157 0.000167 0.000241	0 0.000241 0.000202	0 0.000202 1.52E-05 1.15E-05 3.619518	0 3.619518 3.32E-07 3.84E-07
ANNUAL	2016 San Diego Inboard Diesel active 2016 San Diego Inboard Diesel active	750 750	1982 137.5444 0.00017 0.000307 0.00 1983 163.5128 0.000202 0.000365 0.00		0 0 0 0 0 0		1.905502 0.00017 0.000245 2.265262 0.000202 0.000291	0 0.000245 0.000206 0 0.000291 0.000244	0 0.000206 1.55E-05 1.17E-05 3.68202 0 0.000244 1.84E-05 1.39E-05 4.377187	0 3.68202 3.38E-07 3.9E-07 0 4.377187 4.02E-07 4.64E-07

VESSNAME	IMO	MMSI S				AIN_KW DESIGN	DESIGNATIO	DISP MAIN_ENGIN					т ст	DWT			OPERATOR	STATUS	Length (m)	Length (ft) Sli	
ZENITH	9677416		ACHT	Yacht	2012	1640 Caterpillar	C32	2.7 HSD	1	SVC	14.00		91 11		DWI_CATES	1 All	Aston Enterprise Agency LLC	In Service/Commission	24 0	2019 201 (11) 311 79	100
KHALILAH	9699713		ACHT	Yacht	2012	354 Yanmar	4LHA-STP	0.9 HSD	1	LUX	10.00	-	35 11			1 All	Luxembourg Marine Services SA	In Service/Commission	24.0	79	100
NASIMA	9671840		ACHT	Yacht	2010	204 Deutz	DTA44	1.0 HSD	1	RUS	10.00	-	71 12			1 All	Yar-yachting Ltd	In Service/Commission	24.4	80	100
KING BABY	9703148	538070932 Y		Yacht (Sail		261 Cummins	OSB5.9	1.0 HSD	1	MAI	13.00		34 11			1 All	Castlefin Inc	In Service/Commission	24.9	82	100
SCOUT	1005576	235010950 Y		Yacht	1991	588 Caterpillar	3406TA	2.4 HSD	1	GBI	12.00		47 15			1 All	Green Marine Ltd	In Service/Commission	26.8	88	100
MRS D	1005825		ACHT	Yacht (Sail		214 M.T.U.	10V183AA61	1.8 HSD	1	BER	11.30		31 10			1 All	Go Ahead International	In Service/Commission	27.0	89	100
LADY GENYR	6608919	367007580 Y		Yacht	1965	563 Caterpillar	D398SCAC	4.0 HSD	1	USA	12.00		56 16			1 All	Devaux S	In Service/Commission	27.0	89	100
WINNING DRIVE	9747223	319062500 Y		Yacht	2012	1440 M.T.U.	8V2000M72	2.2 HSD	1	CAY	12.00		0 10			1 All	My Zehava Yachting Ltd	In Service/Commission	28.0	92	100
OM OF LONDON	9649017	Y	ACHT	Yacht	2009	1618 MAN	D2842LE	1.8 HSD	1	MTA	11.00	0 1	84 26	57 186		1 All	Ocean Management GmbH	In Service/Commission	28.2	93	100
ZAZOU	5311698	234773000 Y		Yacht	1962	1169 Caterpillar	3516TA	4.3 HSD	1	GBI	11.00		51 17			1 All	Galaxy Lights Ltd	In Service/Commission	29.2	96	100
SEAHAWK	1011123	319026500 Y	ACHT	Yacht (Sail	ili 2007	350 Cummins	QSM11-M	1.8 HSD	1	CAY	13.00	ō	34 11	4 13		1 All	Sarafin Ltd	In Service/Commission	30.2	99	100
PARADISE	8744327	366749490 Y		Yacht	1982	1470 Lugger	L6140LA2	2.5 HSD	1	USA	15.00		55 18			1 All	Red Rooster III	In Service/Commission	31.4	103	125
GITANA	1002562	378111105 Y		Yacht	1988	750 Caterpillar	3412TA	2.2 HSD	1	VGI	12.00		0 15			1 All	Silver Star Shipping	In Service/Commission	31.7	103	125
MILK MONEY	9702285	518801000 Y		Yacht	2013	1492 Caterpillar	C32 ACERT	2.7 HSD	1	GIB	26.00		72 24			1 All	MS Yachts	In Service/Commission	32.6	107	125
GOLDEN SHADOW	9707039	311000159 Y		Yacht	2006	866 Caterpillar	3406C-TA	2.4 HSD	1	BAH	13.00	-	89 29			1 All	Owner Unknown	In Service/Commission	32.9	108	125
ODESSA	9022350		ATCH	Yacht	2001	1030 Caterpillar	3412	2.2 HSD	1	UNK	13.00	-	68 22			1 All	Far Niente Enterprises	In Service/Commission	33.2	100	125
SOY AMOR	7308700		ACHT	Yacht	1956		8V-71-N	1.2 HSD	1	CAN	10.00		87 20			1 All	Inter Coast Towing Ltd	In Service/Commission	33.2	109	125
MERIDIAN	9674701		ACHT	Yacht (Sail		522 Cummins	QSB5.9	1.0 HSD	1	CAY	10.00		0 23			1 All	Neegu Ltd	In Service/Commission	33.5	110	125
SERENITY	9539133	538070849 Y		Yacht	2006	2942 M.T.U.	16V2000M91	2.0 HSD	1	MAI	17.00		74 24			1 All	Smith B	In Service/Commission	33.7	110	125
GRACE E	9644706	538071020 Y		Yacht	2011	1492 Caterpillar	C32 ACERT	2.7 HSD	1	MAI	23.00		89 29			1 All	Rock Technology Trading Ltd	In Service/Commission	33.7	111	125
ESCAPADE	1002225	538070946 Y		Yacht	1993	756 Caterpillar	3408TA	2.2 HSD	1	MAI	12.00		13 37	78 387		1 All	Rotd Sold Undisclosed Interest	In Service/Commission	34.0	112	125
MEDUSE	8981884	366828690 Y	ACHT	Yacht	1999	358 Caterpillar	3406TA	2.4 HSD	1	USA	11.00	0	59 19	97 0		1 All	Medical Foundation	In Service/Commission	34.0	112	125
THUMPER	9784922	319086800 Y		Yacht	2013	1000 Caterpillar	C18	3.0 HSD	1	CAY	13.00		0 31			1 All	Camper & Nicholsons France	In Service/Commission	34.0	112	125
ZENITH	1002184	235019268 Y	ATCH	Yacht	1977	736 Caterpillar	3412TA	2.2 HSD	1	GBI	10.00	ō	89 23	33 0		1 All	Safehaven International Ltd	In Service/Commission	34.5	113	125
HARMONY	9662863	319042600 Y		Yacht	2011	3878 M.T.U.	16V2000M94	2.2 HSD	1	CAY	20.00		70 23			1 All	Ocean Sunshine Ltd	In Service/Commission	34.7	114	125
LADY MAY	8745058	367593540 Y		Yacht	2009	2680 M.T.U.	12V2000M93	2.2 HSD	1	USA	15.00		87 29			1 All	Hillman H	In Service/Commission	34.7	114	125
GRACE	1004948	234225000 Y		Yacht	1992	1136 MWM	TBD234V12	1.8 HSD	1	GBI	14.00	-	61 20			1 40	Carlevaris A & Partners	In Service/Commission	34.7	114	125
SAMAX	9686261	533130093 Y		Yacht	2010	1618 MAN	D2842LE	1.8 HSD	1	MAL	13.00		85 28			1 All	Tang WL	In Service/Commission	34.8	114	125
HEY JUDE	1012165	235100877 Y		Yacht	2011	1066 Caterpillar	C18	3.0 HSD	1	JER	10.50		0 23			1 All	Float Investments Ltd	In Service/Commission	35.3	116	125
BRAZIL	8998318		ACHT	Yacht (Sail		434 M.T.U.	10V183AA61	1.8 HSD	1	UNK	11.00		42 14			1 All	Green Shoe	In Service/Commission	36.0	118	125
LADY SURA	9656709	229106000 Y		Yacht	2009	1220 Yanmar	6AYM-ETE	3.4 HSD	1	MTA	12.00		04 34			1 All	Lunik Ltd	In Service/Commission	36.0	118	125
MISTRESS	9521459	319047100 Y		Yacht	1991	2618 M.T.U.	12V396TE94	4.0 HSD	1	CAY	19.00		08 36			1 All	Moran Yacht & Ship	In Service/Commission	36.1	110	125
CAKEWALK	9129990	246859000 Y		Yacht	1995	1174 Caterpillar	3512	4.3 HSD	1	NTH	14.00		79 26			1 All	Lars Yacht Charter BV	In Service/Commission	36.4	119	125
LADYSHIP	9677844	319859000 Y		Yacht	2007	1066 Caterpillar	C18	3.0 HSD	1	CAY	10.50		96 32			1 All	Far Far Away Yachting Ltd	In Service/Commission	36.5	120	125
LEVANTE	1002081	232008000 Y		Yacht (Sail		441 MWM	TBD604-6	3.7 HSD	1	GBI	10.00	-	62 22			1 All	Jagare Shipping	In Service/Commission	36.5	120	125
HEUREKA	1002001	538080088 Y		Yacht	1990	1000 Caterpillar	3512TA	4.3 HSD	1	MAI	12.00		89 29			1 All	Talanda Trading	In Service/Commission	36.5	120	125
LADY K II	1010765	235064976 Y		Yacht	2007	4080 M.T.U.	12V4000M90	4.1 HSD	1	GBI	20.00	-	67 22			1 All	Ocean Pride Shipping Co Ltd	In Service/Commission	36.5	120	125
TELEOST	1010703	319003700 Y		Yacht	2008	4080 M.T.U.	12V4000M90	4.1 HSD	1	CAY	28.00		66 22			1 40	Verpeka Yacht Brokerage	In Service/Commission	36.5	120	125
BOADICEA	9700914	367585110 Y		Yacht	2008	3878 M.T.U.	16V2000M94	2.2 HSD	1	USA	17.00	0	84 28			1 All	Circle Marine LLC	In Service/Commission	36.7	120	125
MOONLIGHT	9024906	235011760 Y		Yacht (Sail		894 M.T.U.	12V183TE91	1.8 HSD	1	IOM	12.50	-	90 30			1 All	Perini Navi USA Inc	In Service/Commission	36.7	120	125
SEA EAGLE	1003413	310525000 Y		Yacht	1990	2610 Caterpillar	3512TA	4.3 HSD	1	BER	13.00	-	95 31			1 All	Quorum Ltd	In Service/Commission	36.7	120	125
APOSTROPHE	1005415	319858000 Y		Yacht	1996	588 Caterpillar	3406E	4.3 HSD 2.4 HSD	1	GBI	13.00		84 28			1 All	Enrapture	In Service/Commission	36.9	120	125
NAMELESS	9694206	235098655 Y		Yacht	2013	2160 M.T.U.	12V2000M72	2.2 HSD	1	IOM	14.00		89 29			1 All	YCO SAM	In Service/Commission	36.9	121	125
NORWEGIAN QUEEN	9652856	319339000 Y		Yacht	2013	2160 M.T.U.	12V2000M72	2.2 HSD 2.2 HSD	1	CAY	14.00		86 28			1 All	Commanwealth Marine Ltd	In Service/Commission	36.9	121	125
INUKSHUK	1000849	316149000 Y		Yacht (Sail		600 MAN	D2866LF	2.0 HSD	1	CAN	10.00		0 28			1 All	Woolger E	In Service/Commission	37.0	121	125
INVADER	9642825		ACHT	Yacht (San	2009	3824 M.T.U.	16V2000M93	2.0 HSD 2.2 HSD	1	IOM	21.00	-	84 28			1 All	Pelagos Yachts Ltd	In Service/Commission	37.0	121	125
RAINBOW	1000954	229210000 Y		Yacht	1983	708 Caternillar	3412TA	2.2 HSD	1	MTA	12.00		74 24			1 All	Blue Attraction Yacht Charters	In Service/Commission	37.5	122	125
ASYA	1012505	577203000 Y		Yacht (Sail		375 Caterpillar	C9	1.5 HSD	1	VAN	9.00	-	56 18			1 All	Waddilove Yachts Ptv Ltd	In Service/Commission	37.5	123	125
IAGARE	1012505	314094000 Y		Yacht	1981	1066 Caterpillar	D348TA	2.4 HSD	1	BBD	11.00		77 25			1 All	Yacht Services Intl Ltd	In Service/Commission	37.9	123	125
BLUSH	9755713	538071025 Y		Yacht	2014	1492 Caterpillar	C32 ACERT	2.7 HSD	1	MAI	15.50		85 28			1 All	Impero Holdings	In Service/Commission	38.0	124	125
ATOMIC	1011733		ACHT	Yacht	2014	448 Caterpillar	C32 ACERT	2.7 HSD 3.0 HSD	1	IOM	15.50		85 28 59 19			1 All			38.0	125	125
ONIKA	8742264	229864000 Y		Yacht	2009	448 Caterpillar 4480 M.T.U.	16V396TE94	4.0 HSD	-	MTA	14.50		25 41			1 All	Safehaven International Ltd Edmiston Yacht Management Ltd	In Service/Commission In Service/Commission	38.1	125	125
SERENITAS	1007782	310397000 Y		Yacht	2001		3508TA	4.0 HSD 4.3 HSD	1	BER	14.00		36 45			1 All			38.1		
MORNING STAR	9693343	310397000 Y 319224000 Y		Yacht	2001	1156 Caterpillar 1066 Caterpillar	C18	4.3 HSD 3.0 HSD	1	CAY	14.00		.30 43 96 31			1 All	Sterling Management Sea Explorer Ltd	In Service/Commission In Service/Commission	38.4	126 126	150 150
		319224000 Y 355793000 Y			2009	1066 Caterpinar 1576 M.T.U.			1	PAN			90 31 89 29			1 All					
MUSTANG SALLY ALEKSANDRA	9655834 9690456	319483000 Y		Yacht	1987	1492 Caterpillar	12V2000M70 C32 ACERT	2.0 HSD 2.7 HSD	1	CAY	12.00 12.00		89 29 71 23			1 All	Estry United Ltd Campbell Corporate Serv Ltd	In Service/Commission	38.5 38.7	126 127	150 150
MAVERICK	1010868	256893000 Y		Yacht Yacht	2007	1492 Caterpinar 1470 MAN	D2842LE	1.8 HSD	1	MTA	12.00		71 Z: 29 43			1 All	Verenity Ltd	In Service/Commission In Service/Commission	38.7	127	150
BACARFILA	1010868	256893000 Y		Yacht	2007	1470 MAN 1000 Caternillar	C18	3.0 HSD	1	CAY	11.00		29 43 16 38			1 All	Moran Yacht Management Inc	In Service/Commission	39.0	128	150
O' PARI 3	9776054	256428000 Y		Yacht	2005	1198 Caterpillar	C18 ACERT	3.0 HSD	1	MTA	12.00		84 28			1 All	Taransay GmbH & Co KG	In Service/Commission	39.0	128	150
NASSIMA	9670456	319576000 Y		Yacht	2015	984 Caterpillar	C18 ACERT	2.7 HSD	1	CAY	12.00	0 1				1 All	Safira Maritime Holdings LLC	In Service/Commission	39.0	128	150
DRIZZLE	9623207	235096604 Y		Yacht Yacht (Sail		533 Caterpillar	C32 ACERT C18	2.7 HSD 3.0 HSD	1	IOM	12.00		2/ 42 76 25			1 All	Safira Maritime Holdings LLC. Dohle Private Clients Ltd	In Service/Commission	39.3	129	150
MINDERELLA	9068964	235096604 Y 319732001 Y		Yacht (San	1973		3406	2.4 HSD		CAY	14.00		70 Z: 53 13			1 All			39.5	129	150
DIVINE	9068964	538070734 Y		Yacht	2008	588 Caterpillar 4080 M.T.U.	12V4000M90	2.4 HSD 4.1 HSD	1	MAI	20.00		53 13 99 33			1 All	Caicos Live Aboard Diving Rice Quarters II Ltd	In Service/Commission	39.6	130	150
SAMURAI	9539890	319022100 Y		Yacht	2008	4080 M.T.U.	12V4000M90	4.1 HSD 4.1 HSD	1	CAY	20.00		99 33 99 33			1 All	Rptd Sold Undisclosed Interest	In Service/Commission	39.6	130	150
ACHILLES	9539901 9557496	319022100 Y 319009200 Y		Yacht	2008	4080 M.T.U.	12V4000M90	4.1 HSD 4.1 HSD	1	CAY	20.00	0	99 33 99 33			1 All	Milk Money Services II LLC	In Service/Commission In Service/Commission	39.6	130	150
BART ROBERTS					2008	2640 M.T.U.			1	CAY						1 All				130	150
	9557501 9583562	319011700 Y		Yacht	2008	4080 M.T.U.	12V4000M60 12V4000M90	4.1 HSD 4.1 HSD	1	USA	20.00 12.00		99 33 99 33			1 All	Aphrodite Marine Ltd	In Service/Commission	39.6 39.6	130	150
EXCELLENCE V		367481320 Y		Yacht					1								Gene Machine LLC	In Service/Commission			
SEA OWL	9620188	367541760 Y		Yacht	2010	4080 M.T.U.	12V4000M90	4.1 HSD	1	USA	20.00		99 33			1 All	Winning Way LLC	In Service/Commission	39.6	130	150 150
KANALOA	9633238	319042300 Y		Yacht	2011	4080 M.T.U.	12V4000M90	4.1 HSD	1	CAY	20.00		99 33			1 All	Campbell Corporate Serv Ltd	In Service/Commission	39.6	130	
PEARL	9633240	338083000 Y		Yacht	2011	4320 M.T.U.	12V4000M73L	4.1 HSD	1	USA	20.00		99 33			1 All 1 All	LG Corporation of Palm Beach	In Service/Commission	39.6 39.6	130 130	150 150
RM ELEGANT	9654921	338264000 Y		Yacht	2011	4320 M.T.U.	12V4000M73L	4.1 HSD	1	USA	20.00	-	99 33				Seven LXX LLC	In Service/Commission			
FLYING FOX	9663788	319056200 Y		Yacht	2012	4024 M.T.U.	12V4000M90	4.3 HSD	1	CAY	20.00		99 33			1 All	Westport Shipyard Inc	In Service/Commission	39.6	130	150
FUSION	9678496	538071050 Y		Yacht	2012	4262 M.T.U.	12V4000M73L	4.3 HSD	1	CAY	20.00	-	99 33			1 All	Far Niente Ventures LLC	In Service/Commission	39.6	130	150
COCOA BEAN	9685360	319089200 Y		Yacht	2015	4320 M.T.U.	12V4000M73L	4.3 HSD	1	CAY	20.00	0 1				1 All	Westport Shipyard Inc	In Service/Commission	39.6	130	150
LEXICON BEEE CHIEE	1001489	339319000 Y		Yacht	1989 2012	2238 Caterpillar	3512TA	4.3 HSD 2.7 HSD	1	JAM USA	12.00 16.00		00 33			1 All 1 All	Baker B	In Service/Commission	39.6	130	150
	1012373	367618660 Y		Yacht		2386 Caterpillar	C32		1			-				1 All	Akino Corp	In Service/Commission	39.6	130	150
MARIPOSA	1011783		ACHT	Yacht (Sail		294 Scania	DI12 M	2.0 HSD	1	CUR	11.00	-		94 176		1 / 10	Rainbow BV	In Service/Commission	40.0	131	150
SMILING T	1011862	319237000 Y		Yacht	2010	1940 Caterpillar	C32 ACERT	2.7 HSD	1	CAY	15.40	0 1				1 All	Northern Trust Corp	In Service/Commission	40.0	131	150
THE WELLESLEY	8673097	319053900 Y		Yacht	2011	4680 M.T.U.	12V4000M93	4.3 HSD	1	CAY	12.00		01 33			1 All	Rptd Sold Cayman Islands	In Service/Commission	40.0	131	150
REEF CHIEF	8988870	538080008 Y		Yacht	1993	762 Caterpillar	3508	4.3 HSD	1	MAI	12.00		96 32			1 All	Hill Robinson International	In Service/Commission	40.0	131	150
FAR AWAY	9694012	319044500 Y		Yacht	2011	4680 M.T.U.	12V4000M93	4.3 HSD	1	CAY	23.00		18 39			1 All	Princess Yachts Intl Plc	In Service/Commission	40.0	131	150
GOLDEN ODYSSEY II	9751987	229942000 Y	ACHI	Yacht	2013	4680 M.T.U.	12V4000M93	4.3 HSD	1	MTA	12.00	υ 1	.01 33	88 0		1 All	Thumper Ltd	In Service/Commission	40.0	131	150

VECCHARAE	IMO	MMSI SHIP TYP			N KON DECICN	DESIGNATIO		CATECODY ANY KIN		CD5550 T				NAT DUE CATECO	DWT DANCE	OPERATOR	STATUS	Leventh (m)		
VESSNAME W	1MU 9752747	319070300 YACHT	Yacht	2013	N_KW DESIGN 4680 M.T.U.	12V4000M93	4.3 HSD	CATEGORY AUX_KW	CAY	12.00		101 NKI G			1 All	Imperial Yachts SARL	In Service/Commission	Length (m) 40.0	Length (ft) Slip 131	p 150
IRIMARI	9600841	248499000 YACHT	Yacht	2013	1640 Caterpillar	C32	2.7 HSD	1	MTA	12.00			388		1 All	Itatzel Marketing Inc	In Service/Commission	40.0	131	150
OKTO	9669225	319844000 YACHT	Yacht	2010	2238 M.T.U.	12V2000M72	2.2 HSD	1	CAY	14.00			346		1 All	B C Ltd	In Service/Commission	40.2	132	150
FINISH LINE	9695236	538071092 YACHT	Yacht	2011	2160 M.T.U.	12V2000M72	2.2 HSD	1	CRO	14.00	0	103	346		1 All	Autozubak-Zagreb doo	In Service/Commission	40.2	132	150
SENSES	8734281	538070715 YACHT	Yacht	1970	976 Caterpillar	D348TA	2.4 HSD	1	MAI	14.00	0	70	235	0	1 All	Alchemy Ventures Ltd	In Service/Commission	40.3	132	150
I NOVA	9660401	319311000 YACHT	Yacht	2013	2206 M.T.U.	12V2000M91	2.0 HSD	1	CAY	14.00	0		366		1 All	Ocean Management GmbH	In Service/Commission	40.5	133	150
DEJA VU	8651386	378019000 YATCH	Yacht	1990	2000 M.T.U.	8V396TE74	4.0 HSD	1	VGI	13.00	0		324		1 All	Biltmore Management Ltd	In Service/Commission	40.5	133	150
KATYA	1011458	319036500 YACHT	Yacht	2008	3700 M.T.U.	12V4000M71	4.1 HSD	1	CAY	28.00			461		1 All	Star 7 Holdings LLC	In Service/Commission	40.5	133	150
LAZY Z	8980309	339333000 YATCH	Yacht	1995	3090 Caterpillar	3516B-TA	4.3 HSD	1	JAM	20.00			488		1 All	Rock Chalk Boat Co	In Service/Commission	40.5	133	150
TANGO 5	1011874	538070874 YACHT	Yacht	2010	1492 Caterpillar	C32	2.7 HSD	1	MAI	14.50					1 All	Ferrum Investments Ltd	In Service/Commission	40.5	133	150
IL SOLE PLAN B	8991425 9665982	377714000 YACHT 319067700 YACHT	Yacht Yacht	1987 2010	2238 M.T.U. 4680 M.T.U.	12V396TB83 12V4000M93	4.0 HSD 4.3 HSD	1	SVC CAY	13.00 24.00	-		482 338	-	1 All 1 All	Azzura Yacht Management Allova Ltd	In Service/Commission In Service/Commission	40.6 40.8	133 134	150 150
ANDIAMO!	9640073	225449000 YACHT	Yacht	2010	4680 M.I.U. 1066 Caterpillar	12V4000M93 C18	4.3 HSD 3.0 HSD	1	SPN	24.00			338		1 All	Alloya Ltd Aldabra Marine SL	In Service/Commission	40.8	134	150
STAR	1008542	319407000 YACHT	Yacht (Sa		448 Lugger	L6140LA2	2.5 HSD	1	CAY	12.00	0		198		1 All	Mountain Country Ltd	In Service/Commission	40.9	134	150
BUYA	1012684	319085300 YACHT	Yacht	2013	746 Caterpillar	C32 ACERT	2.7 HSD	1	CAY	12.00					1 All	West Nautical Ltd	In Service/Commission	41.0	134	150
PENELOPE	1000617	538080089 YACHT	Yacht	1987	778 Kelvin	TBSC8	3.9 HSD	1	MAI	13.00			352		1 All	Kota Ltd	In Service/Commission	41.0	135	150
SUERTE	9672428	319053100 YACHT	Yacht	2012	4680 M.T.U.	12V4000M93	4.3 HSD	1	CAY	23.00	0	106	356	0	1 All	Gulf Craft Inc	In Service/Commission	41.1	135	150
TOMMY	9671230	229477000 YACHT	Yacht	2012	3878 M.T.U.	16V2000M94	2.2 HSD	1	MTA	17.00	0	105	351	0	1 All	Star Chartering Ltd	In Service/Commission	41.2	135	150
MISSING LINK	9093000	319825000 YACHT	Yacht	1987	1492 Caterpillar	3508B	4.3 HSD	1	CAY	14.00	0	131	439		1 All	Moran Yacht Management Inc	In Service/Commission	41.4	136	150
SOLEMAR	9689457	319987000 YACHT	Yacht	2010	2162 Caterpillar	C32 ACERT	2.7 HSD	1	CAY	14.00	0	131	439	0	1 All	BURGESS	In Service/Commission	41.9	138	150
KISMET	9737682	378377000 YACHT	Yacht	2011	2162 Caterpillar	C32 ACERT	2.7 HSD	1	VGI	14.00			464		1 All	Fraser Worldwide SAM	In Service/Commission	41.9	138	150
SAVANNAH	1012206	319075800 YACHT	Yacht	2015	3530 Caterpillar	3512C	4.9 HSD	1	CAY	16.50		143			1 All	Supertoys	In Service/Commission	42.0	138	150
LORETTA ANNE	8741404	538080061 YACHT	Yacht (Sa		346 Lugger	L6140A	2.5 HSD	1	MAI	11.00	0		231		1 All	M3 Marine Ltd	In Service/Commission	42.0	138	150
SAVARONA	9069633	518571000 YACHT	Yacht	1988	1308 M.T.U.	8V396TB63	4.0 HSD	1	CKI	12.50			354		1 All	Rptd Sold Undisclosed Interest	In Service/Commission	42.0	138	150
GENE MACHINE	9747039	229867000 YACHT	Yacht	2012	2160 M.T.U.	12V2000M72	2.2 HSD	1	MTA	14.00	0		275		1 All	YCO SAM	In Service/Commission	42.0	138	150
AQUILA	9796004	538071119 YACHT	Yacht	2013	2386 Caterpillar	C32 ACERT	2.7 HSD	1	MAI	15.00	-		469	-	1 All	Vessel Safety Management	In Service/Commission	42.0	138	150
SEARCHER	1002093	319706000 YACHT	Yacht	1984	1268 Caterpillar	D398TA	4.0 HSD	1	CAY	12.00	0		373		1 All	Yachting Partners Intl Monaco	In Service/Commission	42.0	138	150
AZZURRA II	8657732	367545250 YATCH	Yacht	1994	2796 MWM	TBD604BV12	4.4 HSD	1	USA	13.00	-		458	-	1 All	Christensen Abbracci LLC	In Service/Commission	42.1	138	150
LATITUDE	8949965	312881000 YACHT	Yacht	1974	1618 General Motors	YYYYYY	2.4 HSD	1	BLZ	12.00			371		1 All	Sun Dancer Belize Ltd	In Service/Commission	42.1	138	150
ASPEN ALTERNATIVE LA MASQUERADE	8999647 8990275	229689000 YACHT 256670000 YATCH	Yacht Yacht	1994 1963	2498 M.T.U. 956 Caterpillar	12V396TE94 D399TA	4.0 HSD 4.0 HSD	1	MTA MTA	19.00 12.00	0		339 316		1 All 1 All	Serene Waters Ltd Gem-Star Yacht	In Service/Commission In Service/Commission	42.1 42.3	138 139	150 150
MIRABELLA III	1001829	319739000 YACHT	Yacht	1963	1398 MWM	TBD604BL6	4.0 HSD 4.4 HSD	1	UNK	12.00			437		1 All	Rptd Sold Undisclosed Interest	In Service/Commission	42.3	139	150
SARABETH	9752668	319071900 YACHT	Yacht	2012	2160 M.T.U.	12V2000M72	2.2 HSD	1	CAY	14.00			467		1 All	Feranti Ventures Ltd	In Service/Commission	42.4	139	150
BLUE SKY	1011769	YACHT	Yacht	2012	2460 Caterpillar	3512C	4.3 HSD	1	ITL	14.00	-		407		1 All	UniCredit Leasing SpA	In Service/Commission	42.5	139	150
LADY M	8928492	319112000 YACHT	Yacht	1991	4480 M.T.U.	16V396TE94	4.0 HSD	1	CAY	20.00			431		1 All	CSO Yachts Ltd	In Service/Commission	42.7	140	150
ROCKSTAR	9653032	235090917 YACHT	Yacht	2007	2908 Caterpillar	3512B	4.3 HSD	1	GBI	15.50					1 All	Pelagos Yachts Ltd	In Service/Commission	42.8	140	150
CV-9	1005629	235720000 YATCH	Yacht	1988	3234 M.T.U.	16V396TB93	4.0 HSD	1	IOM	21.00	0		316		1 All	Redline Developments Ltd	In Service/Commission	43.0	141	150
WHY WORRY	9548031	319002600 YACHT	Yacht	2005	1640 Caterpillar	C32	2.7 HSD	1	CAY	14.00	0	119	399	96	1 All	EPBC Holdings Ltd	In Service/Commission	43.0	141	150
ELFJE	1003750	319130000 YATCH	Yacht	1993	1156 Caterpillar	3508TA	4.3 HSD	1	CAY	12.00			438		1 All	Teka Investment Ltd	In Service/Commission	43.0	141	150
SEA EAGLE	1012787	319082400 YACHT	Yacht (Sa	ili 2013	533 Caterpillar	C18	3.0 HSD	1	CAY	14.00	0	69	233	35	1 All	Rptd Sold Undisclosed Interest	In Service/Commission	43.0	141	150
MOKA	8742393	538080063 YATCH	Yacht	1996	1766 General Motors	16V-149	2.4 HSD	1	UNK	16.00	0	126	423	0	1 All	Lady Nora Ltd	In Service/Commission	43.0	141	150
PRINCESS K	9776901	338214000 YACHT	Yacht	2012	3898 M.T.U.	12V4000M73L	4.3 HSD	1	USA	17.00	0	285	497	0	1 All	King Baby Marine II	In Service/Commission	43.0	141	150
BLACK MAGIC	1004132	229694000 YACHT	Yacht	1972	1544 Caterpillar	D398TA	4.0 HSD	1	MTA	12.00	0	99	330	0	1 All	Maltover Seas Co I Ltd	In Service/Commission	43.0	141	150
FARFALLA	1002407	253081000 YACHT	Yacht	1992	1210 MWM	TBD234V12	1.8 HSD	1	LUX	12.00			390		1 All	Carola Shipping SA	In Service/Commission	43.1	141	150
FOREVER ONE	8969159	239994000 YATCH	Yacht	1995	1912 Caterpillar	3508TA	4.3 HSD	1	GRC	14.00			496		1 All	Fantasy Cruises	In Service/Commission	43.1	141	150
RAHIL	9658733	229889000 YACHT	Yacht	2012	1940 Caterpillar	C32 ACERT	2.7 HSD	1	MTA	17.00			381		1 All	Carolis Shipping Ltd	In Service/Commission	43.2	142	150
ANNA	9707936	319077100 YACHT	Yacht	2012	2738 M.T.U.	12V4000M53	4.8 HSD	1	CAY	14.00			480		1 All	YES Marine Ltd	In Service/Commission	43.3	142	150
PARAFFIN	9570046	319017900 YACHT	Yacht	2007	1640 Caterpillar	C32	2.7 HSD	1	CAY	14.00			380		1 All	Sands Point Ltd	In Service/Commission	43.3	142	150
PREDICTION	1010105	319057800 YACHT	Yacht	2007	1640 Caterpillar	3508	4.3 HSD	1	CAY	15.00			480		1 All	Merl M	In Service/Commission	43.3	142	150
ICE BEAR ESTER III	1012062 9589334	319648000 YACHT	Yacht (Sa		533 Caterpillar	C18	3.0 HSD	1	CAY BAH	14.00 10.00	0		233		1 All 1 All	Blue Papillon Ltd	In Service/Commission	43.3	142	150
MADCAP	9589334	311000170 YACHT 339378000 YACHT	Yacht	2005 1998	1000 Caterpillar 2460 Caterpillar	3412E 3512B	2.2 HSD 4.3 HSD	1	UNK	10.00			473 439		1 All	IMA Yachts LLC J&M Charters Inc	In Service/Commission	43.4 43.5	142 143	150 150
DWINGER	1002342	310245000 YACHT	Yacht Yacht	1998	1156 Caterpillar	3508TA	4.3 HSD 4.3 HSD	1	BER	12.00			439 489		1 All	Pink Sands Holdings	In Service/Commission In Service/Commission	43.5	143	150
SALT DANCER	8736174	310245000 TACHT 319041800 YATCH	Yacht	1991	3360 M.T.U.	12V396TF94	4.3 HSD 4.0 HSD	1	CAY	12.00			489		1 All	Clearfield Properties Ltd	In Service/Commission	43.6	143	150
HAMPSHIRE II	9611761	319023700 YACHT	Yacht	2008	1940 Caterpillar	C32 ACERT	4.0 HSD 2.7 HSD	1	CAY	14.00	-		440	-	1 All	Chilinea Holding Ltd	In Service/Commission	43.6	143	150
LADY SARA	9673070	319659000 YACHT	Yacht	2000	1492 Caterpillar	C32 ACERT	2.7 HSD	1	CAY	26.00					1 All	Reflection Marine Ventures	In Service/Commission	43.6	143	150
AMARULA SUN	9745782	229888000 YACHT	Yacht	2010	1938 Caterpillar	C32 ACERT	2.7 HSD	1	MTA	14.00	-				1 All	Farwood Marine Ltd	In Service/Commission	43.6	143	150
ODESSA II	9664718	518728000 YACHT	Yacht (Sa		447 Caterpillar	C18 ACERT	3.0 HSD	1	CKI	10.00	0		258		1 All	Eclipse Marine Ltd	In Service/Commission	43.9	144	150
SURI	1011044	319044000 YACHT	Yacht	2008	1118 Caterpillar	C32	2.7 HSD	1	CAY	14.00	0	127	426	418	1 All	Kingship Marine Ltd	In Service/Commission	44.0	144	150
HERCULINA	1012555	503018980 YACHT	Yacht	2013	1790 Caterpillar	C32	2.7 HSD	1	AUS	15.00					1 All	Motor Yacht Build Ltd	In Service/Commission	44.0	144	150
LADY CANDY	9446922	319774000 YACHT	Yacht	2005	2460 Caterpillar	3512B-DITA	4.3 HSD	1	CAY	13.50	0	148	494	0	1 All	Fairport Yacht Support	In Service/Commission	44.2	145	150
SEA RHAPSODY	9709104	319057200 YACHT	Yacht	2007	898 Caterpillar	3412	2.2 HSD	1	CAY	12.00	0			148	1 All	Balodessa Services Ltd	In Service/Commission	44.2	145	150
CAROLINE SEA II	1010583	477991303 YACHT	Yacht	2009	1576 M.T.U.	12V2000M70	2.0 HSD	1	HKG	14.20	0	149	499	0	1 All	Jetpon Asia Co Ltd	In Service/Commission	44.7	146	150
MQ2	1009807	319071600 YACHT	Yacht	2007	1574 M.T.U.	12V2000M70	2.0 HSD	1	CAY	10.00					1 All	Atomic Yachting LLC	In Service/Commission	44.8	147	150
JANICE OF WYOMING	1002720	232130000 YACHT	Yacht	1983	3980 M.T.U.	16V538TE82	5.4 HSD	1	GBI	18.00			435		1 All	Sunrise Yachting Yatcilik	In Service/Commission	44.8	147	150
MY ZEHAVA	1011238	319058900 YACHT	Yacht	2008	1940 Caterpillar	C32	2.7 HSD	1	CAY	14.50			496		1 All	Yacht Logistics Inc	In Service/Commission	45.0	148	150
AUDACIA	1011408	378361000 YACHT	Yacht	2011	1940 Caterpillar	C32	2.7 HSD	1	VGI	12.50			496		1 All	Hill Robinson Yacht Management	In Service/Commission	45.0	148	150
MALIBU	1012153	319064300 YACHT		ili 2011	551 Volvo Penta	D16MH750	2.7 HSD	1	CAY	15.00	0		162		1 All	Equiom Isle of Man Ltd	In Service/Commission	45.0	148	150
TALITHA	1012608	319080200 YACHT	Yacht	2012	1766 Caterpillar	C32	2.7 HSD	1	CAY	15.00	0	-	496	-	1 All	Campbell Corporate Serv Ltd	In Service/Commission	45.0	148	150
WABI-SABI	9663829	373423000 YACHT	Yacht	2012	2588 M.T.U.	12V4000M60	4.1 HSD	1	PAN	16.00			491		1 All	Horizon Yacht Co Ltd	In Service/Commission	45.0	148	150
FALCON LAIR	9757761	319072700 YACHT	Yacht	2014	2162 Caterpillar	C32 ACERT	2.7 HSD	1	CAY	14.00	-		499		1 All	Rptd Sold Undisclosed Interest	In Service/Commission	45.0	148	150
YOU & ME	9767869 9590656	319077400 YACHT 538080068 YACHT	Yacht	2014 2008	948 Cummins	QSM11 3508B-TA	1.8 HSD	1	CAY	12.00 10.00			479 496		1 All	Seaisee Holdings Ltd	In Service/Commission	45.0	148	150
J'ADE CRYSTAL	9590656 9641211	538080068 YACHT 229362000 YACHT	Yacht Yacht	2008	1566 Caterpillar 1530 Mitsubishi	3508B-TA S12A2-MTK	4.3 HSD 2.8 HSD	1	UNK	10.00 14.50					1 All 1 All	Temple Marine Ltd Katerina Shipping & Yachting	In Service/Commission	45.1 45.2	148 148	150 150
AQUIJO	9641211 8991140	229362000 YACHT 319055500 YACHT	Yacht Yacht	2009	1530 Mitsubishi 1140 Caterpillar	3508TA	2.8 HSD 4.3 HSD	1	GBI	14.50					1 All	Aquarius Star Ltd	In Service/Commission In Service/Commission	45.2	148	150
MOGAMBO	9663568	319055500 YACHT 319274000 YACHT	Yacht Yacht	2008	1140 Caterpillar 1640 Caterpillar	35081A 3508C	4.3 HSD 4.3 HSD	1	CAY	20.00	-				1 All	Aquarius Star Ltd Carson Maritime LLC	In Service/Commission	45.4 45.4	149	150
APHRODITE	9022831	538071013 YATCH	Yacht	2008	1386 General Motors	16V-149-NA	4.3 HSD 2.4 HSD	1	MAI	20.00	-		497		1 All	Island Girl Ltd	In Service/Commission	45.4	149	150
PASSION	8980294	316001670 YACHT	Yacht	1991	3310 Caterpillar	3512B-TA	4.3 HSD	-	CAN	14.00	-		515		1 All	Great Pacific Capital Corp	In Service/Commission	45.7	150	150
JAGUAR	9331969	366705000 YACHT	Yacht	2002	3000 Caterpillar	3512B-1A	4.3 HSD	1	USA	18.50					1 All	Fairport Yacht Support	In Service/Commission	45.7	150	150
OCEAN PARADISE	9669847	319053800 YACHT	Yacht	2002	2984 Caterpillar	C32	2.7 HSD	1	CAY	15.00			437		1 All	Status Quo Inc	In Service/Commission	45.7	150	150
LARS	1010521	319059200 YACHT	Yacht	2009	1425 Caterpillar	3512B	4.3 HSD	1	SVC	14.50					1 All	Fairport Yacht Support	In Service/Commission	45.7	150	150
SURPINA		319009600 YACHT	Yacht	2005	1492 Caterpillar	3508	4.3 HSD	1	CAY	16.00		141			1 All	Midwest Yachting LLC	In Service/Commission	46.0	151	175
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VESSNAME	IMO	· · -			IN_KW DESIGN	DESIGNATIO		CATEGORY	AUX_KW							EGO DWT_RANGE		STATUS		Length (ft) Sli	
FORMOSA	9501306	319200000 YACHT	Yacht	2006 1993	4080 M.T.U.	12V4000M90	4.1 HSD	1		CAY	18.00	0 1				1 All	Freedom Sea LLC	In Service/Commission	46.0	151	175
ENCORE	1002706	310034000 YACHT	Yacht		1623 Caterpillar	3508TA	4.3 HSD-ED	1		BER	15.00	0 1		37 (-	1 All	Fraser Worldwide SAM	In Service/Commission	46.0	151	175
STATE OF GRACE	1003621	538071110 YATCH	Yacht	1989	2400 MWM	TBD604BV12	4.4 HSD	1		MAI	13.00			28 276		1 All	Houlihan-Parnes	In Service/Commission	46.0	151	175
MOON SAND	1012127	229492000 YACHT	Yacht	2011	533 Caterpillar	C18	3.0 HSD	1		MTA	16.00	-		51 (-	1 All	McMaster Yachts Ltd	In Service/Commission	46.0	151	175
PRIDE	1012359	319059500 YACHT	Yacht	2014	2388 Caterpillar	C32	2.7 HSD	1		CAY	16.00	0 1		06 44		1 All	Lodestone Corp Ltd	In Service/Commission	46.0	151	175
APOLLO	1012672	319077900 YACHT	Yacht	2012	1790 Caterpillar	C32	2.7 HSD	1		CAY	19.50	0 1		23 5		1 All	Med Yacht Services Srl	In Service/Commission	46.0	151	175
SARAMOUR	8847349	229401000 YATCH	Yacht	1991	2830 M.T.U.	12V396TB93	4.0 HSD	1		MTA	18.00	0 1		11 (1 All	Imperial Holdings Ltd	In Service/Commission	46.0	151	175
INSPIRATION	9666821	235093493 YACHT	Yacht	2012	3530 Caterpillar	3512C	4.9 HSD	1		GBI	14.50	0 1		99 (-	1 All	Cote d'Azur Banque Populaire	In Service/Commission	46.0	151	175
TRIDENT	9671010	319090800 YACHT	Yacht	2011	3000 Caterpillar	3512C-HD	4.9 HSD	1		CAY	14.00	0 1		99 70		1 All	Wilson Yacht Management	In Service/Commission	46.0	151	175
VITAMIN	9741695	378379000 YACHT	Yacht	2012	3530 Caterpillar	3512C	4.9 HSD	1		VGI	14.00			99 65	-	1 All	Lighthouse Yacht Management	In Service/Commission	46.0	151	175
AURORA A	9770672	235109157 YACHT	Yacht	2012	3000 Caterpillar	3512	4.3 HSD	1		IOM	18.00			99 65	-	1 All	Ocean Management GmbH	In Service/Commission	46.0	151	175
DESIRE	9779329	256593000 YACHT	Yacht	2008	2908 Caterpillar	3512B	4.3 HSD	1		MTA	12.00			96 100		1 All	Santa Lucija Yacht Co Ltd	In Service/Commission	46.3	152	175
IMPERIAL PRINCESS	9779915	235111456 YACHT	Yacht	2008	2910 Caterpillar	3512B-HD	4.9 HSD	1		IOM	12.00	0 1		89 (-	1 All	Arrow Services Monaco	In Service/Commission	46.3	152	175
BIG ZIP	1011927	256969000 YACHT	Yacht	2010	1938 Caterpillar	C32	2.7 HSD	1		MTA	10.00			99 70		1 All	Ocean Management GmbH	In Service/Commission	46.4	152	175
OSTAR	9520730	319982000 YACHT	Yacht	2004	1492 Caterpillar	3512B	4.3 HSD	1		CAY	18.00			99 99		1 All	QX Maritime LLC	In Service/Commission	46.6	153	175
RED ROOSTER III	1011264	229056000 YACHT	Yacht	2010	2320 M.T.U.	8V4000M70	4.1 HSD	1		MTA	15.50	0 1		91 (1 All	Hill Robinson Yacht Management	In Service/Commission	46.7	153	175
PHILMI	1012438	319067900 YACHT	Yacht	2012	2000 M.T.U.	8V4000M70	4.1 HSD	1		CAY	15.50	0 1		99 10		1 All	Art of Yacht Management Ltd	In Service/Commission	46.7	153	175
DARLING	1011240	244814000 YACHT	Yacht	2009	3260 M.T.U.	16V2000M92	2.2 HSD	1		NTH	17.00	0 1		99 98		1 All	Blue Seas Chartering Corp BV	In Service/Commission	47.0	154	175
BIG CITY	1011915	235093789 YACHT	Yacht	2010	2000 M.T.U.	8V4000M70	4.1 HSD	1		IOM	15.50			91 (-	1 All	Fraser Worldwide SAM	In Service/Commission	47.0	154	175
TULLY	1012440	319564000 YACHT	Yacht	2012	2000 M.T.U.	8V4000M70	4.1 HSD	1		CAY	15.50	0 1		99 (1 All	YCO SAM	In Service/Commission	47.0	154	175
LIONHEART	9657703	538071062 YACHT	Yacht	2009	2160 M.T.U.	12V2000M72	2.2 HSD	1		CAY	14.00	0 1		95 102	2	1 All	RBC Wealth Management	In Service/Commission	47.0	154	175
QUATTROELLE	9723875	235102586 YACHT	Yacht	2012	4320 M.T.U.	12V4000M73L	4.3 HSD	1		IOM	23.00	0 1		95 (D	1 All	Dominion Marine Corporate Serv	In Service/Commission	47.0	154	175
MOUSE TRAP	1002926	319946000 YACHT	Yacht	1987	2090 M.T.U.	12V396TE74	4.0 HSD	1		CAY	12.00			02 5		1 All	Sapir Organization	In Service/Commission	47.0	154	175
SUN DANCER II	1011800	319589000 YACHT	Yacht	2010	2386 Caterpillar	C32 ACERT	2.7 HSD	1		CAY	17.00	0 1	33 4	44 (D	1 All	Newson S	In Service/Commission	47.1	154	175
AMANTI	8657653	245938000 YACHT	Yacht (Sa	ili 1999	400 M.T.U.	12V2000M60	2.0 HSD	1		NTH	10.00	0 1	01 3	39 280	D	1 All	Victorius Shipping Co NV	In Service/Commission	47.3	155	175
BLUE MOON	9570345	538070840 YACHT	Yacht	2009	2462 Caterpillar	3512C	4.3 HSD	1		MAI	16.80	0 2	46 8	22 (D	1 All	Dohle Private Clients Ltd	In Service/Commission	47.5	156	175
RASSELAS	1012256	319059300 YACHT	Yacht (Sa	ili 2014	533 Caterpillar	C18	3.0 HSD	1		CAY	14.00	0	75 2	52 0	D	1 All	Marine Construction Mgmt	In Service/Commission	47.7	156	175
DIAMOND A	9516612	319010700 YACHT	Yacht	2006	2640 M.T.U.	12V4000M60	4.1 HSD	1		CAY	17.50	0 1	49 4	99 79	Э	1 All	Megayacht Technical Services	In Service/Commission	47.9	157	175
MONDANGO 3	1007952	538071061 YATCH	Yacht	1990	1350 Caterpillar	3508TA	4.3 HSD	1		MAI	14.50	0 1	54 5	15 448	В	1 All	Burgess	In Service/Commission	47.9	157	175
RUYA	1005411	319093000 YACHT	Yacht	1994	3042 Deutz	TBD620BV12	4.4 HSD	1		CAY	17.00	0 1	62 5	43 (D	1 All	Hill Robinson Yacht Management	In Service/Commission	48.0	157	175
STARFIRE	8731942	319860000 YACHT	Yacht (Sa	ili 1989	1066 Caterpillar	C18	3.0 HSD	1		CAY	12.00	0	91 3	04 320	D	1 All	Pelagos Yachts Ltd	In Service/Commission	48.0	157	175
ULYSSES	9436525	240934000 YATCH	Yacht	1996	3530 General Motors	16V-149-TI	2.4 HSD	1		GRC	14.00	0 1	29 4	32 (D	1 All	Inspiration Yacht Charterers	In Service/Commission	48.0	157	175
ELENVAR	1005435	319142000 YATCH	Yacht	1997	1350 Caterpillar	3508TA	4.3 HSD	1		CAY	14.50	0 1	49 4	99 46	5	1 All	International Yacht Collection	In Service/Commission	48.2	158	175
ANTARA	1005796	319495000 YATCH	Yacht	1996	1790 Cummins	KTA-38-M2	3.2 HSD	1		CAY	15.00	0 1	80 6	03 589	Э	1 All	Elmwood Ventures Ltd	In Service/Commission	48.5	159	175
RICE QUARTERS H2O2	9744348	319065600 YACHT	Yacht	2012	3878 M.T.U.	16V2000M94	2.2 HSD	1		CAY	32.00	0 1	45 4	85 (D	1 All	Swift Marine	In Service/Commission	48.5	159	175
ACTION	1000239	229551000 YACHT	Yacht	1990	1148 General Motors	16V-92-TA	1.5 HSD	1		MTA	12.00	0 1	40 4	67 (D	1 All	Luxembourg Marine Services SA	In Service/Commission	48.6	159	175
AZAMANTA	9485485	319001100 YACHT	Yacht	2006	2604 M.T.U.	12V4000M60	4.1 HSD	1		CAY	17.00	0 1	47 4	91 87	7	1 All	Green Dolphin Marine Ventures	In Service/Commission	48.7	160	175
INVICTUS	9683154	319063200 YACHT	Yacht	2010	2460 Caterpillar	3512C-HD	4.9 HSD	1		CAY	16.00	0 1	49 4	99 92	2	1 All	Harlan Ltd	In Service/Commission	48.7	160	175
SECRET	9560728	319582000 YACHT	Yacht	2007	2604 M.T.U.	12V4000M60	4.1 HSD	1		CAY	17.50	0 1	49 4	98 84	4	1 All	ACA Megavachts LLC	In Service/Commission	48.8	160	175
LADY GOODGIRL	1006219	319451000 YACHT	Yacht	1997	1350 Caterpillar	3508TA	4.3 HSD	1		CAY	14.50			87 (D	1 All	Teleost Cayman	In Service/Commission	48.8	160	175
MICHAELA ROSE	1011630	319038100 YACHT	Yacht (Sa		600 M.T.U.	12V2000M60	2.0 HSD	1		CAY	17.00			41 (1 All	Campus Mare Ltd	In Service/Commission	49.0	161	175
VIRGINIAN	8747824	319827000 YACHT	Yacht	1992	4480 M.T.U.	16V396TE94	4.0 HSD	1		CAY	19.00			66 0	- 1	1 All	963 Luxury Ltd	In Service/Commission	49.0	161	175
ABBRACCI	9509566	319370000 YACHT	Yacht	2004	3356 Caterpillar	3512B	4.3 HSD	1		CAY	18.00	0 1			-	1 All	Fairport Yacht Support	In Service/Commission	49.1	161	175
CACOS V	9537458	319002200 YACHT	Yacht	2004	1940 Caterpillar	3512B	4.3 HSD	1		CAY	18.00			76 130		1 All	New Idea LLC	In Service/Commission	49.1	161	175
HALO	9557692	319009300 YACHT	Yacht	2006	3310 Caterpillar	3512B	4.3 HSD	1		CAY	17.50	0 1		42 122		1 All	Campbell Corporate Serv Ltd	In Service/Commission	49.1	161	175
MADAME KATE	9668104	319045300 YACHT	Yacht	2010	3530 Caterpillar	3512D 3512C	4.9 HSD	1		CAY	14.00	0 1		73 290		1 All	Pensum Ltd	In Service/Commission	49.2	161	175
SUBI	7722059	538070349 YACHT	Yacht	1977	1368 General Motors	16V-149	2.4 HSD	1		MAI	12.00	0 4				1 All	Suri Holdings I td	In Service/Commission	49.2	162	175
TWILIGHT	1002756	233731000 YATCH	Yacht	1984	1526 Deutz	SBA6M528	10.6 MSD	2		GBI	14.00	0 2			-	1 All	Rochelle Marine Ltd	In Service/Commission	49.3	162	175
ARCTIC SUNRISE	7382902	244538000 YACHT	Yacht	1974	1618 MaK	9M452AK	36.2 MSD	3		NTH	13.00			49 610		1 All	Greenpeace Council Stichting	In Service/Commission	49.5	162	175
GENESIS II	9485473	538080060 YACHT	Yacht	2005	2604 M.T.U.	12V4000M60	4.1 HSD	3		MAI	17.00	0 1		45 010 91 (-	1 All	McDonald's Casino Royale Ltd	In Service/Commission	49.3	162	175
ENTOURAGE	9485473 7309546	303938000 YACHT	Yacht	1963	588 White Superior	40-M-6	4.1 HSD 9.8 MSD	1		FLI	12.00	0 3		79 309		1 All			49.7	163	
STEP ONE	1012658	319083700 YACHT		2015	3528 Caterpillar	3512C-HD	4.9 HSD	2		CAY	20.00	0 3		49 210	-	1 All	Lau Shipping Co Ltd	In Service/Commission	49.7	163	175 175
LADY BRITT	9606247	247323600 YACHT	Yacht Yacht (Sa		1081 Caterpillar	C32 ACERT	2.7 HSD	1		ITI	20.00			49 210 70 69		1 All	Ocean Management GmbH	In Service/Commission In Service/Commission	49.7	163	175
LADY BRITT	9606247	319617000 YACHT	Yacht (Sa	2008	3356 Caterpillar	3512B	4.3 HSD	1		CAY	16.00			55 123	-	1 All	Enterprise Shipping Agency Srl C Fly Marine Services LLC	In Service/Commission	49.7	163	175
LIONWIND	9641560	319054400 YACHT		2008	3480 M.T.U.	12V4000M70		1		CAY	12.00	0 1		46 13	-	1 All	Trident Trust Co BVI Ltd		49.8		
TAIBA	9599705	538071065 YACHT	Yacht Yacht	2010	1640 Caterpillar	3508B-TA	4.1 HSD 4.3 HSD	1		MAI	20.00	0 2		40 13. 98 (1 All	COCASENELREFRI	In Service/Commission	49.8	163 163	175 175
				1997				1			18.00				-			In Service/Commission			
ALCHEMY SAINT	1006520 8954752	319368000 YACHT 319780000 YACHT	Yacht Yacht	1997	3280 Caterpillar 3310 M.T.U.	3516TA 12V396TE94	4.3 HSD 4.0 HSD	1		CAY CAY	18.00			08 110 96 (1 All 1 All	Next Century Marine YCO SAM	In Service/Commission In Service/Commission	49.9 49.9	164 164	175 175
				2008		12V3961E94 16V4000M60	4.0 HSD 4.1 HSD	1		JAM						1 All			49.9	164	175
VIVA MAS STATUS OUO	9557513 9583574	339396000 YACHT	Yacht	2008	3520 M.T.U. 3520 M.T.U.	16V4000M60		1		CAY	20.00	0 1				1 All	Doria Acquisitions LLC	In Service/Commission	49.9	164	175
		319181000 YACHT	Yacht				4.1 HSD	1			12.00				-		Yacht Logistics Inc	In Service/Commission			
RED SAPPHIRE SHADOW	1012036	378111881 YACHT	Yacht	2011	3530 Caterpillar	3512C	4.9 HSD	1		VGI	14.50			98 100		1 All	BA Maritime Corp	In Service/Commission	50.0	164	175
ARIANNA	8977534	319735000 YACHT	Yacht	1993	2618 MWM	TBD604BV12	4.4 HSD	1		CAY	18.50			07 0	-	1 All	Ilsole Ltd	In Service/Commission	50.0	164	175
LIFE SAGA	8979805	256676000 YACHT	Yacht	1989	1126 Caterpillar	3412TA	2.2 HSD	1		MTA	12.00	0 2		75 (1 All	Seven Seas Navigation Ltd	In Service/Commission	50.0	164	175
ROYAL ROMANCE	9763899	319074600 YACHT	Yacht	2012	2000 M.T.U.	8V4000M63	4.8 HSD	1		CAY	12.00	0 1		97 112	-	1 All	Titan Fleet Management Sarl	In Service/Commission	50.0	164	175
BELUGA	1005966	229761000 YACHT	Yacht	1996	2028 Caterpillar	3512B-HD	4.9 HSD	1		MTA	15.50	0 1		56 600		1 All	Istros Ltd	In Service/Commission	50.0	164	175
GODSPEED	1007158	319663000 YACHT	Yacht	2000	1790 Cummins	KTA-38-M2	3.2 HSD	1		CAY	15.00			13 (1 All	Titan Fleet Management Sarl	In Service/Commission	50.0	164	175
SINDHU SANKALP	1008023	319055000 YACHT	Yacht	1992	1136 Caterpillar	3516TA	4.3 HSD	1		BER	12.00	-		55 (-	1 All	Rptd Sold Undisclosed Interest	In Service/Commission	50.0	164	175
TURKS & CAICOS AGGRESSOR II	1004819	538070743 YACHT	Yacht	1994	2236 Caterpillar	3512TA	4.3 HSD	1		MAI	12.00			58 (1 All	ALB Ltd	In Service/Commission	50.0	164	175
SERENITY J	1012737	319084300 YACHT	Yacht	2015	2000 M.T.U.	8V4000M63	4.8 HSD	1		CAY	12.00	0 1		99 123		1 All	Ann G Voyage Ltd	In Service/Commission	50.0	164	175
DREAM	9526320	367368250 YACHT	Yacht	2005	3310 Caterpillar	3512B	4.3 HSD	1		USA	18.00			66 130	-	1 All	Norwegian Queen Management LLC	In Service/Commission	50.0	164	175
ONLY ONE	9556923	367403020 YACHT	Yacht	2006	3310 Caterpillar	3512B	4.3 HSD	1		USA	20.00			56 130	-	1 All	Hendrick Marine LLC	In Service/Commission	50.0	164	175
KIBO	9581980	319972000 YACHT	Yacht	2009	2460 Caterpillar	3512C	4.9 HSD	1		CAY	16.00	0 1		98 100		1 All	Frazier Overseas Ltd	In Service/Commission	50.0	164	175
ALUCIA	9583251	319018500 YACHT	Yacht	2007	2625 Caterpillar	3512B	4.3 HSD	1		CAY	12.00	0 1		59 146		1 All	Rptd Sold USA	In Service/Commission	50.0	164	175
FORWIN	9599640	319021700 YACHT	Yacht	2007	1940 Caterpillar	3512B	4.3 HSD	1		CAY	12.00	0 1		90 130		1 All	Automotive Management Services	In Service/Commission	50.0	164	175
ENDEAVOUR	9737981	319077500 YACHT	Yacht	2012	2460 Caterpillar	3512C	4.9 HSD	1		CAY	13.00	0 2		95 135	-	1 All	GRNF Denizcilik ve Insaat	In Service/Commission	50.0	164	175
TURMOIL	9658006	319044100 YACHT	Yacht	2009	1440 M.T.U.	8V2000M72	2.2 HSD	1		CAY	12.00	0 1		10 0		1 All	Rainbow Peak Ltd	In Service/Commission	50.2	165	175
KAMAXITHA	1004936	319214000 YACHT	Yacht	1992	1884 Caterpillar	3512TA	4.3 HSD	1		CAY	15.50	0 2		80 680	-	1 All	Burgess	In Service/Commission	50.3	165	175
SECRET LOVE	1006556	319642000 YACHT	Yacht	1997	2238 Caterpillar	3512TA	4.3 HSD	1		CAY	16.50	0 2		92 (1 All	RSO Holdings Ltd	In Service/Commission	50.3	165	175
REMEMBER WHEN	8988208	319126000 YATCH	Yacht	1983	2648 MaK	12M282AK	12.7 MSD	2		CAY	17.00			03 186	5	1 All	SBK Marine	In Service/Commission	50.5	166	175
MY SKY	9458664	229963000 YACHT	Yacht	2005	1840 Deutz	TBD620V8	4.4 HSD	1		ITL	13.00			83 (1 All	Fraser Worldwide SAM	In Service/Commission	50.5	166	175
DYNA R	5035816	316004442 YATCH	Yacht	1953	736 Caterpillar	D399TA	4.0 HSD	1		CAN	10.00			34 332		1 All	Oak Bay Marina Ltd	In Service/Commission	50.6	166	175
RENA	8030594	470459000 YACHT	Yacht	1981	1654 Caterpillar	D399SCAC	4.0 HSD	1		UAE	12.00	0 3	21 10	73 1200	D	1 All	AI Ali MAR	In Service/Commission	50.6	166	175

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Supple State State <t< td=""><td></td><td></td><td>319070900 YACHT</td><td>Yacht</td><td></td><td>3946 M.T.U.</td><td>16V4000M61</td><td>4.1 HSD</td><td>1</td><td></td><td></td><td>.00</td><td>0 234</td><td></td><td>0</td><td></td><td>Jade959 Ltd-CHT</td><td>In Service/Commission</td><td></td><td></td><td></td></t<>			319070900 YACHT	Yacht		3946 M.T.U.	16V4000M61	4.1 HSD	1			.00	0 234		0		Jade959 Ltd-CHT	In Service/Commission			
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IDD IDD IDD IDD IDD	SEA FALCON 2	1009467	319331000 YACHT	Yacht	2006	2100 M.T.U.	16V2000M70	2.0 HSD	1	CA	AY 15	.00	0 192	642	0	1 All	Were Dreams Ltd	In Service/Commission	52.4	172	175
ADACNUM	MATCH POINT	8987694	319698000 YATCH	Yacht (Sa	ili 1999	1030 Caterpillar	3412E	2.2 HSD	1	CA	AY 14	.00	0 108	361	0	1 All	Atalante Yachting Sarl	In Service/Commission	53.0	174	175
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Add List Mail List <th< td=""><td></td><td></td><td>319053400 YACHT</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>170</td><td></td><td>Success Sail Ltd</td><td>In Service/Commission</td><td></td><td></td><td></td></th<>			319053400 YACHT						1						170		Success Sail Ltd	In Service/Commission			
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ALUGA 124/22 3380099 Victif Yuft Yuft <td>AXIOMA</td> <td>9774202</td> <td>319082200 YACHT</td> <td>Yacht</td> <td>2012</td> <td>3000 M.T.U.</td> <td>12V4000M63</td> <td>4.8 HSD</td> <td>1</td> <td>CA</td> <td>AY 18</td> <td>.00</td> <td>0 303</td> <td>1013</td> <td>0</td> <td>1 All</td> <td>Palumbo Group SpA</td> <td>In Service/Commission</td> <td>55.7</td> <td>183</td> <td>200</td>	AXIOMA	9774202	319082200 YACHT	Yacht	2012	3000 M.T.U.	12V4000M63	4.8 HSD	1	CA	AY 18	.00	0 303	1013	0	1 All	Palumbo Group SpA	In Service/Commission	55.7	183	200
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ARTE 10133 31967/200 YACH Yach 2011 2200 MYLU 120400M58 4.8 MSD 1 CAY 15.0 0 22 91 0 1.41 YOSAK Inservice/Commission 57.6 1.89 200 AURORA 101245 22990700 YACH Yach 201 250 4.3 HSD 1 MT 1.60 0 28 98 1.81 1.41 YOMAK Magenent LAG Inservice/Commission 58.0 1.90 200 VARLEY VOYAGER 989785 5807/092 LVACHT Yach 200 351.2 4.3 HSD 1 CAV 1.00 0 24 1.81 Hill Reiport Yacht Support Inservice/Commission 58.2 1.91 200 COKALISAN 593083 31900300 YACHT Yach 200 243 1.87 1.40 Kacht Magenent Inservice/Commission 58.2 1.91 200 GANESIAN 5250735 XVLT Yacht Kall 201 4.3 </td <td></td> <td>1007017</td> <td>319807000 YACHT</td> <td>Yacht</td> <td>1999</td> <td>2864 Caterpillar</td> <td>3516TA</td> <td>4.3 HSD</td> <td>1</td> <td></td> <td></td> <td>.00</td> <td>0 327</td> <td>1092</td> <td>180</td> <td></td> <td>Dynamic Yacht Management LLC</td> <td>In Service/Commission</td> <td></td> <td></td> <td></td>		1007017	319807000 YACHT	Yacht	1999	2864 Caterpillar	3516TA	4.3 HSD	1			.00	0 327	1092	180		Dynamic Yacht Management LLC	In Service/Commission			
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MY SECRET 1012452 229907000 YACHT Yacht 2016 3512 4.3 HSD 1 MTA 18.00 0 28.8 96.3 18.8 1 All Camper & Nicholsons France In Service/Commission 58.0 19.0 20.0 VARITY VOYAGER 993795 538070921 YACHT Yacht 2005 31002100 YACHT Yacht 2005 35168-H0 4.9 HSD 1 CAY 18.00 0 24.7 91.0 1 HII Robinson Yacht Name In Service/Commission 58.2 19 2 COCKALISLAND 526318 31090300 YACHT Yacht 2906 29061001 35167A 4.3 HSD 1 CAY 18.00 0 24.7 491 60 1 All Berkice/Commission 58.6 192 200 JUST JS 966966 2359732 YACHT Yacht (Saiii) 201 3000 Caterpillar 3512C 2.4 HSD 1									1						-						
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COCKTAILS 959383 319025100 YACHT Yacht 2005 3372 Caterpillar 35160-HD 4.9 HSD 1 CAY 12.00 0 24 749 157 1 All Fairport Yacht Support In Service/Commission 58.2 191 200 CORAL ISLAND 9556318 319003900 YACHT Yacht 196 2560 Caterpillar 3512 4.3 HSD 1 CAY 18.00 0 24 18.01 1 BURESS In Service/Commission 58.2 191 200 JUST /S 9669366 25097329 YACHT Yacht (Saill 2011 1440 N.U. 8V2000M72 2.2 HSD 1 IOM 15.50 0 147 491 71 1 All Dohle Private Chartering Itd In Service/Commission 58.6 192 200 SOLANDGE 397329 YACHT Yacht (Saill 2015 1400 15.50 147 491 71 1 All Imperial Yacht SARL In Service/Commission 58.8 193									1												
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JUST J'S 9669366 235097329 YACHT Yacht (Salli 2011 1440 M.T.U. 8V2000M72 2.2 HSD 1 IOM 15.50 0 147 491 60 1 All Ox Pasture Chartering Ltd In Service/Commission 58.6 192 200 SOLANDGE 972132 23102716 YACHT Yacht (Salli 2011 1440 M.T.U. 8V2000M72 2.2 HSD 1 IOM 12.50 0 147 491 71 1 All Dehle Private Clients Ltd In Service/Commission 58.6 192 200 UNBRIDLED 355775 31983000 YACHT Yacht 200 1480 Catepillar 35127 4.3 HSD 1 CAY 14.00 0 355 275 1 All Imperial Yacht SAL In Service/Commission 58.0 19 200 DRUBREAT 100694 31940300 YACHT Yacht 199 294 Catepillar 351676 1 CAY 16.00 0 325 052 7.5 1 All Inservice/Mixide SAM In Service/Commission 60.0 197 200 DRUBREAT 100694 31946000 YACHT<									1												
SOLANDGE 972132 23102/16 VACHT Yacht (Saill Zolf) 1440 M.U. 87000M72 2.2 HSD 1 IOM 12.50 0 147 11 1 Dohle Private Client's Ld In Service/Commission 58.6 192 200 PALMARINA 10162 319733000 VACHT Vacht 2000 1480 31512 4.9 HSD 1 CAV 14.00 0 355 1152 275 1 All Imperial Yachts Salt In Service/Commission 58.8 192 200 UMBRINEED 359575 31983000 VACHT Yacht 2000 1480 12 Col 0 355 1152 275 1 All Imperial Yachts Salt In Service/Commission 58.8 192 200 BULE PAPILLON 1000894 31954000 VACHT Yacht 199 5167 4.3 HSD 1 CAV 16.00 0 250 0 1 All Imperial Yachts Salt In Service/Commission 60.0 197 200 DRUMEAT 31966000 VACHT Yacht									1						-						
PALMARINA 1011642 31373000 YACHT Yacht 2010 3000 Caterpillar 312C 4.9 HSD 1 CAY 13.00 0 335 119 20 1 All Imperial Yachts SARL In Service/Commission 58.8 19.8 200 UNBRIDLED 100295 31989300 YACHT Yacht 200 1480 Caterpillar 31517 4.3 HSD 1 CAY 14.00 0 20 87.75 1 All Fracy Style Investments In Service/Commission 60.0 19.7 200 BLUE PAPILLON 1000546 31546000 YACHT Yacht 199 2984 Caterpillar 31.65 1 CAY 16.50 0 27.106 0 1.41 Frace Wordwide SAM In Service/Commission 60.0 19.7 200 PHAEDRA 100547 31906000 YACHT Yacht 200 256.66 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64 1.64									1												
UNRIDLED 959775 31983000 YACHT Yacht 1480 Catepillar 3127A 4.3 HSD 1 CAY 14.00 0 315 27.5 1 All Fancy Syle Investments Ltd In Service/Commission 59.8 16 200 BLUE PAPILLON 100290 319433000 YACHT Yacht 198 4414 N.T.U 121713762 1.6 CAY 14.00 0 315 75 1 All Fancy Syle Investments Ltd In Service/Commission 50.0 97 20 DRUMBEAT 1006946 3154600 YACHT Yacht 199 2484 16 CAY 16.0 2 75 1 All Fancy Mord/Wide SAM In Service/Commission 60.0 197 200 PIAEDRA 100894 3196000 YACHT Yacht 290 43.850 1 CAY 1.00 0 34.160 1.01 200 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01									1												
BLUE PAPILLON 100299 31404000 YACHT Yacht 198 4414 M.U. 121163TB62 1.6 MSD 2 CAY 19.00 0 290 98 70 1 All YCOSMM In Service/Commission 60.0 197 200 DRUMBEAT 100894 31964000 YACHT Yacht 1999 298 Caterpillar 31516 4.3 HSD 1 CAY 16.50 0 27.105 0 1 All Inservice/Admission 60.0 197 200 PHAEDBA 100894 31927100 YACHT Yacht 204 000 Caterpillar 3516F-UTA 4.3 HSD 1 CAY 16.50 0 327 109 20 1.4 Il Inservice/Admission 60.0 197 200 CAROUNA 101047 3190780 YACHT Yacht 207 3530 Caterpillar 3512 4.3 HSD 1 CAY 16.50 0 34 2 HA 0 318 160 318 360 1 318 32 1 All Yacht (a) A									1								P				
DRUMBEAT 1006946 31964000 YACHT Yacht 199 2984 Caterpillar 35167A 4.3 HSD 1 CAY 16.50 0 327 192 0 1 In Fraser Worldwide SAM In Second 199 200 PHAEDRA 100894 3192/1000 YACHT Yacht 2004 35168-01TA 4.3 HSD 1 CAY 17.00 0 44 15.90 0 1.41 Inserve/rodinide SAM Inservice/Commission 60.0 197 200 CAROUINA 1010894 319806000 YACHT Yacht 2076 25126 4.3 HSD 1 CAY 16.00 381 06.0 240 16.00 14.11 Inserve/rodinide SAM Inservice/Commission 60.0 197 200 KRISS 1011654 319097800 YACHT Yacht 203 3530 12 CAY 16.50 0 34 140 2102 1.41 Yachtt 1.50 0.0									2												
PHAEDRA 100899 319271000 YACHT Yacht 2000 Carpillar 35168-DITA 4.9 HSD 1 CAY 17.00 0 44 154 0 1 All Inserve Yachts Ltd In Service/Commission 60.0 197 200 CARDUNA 1010947 319806000 YACHT Yacht 200 7260 Catepillar 35128 4.3 HSD 1 CAY 16.00 0 318 1060 1 All BURGESS In Service/Commission 60.0 197 200 MKKS 1011245 319099400 YACHT Yacht 2012 S330 Catepillar 3512C 4.3 HSD 1 CAY 16.00 0 32 Hdo 1All BurderSS In Service/Commission 60.0 197 200 MOKA 101245 31909940 YACHT Yacht 2012 38 HSD 1 CAY 12.00 0 38 Hdo 1 CAY 12.00 0 38 Hdo 1 CAY 12.00 0 38 Hdo 1									1												
KHSS 1011654 31907980 VACHT Yacht 201 530 Catepliar 312 / 2 4 9 HSD 1 CAY 16 50 9 42 1140 250 1 All Yachting Concept Sart In Service/Commission 60. 19 200 MCKA 1011264 319093400 YACHT Yacht 202 880 M.T.U. 1650 00073L 4.3 HSD 1 CAY 16 50 0 342 1140 250 1 All AlgerValilik Sanayi In Service/Commission 60.0 197 200 DYNATALIN IV 897/443 319093200 YACHT Yacht 196 3040 Actepliar 35128 4.3 HSD 1 UNK 18.00 0 295 1 All Alser Marine Supplies In Service/Commission 60.0 197 200 BELE ANNA 968594 31909700 YACHT Yacht 216 12400 232 089 1 All Faser Yachts Monaco SAM In Service/Commission 60.0 197 200 ACE 9712383 538071160 YACHT Yacht 2100 Ourminsi									1											197	
MOKA 1012426 319099400 YACHT Yacht 2012 2880 M.T.U. 16V4000M73L 4.3 HSD 1 CAY 12.00 0 308 12.92 235 1 All Alya Yatclilk Sanayi In Service/Commission 60.0 197 200 D'NATALIN IV 8972443 319092300 YACHT Yacht 196 3044 Caterplant 3152B 4.3 HSD 1 UNK 18.00 0 26 97 0 1 All Alsee Marine Supplies In Service/Commission 60.0 197 200 BELLE ANNA 968594 319079700 YACHT Yacht 2000 Ummission 4.8 HSD 1 CAY 15.00 0 262 189 240 1 All Algee Marine Supplies In Service/Commission 60.0 197 200 ACE 97/2288 538071106 YACHT Yacht 2012 2000 Ummission 60.0 197 200	CAROLINA	1010947	319806000 YACHT	Yacht	2007	2760 Caterpillar	3512B	4.3 HSD	1	CA	AY 16	.00	0 318	1060	240	1 All	BURGESS	In Service/Commission	60.0	197	200
D'NATALIN IV 8972443 3199932300 YACHT Yacht 1996 3044 Caterpillar 35128 4.3 HSD 1 UNK 18.00 0 296 987 0 1 All Alseer Marine Supplies In Service/Commission 60.0 197 200 BELLE ANNA 9668594 319097200 YACHT Yacht 2010 2760 M.T.U. 1240000M53 4.8 HSD 1 CAY 15.00 0 325 1089 240 1 II Fraser Yachts Monaco SAM In Service/Commission 60.0 197 200 ACE 9712838 538071106 YACHT Yacht 2000 Cammission 63.0 197 200									1												
BELLE ANNA 9668594 319079700 YACHT Yacht 2010 2760 M.T.U. 12V4000M53 4.8 HSD 1 CAY 15.00 0 326 1089 240 1 All Fraser Yachts Monaco SAM In Service/Commission 60.0 197 200 ACE 9712838 538071106 YACHT Yacht 2013 2000 Cummins KTA-38-M2 3.2 HSD 1 MAI 13.70 0 363 1212 253 1 All Exmar Yachting NV In Service/Commission 60.0 197 200									1												
ACE 9712838 538071106 YACHT Yacht 2013 2000 Cummins KTA-38-M2 3.2 HSD 1 MAI 13.70 0 363 1212 253 1 All Exmar Yachting NV In Service/Commission 60.0 197 200									-						-						
DUDDLE INCUDELE 1000920 319621000 YALHI YACHI YACHI 2004 3372 Caterpiliar 35106-HU-UIIA 4.9 HSU 1 CAY 14.00 0 416 1428 0 1 All International Yacht Collection In Service/Commission 60.1 197 200	/ ICL								-												
	DOOBLE IKOUBLE	1008950	319821000 YACHT	racht	2004	5572 Caterpillar	3010B-HD-DITA	4.9 HSD	1	CA	AT 14	.00	U 416	1428	U	1 All	International Yacht Collection	in service/commission	60.1	197	200

VESSNAME	IMO	MMSI	SHIP_TYPE	E LLOYDS_T	KEEL MAIN	LKW DESIGN	DESIGNATIO	DISP MAIN_ENGIN	CATEGORY	AUX_KW LL_FLAG	SPEED T	EUS N	IRT GT	DWT D	WT_CATEGO DWT_RANGE	OPERATOR	STATUS	Length (m)	Length (ft) Sli	р
60 YEARS	1008360	319984000	YACHT	Yacht	2003	2984 Caterpillar	3516B-DITA	4.3 HSD	1	CAY	16.40	0	330 1102	137	1 All	Moore K	In Service/Commission	60.4	198	200
SCOUT	1012347	319072900	YACHT	Yacht	2012	2280 M.T.U.	12V4000M53R	4.8 HSD	1	CAY	15.00	0	315 1052	172	1 All	Ocean Management GmbH	In Service/Commission	60.5	199	200
LAU TRADER	1004675	319305000	YACHT	Yacht	1994	2550 Caterpillar	3516TA	4.3 HSD	1	CAY	16.00	0	308 1028	0	1 All	Fraser Yachts Florida Inc	In Service/Commission	60.6	199	200
FAITH	9563524	538080087	YACHT	Yacht	2009	2984 M.T.U.	16V4000M53R	4.8 HSD	1	MAI	15.50	0	489 1632	185	1 All	Vessel Safety Management	In Service/Commission	60.9	200	200
VOYAGER	1012048	319064100	YACHT	Yacht	2011	2460 Caterpillar	3512C	4.3 HSD	1	CAY	16.50	0	321 1070	125	1 All	FOS4U SA	In Service/Commission	61.0	200	200
MYSTERE C. I.	1012567	319088500	YACHT	Yacht	2016	3530 Caterpillar	3512C	4.9 HSD	1	CAY	13.00	0	0 1160	0	1 All	Rptd Sold Undisclosed Interest	In Service/Commission	61.0	200	200
CASINO ROYALE	8985957	353270000	YACHT	Yacht	1972	1654 Caterpillar	D399SCAC	4.0 HSD	1	PAN	13.00	0	234 780	0	1 All	Rptd Sold Undisclosed Interest	In Service/Commission	61.0	200	200
SAFIRA	1006544	319868000	YACHT	Yacht	2000	3878 Caterpillar	3516B-TA	4.3 HSD	1	CAY	17.00	0	344 1149	0	1 All	Pacific Yacht Operations	In Service/Commission	61.5	202	240
NONO	1011604	311000106	YACHT	Yacht	2009	3040 M.T.U.	16V4000M53R	4.8 HSD	1	BAH	16.00	0	448 1494	236	1 All	Edge Yachts Ltd	In Service/Commission	62.0	203	240
VIKING LEGACY	1004493	310181000	YACHT	Yacht	1990	2400 MAN	12V20/27	8.5 MSD	2	BER	12.00	0	308 1027	0	1 All	Megayacht Technical Services	In Service/Commission	62.2	204	240
SOLIS	1006697	319571000	YACHT	Yacht	1998	2984 Caterpillar	3516B-TA	4.3 HSD	1	CAY	17.00	0	323 1078	241	1 All	Vessel Safety Management	In Service/Commission	62.3	204	240
ANDREA	1010258	319573000	YACHT	Yacht	2007	3700 M.T.U.	12V4000M71	4.1 HSD	1	CAY	16.00	0	379 1266	240	1 All	Fairport Yacht Support	In Service/Commission	62.5	205	240
OHANA	1007990	235009930	YACHT	Yacht	2002	3370 Caterpillar	3516B-HD	4.9 HSD	1	IOM	16.00	0	416 1389	273	1 All	Bimini Yachting Ltd	In Service/Commission	63.0	207	240
ENDLESS SUMMER	1011056	319594000	YACHT	Yacht	2008	3040 M.T.U.	16V4000M61	4.1 HSD	1	CAY	16.00	0	369 1231	0	1 All	Vessel Safety Management	In Service/Commission	63.0	207	240
GRACEFUL	9776535	235110453	YACHT	Yacht	2012	3000 M.T.U.	12V4000M63	4.8 HSD	1	IOM	17.00	0	404 1347	0	1 All	Corpus Ventures Corp-BVI	In Service/Commission	63.1	207	240
ATALANTE	1001544	319908000	YACHT	Yacht	1988	3050 Deutz	SBV8M628	12.7 MSD	2	CAY	18.00	0	340 1134	0	1 All	Hill Robinson Yacht Management	In Service/Commission	64.0	210	240
CARDIGRAE VI	1005679	235000230	YACHT	Yacht (Sail	i 1996	588 Cummins	NTA-855-M	2.3 HSD	1	GBI	12.00	0	175 586	0	1 All	Jubilee Sailing Trust Ltd	In Service/Commission	65.0	213	240
CARSON	1011977	319062900	YACHT	Yacht	2011	4000 Caterpillar	3516C	4.9 HSD	1	CAY	13.00	0	449 1499	0	1 All	Edmiston Yacht Management Ltd	In Service/Commission	65.0	213	240
LOLA	1010648	319020900	YACHT	Yacht	2008	4000 Caterpillar	3516C	4.9 HSD	1	CAY	17.00	0	450 1503	0	1 All	Ocean Management GmbH	In Service/Commission	65.5	215	240
GOLDEN EAGLE	1011082	319329000	YACHT	Yacht	2008	3840 Caterpillar	3516B-HD	4.9 HSD	1	CAY	17.00	0	583 1943	432	1 All	BURGESS	In Service/Commission	65.5	215	240
KISS	1012189	319072300	YACHT	Yacht	2014	3000 M.T.U.	12V4000M63	4.8 HSD	1	CAY	18.00	0	458 1527	238	1 All	B Yachting Sarl	In Service/Commission	66.0	216	240
LATIKO	1012335	319064900	YACHT	Yacht	2012	3530 Caterpillar	3512C-HD	4.9 HSD	1	CAY	18.00	0	344 1149	180	1 All	Keely Yachting Ltd	In Service/Commission	66.0	216	240
C SIDE	1005136	310094000	YACHT	Yacht	1993	3960 Deutz	SBV9M628	12.7 MSD	2	BER	16.00	0	387 1293	1016	1 All	Fraser Worldwide SAM	In Service/Commission	66.8	219	240
ERICA XI OF HAMILTON	1000150	232398000	YACHT	Yacht (Sail	1984	397 MAN	D2848LXE	1.8 HSD	1	GBI	10.00	0	87 291	0	1 All	Cherokee Bay Ltd	In Service/Commission	67.0	220	240
BIG FISH	1011719	256701000	YACHT	Yacht	2009	3040 M.T.U.	16V4000M	4.1 HSD	1	MTA	15.00	0	380 1269	0	1 All	Camper & Nicholsons France	In Service/Commission	67.0	220	240
FLEURTJE	1006099	319421000	YACHT	Yacht	1996	2984 Caterpillar	3516TA	4.3 HSD	1	CAY	16.00	0	386 1289	0	1 All	Arran Point Charters Ltd	In Service/Commission	68.6	225	240
PERSEUS 3	1011185	256977000	YACHT	Yacht	2011	3650 Caterpillar	3516B-HD	4.9 HSD	1	MTA	16.50	0	0 1467	287	1 All	Magellan Management	In Service/Commission	69.3	227	240
LUNAR	1007287	319741000	YACHT	Yacht	2000	4000 M.T.U.	16V4000M70	4.1 HSD	1	CAY	17.00	0	599 1998	285	1 All	Fraser Yachts Florida Inc	In Service/Commission	70.7	232	240
Z	9735244	256477000	YACHT	Yacht	2015	4634 Caterpillar	3516C	4.3 HSD	1	MTA	15.50	0	512 1708	340	1 All	Golden Yachts Ltd	In Service/Commission	71.0	233	240
QING	1011109	319088700	YACHT	Yacht	2008	4000 Caterpillar	3516-HD	4.9 HSD	1	CAY	18.00	0	634 2114	0	1 All	Hill Robinson Yacht Management	In Service/Commission	72.0	236	240
AMARYLLIS	9571143	229894000	YACHT	Yacht	2007	4632 Caterpillar	3516C	4.9 HSD	1	MTA	17.00	0	486 1620	262	1 All	Yachting Partners Intl Monaco	In Service/Commission	72.0	236	240
DIAMONDS ARE FOREVER	9334442	240349000	YACHT	Yacht	2002	3324 Caterpillar	3516B-HD	4.9 HSD	1	GRC	17.00	0	462 1541	500	1 All	WEM Lines SA	In Service/Commission	72.5	238	240
BEAUGESTE	1004833	310077000	YACHT	Yacht	1992	2864 Caterpillar	3516TA	4.3 HSD	1	BER	12.00	0	413 1379	0	1 All	Coral Island	In Service/Commission	72.6	238	240
KARIMA	1011886	319048800	YACHT	Yacht	2014	3280 Caterpillar	C32	2.7 HSD	1	GBI	16.50	0	562 1590	0	1 All	BURGESS	In Service/Commission	73.0	239	240
CHOPI CHOPI	9645671	538070951	YACHT	Yacht	2009	3520 M.T.U.	16V4000M60	4.1 HSD	1	MAI	17.00	0	531 1767	1530	1 All	Camper & Nicholsons France	In Service/Commission	73.1	240	240
NOVA SPIRIT	9650602	319618000	YACHT	Yacht	2009	3520 M.T.U.	16V4000M60	4.1 HSD	1	CAY	17.00	0	400 1773	220	1 All	Royale Oceanic Intl Yacht	In Service/Commission	73.1	240	240

					_									365.00			From GHG	Inventory S	ources and S	inks 2015					From GREE			
Row Labels	Population	Total Hours	NOx	PM10	fons per y PM2.5		co	SOx	CO2		рор	hrs	hrs/year	hrs/day										Diesel	Carbon 87.1%	CO2 3194		
Inboard	7,229			0.0071			2.9576		36.2421		7,229	433,764		0.16				CH4	N2O	CO2				Gasoline	82.8%	3035		
Diesel 15	2,313 289	138,804 17,351		0.0044	0.0033	0.0003	0.0879	0.0001	10.0187 0.0701		2,313	138,804	60.0000	0.16			Diesel Gasoline	0.02	0.14 0.08	3194 3035								
25	289	17,351	0.0024	0.0001	0.0000	0.0007	0.0011	0.0000	0.1597																			
50 120	289 289			0.0001			0.0020		0.2685									Dies	sel ision Rates (g	/hr)								
175				0.0004	0.0003	0.0051	0.0076	0.0000	0.8857						Slip Size	Hr/yr	NOx	PM10	PM2.5	ROG	со	SOx	CO2	CH4	N20	Share		
250 500				0.0007			0.0129	0.0000 0.0000	1.4493 2.3100						50 60	60 60	1.52 2.44	0.034 0.054	0.026 0.041	0.45 0.72	0.68 1.08	0.001 0.001	0.7 1.1	0.000 0.000	0.000 0.000	5% 4%		
750				0.0010			0.0207		4.3133						75	60	4.57		0.041	1.36	2.03	0.001	2.0	0.000	0.000	93%		
Gasoline				0.0027			2.8697		26.2234		4,916	294,959	60.0000	0.16														
15 25	925	55,482	0.0012	0.0000	0.0000	0.0213	0.0331	0.0000	0.2479																			
50				-			-	-	-									Gaso										
120				-			-	-							Slip Size	Hr/yr	NOx	Emis PM10	sion Rates (g PM2.5	/hr) ROG	со	SOx	CO2	CH4	N20	Share		
250	730			0.0003			0.3139		3.5015						50	60	0.67	0.007	0.005	1.22	6.50	0.001	6.5	0.000	0.000	12%		
500 750				0.0023			2.5198 0.0029		22.4297 0.0443						60 75	60 60	0.50 0.24	0.011 0.018	0.008 0.014	1.64 0.89	11.69 11.43	0.001 0.002	11.7 11.4	0.001 0.001	0.000 0.000	48% 1%		
Outboard	23,614						11.0895		50.4172		23,614	1,464,097	62.0000	0.17	/5	00	0.24	0.018	0.014	0.69	11.45	0.002	11.4	0.001	0.000	176		
Gasoline 15	23,614 7.369	1,464,097		0.3314 0.0128			11.0895 0.5616		50.4172 1.9725		23,614	1,464,097	62.0000	0.17														
25		456,894		0.0128			0.5816		2.2097																			
50	4,276			0.0422			1.4107		5.7001											Outboard S								
120				0.1001			3.5174	0.0003	15.5672 8.2802						10.19	mins/day?		50 60	60 60	60 60	47 47	49.2 53.9						
250	1,558			0.0918			2.0807		12.2641									75	60	60	47	59.3						
500		28,910	0.0488	0.0161	0.0122	0.0924	1.0150	0.0001	4.4235																			
Sterndrive	15,780	741,650	0.3968	0.0045	0.0034	0.7133	3.2669	0.0005	43.9182		15,780	741,650	47.0000	0.13														
Gasoline 15	15,780 4.001			0.0045			3.2669 0.1091		43.9182 0.8392		15,780	741,650	47.0000	0.13														
25		100,004	- 0.0071	- 0.0001	- 0.0001	-	- 0.1091	-	-																			
50			-	-	-	-	-	-	-									Gaso										
120				0.0000			0.0001 0.5667		0.0012 9.9290						Slip Size	Hr/yr	NOx	PM10	sion Rates (g PM2.5	/nr) ROG	со	SOx	CO2	CH4	N20	Share		
250				0.0017			1.5758		17.3277						50	47	0.60	0.007	0.005	1.13	6.10	0.001	6.1	0.000	0.000	83%		
500 750				0.0016			1.0097 0.0056		15.6629 0.1581						60 75	47 47	0.48 1.02		0.007 0.014	1.42 3.54	6.13 6.18	0.001 0.002	6.1 6.2	0.000	0.000	47% 6%		
Grand Total	46,624								130.5775		46,624	2,639,511	56.6131	0.16														
									FAL to Point Point Loma 1		8.38 ni 46.00 ni				Slip Size	Hr/vr	NOx	PM10	PM2.5	Average E ROG	mission Rat CO	es (g/hr) SOx	CO2	CH4	N20			
									r onte conta i		40.00				50	49.2	0.65	0.01	0.01	1.11	5.89	0.001	5.9	0.000	0.000			
					Нр		One-Way		Age						60 75	53.9 59.3	0.57 4.32	0.01 0.10	0.01 0.07	1.50 1.47	8.61 2.38	0.001 0.003	8.6 2.4	0.001 0.000	0.000			
Row Labels		Prop kW	Service	Speed	Prop	Aux	Time		2016	2021	2032				/5	55.5	4.52	0.10	0.07	1.47	2.50	0.005	2.4	0.000	0.000			
100 125	1999 1999	764 1,597	11.75 14.30		1,024 2,141	102 214			17.18 16.71	22.18 21.71	33.18 32.71	0.66		Ratio set at 10% bas	od upon 2015 D	ort of Loc An	golos Invent	on for Crow	Poatr									
150	2003	2,199	15.02		2,949	295			12.56	17.56	28.56	0.31		Natio set at 10% bas	eu upon 2015 r	011 01 203 All	geles invent	tory for crew	v boats									
175	2000	2,319			3,109	311			16.03	21.03	32.03	-																
200 240	2004	2,602 3,284			3,489 4,402	349 440			12.38 12.14	17.38 17.14	28.38 28.14	- 0.03																
Grand Total	2002	2,280	15.05																									
				Calls																								
	Turn-over		days	6.64	Hoteling	per call	1320	hours																				
	Speed	4.5	knot								Electricity GHGs				RPS													
		Factors						6 H			2016		lb/MWh	190.39 g/hp-hr	35.2%													
	Propulsion 0.45	Auxiliary 0.43		Based up	on Crew B	loats in AR	B Harborcra	aft method	ology		2021 2030		lb/Mwh lb/Mwh	180.88 g/hp-hr 126.17 g/hp-hr	45.2% 50.0%													
											021/2032 bau	782	lb/Mwh	264.64 g/hp-hr		(same as CA	AP BAU for 2	2020)	Taken from	2013 Port o	of Long Bea	ch Invento	ry					
											1MW = 2025	1340.48	hp Ib/Mwh	145.60 g/hp-hr	43.0%											ULSD		
												0.68							wh	g/hp								
Slip Size	Engine	NOx	DPM	Zero PM2.5	Hour Emi ROG	ission Fact CO	ors (g/hp-h SOx	hr) CO2	CH4	N2O	2050	-	lb/Mwh	- g/hp-hr	100.0%		Engine Propulsion	CH4 0.018		CH4 0.013	N2O 0.023					Carbo CO2/	on Content C	87.1% 3.666667
100	Propulsion	9.64	0.36	0.35	0.68	1.97	0.13	588	0.013	0.023							Auxiliary	0.018		0.015	0.023							
200	Auxiliary	8.75	0.58	0.56	1.18	3.59	0.13		0.016	0.023																CO2/	fuel	3.193667
125	Propulsion Auxiliary	9.64 8.17	0.36 0.32		0.68 0.81	1.97 2.78	0.13 0.13	588 588	0.013 0.016	0.023 0.023																		
									0.013	0.023																		
150	Propulsion	7.31			0.68	1.97	0.13																					
	Propulsion Auxiliary	7.31	0.32	0.31	0.81	2.78	0.13	588	0.016	0.023																		
150 175	Propulsion Auxiliary Propulsion Auxiliary	7.31 7.31 7.31	0.32 0.36 0.32	0.31 0.35 0.31	0.81 0.68 0.81	2.78 1.97 2.78	0.13 0.13 0.13	588 588 588	0.016 0.013 0.016	0.023 0.023 0.023																		
	Propulsion Auxiliary Propulsion Auxiliary Propulsion	7.31 7.31 7.31 7.31	0.32 0.36 0.32 0.36	0.31 0.35 0.31 0.35	0.81 0.68 0.81 0.68	2.78 1.97 2.78 1.97	0.13 0.13 0.13 0.13	588 588 588 588	0.016 0.013 0.016 0.013	0.023 0.023 0.023 0.023																		
175 200	Propulsion Auxiliary Propulsion Auxiliary	7.31 7.31 7.31	0.32 0.36 0.32	0.31 0.35 0.31 0.35 0.15	0.81 0.68 0.81	2.78 1.97 2.78	0.13 0.13 0.13	588 588 588 588 588	0.016 0.013 0.016	0.023 0.023 0.023																		
175	Propulsion Auxiliary Propulsion Auxiliary Propulsion Auxiliary	7.31 7.31 7.31 7.31 7.31 5.10	0.32 0.36 0.32 0.36 0.15	0.31 0.35 0.31 0.35 0.15 0.35	0.81 0.68 0.81 0.68 0.81	2.78 1.97 2.78 1.97 3.73	0.13 0.13 0.13 0.13 0.13	588 588 588 588 588 588	0.016 0.013 0.016 0.013 0.016	0.023 0.023 0.023 0.023 0.023																		

Harborcraft ULSD Correction Factors

Years	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O
Pre-1995	0.930	0.720	0.720	0.720	1.000	0.043	1.000	0.720	0.930
1996-2010	0.948	0.800	0.800	0.720	1.000	0.043	1.000	0.720	0.948
2011 +	0.948	0.852	0.852	0.720	1.000	0.043	1.000	0.720	0.948

				Fuel Co	rrected En	nission Fa	tors (g/hp	-hr)		
Slip Size	Engine	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O
100	Propulsion	9.14	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
100	Auxiliary	8.30	0.46	0.45	0.85	3.59	0.01	588	0.012	0.022
125	Propulsion	9.14	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
125	Auxiliary	7.75	0.26	0.25	0.58	2.78	0.01	588	0.012	0.022
150	Propulsion	6.93	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
150	Auxiliary	6.93	0.26	0.25	0.58	2.78	0.01	588	0.012	0.022
175	Propulsion	6.93	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
1/5	Auxiliary	6.93	0.26	0.25	0.58	2.78	0.01	588	0.012	0.022
200	Propulsion	6.93	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
200	Auxiliary	4.84	0.12	0.12	0.58	3.73	0.01	588	0.012	0.022
240	Propulsion	6.93	0.29	0.28	0.49	1.97	0.01	588	0.010	0.022
240	Auxiliary	4.84	0.12	0.12	0.58	3.73	0.01	588	0.012	0.022

	Useful	Annual	Deter	
Engine	Life	Hours	Cap	
Propulsion	22	788	15.23	Average annual hours and useful life for crew boats
Auxiliary	22	3,036	3.95	

	Deteriorati	on Factors	5	
Engine	NOx	PM	HC	со
Propulsion	0.21	0.67	0.44	0.25
Auxiliary	0.06	0.31	0.51	0.41

				2016 Dete	erioirated	Emission I	actors (g/l	hp-hr)		
Slip Size	Engine	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O
100	Propulsion	10.47	0.42	0.41	0.64	2.31	0.01	588	0.010	0.022
100	Auxiliary	8.38	0.49	0.47	0.93	3.86	0.01	588	0.012	0.022
125	Propulsion	10.47	0.42	0.41	0.64	2.31	0.01	588	0.010	0.022
125	Auxiliary	7.83	0.27	0.26	0.64	2.99	0.01	588	0.012	0.022
150	Propulsion	7.76	0.40	0.39	0.61	2.25	0.01	588	0.010	0.022
150	Auxiliary	7.00	0.27	0.26	0.64	2.99	0.01	588	0.012	0.022
175	Propulsion	7.94	0.42	0.41	0.64	2.31	0.01	588	0.010	0.022
1/5	Auxiliary	7.00	0.27	0.26	0.64	2.99	0.01	588	0.012	0.022
200	Propulsion	7.75	0.40	0.39	0.61	2.25	0.01	588	0.010	0.022
200	Auxiliary	4.89	0.13	0.12	0.64	4.00	0.01	588	0.012	0.022
240	Propulsion	7.73	0.40	0.38	0.61	2.24	0.01	588	0.010	0.022
240	Auxiliary	4.89	0.13	0.12	0.64	4.00	0.01	588	0.012	0.022

			20	21/2032 0	eterioirat	ed Emissic	n Factors (g/hp-hr)		
Slip Size	Engine	NOx	DPM	PM2.5	ROG	со	SOx	CO2	CH4	N2O
100	Propulsion	10.47	0.42	0.41	0.64	2.31	0.01	588	0.010	0.02
100	Auxiliary	8.38	0.49	0.47	0.93	3.86	0.01	588	0.012	0.02
125	Propulsion	10.47	0.42	0.41	0.64	2.31	0.01	588	0.010	0.02
125	Auxiliary	7.83	0.27	0.26	0.64	2.99	0.01	588	0.012	0.02
150	Propulsion	7.94	0.42	0.41	0.64	2.31	0.01	588	0.010	0.02
150	Auxiliary	7.00	0.27	0.26	0.64	2.99	0.01	588	0.012	0.02
175	Propulsion	7.94	0.42	0.41	0.64	2.31	0.01	588	0.010	0.02
1/5	Auxiliary	7.00	0.27	0.26	0.64	2.99	0.01	588	0.012	0.02
200	Propulsion	7.94	0.42	0.41	0.64	2.31	0.01	588	0.010	0.02
200	Auxiliary	4.89	0.13	0.12	0.64	4.00	0.01	588	0.012	0.02
240	Propulsion	7.94	0.42	0.41	0.64	2.31	0.01	588	0.010	0.02
240	Auxiliary	4.89	0.13	0.12	0.64	4.00	0.01	588	0.012	0.02

Taken from ARB Harborcraft Inventory Methodology Diesel Emission Rates (Zero Hour - non fuel corrected)

HP		Model			2	Zero Hour N	Ion-Fuel Co	rected Emi	ssion Factor	s (g/bhp-hr)			
Min	Max	Year	ME ROG	ME CO	ME NOx	ME PM	AE ROG	AE CO	AE NOx	AE PM	Fuel	CO2	SOx
51	120	1999	0.99	2.55	10.33	0.66	1.18	3.59	8.75	0.58	184.16	588	0.129
176	250	1999	0.68	1.97	9.64	0.36	0.81	2.78	8.17	0.32	184.16	588	0.129
251	500	2000	0.68	1.97	7.31	0.36	0.81	2.78	7.31	0.32	184.16	588	0.129
251	500	2003	0.68	1.97	7.31	0.36	0.81	2.78	7.31	0.32	184.16	588	0.129
251	500	2004	0.68	3.73	5.10	0.15	0.81	3.73	5.10	0.15	184.16	588	0.129
751	1900	1999	0.68	1.97	9.64	0.36	0.81	2.78	8.17	0.32	184.16	588	0.129
1901	3300	1999	0.68	1.97	9.64	0.36	0.81	2.78	8.17	0.32	184.16	588	0.129
1901	3300	2000	0.68	1.97	7.31	0.36	0.81	2.78	7.31	0.32	184.16	588	0.129
1901	3300	2003	0.68	1.97	7.31	0.36	0.81	2.78	7.31	0.32	184.16	588	0.12
3301	5000	2004	0.68	1.97	7.31	0.36	0.81	2.78	7.31	0.32	184.16	588	0.12

Landside Construction Sheets

Parte Temp Temp <t< th=""><th>Offroad E</th><th>missions Calculations</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Offroad E	missions Calculations																													
b b <tth>b b <</tth>	-												1		Round	c por day				Actric t	onc nor d	24	1		Tons				Motri	c tonc n	r voor
matrix matrix<	ID	Phase	Yr	Days	Equip		#/day	hrs/	CMOD	HP Bin	HP/kW	LF Concat																			
Instant Under stant Description <						D		ay					ROG	NOX	co	PM10		502		CH4	-		ROG	NOX	60	PM10	-				
District							-	-																							
District 1 Dest 1 1		Mobilization/Demolition				-	1	8																							
Disk Disk Disk Disk Di						0	1	8																							
Buesh - Buesh - <t< td=""><td></td><td>Dewatering/Shoring</td><td></td><td></td><td></td><td>E</td><td></td><td>24</td><td></td><td>-</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td><td></td><td></td></t<>		Dewatering/Shoring				E		24		-			-	-	-	-	-	-	-	-	-		-	-	-	-	-				
Piesci I Piesci II Piesci IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII						D	1	8		250			0.4	4.9	1.7	0.2	0.1	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	2.8 (0.0	
Planelity Planelity <t< td=""><td>Phase2.1</td><td></td><td></td><td>100</td><td>Pile Driving Rig</td><td>D</td><td>2</td><td>8</td><td>Bore/Drill Rigs</td><td>250</td><td>221</td><td>0.5 2019Bore/Drill Rigs250</td><td>0.6</td><td>7.4</td><td>4.2</td><td>0.2</td><td>0.2</td><td>0.0</td><td>0.8</td><td>0.0</td><td>0.0</td><td></td><td>0.0</td><td>0.4</td><td>0.2</td><td>0.0</td><td>0.0</td><td>0.0</td><td>84.5 (</td><td>0.0 0.0</td><td></td></t<>	Phase2.1			100	Pile Driving Rig	D	2	8	Bore/Drill Rigs	250	221	0.5 2019Bore/Drill Rigs250	0.6	7.4	4.2	0.2	0.2	0.0	0.8	0.0	0.0		0.0	0.4	0.2	0.0	0.0	0.0	84.5 (0.0 0.0	
Lace def nontration Display Locarator D S A A A A A B A B A B A B A B A B A B A B A B A B A B A B A B A B A B B B B <th< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td>6</td><td>24</td><td></td><td>-</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td></th<>						-	6	24		-			-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		
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Piase 2 Structurial Frame Piase 2 Structurial Frame Piase 3 Piase 3 <t< td=""><td></td><td></td><td>2019</td><td>273</td><td></td><td>Е</td><td>1</td><td>10</td><td>crane low-rise</td><td>-</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>0.0</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>10.1</td></t<>			2019	273		Е	1	10	crane low-rise	-			-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-		10.1
Pisac2 Pisac2 Pisac2 Pisac2 <td>Phase2.2</td> <td></td> <td>2019</td> <td>273</td> <td>*Concrete Pump</td> <td>Е</td> <td>1</td> <td>10</td> <td>concrete pump</td> <td>-</td> <td>60</td> <td>0.8 2019concrete pump-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>0.1</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>30.4</td>	Phase2.2		2019	273	*Concrete Pump	Е	1	10	concrete pump	-	60	0.8 2019concrete pump-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-		30.4
Pines2 Pines2 Pines2 Pines2 <td></td> <td>Structural Frame</td> <td></td> <td></td> <td></td> <td>D</td> <td>1</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5.0</td> <td></td>		Structural Frame				D	1	8						5.0																	
piss2 piss2 <th< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>						-	-	8																							
phase 3 constraine constraine constraine constraine </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>1</td> <td>8</td> <td></td>						-	1	8																							
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pinas2.3 Deterior Convers and Rooff (Ear/MEP/raming) 200 28 Mill Tramin Forkiffs 0 0.3 0.3 0.4 0.0 0.3 0.0 0.0 0.0 0.0 <						F		0		50			-	-	-		- 0.0	- 0.0	- 0.4	- 0.0	-			- 0.8	-	- 0.0	-	- 0.0			
Phase2.5 Interior Rough-In [Elev, MEP/Framip 2020 276 All trans forkitfs 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 </td <td></td> <td>Exterior Closure and Roofing</td> <td></td> <td></td> <td></td> <td>D</td> <td></td> <td></td> <td></td> <td>120</td> <td></td> <td></td> <td>0.3</td> <td>3.5</td> <td>4.6</td> <td>0.1</td> <td>0.1</td> <td>0.0</td> <td>0.3</td> <td>0.0</td> <td>0.0</td> <td></td> <td>0.0</td> <td>0.6</td> <td>0.8</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>99.8</td> <td>0.0 0.0</td> <td></td>		Exterior Closure and Roofing				D				120			0.3	3.5	4.6	0.1	0.1	0.0	0.3	0.0	0.0		0.0	0.6	0.8	0.0	0.0	0.0	99.8	0.0 0.0	
Interior Rouge index / APP/Family 11/2 All Errain Forking 1 1 1 1 1 1 1 2 0	-	Extends closure and nooning			/ in rendim of kind	0	-	0	nough renum on and	120	100	the result of th																			
phase2 interior construction frame 202 25 Sixe of the frame Construction frame Constr	Phase2.5	Interior Rough-In (Elev./MEP/Framing)	2020	179	none; w/ structure, finishes		-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
Phase27 Out 187 All Terrain Forkitfs D 1 8 Bough Terain Forkitfs 10 11 12 13 11 11 12 13 11 13						-	-	-																							
Phase2 Meg Systems 200 1.3 5.8 8.4 0.1		Interior Construction/ Finishes				-	6	U																							
Phase2. Phase Completion Work 201 7.3 none - - - - - <th< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td>1</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>						-	1	8																							
Phases1 2019 40 Pile Driving Rig D 1 8 Bore/Drill Rigs20 0.3 3.7 2.1 0.1 0.1 0.0						D	6	8	Aerial Lifts	50			0.3	6.1	6.4	0.1	0.1	0.0	0.5	0.0	0.0	0.5	0.0	0.6	0.6	0.0	0.0	0.0	91.5 (J.U U	0 93.0
Phase3.1 Condition Condition <th< td=""><td></td><td>Phase completion work</td><td></td><td></td><td></td><td>- D</td><td>1</td><td>-</td><td>- Bore/Drill Bigs</td><td>250</td><td></td><td></td><td>03</td><td>3.7</td><td>21</td><td>0.1</td><td>0.1</td><td>0.0</td><td>0.4</td><td>0.0</td><td>0.0</td><td>0.4</td><td>0.0</td><td>0.1</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>16.9</td><td>10 0</td><td>0 172</td></th<>		Phase completion work				- D	1	-	- Bore/Drill Bigs	250			03	3.7	21	0.1	0.1	0.0	0.4	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	16.9	10 0	0 172
Phase3. Poundations 2019 40 Mode Concrete Pump D 1 8 Pumps 120 84 0.7 2019 pumps 20 0.5 3.8 3.8 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0 0.0 0.1 0.0 0.0 0.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>E</td><td></td><td>-</td><td></td><td>-</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td></t<>						E		-		-			-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-
Phase3.2 Structural Frame OID 4.1 * crame low-rise 6.0 0.3 2019 and 100 and 10		Foundations				D	1	8		120			0.5	3.8	3.8	0.2	0.2	0.0	0.3	0.0	0.0		0.0	0.1	0.1	0.0	0.0	0.0	11.3 (0.0	
Phase3.2 Structural Frame 2019 141 Mobile Concrete Pump 0 1 8 Pumps 120 64 0.7 2019 1.0 0.3 0.0 0.3 0.0 0.3 0.0 0.3 0.0 <td>Phase3.2</td> <td></td> <td>2019</td> <td>141</td> <td>*Tower Crane</td> <td>E</td> <td>1</td> <td>10</td> <td>tower crane</td> <td>-</td> <td>75</td> <td>0.3 2019tower crane-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>0.0</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>6.5</td>	Phase3.2		2019	141	*Tower Crane	E	1	10	tower crane	-	75	0.3 2019tower crane-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-		6.5
Phase3.3 2020 216 Boom Lifts D 3 8 Aerial Lifts 50 63 0.3 2020 Aerial Lifts 0.0 0.2 3.0 0.0						-	1	10	crane low-rise	-			-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-
Phase3.3 Exterior Closure 2020 216 *Man/ Material Hoist E 2 10 man/mt low rise 1 10 0.5 2020man/mt low rise 1 1.7 2.3 0.1 0.1 0.1 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.0 0.2 0.0 0.0 0.2 0.0 0.0 0.2 0.0 0.0 0.2 0.0 0.0 0.2 0.0 0.0 0.0 0.2 0.0<		Structural Frame				0	1	8																							-
Extend Closure 2020 216 *Man/ Material Hoist E 2 10 man/mti public low rise - 10 2020man/mti public low rise - 1 2 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>D</td><td>-</td><td>0</td><td></td><td>50</td><td></td><td></td><td>0.2</td><td>3.0</td><td>3.2</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.2</td><td>0.0</td><td>0.0</td><td></td><td>0.0</td><td>0.3</td><td>0.3</td><td>0.0</td><td>0.0</td><td>0.0</td><td>52.9 (</td><td>0.0 0</td><td></td></t<>						D	-	0		50			0.2	3.0	3.2	0.0	0.0	0.0	0.2	0.0	0.0		0.0	0.3	0.3	0.0	0.0	0.0	52.9 (0.0 0	
Phase3.3 2020 216 All Terrain Forkliffs D 1 8 Rough Terrain Forkliffs 120 100 0.4 2020 output 100 0.2 0.0		Exterior Closure				E				-			-	-	-		-	-	-				-			-	-	-			
Phase3.4 Interior Construction/Finishes 2020 211 Scisor Lift D 6 8 Aerial Lifts 50 63 0.3 2020 0.1 0.1 0.0 0.5 0.0 0.6 0.7 0.0						D	1	8		120			0.1	1.7	2.3	0.1	0.1	0.0	0.2	0.0	0.0		0.0	0.2	0.2	0.0	0.0	0.0	32.9	0.0 0.0	
Phase 0 mpletion Work 201 20 Scisor Lift D 6 8 Aerial Lifts 50 63 0.3 201 6.1 0.1 0.1 0.0 0.5 0.0 0.0 0		Interior Construction/ Finishes				D	6	8						6.1	6.4	0.1	0.1				0.0			0.6	0.7	0.0					
PhaseA1 Offsite Demolition / Grading / Utility is provided with an equation of the phaseA1. Output and the phaseA			2021	20		D	6	8	Aerial Lifts	50	63		0.3	6.0	6.4	0.1	0.1	0.0	0.5	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.0	9.8 (0 0.0	0 9.9
Offsite Demolition / Grading / Utilities 2020 128 skid steer D 2 8 Skid Steer Loaders 120 65 0.4 2020kid Steer Loaders120 0.2 2.1 2.8 0.1 0.1 0.0 0.2 0.0 0.1 0.2 0.0	Phase4.1	· ·	2020	128	Loader	D	1	8	Rubber Tired Loaders	250	203	0.4 2020Rubber Tired Loaders25	0.4	4.4	1.6	0.1				0.0	0.0		0.0	0.3	0.1			0.0			
Phase4.1 Old 2 8 Skid steer D 2 8 Skid steer Loaders 120 65 0.4 2020 kid Steer Loaders120 0.2 2.1 2.1 2.1 0.1 0.1 0.0 0.1 0.2 0.0 0.1 0.2 0.0 0.1 0.0 0.1 0.0 0.2 2.5 Phase4.4 Phase4.4 2020 81 Asphalt Paver D 1 8 Pavers 120 130 0.4 2020Pavers120 0.4 4.2 3.4 0.3 0.0		Offsite Demolition / Grading / Utilities				-	-	8																							
Phase4.4 2020 81 Asphalt Paver D 1 8 Pavers 120 130 0.4 2020 Pavers120 0.4 4.2 3.4 0.3 0.0 0.2 0.0 0.2 0.1 0.0 0.0 16.7 Phase4.4 2020 81 Vibratory roller D 2 8 Rollers 120 80 0.4 2020 Pavers120 0.4 4.1 3.7 0.3 0.2 0.0 0.2 0.1 0.0 0.0 18.7 Phase4.4 2020 81 Backney/loader D 3 7.7actors/Loaders/Backhoe 120 97 0.4 2020 6.6 3 6.8 0.4 0.0						-	-	8																							
Phase4.4 2020 81 Vibratory roller D 2 8 Rollers 120 80 0.4 2020 81 37 0.3 0.2 0.4 0.1 3.7 0.3 0.2 0.0 0.2 0.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>-</td> <td>8</td> <td></td>						0	-	8																							
Phase4.4 Ste Improvements 2020 81 Backhoe/loader D 3 8 Tractors/Loaders/Backhoe 120 97 0.4 2020Tractors/Loaders/Backhoe 0.6 6.3 6.8 0.4 0.0 0.1 0.1 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.0						-	-	8																							
Phase4.4 Site Improvements 2020 81 Excavator D 1 8 Excavators 175 158 0.4 2020Excavators175 0.2 2.4 3.3 0.1 0.1 0.0 0.2 0.0 0.1 0.1 0.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>							2	8																							
Phase4.4 2020 81 Bobcat D 2 8 Tractors/Loaders/Backhoes 120 97 0.4 2020Tractors/Loaders/Backhoes 0.4 4.2 4.5 0.3 0.2 0.0 0.3 0.0 0.2 0.0		Site Improvements				-	1	8																							
Phase4.4 2020 81 All Terrain Forkliffs D 1 8 Rough Terrain Forkliffs 120 100 0.4 2020Rough Terrain Forkliffs 0.1 1.7 2.3 0.1 0.1 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.1 0.1 0.0 0.0 0.0 12.3 0.0 0.0 12.5						-	2	8																							
Phase4.4 2020 81 Mobile Concrete Pump D 1 8 Pumps 120 84 0.7 2020Pumps120 0.4 3.5 3.8 0.2 0.2 0.0 0.3 0.0 0.3 0.0 0.1 0.2 0.0 0.0 0.2 2.9 0.0 0.0 23.1	Phase4.4		2020	81	All Terrain Forklifs	D	1	8	Rough Terrain Forklifts	120	100		0.1	1.7	2.3	0.1	0.1	0.0	0.2	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.0	0.0		0.0 0.0	0 12.5
	Phase4.4		2020	81	Mobile Concrete Pump	D	1	8	Pumps	120	84	0.7 2020Pumps120	0.4	3.5	3.8	0.2	0.2	0.0	0.3	0.0	0.0	0.3	0.0	0.1	0.2	0.0	0.0	0.0	22.9 (0 0.0	0 23.1

Onr	ad Emission	is Calcula	ations																																			
	ID	Year		Concat	Vehicle	0	Workers	Employ	Employ Mi/ Day	Facalas at the	Truck	#Loads/Yr	Truck Mi/	Truck Mi/ Yr	Vehicle	1		F	ounds pe	er day			1		Metric tor	ns per day	,				Tons pe	er year				Metric tons p	per year	
	10	Year			Vehicle	Days	per day	Trip/Da		Employ Mi/Yr	Trip/Day r/t	#Loads/Yr	Day	Truck Mi/ Yr		ROG	NOX					PM2.5 D	SO2		CH4	N2O	CO2e	ROG	NOX	со				A2.5 D SO2	CO2		N2O CO2	2e
	Phase1.1	2018	Phase1.1:2018	LDA/LDT1/LDT22018	Employee	17	20	40	432	7,344					LDA/LDT1/LDT2	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3		0.0000 3	1
	Phase1.2 Phase2.1	2019 2019	Phase1.2:2019 Phase2.1:2019	LDA/LDT1/LDT22019 LDA/LDT1/LDT22019	Employee Employee	10 100	30 30	60 60	648 648	6,480 64,800					LDA/LDT1/LDT2 LDA/LDT1/LDT2	0.0	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0		0.0 0.0	2 22		0.0000 2	
	Phase2.2	2019	Phase2.2:2019	LDA/LDT1/LDT22019	Employee	273	90	180	1.944	530,712					LDA/LDT1/LDT2 LDA/LDT1/LDT2	0.0	0.2	4.7	0.0	0.0	0.2	0.0	0.0	1	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.0		0.0 0.0	179		0.0003 22	- 79
	Phase2.3	2020	Phase2.3:2020	LDA/LDT1/LDT22020	Employee	328	60	120	1,296	425,088					LDA/LDT1/LDT2	0.1	0.3	2.6	0.0	0.0	0.1	0.1	0.0	ō	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0		0.0 0.0	139		0.0018 139	s9
	Phase2.5	2020	Phase2.5:2020	LDA/LDT1/LDT22020	Employee	179	110	220	2,376	425,304					LDA/LDT1/LDT2	0.1	0.5	4.8	0.0	0.0	0.2	0.1	0.0	1	0.0	0.0	0.8	0.0	0.0	0.4	0.0	0.0		0.0 0.0	139		0.0018 139	<i>;</i> 9
	Phase2.6	2020	Phase2.6:2020	LDA/LDT1/LDT22020	Employee	276	40	80	864	238,464					LDA/LDT1/LDT2	0.0	0.2	1.7	0.0	0.0	0.1	0.0	0.0	0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0		0.0 0.0	78		0.0010 78	~
	Phase2.7	2020	Phase2.7:2020	LDA/LDT1/LDT22020	Employee	187 73	125	250	2,700 2,484	504,900					LDA/LDT1/LDT2 LDA/LDT1/LDT2	0.1	0.6	5.4 4.7	0.0	0.0	0.3	0.1	0.0	1	0.0	0.0	0.9 0.8	0.0	0.1	0.5	0.0	0.0		0.0 0.0 0.0 0.0	165 57		0.0021 165	
	Phase2.8 Phase3.1	2021 2019	Phase2.8:2021 Phase3.1:2019	LDA/LDT1/LDT22021 LDA/LDT1/LDT22019	Employee Employee	40	115 10	230 20	2,484	181,332 8,640					LDA/LDT1/LDT2	0.1	0.5	4.7	0.0	0.0	0.2	0.1	0.0	0	0.0	0.0 0.0	0.8	0.0	0.0	0.2	0.0	0.0		0.0 0.0	3		0.0007 57	<i>.</i>
	Phase3.2	2019	Phase3.2:2019	LDA/LDT1/LDT22019	Employee	141	15	30	324	45.684					LDA/LDT1/LDT2	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.0	õ	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	15		0.0002 15	5
	Phase3.3	2020	Phase3.3:2020	LDA/LDT1/LDT22020	Employee	216	10	20	216	46,656					LDA/LDT1/LDT2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	15	0.0	0.0 15	5
	Phase3.4	2020	Phase3.4:2020	LDA/LDT1/LDT22020	Employee	211	20	40	432	91,152					LDA/LDT1/LDT2	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0		0.0 0.0	30	0.0	0.0 30	a
	Phase3.5	2021	Phase3.5:2021	LDA/LDT1/LDT22021	Employee	20	25	50	540	10,800					LDA/LDT1/LDT2	0.0	0.1	1.0	0.0	0.0	0.1	0.0	0.0	0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3		0.0 3	
	Phase4.1 Phase4.4	2020 2020	Phase4.1:2020 Phase4.4:2020	LDA/LDT1/LDT22020 LDA/LDT1/LDT22020	Employee Employee	128	15	30 120	324 1.296	41,472 104.976					LDA/LDT1/LDT2 LDA/LDT1/LDT2	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	14	0.0	0.0 14	4
	Phase1 1	2020	Phase4.4:2020 Phase1.1:2018	T7SC2018	Haul Truck	17	bU	120	1,296	104,976	9	75	146	2.490	T7SC	0.0	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	34	0.0	0.0 34	<u>+</u>
	Phase1.2	2019	Phase1.2:2019	T7SC2019	Haul Truck	10					6	30	454	4,536	T7SC	0.1	4.9	0.5	0.0	0.0	0.1	0.0	0.0	1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0		0.0 0.0	7	0.0	0.0 7	/
	Phase2.1	2019	Phase2.1:2019	T7SC2019	Haul Truck	100					46	2,300	3,478	347,760	T7SC	1.0	37.9	4.0	0.3	0.2	0.7	0.3	0.1	6	0.0	0.0	5.8	0.1	1.9	0.2	0.0	0.0	0.0	0.0 0.0	573	0.0	0.0 578	8
	Phase2.2	2019	Phase2.2:2019	T7SC2019	Haul Truck	273					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	/
	Phase2.3	2020	Phase2.3:2020 Phase2.5:2020	T7SC2020 T7SC2020	Haul Truck	328 179					0	0	0	0	T7SC T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	1
	Phase2.5 Phase2.6	2020 2020	Phase2.6:2020	T7SC2020	Haul Truck Haul Truck	276					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	
Offsit	Phase2.7	2020	Phase2.7:2020	T7SC2020	Haul Truck	187					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ő	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	,
Offsit	Phase2.8	2021	Phase2.8:2021	T7SC2021	Haul Truck	73					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0	0.0	0.0 0	,
	Phase3.1	2019	Phase3.1:2019	T7SC2019	Haul Truck	40					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	,
	Phase3.2	2019	Phase3.2:2019	T7SC2019	Haul Truck	141					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	/
	Phase3.3 Phase3.4	2020 2020	Phase3.3:2020 Phase3.4:2020	T7SC2020 T7SC2020	Haul Truck Haul Truck	216 211					0	0	0	0	T7SC T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0 0.0 0.0	0	0.0	0.0 0	1
	Phase3.5	2020	Phase3.5:2021	T7SC2020	Haul Truck	20					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	,
	Phase4.1	2020	Phase4.1:2020	T7SC2020	Haul Truck	128					1	50	13	1,660	T7SC	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	ō	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3		0.0 3	5
	Phase4.4	2020	Phase4.4:2020	T7SC2020	Haul Truck	81					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	,
	Phase1.1	2018	Phase1.1:2018	T6Heavy2018	Delivery	17					0	0	0	0	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0		0.0	0.0 0	1
	Phase1.2	2019	Phase1.2:2019 Phase2.1:2019	T6Heavy2019 T6Heavy2019	Delivery	10 100					0	0 500	0	0	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	9	0.0	0.0 0	1
	Phase2.1 Phase2.2	2019 2019	Phase2.2:2019	T6Heavy2019	Delivery Delivery	273					10 29	3.900	73 209	7,300 56.940	T6Heavy T6Heavy	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	9 69	0.0	0.0 9	0
	Phase2.3	2019	Phase2.3:2020	T6Heavy2020	Delivery	328					4	600	203	8,760	T6Heavy	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0		0.0 0.0	11	0.0	0.0 /0	-
	Phase2.5	2020	Phase2.5:2020	T6Heavy2020	Delivery	179					3	300	24	4,380	T6Heavy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	5	0.0	0.0 5	<i>i</i>
	Phase2.6	2020	Phase2.6:2020	T6Heavy2020	Delivery	276					1	150	8	2,190	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3	0.0	0.0 3	,
	Phase2.7	2020	Phase2.7:2020	T6Heavy2020	Delivery	187 73					1	100	8	1,460	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	2	0.0	0.0 2	÷
	Phase2.8 Phase3.1	2021 2019	Phase2.8:2021 Phase3.1:2019	T6Heavy2021 T6Heavy2019	Delivery	/3 40					4	150 100	30 37	2,190 1.460	T6Heavy T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3	0.0	0.0 3	,
	Phase3.2	2019	Phase3.2:2019	T6Heavy2019	Delivery	141					10	700	72	10,220	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	12	0.0	0.0 12	2
	Phase3.3	2020	Phase3.3:2020	T6Heavy2020	Delivery	216					1	100	7	1,460	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ō	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	2	0.0	0.0 2	é i
	Phase3.4	2020	Phase3.4:2020	T6Heavy2020	Delivery	211					1	125	9	1,825	T6Heavy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	2	0.0	0.0 2	-
	Phase3.5	2021	Phase3.5:2021	T6Heavy2021	Delivery	20					6	60	44	876	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	1	0.0	0.0 1	
	Phase4.1 Phase4.4	2020 2020	Phase4.1:2020 Phase4.4:2020	T6Heavy2020 T6Heavy2020	Delivery Delivery	128 81			hrs/day	trucks	0	0 160	0	0 2.336	T6Heavy T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	0	0.0	0.0 0	
	Phase1.1	2020	Phase4.4:2020 Phase1.1:2018	T6Heavy 52018	Water Truck	81			hrs/day 8	trucks 1	4	100	29 40	2,336	T6Heavy 5	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3	0.0	0.0 3	,
	Phase1.2	2019	Phase1.2:2019	T6Heavy 52019	Water Truck	10			8	1	-		40	400	T6Heavy 5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	1	0.0	0.0 1	1
	Phase2.1	2019	Phase2.1:2019	T6Heavy_52019	Water Truck	100			8	1		-	40	4,000	T6Heavy_5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		0.0 0.0	9	0.0	0.0 9	,
	Phase2.2	2019	Phase2.2:2019	T6Heavy 52019	Water Truck	273			8	1	-	-	40	10,920	T6Heavy 5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0		0.0 0.0	25		0.0 25	-
Onsit	Phase4.1	2020	Phase4.1:2020	T6Heavy 52020	Water Truck	128			8	1			40	5,120	T6Heavy 5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0		0.0 0.0	12		0.0 12	
Unsit	Phase4.4 Phase1.1	2020	Phase4.4:2020 Phase1.1:2018	T6Heavy_52020 T7SC 52018	Water Truck End Dumps	81			8	2			80	6,480 1.360	T6Heavy_5 T7SC_5	0.1	1.8	0.3	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0		0.0 0.0	15	0.0	0.0 15	-
	Phase1.1 Phase1.2	2018	Phase1.1:2018 Phase1.2:2019	T7SC_52018	End Dumps	10			8	2	-		80	1,300	T7SC 5	0.2	3.3	0.6	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0		0.0 0.0	3	0.0	0.0 4	
	Phase2.1	2019	Phase2.1:2019	T7SC 52019	End Dumps	100			8	5	-		200	20,000	T7SC_5	0.5	8.1	1.5	0.1	0.0	0.1	0.1	0.0	1	0.0	0.0	0.7	0.0	0.4	0.1	0.0	0.0		0.0 0.0	65		0.0 65	-
	Phase4.1	2020	Phase4.1:2020	T7SC 52020	End Dumps	128			8	2	-	-	80	10,240	T7SC_5	0.1	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0		0.0 0.0		0.0	0.0 33	3
	Phase4.4	2020	Phase4.4:2020	T7SC 52020	End Dumps	81			8	2			80	6,480	T7SC_5	0.1	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0 0.0	21	0.0	0.0 21	1

Alternative 6 (below grade parking alternative; unmitigated)

Onr	oad Emiss	sions (Calculations	I																																		
							Workers	Employ			Truck		Truck Mi/						Pounds p	er dav					Metric to	is per day					Tons n	oer year				Met	ric tons per	rvear
	ID	Year		Concat	Vehicle	Days		Trip/Da	Employ Mi/ Day	Employ Mi/Yr	Trip/Day r/t	#Loads/Yr	Day	Truck Mi/ Y	r Vehicle	ROG	NOX				PM10	DPM2.5 D	SO2	CO2			02e	ROG	NOX	co		PM2.5	PM10 D	PM2.5	D SO2			20 CO2e
	Phase1.1	2018		LDA/LDT1/LDT22018	Employee	17	20	40	432	7,344					LDA/LDT1/LDT2	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 3
	Phase1.2	2019		LDA/LDT1/LDT22019	Employee	10	30	60	648	6,480					LDA/LDT1/LDT2	0.0	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 2
	Phase2.1	2019	Phase2.1:2019		Employee	100	30	60	648	64,800					LDA/LDT1/LDT2	0.0	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0	0.0			0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0			0.0 22
	Phase2.2	2019	Phase2.2:2019		Employee	273	90	180	1,944	530,712					LDA/LDT1/LDT2	0.1	0.5	4.2	0.0	0.0	0.2	0.1	0.0	1	0.0			0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.0			0.0 179
	Phase 2.3	2020	Phase2.3:2020 Phase2.5:2020		Employee	328 179	60 110	120 220	1,296 2.376	425,088 425.304					LDA/LDT1/LDT2 LDA/LDT1/LDT2	0.1	0.3	2.6 4.8	0.0	0.0	0.1	0.1	0.0	0	0.0			0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0			0.0 139
	Phase 2.5 Phase 2.6	2020	Phase2.6:2020 Phase2.6:2020		Employee Employee	276	40	80	2,376	238,464					LDA/LDT1/LDT2	0.1	0.5	4.8	0.0	0.0	0.2	0.0	0.0	1	0.0			0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0			0.0 78
	Phase 2.0 Phase 2.7	2020	Phase2.6:2020 Phase2.7:2020		Employee	187	125	250	2,700	238,464					LDA/LDT1/LDT2	0.0	0.2	5.4	0.0	0.0	0.1	0.0	0.0	1	0.0			0.0	0.0	0.2	0.0	0.0	0.0	0.0			0.0 0.	
	Phase2.8	2021	Phase2.8:2021	LDA/LDT1/LDT22021	Employee	73	115	230	2,484	181,332					LDA/LDT1/LDT2	0.1	0.5	4.7	0.0	0.0	0.2	0.1	0.0	1	0.0			0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase 3.1	2019	Phase3.1:2019	LDA/LDT1/LDT22019	Employee	40	10	20	216	8.640					LDA/LDT1/LDT2	0.0	0.1	0.5	0.0	0.0	0.0	0.0	0.0	Ô	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase3.2	2019	Phase3.2:2019		Employee	141	15	30	324	45,684					LDA/LDT1/LDT2	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 15
	Phase 3.3	2020	Phase3.3:2020		Employee	216	10	20	216	46.656					LDA/LDT1/LDT2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	ō	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 15
	Phase3.4	2020	Phase3.4:2020	LDA/LDT1/LDT22020	Employee	211	20	40	432	91,152					LDA/LDT1/LDT2	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	30	0.0 0.	0.0 30
	Phase3.5	2021	Phase3.5:2021	LDA/LDT1/LDT22021	Employee	20	25	50	540	10,800					LDA/LDT1/LDT2	0.0	0.1	1.0	0.0	0.0	0.1	0.0	0.0	0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0 0.	0.0 3
	Phase4.1	2020	Phase4.1:2020	LDA/LDT1/LDT22020	Employee	128	15	30	324	41,472					LDA/LDT1/LDT2	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0 0.	0.0 14
	Phase4.4	2020	Phase4.4:2020	LDA/LDT1/LDT22020	Employee	81	60	120	1,296	104,976					LDA/LDT1/LDT2	0.1	0.3	2.6	0.0	0.0	0.1	0.1	0.0	0	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	34	0.0 0.	0.0 34
	Phase1.1	2018	Phase1.1:2018	T7SC2018	Haul Truck	17					9	75	146	2,490	T7SC	0.0	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 4
	Phase1.2	2019	Phase1.2:2019		Haul Truck	10					6	30	454	4,536	T7SC	0.1	4.9	0.5	0.0	0.0	0.1	0.0	0.0	1	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase2.1	2019	Phase2.1:2019	T7SC2019	Haul Truck	100					196	9,800	14,818	1,481,760	T7SC	4.4	161.6		1.1	1.0	3.2	1.2	0.5	24	0.0			0.2	8.1	0.9	0.1	0.1	0.2	0.1	0.0			0.1 2,463
	Phase2.2	2019	Phase2.2:2019		Haul Truck	273					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase2.3	2020	Phase2.3:2020		Haul Truck	328					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase2.5	2020	Phase2.5:2020	T7SC2020	Haul Truck	179					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase 2.6	2020 2020	Phase2.6:2020 Phase2.7:2020	T7SC2020 T7SC2020	Haul Truck Haul Truck	276 187					0	0	0	0	T7SC T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
Offsit	Phase 2.7 Phase 2.8	2020	Phase2.7:2020 Phase2.8:2021	T/SC2020 T/SC2021	Haul Truck Haul Truck	187					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase 2.8 Phase 3.1	2021	Phase3.1:2021		Haul Truck	40					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase3.2	2019	Phase3.2:2019	T7SC2019	Haul Truck	141					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase 3.3	2020	Phase3.3:2020	T7SC2020	Haul Truck	216					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase3.4	2020	Phase3.4:2020	T7SC2020	Haul Truck	210					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase 3.5	2021	Phase3.5:2021	T7SC2021	Haul Truck	20					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase4.1	2020	Phase4.1:2020		Haul Truck	128					1	50	13	1,660	T7SC	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 3
	Phase4.4	2020	Phase4.4:2020		Haul Truck	81					ō	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ō	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 0
	Phase1.1	2018	Phase1.1:2018	T6Heavy2018	Delivery	17					0	0	0	0	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.	0.0
	Phase1.2	2019	Phase1.2:2019	T6Heavy2019	Delivery	10					0	0	0	0	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.	0.0
	Phase2.1	2019	Phase2.1:2019	T6Heavy2019	Delivery	100					10	500	73	7,300	T6Heavy	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0 0.	0.0 9
	Phase2.2	2019	Phase2.2:2019	T6Heavy2019	Delivery	273					29	3,900	209	56,940	T6Heavy	0.0	1.3	0.1	0.0	0.0	0.1	0.0	0.0	0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	69	0.0 0.	0.0 70
	Phase2.3	2020	Phase2.3:2020	T6Heavy2020	Delivery	328					4	600	27	8,760	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0 0.	0.0 11
	Phase2.5	2020	Phase2.5:2020		Delivery	179					3	300	24	4,380	T6Heavy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 5
	Phase2.6	2020	Phase2.6:2020		Delivery	276					1	150	8	2,190	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 3
	Phase2.7	2020	Phase2.7:2020	T6Heavy2020	Delivery	187					1	100	8	1,460	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 2
	Phase2.8	2021	Phase2.8:2021	T6Heavy2021	Delivery	73					4	150	30	2,190	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 3
	Phase3.1	2019	Phase3.1:2019	T6Heavy2019	Delivery	40					5	100	37	1,460	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 2
	Phase3.2	2019	Phase3.2:2019		Delivery	141					10	700	72	10,220	T6Heavy	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase3.3	2020	Phase3.3:2020		Delivery	216					1	100 125	2	1,460	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 2
	Phase 3.4 Phase 3.5	2020 2021	Phase3.4:2020 Phase3.5:2021	T6Heavy2020 T6Heavy2021	Delivery Delivery	211 20					1	125	9 44	1,825 876	T6Heavy T6Heavy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 2
		2021	Phase 4.1:2020		Delivery	128					0	0	44	8/6	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 1
	Phase4.1 Phase4.4	2020	Phase4.1:2020 Phase4.4:2020		Delivery	81			hrs/dav	trucks	0	160	29	2.336	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase4.4 Phase1.1	2020	Phase4.4:2020 Phase1.1:2018		Water Truck	17			nrs/day 8	1	4	100	40	680	T6Heavy 5	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 3
	Phase 1.1	2018		T6Heavy_52019	Water Truck	10			8	1	-		40	400	T6Heavy_5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase 2.1	2019	Phase 2.1:2019		Water Truck	100			8	1			40	4,000	T6Heavy_5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	
	Phase 2.2	2019	Phase 2.2:2019		Water Truck	273			8	1			40	10.920	T6Heavy_5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	ő	0.0			0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0			0.0 25
	Phase 4.1	2020	Phase 4.1:2020		Water Truck	128			8	1			40	5.120	T6Heavy 5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0			0.0 12
Onsit		2020	Phase 4.4:2020		Water Truck	81			8	2			80	6,480	T6Heavy 5	0.1	1.8	0.3	0.0	0.0	0.0	0.0	0.0	ő	0.0			0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0			0.0 15
	Phase1.1	2018	Phase 1.1:2018	T7SC 52018	End Dumps	17			8	2			80	1,360	T7SC 5	0.2	3.3	0.6	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0 4
	Phase1.2	2019	Phase 1.2:2019		End Dumps	10			8	2			80	800	T7SC 5	0.2	3.2	0.6	0.0	0.0	0.0	0.0	0.0	0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0 0.	
	Phase 2.1	2019	Phase 2.1:2019	T7SC_52019	End Dumps	100			8	5	-		200	20,000	T7SC_5	0.5	8.1	1.5	0.1	0.0	0.1	0.1	0.0	1	0.0	0.0	0.7	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	65	0.0 0.	0.0 65
	Phase4.1	2020	Phase4.1:2020		End Dumps	128			8	2	-		80	10,240	T7SC_5	0.1	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0	0.0					0.0	0.0	0.0	0.0	0.0	0.0		0.0 0.	0.0 33
	Phase4.4	2020	Phase4.4:2020	T7SC_52020	End Dumps	81			8	2	-		80	6,480	T7SC_5	0.1	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0 0.	0.0 21

Alternative 6	
(below grade parking alternative; mitigated)	

Onroad Emissions	Calculatio	ons																																		
						14/a-d	per Employ			Truck		Truck Mi,						Pounds p				r		letric tons per	. days				Tons per					Metric ton		
ID	Year		Concat	Vehicle	Days	dav	Trip/Da	Employ Mi/ Day	Employ Mi/Yr	Trip/Dav r/t	#Loads/Yr	Dav	Truck Mi/ Yr	Vehicle	ROG	NOX				PM10 D P	M2 5 D	\$02		CH4 N20		ROG	NOX	co			410 D PM2.5	5.0 502	C02			CO2e
Phase1.1	2018	Phase1.1:2018	LDA/LDT1/LDT22018	Employee	17	20	40	432	7,344	1110/0441/1		buy		LDA/LDT1/LDT2	0.0	0.1	1.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		3		0.0000	
Phase1.2	2019	Phase1.2:2019	LDA/LDT1/LDT22019	Employee	10	30	60	648	6,480					LDA/LDT1/LDT2	0.0	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		2		0.0000	
Phase2.1	2019	Phase2.1:2019	LDA/LDT1/LDT22019	Employee	100	30	60	648	64,800					LDA/LDT1/LDT2	0.0	0.2	1.4	0.0	0.0	0.1	0.0	0.0	0	0.0 0.0	0.2	0.0	0.0	0.1	0.0	0.0 0	0.0 0.0	0.0	22	0.0003	0.0003	22
Phase2.2	2019	Phase2.2:2019	LDA/LDT1/LDT22019	Employee	273	90	180	1,944	530,712					LDA/LDT1/LDT2	0.1	0.5	4.2	0.0	0.0	0.2	0.1	0.0	1	0.0 0.0	0.7	0.0	0.1	0.6	0.0	0.0 0	0.0 0.0	0.0	179	0.0023	0.0024	179
Phase2.3	2020	Phase2.3:2020	LDA/LDT1/LDT22020	Employee	328	60	120	1,296	425,088					LDA/LDT1/LDT2	0.1	0.3	2.6	0.0	0.0	0.1	0.1	0.0	0	0.0 0.0	0.4	0.0	0.0	0.4	0.0	0.0 0	0.0 0.0	0.0	139	0.0017	0.0018	139
Phase2.5	2020	Phase2.5:2020	LDA/LDT1/LDT22020	Employee	179	110	220	2,376	425,304					LDA/LDT1/LDT2	0.1	0.5	4.8	0.0	0.0		0.1	0.0	1	0.0 0.0		0.0	0.0	0.4			0.0 0.0				0.0018	
Phase2.6	2020	Phase2.6:2020		Employee	276	40	80	864	238,464					LDA/LDT1/LDT2	0.0	0.2	1.7	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.2			0.0 0.0		78		0.0010	
Phase2.7	2020	Phase2.7:2020		Employee	187	125	250	2,700	504,900					LDA/LDT1/LDT2	0.1	0.6	5.4	0.0	0.0		0.1	0.0	1	0.0 0.0		0.0	0.1	0.5			0.0 0.0		165		0.0021	
Phase2.8	2021	Phase2.8:2021	LDA/LDT1/LDT22021	Employee	73	115	230	2,484	181,332					LDA/LDT1/LDT2	0.1	0.5	4.7	0.0	0.0		0.1	0.0	1	0.0 0.0		0.0	0.0	0.2			0.0 0.0		57		0.0007	
Phase3.1	2019	Phase3.1:2019	LDA/LDT1/LDT22019	Employee	40	10	20	216	8,640					LDA/LDT1/LDT2	0.0	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		3		0.0000	
Phase3.2	2019	Phase3.2:2019	LDA/LDT1/LDT22019	Employee	141	15	30	324	45,684					LDA/LDT1/LDT2	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		15		0.0002	
Phase3.3	2020 2020	Phase3.3:2020		Employee	216	10 20	20 40	216 432	46,656					LDA/LDT1/LDT2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		15		0.0002	
Phase3.4 Phase3.5	2020	Phase3.4:2020 Phase3.5:2021		Employee	211		40	432	91,152 10.800					LDA/LDT1/LDT2 LDA/LDT1/LDT2	0.0	0.1	1.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.1			0.0 0.0		30		0.0004	
Phase4.1	2021	Phase4.1:2020		Employee Employee	20 128	25 15	30	324	41.472					LDA/LDT1/LDT2	0.0	0.1	0.6	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		14	0.0000	0.0000	14
Phase4.1 Phase4.4	2020	Phase4.4:2020		Employee	81	60	120	1.296	41,472					LDA/LDT1/LDT2	0.0	0.1	2.6	0.0	0.0			0.0		0.0 0.0	0.1	0.0	0.0	0.0			0.0 0.0		34	0.0	0.0	34
Phase1.1	2020	Phase1.1:2018	T7SC2018	Haul Truck	17	00	120	1,290	104,570	9	75	146	2,490	T7SC	0.0	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.4	0.0	0.0	0.0			0.0 0.0		34	0.0	0.0	4
Phase1.2	2010	Phase 1.2:2019	T7SC2019	Haul Truck	10					6	30	454	4,536	T7SC	0.1	4.9	0.5	0.0	0.0	0.1	0.0	0.0	1	0.0 0.0		0.0	0.0	0.0			0.0 0.0		7	0.0	0.0	7
Phase2.1	2019	Phase2.1:2019	T7SC2019	Haul Truck	115					170	9,800	12,885	1,481,760	T7SC	3.8	140.5	14.9	0.9	0.9	2.8	1.0	0.4	21	0.0 0.0		0.2	8.1	0.9	0.1	0.1 0	0.2 0.1		2,441	0.1	0.1	2,463
Phase2.2	2019	Phase2.2:2019	T7SC2019	Haul Truck	273					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0 0.0	0.0	0	0.0	0.0	0
Phase2.3	2020	Phase2.3:2020	T7SC2020	Haul Truck	328					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	0	0.0	0.0	0
Phase2.5	2020	Phase2.5:2020	T7SC2020	Haul Truck	179					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	0	0.0	0.0	0
Phase2.6	2020	Phase2.6:2020	T7SC2020	Haul Truck	276					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	0	0.0	0.0	0
Offsite Phase2.7	2020	Phase2.7:2020	T7SC2020	Haul Truck	187					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	0	0.0	0.0	0
Phase2.8	2021	Phase2.8:2021	T7SC2021	Haul Truck	73					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase3.1	2019	Phase3.1:2019	T7SC2019	Haul Truck	40					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	0	0.0	0.0	0
Phase3.2	2019	Phase3.2:2019	T7SC2019	Haul Truck	141					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase3.3	2020	Phase3.3:2020	T7SC2020	Haul Truck	216					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase3.4	2020	Phase3.4:2020		Haul Truck	211					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase3.5	2021	Phase3.5:2021		Haul Truck	20					0	0	0	0	T7SC	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase4.1	2020	Phase4.1:2020		Haul Truck	128					1	50	13	1,660	T7SC	0.0	0.1	0.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		3	0.0	0.0	3
Phase4.4	2020	Phase4.4:2020		Haul Truck	81					0	0		-	T7SC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase1.1 Phase1.2	2018 2019	Phase1.1:2018 Phase1.2:2019		Delivery Delivery	17					0	0	0	0	T6Heavy T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase2.1	2019	Phase2.1:2019	T6Heavy2019	Delivery	100					10	500	73	7,300	T6Heavy	0.0	0.5	0.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		9	0.0	0.0	0
Phase2.2	2019	Phase2.2:2019	T6Heavy2019	Delivery	273					29	3,900	209	56,940	T6Heavy	0.0	1.3	0.1	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		69	0.0	0.0	70
Phase2.3	2020	Phase2.3:2020	T6Heavy2020	Delivery	328					4	600	27	8,760	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		11	0.0	0.0	11
Phase2.5	2020	Phase 2.5:2020	T6Heavy2020	Delivery	179					3	300	24	4,380	T6Heavy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		5	0.0	0.0	5
Phase2.6	2020	Phase2.6:2020	T6Heavy2020	Delivery	276					1	150	8	2.190	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		3	0.0	0.0	3
Phase2.7	2020	Phase2.7:2020	T6Heavy2020	Delivery	187					1	100	8	1.460	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	2	0.0	0.0	2
Phase2.8	2021	Phase2.8:2021	T6Heavy2021	Delivery	73					4	150	30	2,190	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0 0.0	3	0.0	0.0	3
Phase3.1	2019	Phase3.1:2019	T6Heavy2019	Delivery	40					5	100	37	1,460	T6Heavy	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0 0	0.0 0.0	0.0	2	0.0	0.0	2
Phase3.2	2019	Phase3.2:2019	T6Heavy2019	Delivery	141					10	700	72	10,220	T6Heavy	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		12	0.0	0.0	12
Phase3.3	2020	Phase3.3:2020	T6Heavy2020	Delivery	216					1	100	7	1,460	T6Heavy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0	0.0	0.0	0.0	0.0			0.0 0.0		2	0.0	0.0	2
Phase3.4	2020	Phase3.4:2020	T6Heavy2020	Delivery	211					1	125	9	1,825	T6Heavy	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		2	0.0	0.0	2
Phase3.5	2021	Phase3.5:2021	T6Heavy2021	Delivery	20					6	60	44	876	T6Heavy	0.0	0.2	0.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		1	0.0	0.0	1
Phase4.1	2020	Phase4.1:2020		Delivery	128					0	0	0	0	T6Heavy	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		0	0.0	0.0	0
Phase4.4	2020	Phase4.4:2020		Delivery	81			hrs/day	trucks	4	160	29	2,336	T6Heavy	0.0	0.2	0.0	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		3	0.0	0.0	3
Phase1.1	2018	Phase1.1:2018	T6Heavy_52018	Water Truck	17			8	1		-	40	680	T6Heavy_5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0 0.0		0.0	0.0	0.0			0.0 0.0		2	0.0	0.0	2
Phase1.2	2019	Phase1.2:2019	T6Heavy_52019	Water Truck				8	1		-	40	400	T6Heavy_5	0.0	0.9	0.1	0.0	0.0			0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		1	0.0	0.0	1
Phase2.1	2019	Phase2.1:2019	T6Heavy_52019	Water Truck	100			8	1		-	40	4,000	T6Heavy_5	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		9	0.0	0.0	9
Phase2.2	2019	Phase2.2:2019	T6Heavy_52019	Water Truck	273			8	1		-	40 40	10,920	T6Heavy_5	0.0	0.9	0.1	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.1	0.0			0.0 0.0		25	0.0	0.0	25
Phase4.1 Onsite Phase4.4	2020 2020	Phase4.1:2020 Phase4.4:2020		Water Truck Water Truck	128 81			8	1		-	40 80	5,120 6.480	T6Heavy_5 T6Heavy_5	0.0	0.9	0.1	0.0	0.0			0.0	0	0.0 0.0		0.0	0.1	0.0			0.0 0.0		12 15	0.0	0.0	12 15
	2020	Phase4.4:2020 Phase1.1:2018	T7SC 52018		81			0	2			80	1,360	T7SC 5	0.1	1.8		0.0	0.0	0.0	0.0	0.0	0	0.0 0.0		0.0	0.1	0.0			0.0 0.0		15	0.0	0.0	15
Phase1.1 Phase1.2	2018 2019	Phase1.1:2018 Phase1.2:2019	T7SC_52018	End Dumps End Dumps	1/			6	2		-	80	1,360	T7SC_5	0.2	3.3	0.6 0.6	0.0	0.0		0.0	0.0	0	0.0 0.0		0.0	0.0	0.0			0.0 0.0		4	0.0	0.0	4
Phase1.2 Phase2.1	2019	Phase2.1:2019	T7SC_52019	End Dumps End Dumps	10			0	2		-	200	20.000	T7SC_5	0.2	3.2	1.5	0.0	0.0			0.0	1	0.0 0.0		0.0	0.0	0.0			0.0 0.0		3 65	0.0	0.0	3 65
Phase4.1	2019	Phase4.1:2020		End Dumps	100			8	2			200	10,240	T7SC_5	0.5	3.0	0.5	0.0	0.0			0.0		0.0 0.0		0.0	0.4	0.0			0.0 0.0		33	0.0	0.0	33
Phase4.1 Phase4.4	2020	Phase4.4:2020		End Dumps	81			8	2			80	6.480	T7SC_5	0.1	3.0	0.5	0.0	0.0			0.0		0.0 0.0		0.0	0.2	0.0			0.0 0.0		21	0.0	0.0	21
riids@4.4	2020	110304.4.2020	C_32020	cna pamps	01	-		0	2		-	00	0,400	1/30_3	0.1	3.0	0.5	0.0	0.0	0.0	0.0	5.0	U	0.0 0.0	0.3	0.0	0.1	0.0	5.0	0.0 0	<u></u> 0.0	0.0		0.0	0.0	21

Re-entrained Paved Road Dust Emissions

Methodology

Calculation Methodology: USEPA AP-42, Paved Roads, Section 13.2.1, Revised January 2011: <u>http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0201.pdf</u> Avg vehicle weight and silt loading on Local Roads within San Diego County <u>http://www.arb.ca.gov/ei/areasrc/fullpdf/full7-9.pdf</u> Precipitation Days greater than 0.254mm (0.01 in) for San Diego <u>CalEEMod</u>

Emission Factor Calculation

$$E_{ext} = [k (sL)^{0.91} \times (W)^{1.02}] (1 - P/4N)$$

Pollutant			Variables			Emission Factor (g
Pollutant	k	sL	w	Р	Ν	per mi)
PM ₁₀	1.00	0.32	2.4	40	365	0.84224
PM _{2.5}	0.25	0.32	2.4	40	365	0.21056

E = particulate emission factor (grams of particulate matter/VMT)

k = particle size multiplier (lb/VMT)

sL = roadway silt loading (g/m2)

W = average weight of vehicles on the road (tons)

P = number of wet days with at least 0.254mm of precipitation CalEEmod Appx D

N = number of days in the averaging period

g to lb conversion

, default from AP-42 ARB Section 7.9, Table 3 & 9, San Diego, Urban Local ARB Section 7.9, Table 9, San Diego CalEEmod Appx D annual days (365) 0.002204623

PM Emissions (daily)

Offsite VMT only

ID	Year	Pounds	per Day	VMT
ID ID	Teal	PM10	PM2.5	VIVII
Phase1.1	2018	1.07	0.27	578
Phase1.2	2019	2.05	0.51	1,102
Phase2.1	2019	7.80	1.95	4,199
Phase2.2	2019	4.00	1.00	2,153
Phase2.3	2020	2.46	0.61	1,323
Phase2.5	2020	4.46	1.11	2,400
Phase2.6	2020	1.62	0.40	872
Phase2.7	2020	5.03	1.26	2,708
Phase2.8	2021	4.67	1.17	2,514
Phase3.1	2019	0.47	0.12	253
Phase3.2	2019	0.74	0.18	396
Phase3.3	2020	0.41	0.10	223
Phase3.4	2020	0.82	0.20	441
Phase3.5	2021	1.08	0.27	584
Phase4.1	2020	0.63	0.16	337
Phase4.4	2020	2.46	0.61	1,325
issions (annu	al)	-		

ID	Year	Tons p	er Year	VMT
U	Tear	PM10	PM2.5	VIVII
Phase1.1	2018	0.01	0.00	9,834
Phase1.2	2019	0.01	0.00	11,016
Phase2.1	2019	0.39	0.10	419,860
Phase2.2	2019	0.55	0.14	587,652
Phase2.3	2020	0.40	0.10	433,848
Phase2.5	2020	0.40	0.10	429,684
Phase2.6	2020	0.22	0.06	240,654
Phase2.7	2020	0.47	0.12	506,360
Phase2.8	2021	0.17	0.04	183,522
Phase3.1	2019	0.01	0.00	10,100
Phase3.2	2019	0.05	0.01	55,904
Phase3.3	2020	0.04	0.01	48,116
Phase3.4	2020	0.09	0.02	92,977
Phase3.5	2021	0.01	0.00	11,676
Phase4.1	2020	0.04	0.01	43,132
Phase4.4	2020	0.10	0.02	107,312

Fugitive Dust from Excavation, Clearing, and Demolition

-			Activity	y			ling EF acre)		ing EF /ton)		ingEF /ton)		no EF /ton)	Gradin	ng (Ibs/d)	Loadir	ng (lbs/d)	Dozir	ng Ibs/d)	Demo	EF lbs/d)		rading ns/yr)		ading ns/yr)	Dozing	(tons/yr)	Demo	(tons/yr)
		Total	Total	hrs of	Total																								
		acres	Excavation	Bolldozi	Demo																								
Phase ID	# Days	Graded	CY)	ng	Tons	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Phase 1.1	17		1050	8	3298	1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00			0.01	0.00	6.02	3.31	4.15	0.63			0.00	0.00	0.05	0.03	0.04	0.01
Phase 1.2	10		420			1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00			0.00	0.00							0.00	0.00				
Phase 2.1	100	3.4	33530	8		1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00	0.91	0.10	0.03	0.01	6.02	3.31			0.05	0.00	0.00	0.00	0.30	0.17		
Phase 2.2	273					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 2.3	328					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 2.5	179					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 2.6	276					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 2.7	187					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 2.8	73					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 3.1	40					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 3.2	141					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 3.3	216					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 3.4	211					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 3.5	20					1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00																
Phase 4.1	128	1.7	3000	8	2251	1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00	0.46	0.05	0.00	0.00	6.02	3.31	0.38	0.06	0.03	0.00	0.00	0.00	0.39	0.21	0.02	0.00
Phase 4.4	81			8		1.06	0.11	0.00	0.00	0.75	0.41	0.02	0.00					0.07	0.04							0.00	0.00		

ROG emissions from Paving

Emissions based on Calculation Details in CalEEMod Users Guide, Appendix A, pages 16-17

Eap = Efap x Aparking

Eap = Efap x Aparking		
	Phase 4.4	
VOC Emissions € (lbs/day)	0.13	max pounds of VOC per day
VOC Emissions € (ton/year)	0.01	tons of VOC per year (2017)
EF	2.62	lbs of VOC per acre paved
SF_total	178481	total paving square footage
A_total	4.0973	total paving acreage
SF_day	2203	Daily paving square footage
A_day	0.0506	Daily paving acreage

Note:

per PD there is going to be a apraking structure with 213 spaces. It is assumed asphalt paving will be applied.---->Total acres to be paved"2500Sf-4500SF square feet of retail development along the promenade" assumed to be paved4.0973488*Approximately 2.1 acres of public access plaza space throughout the project site4.0973488

Note:

per equipment list and construction scheduel, seems paving occures in phase 4.4 (81 days)

81

VOC emissions from Architectural Coatings

Emissions based on Calculation Details in CalEEMod Users Guide, Appendix A, pages 15-16

Eac = Efac x F x Apaint

EFac = Cvoc / 454 (g/lb) x 3.875 (L/GAL) / 180 (sqft)

Unmitigated	Phase 2.6	Phase 3.4	Phase 4.4	<u>description</u>
VOC Emissions (lbs/day)	78	7	34	pounds of VOC per day; unmitigated
VOC Emissions (ton/year)	11	1	1	
Eexterior (day)	59	5	25	
Einterior (day)	20	2	8	
Eexterior (annual)	16,229	1,104	2,041	
Einterior (annual)	5,410	368	680	
EF -exterior	0.01187	0.01187	0.01187	emission factor (lbs per sq. ft.)
EF - interior	0.01187	0.01187	0.01187	emission factor (lbs per sq. ft.)
New construction (sf)	911,736	62,000	114,660	The hotel tower, including the associated retail and public access plaza, would be approximatel
Days of coatings	276	211	81	
Construction SF per day	3,303	294	1,416	ft2
Fraction exterior	75%	75%	75%	exterior fraction of surface area. Default is 75% of area is exterior surface and 25% interior
Fraction interior	25%	25%	25%	interior fraction of surface area. Default is 75% of area is exterior surface and 25% interior
Cext	250	250	250	Exterior VOC content (g/L)
Cint	250	250	250	Interior VOC content (g/L)
scaling factor for A - surface painting	2	2	2	
g/lb	453.59236	453.59236	453.59236	
.				
liters per gallon	3.87541178	3.87541178	3.87541178	
	180	180	180	

General Assumptions

N2O CO2 Diesel Equipment 0.000026 Climate Registry 2016 CH4_CO2 Diesel Equipment 0.000057 Climate Registry 2016 N2O_NOX Gasoline 0.041600 ARB EMFAC FAQs' lbs/gram 0.002204623 kg/mt 1000 0.000001 mt/gram 0.000453592 mt/lbs ton/lbs 0.0005 ton/gram 1.10E-06 ton per cy conversion 1.2641662 CalEEMod ton per SF conversion 0.046 CalEEMod acre per SF conversion 2.30E-05 CH4 GWP 25 AR4 N2O GWP 298 AR4 Employee Trip length 1-way 10.8 CalEEMod (H-W, San Diego, Urban) Delivery Trip length 1-way 7.3 CalEEMod (C-NW, San Diego, Urban) 16.6 demo to Miramar/Otay Haul Truck Mileage Haul Truck Mileage 75.6 soils to Imperial Trips per employee 2 5 Onsite Truck mph Paving ROG EF 2.62 lbs/acre Grading PM10 EF 1.0605 lbs/acre Grading PM2.5 EF 0.1145 lbs/acre Bulldozing PM10 EF 0.752760759 lbs/hr Bulldozing PM2.5 EF 0.413778428 lbs/hr Truck loading PM10 EF 0.000039 lb/ton Truck loading PM2.5 EF 0.000006 lb/ton Demo PM10 EF 0.021400 lb/ton Demo PM2.5 EF 0.003244 lb/ton % of demo debris haul to recycling 84% to landfill 16% % of excav material haul to recycling 96%

4%

to landfill

CalEEMod (no mitigation) CalEEMod (no mitigation)

					Days b	y Year			Percentag	ge of Days	
Code	Start Date	End Date	Working Days	2018	2019	2020	2021	2018	2019	2020	2021
Phase1.1	12/5/2018	12/28/2018	17	17	0	0	0	100	0	0	0
Phase1.2	12/31/2018	1/14/2019	10	1	9	0	0	10	90	0	0
Phase2.1	1/10/2019	5/30/2019	100	0	100	0	0	0	100	0	0
Phase2.2	5/3/2019	6/16/2020	273	0	173	100	0	0	63	37	0
Phase2.3	1/15/2020	4/19/2021	328	0	0	252	76	0	0	77	23
Phase2.5	11/4/2019	7/10/2020	179	0	42	137	0	0	23	77	0
Phase2.6	5/20/2020	6/10/2021	276	0	0	162	114	0	0	59	41
Phase2.7	10/28/2019	7/15/2020	187	0	47	140	0	0	25	75	0
Phase2.8	3/19/2021	6/30/2021	73	0	0	0	73	0	0	0	100
Phase3.1	3/1/2019	6/16/2020	40	0	218	-178	0	0	545	-445	0
Phase3.2	12/2/2019	6/16/2020	141	0	22	119	0	0	16	84	0
Phase3.3	5/13/2020	3/11/2021	216	0	0	167	49	0	0	77	23
Phase3.4	5/27/2020	3/18/2021	211	0	0	157	54	0	0	74	26
Phase3.5	5/21/2021	6/18/2021	20	0	0	0	20	0	0	0	100
Phase4.1	4/14/2020	10/9/2020	128	0	0	128	0	0	0	100	0
Phase4.4	10/12/2020	2/2/2021	81	0	0	59	22	0	0	73	27
	12/5/2018	6/30/2021						•			
		565	working days								

Marina when hotel 70% complete 9/21/2020 6/22/2021

so, fall 2020 through late Spring/Early Summer 2021 6-9 months to complete

938 overall days

2.6 years

Last Updated: 11-2016(Unmitigated)

CALEEMOD EMISSION FACTORS (all in g/hphr)

Equipment Type	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	10 CH4	11 N2O
Aerial Lifts	2018	2018Aerial Lifts15	15	0.1817	3.2101	3.11639	0.0542	0.0499	0.0054	545.4939	0.1698	0.014
Aerial Lifts	2018	2018Aerial Lifts25	25	0.1817	3.2101	3.11639	0.0542	0.0499	0.0054	545.4939	0.1698	0.014
Aerial Lifts	2018	2018Aerial Lifts50	50	0.1817	3.2101	3.11639	0.0542	0.0499	0.0054	545.4939	0.1698	0.014
Aerial Lifts	2018	2018Aerial Lifts120	120	0.1219	2.0636	3.16685	0.0571	0.0525	0.0049	490.4742	0.1527	0.013
Aerial Lifts	2018	2018Aerial Lifts500	500	0.0623	0.63368	0.93655	0.0088	0.0081	0.0049	490.4122	0.1527	0.013
Aerial Lifts	2018	2018Aerial Lifts750	750	0.225	2.385	1.037	0.071	0.071	0.005	568.299	0.02	0.015
Aerial Lifts	2019	2019Aerial Lifts15	15	0.1719	3.07945	3.11451	0.0417	0.0384	0.0054	536.7427	0.1698	0.014
Aerial Lifts	2019	2019Aerial Lifts25	25	0.1719	3.07945	3.11451	0.0417	0.0384	0.0054	536.7427	0.1698	0.014
Aerial Lifts	2019	2019Aerial Lifts50	50	0.1719	3.07945	3.11451	0.0417	0.0384	0.0054	536.7427	0.1698	0.014
Aerial Lifts	2019	2019Aerial Lifts120	120	0.1182	1.97658	3.17254	0.0485	0.0446	0.0049	482.6056	0.1527	0.012
Aerial Lifts	2019	2019Aerial Lifts500	500	0.0655	0.63586	0.94139	0.0089	0.0082	0.0049	482.5446	0.1527	0.012
Aerial Lifts	2019	2019Aerial Lifts750	750	0.212	2.117	1.023	0.064	0.064	0.005	568.299	0.019	0.015
Aerial Lifts	2020	2020Aerial Lifts15	15	0.1676	2.95486	3.09942	0.0309	0.0284	0.0054	525.0743	0.1698	0.013
Aerial Lifts	2020	2020Aerial Lifts25	25	0.1676	2.95486	3.09942	0.0309	0.0284	0.0054	525.0743	0.1698	0.013
Aerial Lifts	2020	2020Aerial Lifts50	50	0.1676	2.95486	3.09942	0.0309	0.0284	0.0054	525.0743	0.1698	0.013
Aerial Lifts	2020	2020Aerial Lifts120	120	0.1149	1.86859	3.1768	0.0416	0.0382	0.0049	472.1142	0.1527	0.012
Aerial Lifts	2020	2020Aerial Lifts500	500	0.0688	0.63803	0.94623	0.009	0.0083	0.0049	472.0545	0.1527	0.012
Aerial Lifts	2020	2020Aerial Lifts750	750	0.2	1.868	1.013	0.057	0.057	0.005	568.299	0.018	0.015
Aerial Lifts	2021	2021Aerial Lifts15	15	0.1648	2.92238	3.11369	0.0265	0.0244	0.0054	525.0743	0.1698	0.013
Aerial Lifts	2021	2021Aerial Lifts25	25	0.1648	2.92238	3.11369	0.0265	0.0244	0.0054	525.0743	0.1698	0.013
Aerial Lifts	2021	2021Aerial Lifts50	50	0.1648	2.92238	3.11369	0.0265	0.0244	0.0054	525.0743	0.1698	0.013
Aerial Lifts	2021	2021Aerial Lifts120	120	0.1088	1.74368	3.17624	0.0333	0.0306	0.0049	472.1142	0.1527	0.012
Aerial Lifts	2021	2021Aerial Lifts500	500	0.072	0.64021	0.95107	0.0091	0.0083	0.0049	472.0545	0.1527	0.012
Aerial Lifts	2021	2021Aerial Lifts750	750	0.187	1.61	1.004	0.05	0.05	0.005	568.299	0.016	0.015
Air Compressors	2018	2018Air Compressors15	15	0.766	4.762	3.58	0.256	0.256	0.008	568.299	0.069	0.015
Air Compressors	2018	2018Air Compressors25	25	0.807	4.661	2.531	0.232	0.232	0.007	568.3	0.072	0.015
Air Compressors	2018	2018Air Compressors50	50	1.3	4.707	5.439	0.329	0.329	0.007	568.299	0.117	0.015
Air Compressors	2018	2018Air Compressors120	120	0.603	4.05	3.744	0.304	0.304	0.006	568.3	0.054	0.015
Air Compressors	2018	2018Air Compressors175	175	0.435	3.228	3.205	0.17	0.17	0.006	568.299	0.039	0.015
Air Compressors	2018 2018	2018Air Compressors250 2018Air Compressors500	250 500	0.321	2.797	1.146	0.087	0.087	0.006	568.3 568.299	0.029	0.015
Air Compressors		2018Air Compressors500 2018Air Compressors750		_	2.465 2.533	1.101	0.083		0.005	568.299		0.015
Air Compressors	2018	2018Air Compressors750 2018Air Compressors1000	750	0.309			0.084	0.084	0.005	568.299	0.027	0.015
Air Compressors	2018 2019	2019Air Compressors1000 2019Air Compressors15	1000 15	0.343	4.325 4.647	1.21 3.562	0.111 0.241	0.111 0.241	0.005	568.299	0.03	0.015
Air Compressors	2019	2019Air Compressors15 2019Air Compressors25	25	0.748	4.596	2.501	0.241	0.241		568.299	0.007	
Air Compressors	2019	2019Air Compressors50	50	1.129	4.596	5.283	0.222	0.222	0.007	568.299	0.101	0.015
Air Compressors Air Compressors	2019	2019Air Compressors30 2019Air Compressors120	120	0.538	3.706	3.718	0.267	0.267	0.007	568.299	0.048	0.015
Air Compressors	2019	2019Air Compressors120 2019Air Compressors175	120	0.338	2.874	3.204	0.20	0.20	0.006	568.299	0.048	0.015
Air Compressors	2019	2019Air Compressors250	250	0.304	2.469	1.132	0.078	0.078	0.000	568.299	0.030	0.015
Air Compressors	2019	2019Air Compressors500	500	0.293	2.193	1.086	0.075	0.075	0.005	568.299	0.027	0.015
Air Compressors	2019	2019Air Compressors750	750	0.294	2.247	1.086	0.076	0.076	0.005	568.299	0.026	0.015
Air Compressors	2019	2019Air Compressors1000	1000	0.324	4.073	1.182	0.102	0.102	0.005	568.299	0.029	0.015
Air Compressors	2020	2020Air Compressors15	15	0.731	4.542	3.546	0.227	0.227	0.008	568.299	0.066	0.015
Air Compressors	2020	2020Air Compressors25	25	0.769	4.538	2.473	0.212	0.212	0.007	568.3	0.069	0.015
Air Compressors	2020	2020Air Compressors50	50	1.001	4.397	5.164	0.25	0.25	0.007	568.299	0.09	0.015
Air Compressors	2020	2020Air Compressors120	120	0.489	3.4	3.698	0.224	0.224	0.006	568.299	0.044	0.015
Air Compressors	2020	2020Air Compressors175	175	0.374	2.558	3.203	0.133	0.133	0.006	568.299	0.033	0.015
Air Compressors	2020	2020Air Compressors250	250	0.288	2.172	1.121	0.069	0.069	0.006	568.299	0.026	0.015
Air Compressors	2020	2020Air Compressors500	500	0.279	1.935	1.076	0.067	0.067	0.005	568.299	0.025	0.015
Air Compressors	2020	2020Air Compressors750	750	0.28	1.982	1.076	0.067	0.067	0.005	568.299	0.025	0.015
Air Compressors	2020	2020Air Compressors1000	1000	0.306	3.828	1.158	0.093	0.093	0.005	568.3	0.027	0.015
Air Compressors	2021	2021Air Compressors15	15	0.717	4.462	3.531	0.214	0.214	0.008	568.299	0.064	0.015
Air Compressors	2021	2021Air Compressors25	25	0.752	4.497	2.446	0.201	0.201	0.007	568.299	0.067	0.015
Air Compressors	2021	2021Air Compressors50	50	0.887	4.221	5.021	0.212	0.212	0.007	568.299	0.08	0.015
Air Compressors	2021	2021Air Compressors120	120	0.442	3.083	3.67	0.19	0.19	0.006	568.299	0.039	0.015
Air Compressors	2021	2021Air Compressors175	175	0.343	2.218	3.192	0.115	0.115	0.006	568.299	0.03	0.015
Air Compressors	2021	2021Air Compressors250	250	0.268	1.859	1.108	0.06	0.06	0.006	568.299	0.024	0.015
Air Compressors	2021	2021Air Compressors500	500	0.261	1.663	1.064	0.058	0.058	0.005	568.299	0.023	0.015
Air Compressors	2021	2021Air Compressors750	750	0.262	1.699	1.064	0.058	0.058	0.005	568.299	0.023	0.015
Air Compressors	2021	2021Air Compressors1000	1000	0.284	3.565	1.134	0.082	0.082	0.005	568.3	0.025	0.015
Bore/Drill Rigs	2018	2018Bore/Drill Rigs15	15	0.7669	4.86917	4.56857	0.3294	0.303	0.0055	554.2038	0.1725	0.014
Bore/Drill Rigs	2018	2018Bore/Drill Rigs25	25	0.7669	4.86917	4.56857	0.3294	0.303	0.0055	554.2038	0.1725	0.014
Bore/Drill Rigs	2018	2018Bore/Drill Rigs50	50	0.7669	4.86917	4.56857	0.3294	0.303	0.0055	554.2038	0.1725	0.014
Bore/Drill Rigs	2018	2018Bore/Drill Rigs120	120	0.269	3.39962	3.32325	0.1844	0.1696	0.0048	479.6719	0.1493	0.012
Bore/Drill Rigs	2018	2018Bore/Drill Rigs175	175	0.2032	2.35662	2.96107	0.1034	0.0952	0.0049	495.0734	0.1541	0.013
Bore/Drill Rigs	2018	2018Bore/Drill Rigs250	250	0.1545	2.15308	1.07328	0.0608	0.056	0.0048	484.5605	0.1509	0.012
Bore/Drill Rigs	2018	2018Bore/Drill Rigs500	500	0.1349	1.74562	1.03203	0.0522	0.0481	0.0048	485.6893	0.1512	0.012
Bore/Drill Rigs	2018	2018Bore/Drill Rigs750	750	0.126	1.67873	1.00559	0.0545	0.0501	0.0049	489.7301	0.1525	0.013
Bore/Drill Rigs	2018	2018Bore/Drill Rigs1000	1000	0.1252	3.03153	0.97772	0.0604	0.0556	0.0049		0.1526	0.013
Bore/Drill Rigs	2019	2019Bore/Drill Rigs15	15	0.7216	4.71795	4.49723	0.3025	0.2783	0.0055	545.293	0.1725	0.014
Bore/Drill Rigs	2019	2019Bore/Drill Rigs25	25	0.7216	4.71795	4.49723	0.3025	0.2783	0.0055	545.293	0.1725	
Bore/Drill Rigs	2019	2019Bore/Drill Rigs50	50	0.7216	4.71795	4.49723	0.3025	0.2783	0.0055	545.293	0.1725	0.014
Bore/Drill Rigs	2019	2019Bore/Drill Rigs120	120	0.2672	3.32102	3.33202	0.1802	0.1658	0.0048	472.4527	0.1495	0.012
Bore/Drill Rigs	2019	2019Bore/Drill Rigs175	175	0.1813	2.01775	2.95563	0.0876	0.0806	0.0049	487.3552	0.1542	0.012
Bore/Drill Rigs	2019	2019Bore/Drill Rigs250	250	0.1434	1.8943	1.06058	0.0537	0.0494	0.0048	475.7896	0.1505	0.012
Bore/Drill Rigs	2019	2019Bore/Drill Rigs500	500	0.1292	1.55098	1.03449	0.0479	0.0441	0.0048	477.0462	0.1509	0.012
Bore/Drill Rigs	2019	2019Bore/Drill Rigs750	750	0.1165	1.44865	0.97074	0.0478	0.044	0.0049	481.8363	0.1524	0.012
Bore/Drill Rigs	2019	2019Bore/Drill Rigs1000	1000	0.1294	3.04139	0.98342	0.0609	0.056	0.0049		0.1526	0.012
Bore/Drill Rigs	2020	2020Bore/Drill Rigs15	15	0.7158	4.6451	4.51013	0.2941	0.2706	0.0055	535.2948	0.1731	0.014
Bore/Drill Rigs	2020	2020Bore/Drill Rigs25	25	0.7158	4.6451	4.51013	0.2941	0.2706	0.0055	535.2948	0.1731	0.014
Bore/Drill Rigs	2020	2020Bore/Drill Rigs50	50	0.7158	4.6451	4.51013	0.2941	0.2706	0.0055	535.2948	0.1731	0.014
Bore/Drill Rigs	2020	2020Bore/Drill Rigs120	120	0.2462	3.06601	3.32347	0.1586	0.1459	0.0048	463.5827	0.1499	0.012
Bore/Drill Rigs	2020	2020Bore/Drill Rigs175	175	0.1743	1.87149	2.96948	0.0822	0.0757	0.0049	477.722	0.1545	0.012

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Equipment Type	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Bore/Drill Rigs	2020	2020Bore/Drill Rigs250	250	0.1424	1.80732	1.06766		0.0479	0.0048	466.8342	0.151	0.012
Bore/Drill Rigs	2020	2020Bore/Drill Rigs500	500	0.1245	1.40938		0.0446	0.041	0.0048	466.8219	0.151	0.012
Bore/Drill Rigs	2020	2020Bore/Drill Rigs750	750	0.1086	1.23085			0.0377	0.0049	473.6679	0.1532	0.012
Bore/Drill Rigs	2020	2020Bore/Drill Rigs1000	1000	0.1329	3.05008		0.0612	0.0563	0.0049	471.8492	0.1526	0.012
Bore/Drill Rigs	2021	2021Bore/Drill Rigs15 2021Bore/Drill Rigs25	15 25	0.7106	4.63432 4.63432	4.54836 4.54836	0.291	0.2677	0.0055	535.3782 535.3782	0.1732	0.014
Bore/Drill Rigs Bore/Drill Rigs	2021 2021	2021Bore/Drill Rigs25	25 50	0.7106	4.63432	4.54836	0.291	0.2677	0.0055	535.3782	0.1732	0.014
Bore/Drill Rigs	2021	2021Bore/Drill Rigs120	120	0.2169	2.73675		0.291	0.2677	0.0055	464.9725	0.1732	0.014
Bore/Drill Rigs	2021	2021Bore/Drill Rigs120	120	0.2109	1.5983	2.9614	0.0697	0.0641	0.0048	404.9723	0.1504	0.012
Bore/Drill Rigs	2021	2021Bore/Drill Rigs250	250	0.1342	1.55102			0.0041	0.0049	467.9916	0.1543	0.012
Bore/Drill Rigs	2021	2021Bore/Drill Rigs500	500	0.1325	1.22069			0.0433	0.0048	469.8158	0.1514	0.012
Bore/Drill Rigs	2021	2021Bore/Drill Rigs500	750	0.0976	0.95517			0.0307	0.0049	474.079	0.1513	0.012
Bore/Drill Rigs	2021	2021Bore/Drill Rigs1000	1000	0.1359	3.05759		0.0614	0.0565	0.0049	471.8158	0.1526	0.012
Cement and Mortar Mixers	2018	2018Cement and Mortar Mixers15	15	0.661	4.142	3.469	0.163	0.163	0.008	568.299	0.059	0.015
Cement and Mortar Mixers	2018	2018Cement and Mortar Mixers25	25	0.749	4.504	2.44	0.205	0.205	0.007	568.299	0.067	0.015
Cement and Mortar Mixers	2019	2019Cement and Mortar Mixers15	15	0.661	4.142	3.469	0.162	0.162	0.008	568.299	0.059	0.015
Cement and Mortar Mixers	2019	2019Cement and Mortar Mixers25	25	0.735	4.469	2.417	0.196	0.196	0.007	568.299	0.066	0.015
Cement and Mortar Mixers	2020	2020Cement and Mortar Mixers15	15	0.661	4.142	3.47	0.161	0.161	0.008	568.299	0.059	0.015
Cement and Mortar Mixers	2020	2020Cement and Mortar Mixers25	25	0.723	4.442	2.397	0.187	0.187	0.007	568.299	0.065	0.015
Cement and Mortar Mixers	2021	2021Cement and Mortar Mixers15	15	0.661	4.142	3.469	0.161	0.161	0.008	568.299	0.059	0.015
Cement and Mortar Mixers	2021	2021Cement and Mortar Mixers25	25	0.712	4.419	2.381	0.18	0.18	0.007	568.299	0.064	0.015
Concrete/Industrial Saws	2018	2018Concrete/Industrial Saws25	25	0.685	4.332	2.339	0.161	0.161	0.007	568.299	0.061	0.015
Concrete/Industrial Saws	2018	2018Concrete/Industrial Saws50	50	1.032	4.492	4.766	0.277	0.277	0.007	568.299	0.093	0.015
Concrete/Industrial Saws	2018	2018Concrete/Industrial Saws120	120	0.498	3.754	3.571	0.256	0.256	0.006	568.299	0.044	0.015
Concrete/Industrial Saws	2018	2018Concrete/Industrial Saws175	175	0.359	2.945	3.072	0.145	0.145	0.006	568.299	0.032	0.015
Concrete/Industrial Saws	2019	2019Concrete/Industrial Saws25	25	0.685	4.332	2.339	0.161	0.161	0.007	568.299	0.061	0.015
Concrete/Industrial Saws	2019	2019Concrete/Industrial Saws50	50	0.899	4.338	4.645	0.242	0.242	0.007	568.299	0.081	0.015
Concrete/Industrial Saws	2019	2019Concrete/Industrial Saws120	120	0.443	3.441	3.55	0.22	0.22	0.006	568.3	0.04	0.015
Concrete/Industrial Saws	2019	2019Concrete/Industrial Saws175	175	0.33	2.618	3.072	0.128	0.128	0.006	568.299	0.029	0.015
Concrete/Industrial Saws	2020	2020Concrete/Industrial Saws25	25	0.685	4.332	2.339	0.161	0.161	0.007	568.299	0.061	0.015
Concrete/Industrial Saws	2020	2020Concrete/Industrial Saws50	50	0.798	4.196	4.552	0.212	0.212	0.007	568.299	0.072	0.015
Concrete/Industrial Saws	2020	2020Concrete/Industrial Saws120	120	0.401	3.163	3.535	0.19	0.19	0.006	568.299	0.036	0.015
Concrete/Industrial Saws	2020	2020Concrete/Industrial Saws175	175	0.306	2.324	3.072	0.114	0.114	0.006	568.299	0.027	0.015
Concrete/Industrial Saws	2021	2021Concrete/Industrial Saws25	25	0.685	4.332	2.34	0.161	0.161	0.007	568.299	0.061	0.015
Concrete/Industrial Saws	2021	2021Concrete/Industrial Saws50	50	0.722	4.063	4.481	0.184	0.184	0.007	568.3	0.065	0.015
Concrete/Industrial Saws	2021	2021Concrete/Industrial Saws120	120	0.369	2.913	3.523	0.166	0.166	0.006	568.299	0.033	0.015
Concrete/Industrial Saws	2021	2021Concrete/Industrial Saws175	175	0.286	2.055	3.072	0.101	0.101	0.006	568.299	0.025	0.015
Cranes	2018	2018Cranes50	50	2.0722	6.00385	7.24744	0.624	0.5741	0.0053	538.1219	0.1675	0.014
Cranes	2018	2018Cranes120 2018Cranes175	120	0.9316	7.93075		0.5831	0.5364	0.0048	488.1172	0.152	0.013
Cranes	2018 2018	2018Cranes175 2018Cranes250	175 250	0.6212	6.5572 5.77298	3.66571 2.13445	0.3511 0.2499	0.323	0.0049	493.0451 491.4069	0.1535	0.013
Cranes	2018	2018Cranes500	500	0.3697	4.63433	3.1871	0.2499	0.2299	0.0049	491.4069	0.153	0.013
Cranes Cranes	2018	2018Cranes750	750	0.3697	3.7688	1.61304	0.1368	0.172	0.0049	490.8912	0.1528	0.013
	2018	2018Cranes9999	9999	0.2706	2.33544		0.0585	0.0538	0.0049	489.0536	0.1522	0.013
Cranes Cranes	2018	2019Cranes50	50	2.0454	5.95197			0.5657	0.0049	529.4626	0.1527	0.013
Cranes	2019	2019Cranes120	120	0.8032	6.95786		0.5005	0.4604	0.0033	480.3251	0.1073	0.014
Cranes	2019	2019Cranes175	175	0.5677	5.94857	3.5982	0.3177	0.2923	0.0049	485.1817	0.1535	0.012
Cranes	2019	2019Cranes250	250	0.4266	5.0842	1.94079	0.2155	0.1983	0.0049	483.4616	0.153	0.012
Cranes	2019	2019Cranes500	500	0.3491	4.29654	2.96893	0.173	0.1592	0.0049	483.1422	0.1529	0.012
Cranes	2019	2019Cranes750	750	0.252	3.42803		0.1238	0.1139	0.0049	481.1192	0.1522	0.012
Cranes	2019	2019Cranes9999	9999	0.1723	2.34854		0.0595	0.0547	0.0049	482.5446	0.1527	0.012
Cranes	2020	2020Cranes50	50	2.0835	5.98471	7.37625	0.6237	0.5738	0.0053	517.9263	0.1675	0.013
Cranes	2020	2020Cranes120	120	0.7319	6.38117	4.17141	0.4529	0.4167	0.0048	469.8821	0.152	0.012
Cranes	2020	2020Cranes175	175	0.5369	5.5697	3.56232	0.2978	0.274	0.0049	474.5939	0.1535	0.012
Cranes	2020	2020Cranes250	250	0.384	4.563	1.790	0.188	0.173	0.005	472.949	0.153	0.012
Cranes	2020	2020Cranes500	500	0.321	3.862	2.660	0.155	0.142	0.005	472.558	0.153	0.012
Cranes	2020	2020Cranes750	750	0.2418	3.10471	1.44353	0.116	0.1067	0.0049	470.4254	0.1521	0.01205
Cranes	2020	2020Cranes9999	9999	0.1822	2.3614	0.99943		0.0556	0.0049	472.0545	0.1527	0.012092
Cranes	2021	2021Cranes50	50	2.1145	6.01375				0.0053	517.8995	0.1675	
Cranes	2021	2021Cranes120	120	0.6514	5.73085			0.3664	0.0048	469.8867	0.152	0.012037
Cranes	2021	2021Cranes175	175	0.4984	5.1125	3.51648		0.251	0.0049	474.5458	0.1535	
Cranes	2021	2021Cranes250	250	0.3495	4.10439		0.1666		0.0049	472.9057	0.1529	
Cranes	2021	2021Cranes500	500	0.2954	3.44253	2.44833	0.1385	0.1274	0.0049	472.4553	0.1528	
Cranes	2021	2021Cranes750	750	0.2278	2.72739			0.0982	0.0049	470.5495	0.1522	
	2021	2021Cranes9999	9999	0.1918	2.37402	1.00751	0.0614	0.0565	0.0049	472.0545	0.1527	0.012092
Crawler Tractors	2018	2018Crawler Tractors50	50	2.4455	6.16323		0.7038	0.6475	0.0053	536.1409	0.1669	
Crawler Tractors	2018	2018Crawler Tractors120	120	0.7979	6.72257		0.5658	0.5205	0.0049	494.9217	0.1541	
Crawler Tractors	2018	2018Crawler Tractors175	175	0.5549	5.8588	3.42131	0.3255	0.2994	0.0049	490.0002	0.1525	0.012552
Crawler Tractors	2018	2018Crawler Tractors250	250	0.3983	5.28959		0.2001	0.1841	0.0049	491.606	0.153	0.012593
Crawler Tractors	2018	2018Crawler Tractors500 2018Crawler Tractors750	500	0.344	4.37324			0.1559	0.0049	493.5104	0.1536	
Crawler Tractors	2018		750	0.2957	3.8336	1.4447	0.1415	0.1301	0.0049	491.2659	0.1529	
Crawler Tractors	2018 2019	2018Crawler Tractors1000 2019Crawler Tractors50	1000 50	0.4889	7.56366 5.85476		0.2249	0.2069	0.0049	494.1052 525.9767	0.1538	
Crawler Tractors				0.7572	5.85476 6.39347	4.08842	0.6404	0.5892	0.0053	525.9767 486.9909	0.1664	0.013473
Crawler Tractors	2019	2019Crawler Tractors120 2019Crawler Tractors175	120									
Crawler Tractors Crawler Tractors	2019 2019	2019Crawler Tractors175 2019Crawler Tractors250	175 250	0.5169	5.38191 4.9721	3.37886 1.60445		0.2756	0.0049	481.6222 483.4489	0.1524	
Crawler Tractors	2019 2019	2019Crawler Tractors250 2019Crawler Tractors500	250 500	0.3796	4.9721 3.93412		0.1875	0.1725	0.0049	483.4489 485.8645	0.153	0.012384
Crawler Tractors	2019	2019Crawler Tractors750	750	0.2663	3.34253			0.1406	0.0049	483.3879	0.1537	
Crawler Tractors	2019 2019	2019Crawler Tractors/50 2019Crawler Tractors/1000	1000	0.2663	3.34253 7.21215		0.123	0.1132	0.0049	483.3879	0.1529	
Crawler Tractors	2019	2019Crawler Tractors50	50	2.0528	5.64276		0.2106	0.1938	0.0049	400.2545 515.679	0.1538	
Crawler Tractors	2020	2020Crawler Tractors120	120	0.7148	6.00933			0.5439	0.0053	476.3284	0.1666	
Crawler Tractors	2020	2020Crawler Tractors175	120	0.4761	4.87226		0.2722	0.4604	0.0049	470.3284	0.1541	
	2020	2020Crawler Tractors250	250	0.36	4.63225		0.1746		0.0049	472.941	0.1523	0.012005
Crawler Tractors												
Crawler Tractors Crawler Tractors					3,62175							
Crawler Tractors Crawler Tractors Crawler Tractors	2020 2020 2020	2020Crawler Tractors500 2020Crawler Tractors750	500 750	0.3013	3.62175 3.13716	2.0875	0.1409	0.1296	0.0049	475.2338 473.3119	0.1537	

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Equipment Type	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Crawler Tractors	2020	2020Crawler Tractors1000	1000	0.463	7.23682	2.02764	0.212	0.195	0.0049	475.6525	0.1538	0.012184
Crawler Tractors	2021	2021Crawler Tractors50	50	2.064	5.61511	7.34869	0.5906	0.5433	0.0053	516.1077	0.1669	0.01322
Crawler Tractors	2021	2021Crawler Tractors120	120	0.6728	5.65746	4.00549	0.4657	0.4285	0.0049	476.437	0.1541	0.012204
Crawler Tractors	2021 2021	2021Crawler Tractors175 2021Crawler Tractors250	175 250	0.4356	4.3947 4.33394	3.30982 1.51456	0.2445 0.1631	0.225	0.0049	471.421 472.9246	0.1525	0.012076 0.012114
Crawler Tractors Crawler Tractors	2021	2021Crawler Tractors500	500	0.3427	4.33394	2.02434	0.1631	0.15	0.0049	472.9246	0.153	0.012114
Crawler Tractors	2021	2021Crawler Tractors750	750	0.2393	2.82478	1.26985	0.129	0.0955	0.0049	474.4843	0.1535	0.012134
Crawler Tractors	2021	2021Crawler Tractors1000	1000	0.3993	6.3992	1.89563	0.1816	0.1671	0.0049	471.8224	0.1526	0.012086
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment50	50	1.225	4.657	5.461	0.31	0.31	0.007	568.299	0.11	0.014557
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment120	120	0.58	3.881	3.763	0.284	0.284	0.006	568.299	0.052	0.014557
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment175	175	0.427	3.049	3.234	0.161	0.161	0.006	568.299	0.038	0.014557
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment250	250	0.322	2.622	1.146	0.083	0.083	0.006	568.299	0.029	0.014557
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment500	500	0.309	2.312	1.099	0.079	0.079	0.005	568.299	0.027	0.014557
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment750	750	0.308	2.358	1.097	0.079	0.079	0.005	568.299	0.027	0.014557
Crushing/Proc. Equipment	2018	2018Crushing/Proc. Equipment9999	9999	0.361	4.168	1.198	0.107	0.107	0.005	568.299	0.032	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment50	50	1.064	4.495	5.316	0.269	0.269	0.007	568.299	0.096	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment120	120	0.519	3.544	3.739	0.241	0.241	0.006	568.299	0.046	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment175	175	0.394	2.7	3.233	0.141	0.141	0.006	568.299	0.035	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment250	250	0.304	2.3	1.134	0.074	0.074	0.006	568.299	0.027	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment500	500	0.295	2.046	1.087	0.071	0.071	0.005	568.299	0.026	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment750	750	0.294	2.085	1.085	0.071	0.071	0.005	568.299	0.026	0.014557
Crushing/Proc. Equipment	2019	2019Crushing/Proc. Equipment9999	9999	0.345	3.927	1.173	0.098	0.098	0.005	568.299	0.031	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment50	50	0.947	4.347	5.211	0.233	0.233	0.007	568.299	0.085	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment120	120	0.473	3.249	3.722	0.206	0.206	0.006	568.299	0.042	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment175	175	0.367	2.392	3.234	0.124	0.124	0.006	568.299	0.033	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment250	250	0.289	2.014	1.125	0.065	0.065	0.006	568.299	0.026	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment500	500	0.281	1.799	1.078	0.063	0.063	0.005	568.299	0.025	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment750	750	0.281	1.835	1.077	0.063	0.063	0.005	568.299	0.025	0.014557
Crushing/Proc. Equipment	2020	2020Crushing/Proc. Equipment9999	9999	0.329	3.699	1.153	0.089	0.089	0.005	568.299	0.029	0.014557
Crushing/Proc. Equipment	2021	2021Crushing/Proc. Equipment50	50	0.862	4.211	5.136	0.201	0.201	0.007	568.299	0.077	0.014557
Crushing/Proc. Equipment	2021 2021	2021Crushing/Proc. Equipment120 2021Crushing/Proc. Equipment175	120 175	0.438	2.989 2.114	3.711 3.235	0.178	0.178	0.006	568.299 568.299	0.039	0.014557 0.014557
Crushing/Proc. Equipment	2021	••••••••••••••••••••••••••••••••••••••	250	0.344	1.756	3.235	0.109	0.109	0.006	568.299	0.031	0.014557
Crushing/Proc. Equipment		2021Crushing/Proc. Equipment250 2021Crushing/Proc. Equipment500	250 500	-						568.3	0.024	0.014557
Crushing/Proc. Equipment	2021 2021	2021Crushing/Proc. Equipment500 2021Crushing/Proc. Equipment750	750	0.268	1.574 1.606	1.072	0.055	0.055	0.005	568.299	0.024	0.014557
Crushing/Proc. Equipment Crushing/Proc. Equipment	2021	2021Crushing/Proc. Equipment/9999	9999	0.266	3.487	1.136	0.055	0.055	0.005	568.299	0.024	0.014557
Dumpers/Tenders	2021	2018Dumpers/Tenders25	25	0.686	4.35	2.339	0.08	0.08	0.005	568.299	0.028	0.014557
Dumpers/Tenders	2010	2019Dumpers/Tenders25 2019Dumpers/Tenders25	25	0.686	4.341	2.339	0.167	0.167	0.007	568.299	0.061	0.014557
Dumpers/Tenders	2010	2020Dumpers/Tenders25	25	0.685	4.336	2.339	0.165	0.165	0.007	568.299	0.061	0.014557
Dumpers/Tenders	2020	2021Dumpers/Tenders25	25	0.685	4.333	2.339	0.163	0.163	0.007	568.299	0.061	0.014557
Excavators	2018	2018Excavators25	25	0.6874	4.39518	4.70022	0.2841	0.2614	0.0054	545.3468	0.1698	0.013969
Excavators	2018	2018Excavators50	50	0.6874	4.39518	4.70022	0.2841	0.2614	0.0054	545.3468	0.1698	0.013969
Excavators	2018	2018Excavators120	120	0.3681	3.76366	3.56214	0.2505	0.2304	0.0048	486.056	0.1513	0.012451
Excavators	2018	2018Excavators175	175	0.2731	2.92361	3.09338	0.1418	0.1304	0.0049	490.6725	0.1528	0.012569
Excavators	2018	2018Excavators250	250	0.2019	2.59377	1.15209	0.0788	0.0725	0.0049	490.2569	0.1526	0.012558
Excavators	2018	2018Excavators500	500	0.1746	2.05045	1.13951	0.0664	0.0611	0.0049	489.1025	0.1523	0.012529
Excavators	2018	2018Excavators750	750	0.1889	2.26567	1.22359	0.0759	0.0698	0.0048	487.6528	0.1518	0.012492
Excavators	2019	2019Excavators25	25	0.6374	4.19867	4.59698	0.2503	0.2303	0.0054	536.9132	0.1699	0.013753
Excavators	2019	2019Excavators50	50	0.6374	4.19867	4.59698	0.2503	0.2303	0.0054	536.9132	0.1699	0.013753
Excavators	2019	2019Excavators120	120	0.3248	3.36874	3.52421	0.2107	0.1938	0.0048	478.2452	0.1513	0.012251
Excavators	2019	2019Excavators175	175	0.2462	2.53264	3.08163	0.1221	0.1124	0.0049	482.6838	0.1527	0.012364
Excavators	2019	2019Excavators250	250	0.1856	2.24187	1.12671	0.068	0.0625	0.0049	482.2503	0.1526	0.012353
Excavators	2019	2019Excavators500	500	0.1621	1.77986	1.1135	0.0578	0.0532	0.0049	481.2361	0.1523	0.012327
Excavators	2019	2019Excavators750	750	0.1762	1.98661	1.17289	0.0671	0.0618	0.0048	479.2876	0.1516	0.012277
Excavators	2020	2020Excavators25	25	0.5932	4.03131	4.50032	0.2222	0.2044	0.0054	525.3675	0.1699	0.013458
Excavators	2020	2020Excavators50	50	0.5932	4.03131	4.50032	0.2222	0.2044	0.0054	525.3675	0.1699	
Excavators	2020	2020Excavators120	120	0.2992	3.08964	3.50495	0.1848	0.17	0.0048	468.0546	0.1514	0.01199
Excavators	2020	2020Excavators175	175	0.2314	2.27838	3.08597	0.1104	0.1015	0.0049	472.2891	0.1527	0.012098
Excavators	2020 2020	2020Excavators250 2020Excavators500	250 500	0.1774	2.02738	1.11778	0.0614	0.0565	0.0049	471.8828 470.2956	0.1526	0.012088
Excavators Excavators	2020	2020Excavators500 2020Excavators750	500 750	0.1534	1.57199	1.1016	0.0518	0.0476	0.0049	470.2956 468.8706	0.1521	0.012047
Excavators Excavators	2020	2020Excavators750 2021Excavators25	25	0.1697	3.91866	4.46094	0.0612	0.0563	0.0048	468.8706 525.3774	0.1516	0.01201
Excavators	2021	2021Excavators25 2021Excavators50	25 50	0.5624	3.91866	4.46094	0.2016	0.1855	0.0054	525.3774	0.1699	0.013458
Excavators	2021	2021Excavators120	120	0.3024	2.84891	3.49196	0.1606	0.1855	0.0034	467.7906	0.1513	0.013438
Excavators	2021	2021Excavators175	175	0.2164	2.03357	3.08975	0.0986	0.0907	0.0040	472.3586	0.1513	0.0121
Excavators	2021	2021Excavators250	250	0.1628	1.70572	1.10324	0.0523	0.0307	0.0049	471.7931	0.1526	0.012085
Excavators	2021	2021Excavators500	500	0.143	1.33174	1.08777	0.0446	0.0401	0.0049	469.6156	0.1519	0.012000
Excavators	2021	2021Excavators750	750	0.1653	1.61856	1.14978	0.0562	0.0517	0.0049	469.547	0.1519	0.012028
Forklifts	2018	2018Forklifts50	50	1.3934	5.05181	6.10276	0.4466	0.4109	0.0054	545.9188	0.17	0.013984
Forklifts	2018	2018Forklifts120	120	0.5674	5.0153	3.85819	0.4002	0.3682	0.0049	489.8657	0.1525	0.012548
Forklifts	2018	2018Forklifts175	175	0.4272	4.42984	3.33646	0.2412	0.2219	0.0049	490.4659	0.1527	0.012564
Forklifts	2018	2018Forklifts250	250	0.4252	4.93757	1.83475	0.2072	0.1906	0.0049	491.7326	0.1531	0.012596
Forklifts	2018	2018Forklifts500	500	0.282	3.01864	1.87814	0.1245	0.1146	0.0049	492.0335	0.1532	0.012604
Forklifts	2019	2019Forklifts50	50	1.2437	4.86189	5.88034	0.4009	0.3688	0.0054	537.1608	0.17	0.01376
Forklifts	2019	2019Forklifts120	120	0.5095	4.54965	3.80391	0.3525	0.3243	0.0049	482.0069	0.1525	0.012347
Forklifts	2019	2019Forklifts175	175	0.3823	3.86458	3.28831	0.2102	0.1934	0.0049	482.5975	0.1527	0.012362
Forklifts	2019	2019Forklifts250	250	0.3743	4.2498	1.6773	0.1753	0.1613	0.0049	483.8438	0.1531	0.012394
Forklifts	2019	2019Forklifts500	500	0.2675	2.75148	1.814	0.112	0.103	0.0049	484.1399	0.1532	0.012402
FUIKIIIIS	2020	2020Forklifts50	50	1.1238	4.68572	5.70563	0.3601	0.3313	0.0054	525.4833	0.17	0.013461
Forklifts				0 1505	4.13299	3.75954	0.3079	0.2833	0.0049	471.5285	0.1525	0.012079
	2020	2020Forklifts120	120	0.4587							0.1020	
Forklifts	2020 2020	2020Forklifts175	175	0.3381	3.3196	3.24885	0.1797	0.1653	0.0049	472.1062	0.1527	0.012093
Forklifts Forklifts	2020	2020Forklifts175 2020Forklifts250	175 250	0.3381 0.2928	3.3196 3.24149	3.24885 1.44178	0.1797 0.1259	0.1653 0.1158	0.0049 0.0049	472.1062 473.3255	0.1527 0.1531	0.012093 0.012125
Forklifts Forklifts Forklifts	2020 2020	2020Forklifts175 2020Forklifts250 2020Forklifts500	175	0.3381 0.2928 0.2513	3.3196 3.24149 2.43991	3.24885 1.44178 1.47807	0.1797 0.1259 0.0967	0.1653 0.1158 0.0889	0.0049 0.0049 0.0049	472.1062 473.3255 473.6151	0.1527	0.012093 0.012125 0.012132
Forklifts Forklifts Forklifts Forklifts	2020 2020 2020	2020Forklifts175 2020Forklifts250	175 250	0.3381 0.2928	3.3196 3.24149	3.24885 1.44178	0.1797 0.1259	0.1653 0.1158	0.0049 0.0049	472.1062 473.3255	0.1527 0.1531	0.012093 0.012125

Equipment Type										r	r	1
	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Forklifts	2021	2021Forklifts175	175	0.3083	2.9207	3.23128	0.1577	0.1451	0.0049	472.1062	0.1527	0.012093
Forklifts	2021	2021Forklifts250	250	0.2489	2.58195	1.33672	0.0992	0.0912	0.0049	473.3255	0.1531	0.012125
Forklifts	2021	2021Forklifts500	500	0.2536	2.30266	1.48481	0.0938	0.0863	0.0049	473.6151	0.1532	0.012132
Generator Sets	2018	2018Generator Sets15	15	0.679	4.728	3.58	0.237	0.237	0.008	568.299	0.061	0.014557
Generator Sets	2018	2018Generator Sets25	25	0.744	4.661	2.531	0.224	0.224	0.007	568.299	0.067	0.014557
Generator Sets	2018	2018Generator Sets50	50	0.895	4.366	4.182	0.253	0.253	0.007	568.299	0.08	0.014557
Generator Sets	2018	2018Generator Sets120	120	0.461	3.752	3.418	0.239	0.239	0.006	568.299	0.041	0.014557
Generator Sets	2018	2018Generator Sets175	175	0.319	2.989	2.93	0.133	0.133	0.006	568.299	0.028	0.014557
Generator Sets	2018	2018Generator Sets250	250	0.226	2.582	1.048	0.072	0.072	0.006	568.299	0.02	0.014557
Generator Sets	2018	2018Generator Sets500	500	0.211	2.31	1.028	0.069	0.069	0.005	568.299	0.019	0.014557
Generator Sets	2018	2018Generator Sets750	750	0.215	2.37	1.028	0.07	0.07	0.005	568.299	0.019	0.014557
Generator Sets	2018	2018Generator Sets9999	9999	0.28	4.058	1.128	0.095	0.095	0.005	568.299	0.025	0.014557
Generator Sets	2019	2019Generator Sets15	15	0.662	4.617	3.562	0.224	0.224	0.008	568.299	0.059	0.014557
Generator Sets	2019	2019Generator Sets25	25	0.731	4.596	2.501	0.214	0.214	0.007	568.299	0.066	0.014557
Generator Sets	2019	2019Generator Sets50	50	0.779	4.215	4.076	0.222	0.222	0.007	568.299	0.07	0.014557
Generator Sets	2019	2019Generator Sets120	120	0.405	3.446	3.396	0.206	0.206	0.006	568.299	0.036	0.014557
Generator Sets	2019	2019Generator Sets175	175	0.29	2.669	2.929	0.118	0.118	0.006	568.299	0.026	0.014557
Generator Sets	2019	2019Generator Sets250	250	0.211	2.285	1.036	0.064	0.064	0.006	568.299	0.019	0.014557
Generator Sets	2019	2019Generator Sets500	500	0.199	2.056	1.015	0.062	0.062	0.005	568.299	0.018	0.014557
Generator Sets	2019	2019Generator Sets750	750	0.202	2.104	1.015	0.062	0.062	0.005	568.299	0.018	0.014557
Generator Sets	2019	2019Generator Sets9999	9999	0.261	3.829	1.103	0.087	0.087	0.005	568.299	0.023	0.014557
Generator Sets	2020	2020Generator Sets15	15	0.646	4.516	3.546	0.212	0.212	0.008	568.299	0.058	0.014557
Generator Sets	2020	2020Generator Sets25	25	0.721	4.538	2.473	0.205	0.205	0.007	568.299	0.065	0.014557
Generator Sets	2020	2020Generator Sets50	50	0.691	4.075	3.995	0.194	0.194	0.007	568.299	0.062	0.014557
Generator Sets	2020	2020Generator Sets120	120	0.364	3.173	3.38	0.179	0.179	0.006	568.299	0.032	0.014557
Generator Sets	2020	2020Generator Sets175	175	0.267	2.38	2.93	0.105	0.105	0.006	568.299	0.024	0.014557
Generator Sets	2020	2020Generator Sets250	250	0.198	2.016	1.026	0.057	0.057	0.006	568.299	0.017	0.014557
Generator Sets	2020	2020Generator Sets500	500	0.188	1.816	1.005	0.055	0.055	0.005	568.299	0.017	0.014557
Generator Sets	2020	2020Generator Sets750	750	0.191	1.858	1.005	0.056	0.056	0.005	568.299	0.017	0.014557
Generator Sets	2020	2020Generator Sets9999	9999	0.242	3.608	1.082	0.079	0.079	0.005	568.3	0.021	0.014557
Generator Sets	2021	2021Generator Sets15	15	0.634	4.441	3.531	0.201	0.201	0.008	568.299	0.057	0.014557
Generator Sets	2021	2021Generator Sets25	25	0.712	4.497	2.446	0.196	0.196	0.007	568.299	0.064	0.014557
Generator Sets	2021	2021Generator Sets50	50	0.613	3.916	3.905	0.165	0.165	0.007	568.299	0.055	0.014557
Generator Sets	2021	2021Generator Sets120	120	0.326	2.888	3.361	0.153	0.153	0.006	568.299	0.029	0.014557
Generator Sets	2021	2021Generator Sets175	175	0.243	2.068	2.925	0.091	0.091	0.006	568.299	0.021	0.014557
Generator Sets	2021	2021Generator Sets250	250	0.183	1.73	1.016	0.049	0.049	0.006	568.299	0.016	0.014557
Generator Sets	2021	2021Generator Sets500	500	0.175	1.562	0.996	0.048	0.048	0.005	568.299	0.015	0.014557
Generator Sets	2021	2021Generator Sets750	750	0.177	1.596	0.996	0.048	0.048	0.005	568.299	0.016	0.014557
Generator Sets	2021	2021Generator Sets9999	9999	0.22	3.372	1.06	0.07	0.07	0.005	568.3	0.019	0.014557
Graders	2018	2018Graders50	50	2.8087	6.17962	8.62631	0.7895	0.7264	0.005	511.9098	0.1594	0.013113
Graders	2018	2018Graders120	120	1.0752	8.51954	4.69711	0.6971	0.6413	0.0048	487.6979	0.1518	
Graders	2018	2018Graders175	175	0.6614	6.60465	3.70957	0.3713	0.3416	0.0049	497.3767	0.1548	
Graders	2018	2018Graders250	250	0.3843	5.27094	1.41595	0.1713	0.1576	0.0049	495.431	0.1542	0.012691
Graders	2018	2018Graders500	500	0.3243	3.34465	1.56446	0.1295	0.1191	0.0049	490.5758	0.1527	0.012566
Graders	2018	2018Graders750	750	0.353	2.543	1.286	0.09	0.09	0.005	568.299	0.031	0.014557
Graders	2019	2019Graders50	50	2.6164	5.94463	8.27912	0.7367	0.6778	0.005	503.7509	0.1594	0.012904
Graders	2019	2019Graders120	120	1.0321	8.1592	4.6424	0.6653	0.612	0.0048	479.9011	0.1518	0.012293
Graders	2019	2019Graders175	175	0.6088	6.01354	3.65586	0.3365	0.3096	0.0049	489.0419	0.1547	0.012527
Graders	2019	2019Graders250	250	0.3599	4.86575	1.35927	0.1562	0.1437	0.0049	486.3288	0.1539	0.012458
Graders	2019	2019Graders500	500	0.3227	3.21794	1.52849	0.1244	0.1145	0.0049	482.5879	0.1527	0.012362
Graders	2019	2019Graders750	750	0.335	2.276	1.255	0.08	0.08	0.005	568.299	0.03	0.014557
Graders	2020	2020Graders50	50	2.5164	5.82549	8.13394	0.7086	0.6519	0.005	492.8615		
Graders											0.1594	0.012625
Graders	2020	2020Graders120	120	0.976	7.72513	4.56142	0.622	0.5722	0.0048	469.3371	0.1594	0.012625
	2020 2020			0.976	7.72513 5.53045	4.56142 3.62102	0.622	0.5722 0.2838	0.0048		0.1594 0.1518 0.1546	0.012022
Graders		2020Graders120	120	-						469.3371	0.1518	0.012022 0.012245
	2020	2020Graders120 2020Graders175	120 175	0.5667	5.53045	3.62102	0.3085	0.2838	0.0049	469.3371 478.0403	0.1518 0.1546	0.012022 0.012245 0.012175
Graders	2020 2020	2020Graders120 2020Graders175 2020Graders250	120 175 250	0.5667 0.3519	5.53045 4.67787	3.62102 1.34183	0.3085 0.1495	0.2838 0.1376	0.0049	469.3371 478.0403 475.3037	0.1518 0.1546 0.1537	0.012022 0.012245 0.012175
Graders Graders	2020 2020 2020	2020Graders120 2020Graders175 2020Graders250 2020Graders500	120 175 250 500	0.5667 0.3519 0.322	5.53045 4.67787 3.10731	3.62102 1.34183 1.5256	0.3085 0.1495 0.1206	0.2838 0.1376 0.111	0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795	0.1518 0.1546 0.1537 0.1526	0.012022 0.012245 0.012175 0.01209 0.014557
Graders Graders Graders	2020 2020 2020 2020	2020Graders120 2020Graders250 2020Graders500 2020Graders750 2020Graders50 2021Graders50 2021Graders120	120 175 250 500 750	0.5667 0.3519 0.322 0.319	5.53045 4.67787 3.10731 2.031	3.62102 1.34183 1.5256 1.229	0.3085 0.1495 0.1206 0.072	0.2838 0.1376 0.111 0.072	0.0049 0.0049 0.0049 0.005	469.3371 478.0403 475.3037 471.9795 568.299	0.1518 0.1546 0.1537 0.1526 0.028	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627
Graders Graders Graders Graders	2020 2020 2020 2020 2020 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders750 2021Graders50	120 175 250 500 750 50	0.5667 0.3519 0.322 0.319 2.2353	5.53045 4.67787 3.10731 2.031 5.48468	3.62102 1.34183 1.5256 1.229 7.62621	0.3085 0.1495 0.1206 0.072 0.6313	0.2838 0.1376 0.111 0.072 0.5808	0.0049 0.0049 0.0049 0.005 0.005	469.3371 478.0403 475.3037 471.9795 568.299 492.9352	0.1518 0.1546 0.1537 0.1526 0.028 0.1594	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016
Graders Graders Graders Graders Graders Graders	2020 2020 2020 2020 2020 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2021Graders50 2021Graders120 2021Graders175 2021Graders175 2021Graders250	120 175 250 500 750 50 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134	3.62102 1.34183 1.5256 1.229 7.62621 4.45175	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277	0.0049 0.0049 0.005 0.005 0.005	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258
Graders Graders Graders Graders Graders Graders	2020 2020 2020 2020 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders750 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders500	120 175 250 500 750 50 120 175	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.1077	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012156
Graders Graders Graders Graders Graders Graders Graders	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders250 2020Graders500 2020Graders500 2020Graders50 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders500 2021Graders750	120 175 250 500 750 50 120 175 250	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277	0.0049 0.0049 0.005 0.005 0.005 0.0048 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012156
Graders Graders Graders Graders Graders Graders Graders Graders	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders750 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders500	120 175 250 500 750 50 120 175 250 500	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.1077	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012156 0.012088 0.014557
Graders Graders Graders Graders Graders Graders Graders Graders Graders	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders750 2021Graders750 2018Off-Highway Tractors120 20180ff-Highway Tractors175	120 175 250 500 750 50 120 175 250 500 750	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.1077 0.064	0.0049 0.0049 0.005 0.005 0.005 0.0048 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012156 0.012088 0.014557
Graders Graders Graders Graders Graders Graders Graders Graders Graders Off-Highway Tractors	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders250 2020Graders500 2020Graders500 2020Graders50 2021Graders50 2021Graders175 2021Graders175 2021Graders250 2021Graders500 2021Graders750 2018Grd-Highway Tractors120	120 175 250 500 750 50 120 175 250 500 750 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.1077 0.064 0.343	0.0049 0.0049 0.005 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.005 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534	0.012022 0.012245 0.012175 0.01209 0.014557 0.012027 0.012016 0.012258 0.012156 0.012088 0.014557 0.012625
Graders Graders Graders Graders Graders Graders Graders Graders Graders Off-Highway Tractors Off-Highway Tractors	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders750 2021Graders750 2018Off-Highway Tractors120 20180ff-Highway Tractors175	120 175 250 500 750 50 120 175 250 500 750 750 120 175	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219 0.3149	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.1077 0.064 0.343 0.1616	0.0049 0.0049 0.005 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.005 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 491.3128	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.153	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012156 0.012088 0.014557 0.012625 0.012685 0.012518
Graders Graders Graders Graders Graders Graders Graders Graders Graders Off-Highway Tractors Off-Highway Tractors Off-Highway Tractors	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders750 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders500 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors175 2018Off-Highway Tractors250	120 175 250 500 120 175 250 500 750 750 120 175 250	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1186	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.1077 0.064 0.343 0.1616 0.1091	0.0049 0.0049 0.005 0.005 0.005 0.0048 0.0049 0.0049 0.005 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 492.8709 491.3128 488.6765	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.153 0.1521	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012156 0.012088 0.014557 0.012625 0.012685 0.012518
Graders Graders Graders Graders Graders Graders Graders Graders Off-Highway Tractors Off-Highway Tractors Off-Highway Tractors	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders120 2021Graders50 2021Graders50 2021Graders50 2021Graders500 2021Graders500 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors250	120 175 250 500 750 120 175 250 500 750 120 175 250 750 750	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.11871	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1186 0.0806	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.1091 0.0741	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.005 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 491.3128 488.6765 490.1818	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.153 0.1521 0.1521	0.012022 0.012245 0.012175 0.01209 0.01209 0.012627 0.012627 0.01258 0.012557 0.012625 0.012585 0.012585 0.012558 0.012552
Graders Graders Graders Graders Graders Graders Graders Graders Off-Highway Tractors Off-Highway Tractors Off-Highway Tractors Off-Highway Tractors Off-Highway Tractors	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders250 2020Graders500 2020Graders500 2020Graders50 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders500 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors175 2018Off-Highway Tractors250 2018Off-Highway Tractors750 2018Off-Highway Tractors750 2018Off-Highway Tractors750	120 175 250 500 750 120 175 250 500 750 120 175 250 750 250 750 1000	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.11871 0.99773	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1186 0.0806 0.0602	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.1091 0.0741 0.0554	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8881 568.299 492.8709 492.8709 492.8709 493.128 488.6765 490.1818 490.4122	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.153 0.1521 0.1521 0.1526 0.1527	0.012022 0.012245 0.012175 0.01209 0.014557 0.012258 0.01256 0.012568 0.012685 0.012685 0.012588 0.012582 0.012518 0.012556 0.012556 0.012556 0.012556 0.012405
Graders Off-Highway Tractors	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders120 2021Graders175 2021Graders250 2021Graders500 2021Graders750 2013Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors250 2018Off-Highway Tractors250 2018Off-Highway Tractors1000 2019Off-Highway Tractors1000 2019Off-Highway Tractors120	120 175 250 500 750 120 175 250 500 750 120 175 250 750 750 750 750 1000 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.4731	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.49764 3.45421 2.1656 2.35874 4.42145	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.11871 0.99773 3.79465	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1186 0.0806 0.0806 0.0602 0.3311	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.3043 0.0554 0.0554 0.3046	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 474.5386 474.5386 474.5386 474.5386 492.8709 491.3128 488.6765 490.182 490.4122 484.2693	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.1533 0.1521 0.1521 0.1527 0.1532	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012258 0.012258 0.012258 0.012562 0.012625 0.012518 0.012556 0.0125562 0.012562 0.012625 0.012625 0.012625
Graders Off-Highway Tractors	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders75 2021Graders250 2021Graders50 2021Graders50 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors750 2018Off-Highway Tractors750 2018Off-Highway Tractors250 2019Off-Highway Tractors175 2019Off-Highway Tractors175 2019Off-Highway Tractors250	120 175 250 500 120 175 250 500 750 120 175 250 750 750 750 1000 120 175	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.332 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.4731 0.2941	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.457421 2.1656 2.35874 4.42145 3.20755	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.11871 0.99773 3.79465 3.21895	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.1756 0.064 0.3728 0.1756 0.1186 0.1186 0.0806 0.0802 0.3311 0.1586	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.1091 0.0741 0.0554 0.3046 0.1459	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 491.3128 488.6765 490.1818 490.4122 484.2693 484.2693 483.4306	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.1521 0.1526 0.1527 0.1532 0.1532	0.012022 0.012245 0.012175 0.01209 0.01209 0.012627 0.012016 0.012258 0.012156 0.012456 0.012625 0.012655 0.012652 0.012556 0.012553 0.012522 0.012642 0.0126566 0.0126566 0.0126566 0.0126566 0
Graders Off-Highway Tractors	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders750 2021Graders50 2021Graders120 2021Graders50 2021Graders750 2021Graders750 2021Graders500 2021Graders500 2021Graders500 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors250 2018Off-Highway Tractors250 2018Off-Highway Tractors1000 2018Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors1275 2019Off-Highway Tractors1275 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250	120 175 250 500 120 175 250 500 750 120 175 250 750 120 175 250 750 120 175 250	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.4731 0.2941 0.2385	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.2191 1.29494 1.11871 0.99773 3.79465 3.21895 1.21832	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1756 0.0806 0.0806 0.0806 0.3311 0.1586 0.0976	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.1091 0.0741 0.0554 0.3046 0.1459 0.0898	0.0049 0.0049 0.005 0.005 0.0048 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 474.5386 471.8981 568.299 492.8709 492.8709 492.8709 492.8709 492.8709 493.1328 488.6765 490.1818 490.4122 484.2693 483.4306 483.42751	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.1521 0.1526 0.1527 0.1532 0.1533 0.1523	0.012022 0.012245 0.012175 0.01209 0.01209 0.012627 0.012627 0.012166 0.012258 0.012556 0.012585 0.012585 0.012585 0.012556 0.012556 0.012562 0.012405 0.012383 0.012383 0.012355
Graders Off-Highway Tractors	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders75 2021Graders250 2021Graders50 2021Graders50 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors750 2018Off-Highway Tractors750 2018Off-Highway Tractors250 2019Off-Highway Tractors175 2019Off-Highway Tractors175 2019Off-Highway Tractors250	120 175 250 500 750 120 175 250 250 750 120 175 250 750 1000 120 175 250 750	0.5667 0.3519 0.322 0.319 2.2353 0.302 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.4731 0.2385 0.2052	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.117682	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.11871 0.99773 3.79465 3.21892 1.21832 1.21832 1.21832	0.3085 0.1495 0.1206 0.072 0.6313 0.2698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1186 0.0806 0.0806 0.0602 0.3311 0.1586 0.0976 0.082	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.0741 0.0554 0.3046 0.1459 0.0459 0.0898 0.0754	0.0049 0.0049 0.005 0.005 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.5886 471.8881 568.299 492.8709 492.8709 492.8709 492.8709 492.8709 491.818 488.6765 490.1818 490.4122 484.2693 483.4306	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.1533 0.1521 0.1526 0.1532 0.1532 0.1532 0.1523 0.1523	0.012022 0.012245 0.012175 0.01209 0.01209 0.014557 0.012627 0.012627 0.012586 0.012586 0.012586 0.012586 0.012586 0.012562 0.012562 0.012405 0.012383 0.012328 0.012328
Graders Off-Highway Tractors Off-H	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders250 2020Graders500 2020Graders500 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors750 2018Off-Highway Tractors750 2019Off-Highway Tractors120 2019Off-Highway Tractors175 2019Off-Highway Tractors750	120 175 250 500 750 120 175 250 750 120 175 250 750 1000 120 175 250 750 1000	0.5667 0.3519 0.322 0.319 2.2353 0.302 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.4731 0.2941 0.2385 0.2052 0.1396	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.17682 2.37757	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.2974 3.79465 3.21895 1.21832 1.21832 1.21832 1.21934 1.20978	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1756 0.1186 0.0806 0.0806 0.0802 0.3311 0.1586 0.0976 0.0822 0.082	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.1077 0.064 0.343 0.1016 0.1091 0.0741 0.0554 0.3046 0.1459 0.0898 0.0754 0.0567	0.0049 0.0049 0.005 0.005 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 474.5386 474.5386 471.8881 568.299 492.8709 492.8709 492.8709 492.8709 491.3128 488.6765 490.4122 484.2693 483.4306 481.2751 482.3946	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.1533 0.1521 0.1526 0.1527 0.1532 0.1532 0.1532 0.1526 0.1527	0.012022 0.012245 0.012175 0.01209 0.01209 0.014557 0.012627 0.012627 0.012586 0.012586 0.012586 0.012586 0.012586 0.012562 0.012562 0.012405 0.012383 0.012328 0.012328
Graders Off-Highway Tractors	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders750 2013Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors750 2018Off-Highway Tractors100 2019Off-Highway Tractors120 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors175 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors120	120 175 250 500 750 120 175 250 500 750 750 120 175 250 750 1000 120 175 250 750 750 750 1000 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.335 0.322 0.335 0.322 0.3149 0.2716 0.1291 0.4731 0.2941 0.2941 0.2052 0.1396 0.4479	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45764 3.45764 3.49764 3.20755 2.9142 2.17682 2.37757 4.18317	3.62102 1.34183 1.5256 1.229 1.229 1.26261 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.11871 0.99773 3.79465 3.21895 1.21832 1.12832 1.12934 3.78798	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.1176 0.1186 0.11766 0.1186 0.0806 0.3311 0.1586 0.0976 0.082 0.0616 0.307	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.1616 0.1091 0.0741 0.0554 0.3046 0.1459 0.0898 0.0754 0.0567 0.2825	0.0049 0.0049 0.005 0.005 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 474.5386 471.8981 568.299 491.3128 488.6765 490.1128 488.6765 490.1128 484.2693 483.4306 481.2751 482.5446 474.1481	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1548 0.1535 0.1526 0.027 0.1534 0.1521 0.1526 0.1527 0.1532 0.1523 0.1523 0.1523	0.012022 0.012245 0.012175 0.01209 0.014557 0.012627 0.012016 0.012258 0.012556 0.012625 0.012655 0.012558 0.012558 0.012558 0.012625 0.012622 0.012405 0.012381 0.012381 0.012381 0.012314 0.012114
Graders Off-Highway Tractors Off-H	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders500 2021Graders50 2021Graders50 2021Graders120 2021Graders750 2021Graders500 2021Graders500 2021Graders500 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors175 2018Off-Highway Tractors100 2018Off-Highway Tractors1000 2019Off-Highway Tractors175 2019Off-Highway Tractors175 2019Off-Highway Tractors250 2019Off-Highway Tractors175 2019Off-Highway Tractors250 2019Off-Highway Tractors200 20200ff-Highway Tractors120 20200ff-Highway T	120 175 250 500 120 175 250 500 750 120 175 250 750 120 175 250 750 1000 120 175 250 750 1000 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.2945 0.2947 0.2945 0.2947 0.2947 0.2945 0.2947 0.	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 4.38134 4.38134 4.3877 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.37757 4.18317 2.89032	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.30687 1.30687 1.46044 1.207 3.8227 3.2191 1.29494 1.11871 0.99773 3.79465 3.21895 1.21832 1.12934 1.02938 3.21511	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.177 0.064 0.3728 0.1756 0.0806 0.0806 0.3311 0.1586 0.0976 0.0821 0.0616 0.3077 0.1402	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.343 0.0664 0.343 0.0654 0.3046 0.3046 0.3046 0.3046 0.3046 0.3046 0.3046 0.3045 0.3046 0.3045 0.3046 0.3045 0.3046 0.3045 0.3046 0.30450000000000000000000000000000000000	0.0049 0.0049 0.005 0.005 0.005 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 474.5386 471.8981 568.299 492.8709 492.8709 492.8709 491.3128 488.6765 490.1818 490.4122 484.2693 483.4306 481.2751 482.3091 482.5446 474.1481 472.9169	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1526 0.1535 0.1535 0.1526 0.1533 0.1533 0.1527 0.1532 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1526	0.012022 0.012245 0.012175 0.01209 0.01209 0.01205 0.012056 0.012258 0.012156 0.012556 0.012555 0.012555 0.012555 0.012556 0.012556 0.012556 0.012328 0.012332 0.012335 0.012328
Graders Off-Highway Tractors Off-Highway T	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders500 2021Graders50 2021Graders50 2021Graders120 2021Graders50 2021Graders50 2021Graders750 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2018Off-Highway Tractors120 2018Off-Highway Tractors120 2018Off-Highway Tractors1000 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2020Off-Highway Tractors120 2020Off-Highway Tractors120 20200ff-Highway Tractors120 20200ff-Highway Tractors120 20200ff-Highway Tractors120 20200ff-Highway Tractors250	120 175 250 500 750 120 175 250 500 750 120 175 250 750 120 175 250 750 120 120 175 250 750 120 120 175 250 120 120 175 250 120 120 175 250 120 120 175 250 120 175 250 120 175 250 120 120 175 250 120 120 175 250 120 120 175 250 120 120 120 175 250 120 120 120 175 250 120 120 120 120 175 250 120 120 120 120 175 250 120 120 120 175 250 120 120 120 175 250 120 120 120 120 175 250 120 120 120 120 120 120 120 12	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.2214 0.2052 0.1396 0.2052 0.1396 0.4771 0.2214	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.17682 2.37757 4.18317 2.89032 2.89032 2.57547	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.30687 1.207 3.83227 3.2191 1.29494 1.21832	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.277 0.064 0.3728 0.1176 0.064 0.3728 0.1176 0.0806 0.0806 0.0806 0.0976 0.082 0.082 0.0816 0.3072 0.0862	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.007 0.043 0.041 0.043 0.041 0.0554 0.0343 0.0554 0.03466 0.03466 0.0346 0.0346 0.03466 0.03466 0.03466 0.03466 0.0	0.0049 0.0049 0.0049 0.005 0.005 0.0049 0.005 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049 0.0049	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 491.3128 488.6765 490.1818 490.4122 488.6263 483.4306 481.2751 483.2091 482.3091 482.5446 472.9169 472.916 472.9	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1528 0.1525 0.1526 0.1527 0.1534 0.1527 0.1528 0.1527 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523	0.012022 0.012245 0.012175 0.01209 0.01209 0.012627 0.012627 0.012586 0.012586 0.012586 0.012586 0.012586 0.012586 0.012588 0.012588 0.012586 0.012582 0.012582 0.012383 0.012383 0.012355 0.012381 0.012361 0.012361 0.012361 0.012361
Graders Off-Highway Tractors Off-Highway Tracto	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders50 2021Graders75 2021Graders50 2021Graders250 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2018Off-Highway Tractors120 2018Off-Highway Tractors250 2018Off-Highway Tractors250 2019Off-Highway Tractors250 2020Off-Highway Tractors250 2020Off-Highway Tractors250 2020Off-Highway Tractors250 20200ff-Highway Tractors250 20200ff-Highway Tractors250 20200ff-Highway Tractors250 20200ff-Highway Tractors250 20200ff-Highway Tractors250 <	120 175 250 500 750 120 175 250 750 120 175 250 750 120 175 250 750 1000 120 175 250 750 1000 120 175 250 750	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.325 0.322 0.303 0.5219 0.3149 0.2716 0.2716 0.2716 0.2941 0.2941 0.2941 0.2941 0.2941 0.2052 0.1396 0.4739 0.2124 0.2052	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.9142 2.9142 2.91482 2.91757 4.18317 2.89032 2.57547 2.804663	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.22944 1.209773 3.79465 3.21895 1.12934 1.00978 3.78798 3.26798 3.21873 1.1813 1.13143	0.3085 0.1495 0.2006 0.072 0.6313 0.5698 0.27 0.1388 0.372 0.147 0.064 0.3728 0.117 0.064 0.0806 0.0802 0.03311 0.1586 0.0876 0.082 0.0876 0.0416 0.082 0.0826	0.2838 0.1376 0.111 0.5808 0.5242 0.2844 0.1277 0.064 0.1077 0.064 0.1077 0.064 0.1071 0.0741 0.0741 0.0554 0.0754 0.0458 0.0754 0.2825 0.2825 0.2825 0.293 0.0793 0.0793	0.0049 0.0049 0.005 0.005 0.005 0.005 0.005 0.0049 0.005 0.005 0.005 0.005 0.0049 0.005 0.005 0.005 0.005 0.005 0.0049 0.005 0.005 0.0049 0.005 0.005 0.005 0.005 0.005 0.0049 0.005 0.0049 0.005 0.0	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 474.5386 474.5386 474.5386 474.5386 474.5386 492.8709 493.8709 493.	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1526 0.1526 0.1527 0.1535 0.1526 0.1527 0.1526 0.1527 0.1523 0.1522 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1526 0.1527 0.1527 0.1526 0.1527 0.1	0.012022 0.012245 0.012245 0.012175 0.01209 0.014557 0.012627 0.012627 0.012258 0.012558 0.012558 0.012558 0.012558 0.012558 0.012558 0.012558 0.012556 0.012550 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012356 0.012146 0.012146 0.012146 0.01204 0.012064 0.012092
Graders Off-Highway Tractors Off-H	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders750 2021Graders750 20180ff-Highway Tractors120 20180ff-Highway Tractors750 20180ff-Highway Tractors100 20190ff-Highway Tractors120 20190ff-Highway Tractors120 20190ff-Highway Tractors250 20190ff-Highway Tractors120 20190ff-Highway Tractors120 20190ff-Highway Tractors120 20200ff-Highway Tractors120 20200ff-Highway Tractors250 20190ff-Highway Tractors120 20200ff-Highway Tractors250	120 175 250 500 750 50 120 175 250 500 750 120 175 250 750 1000 120 175 250 750 750 750 750 750 1000 120 120 1000	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.3035 0.322 0.3033 0.5219 0.3149 0.2716 0.1955 0.1921 0.4731 0.2941 0.2941 0.2044 0.2014 0.2214 0.2014 0.2014	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.49764 3.49764 3.49764 2.1656 2.38874 4.42145 3.20755 2.9142 2.37757 4.18317 2.8032 2.57547 2.90463 2.39599	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.207 3.21895 1.21832 1.21832 1.21832 1.21832 1.21934 1.20978 3.278798 3.21511 1.1813 1.31443 1.32156	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.064 0.3728 0.116 0.3728 0.3311 0.1686 0.0976 0.0822 0.0616 0.307 0.1402 0.0862 0.0762 0.0762	0.2838 0.1376 0.0111 0.072 0.5808 0.5242 0.2484 0.2277 0.1077 0.064 0.343 0.1616 0.1091 0.0544 0.0544 0.0544 0.0554 0.0554 0.05567 0.2825 0.0754 0.0751 0.0754	0.0049 0.0049 0.0049 0.005 0.005 0.005 0.0048 0.0049 0.005 0.	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 474.5386 471.8981 568.299 491.3128 488.6765 490.1128 489.3412 491.3128 488.6765 490.1128 483.4306 481.2751 482.5446 474.1481 472.9169 470.943	0.1518 0.1546 0.1526 0.1526 0.1526 0.1526 0.1526 0.1526 0.1528 0.1534 0.1535 0.1526 0.1537 0.1533 0.1527 0.1533 0.1527 0.1532 0.1527 0.1533 0.1528 0.1527 0.1533 0.1528 0.1527 0.1533 0.1528 0.1527 0.1533 0.1528 0.	0.012022 0.012245 0.012245 0.012175 0.01209 0.014557 0.012627 0.012627 0.012258 0.012558 0.012558 0.012558 0.012558 0.012558 0.012558 0.012558 0.012556 0.012550 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012356 0.012146 0.012146 0.012146 0.01204 0.012064 0.012092
Graders Off-Highway Tractors Off-Highway Tracto	2020 2020 2020 2020 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders500 2021Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders50 2021Graders750 2021Graders500 2021Graders750 2013Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors750 2018Off-Highway Tractors750 2018Off-Highway Tractors1000 2019Off-Highway Tractors1000 2019Off-Highway Tractors175 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 20200ff-Highway Tractors250 <td>120 175 250 500 120 175 250 500 750 120 175 250 750 120 175 250 750 1000 120 175 250 750 750 1000 120 175 250 750 1000 120</td> <td>0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.2914 0.2941 0.2935 0.2052 0.1396 0.4479 0.2711 0.2214 0.2216 0.2216 0.2215 0.2255 0.2555 0.</td> <td>5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.37757 4.18317 2.89032 2.57547 2.04663 2.35599 3.77306</td> <td>3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55886 1.30687 1.46044 1.207 3.8227 3.2191 1.29494 1.11871 0.99773 3.79465 3.21895 1.21832 1.12934 1.02976 3.78798 3.21511 1.1813 1.13143 1.02156 3.74258</td> <td>0.3085 0.1495 0.200 0.072 0.6313 0.5698 0.27 0.1388 0.177 0.064 0.3728 0.064 0.3718 0.064 0.3076 0.0806 0.0602 0.0616 0.307 0.1402 0.0616 0.30762 0.0638</td> <td>0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2844 0.1277 0.064 0.1277 0.064 0.1071 0.054 0.1091 0.0741 0.0594 0.0793 0.1459 0.0898 0.0754 0.2825 0.2825 0.2825 0.2792 0.0793 0.0701</td> <td>0.0049 0.0049 0.0049 0.005 0.005 0.005 0.0048 0.00490.0049 0.00490000000000</td> <td>469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 492.8709 492.8709 491.3128 488.6765 490.1818 490.4122 483.4306 481.2751 482.5446 474.1481 472.9169 470.943 471.8151 472.055</td> <td>0.1518 0.1546 0.1537 0.1526 0.028 0.1526 0.1526 0.1535 0.1535 0.1535 0.1535 0.1535 0.1526 0.1537 0.1533 0.1523 0.1</td> <td>0.012022 0.012245 0.012245 0.01209 0.01209 0.01205 0.012056 0.012056 0.012156 0.012456 0.012625 0.012625 0.012625 0.012625 0.012556 0.012556 0.012556 0.012262 0.012330 0.012330 0.012328 0.012325 0.012341 0.012146 0.012044 0.012044 0.012045 0.012145 0.012141</td>	120 175 250 500 120 175 250 500 750 120 175 250 750 120 175 250 750 1000 120 175 250 750 750 1000 120 175 250 750 1000 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.2914 0.2941 0.2935 0.2052 0.1396 0.4479 0.2711 0.2214 0.2216 0.2216 0.2215 0.2255 0.2555 0.	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.37757 4.18317 2.89032 2.57547 2.04663 2.35599 3.77306	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55886 1.30687 1.46044 1.207 3.8227 3.2191 1.29494 1.11871 0.99773 3.79465 3.21895 1.21832 1.12934 1.02976 3.78798 3.21511 1.1813 1.13143 1.02156 3.74258	0.3085 0.1495 0.200 0.072 0.6313 0.5698 0.27 0.1388 0.177 0.064 0.3728 0.064 0.3718 0.064 0.3076 0.0806 0.0602 0.0616 0.307 0.1402 0.0616 0.30762 0.0638	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2844 0.1277 0.064 0.1277 0.064 0.1071 0.054 0.1091 0.0741 0.0594 0.0793 0.1459 0.0898 0.0754 0.2825 0.2825 0.2825 0.2792 0.0793 0.0701	0.0049 0.0049 0.0049 0.005 0.005 0.005 0.0048 0.00490.0049 0.00490000000000	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 492.8709 492.8709 491.3128 488.6765 490.1818 490.4122 483.4306 481.2751 482.5446 474.1481 472.9169 470.943 471.8151 472.055	0.1518 0.1546 0.1537 0.1526 0.028 0.1526 0.1526 0.1535 0.1535 0.1535 0.1535 0.1535 0.1526 0.1537 0.1533 0.1523 0.1	0.012022 0.012245 0.012245 0.01209 0.01209 0.01205 0.012056 0.012056 0.012156 0.012456 0.012625 0.012625 0.012625 0.012625 0.012556 0.012556 0.012556 0.012262 0.012330 0.012330 0.012328 0.012325 0.012341 0.012146 0.012044 0.012044 0.012045 0.012145 0.012141
Graders Off-Highway Tractors Off-H	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders120 2021Graders50 2021Graders50 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2018Off-Highway Tractors120 2018Off-Highway Tractors50 2018Off-Highway Tractors1000 2019Off-Highway Tractors1000 2019Off-Highway Tractors750 2019Off-Highway Tractors1000 2020Off-Highway Tractors1000 2020Off-Highway Tractors750 2020Off-Highway Tractors200 2020Off-Highway Tractors200 2020Off-Highway Tractors20 20200ff-Highway Trac	120 175 250 500 750 120 175 250 500 750 120 175 250 750 120 175 250 750 1000 120 175 250 750 1000 120 175 250 750 1000 120	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.2216 0.2916 0.2952 0.1291 0.2385 0.2052 0.1396 0.2052 0.1396 0.2052 0.303 0.2214 0.2014 0.2214 0.2014 0.2214 0.2214 0.2214 0.2214 0.2214 0.2214 0.2214 0.2214 0.2214 0.22587 0.3948 0.2287 0.3948 0.2287 0.3948 0.2287 0.3948 0.2287 0.3948 0.2287 0.3948 0.2287 0.3948 0.2214 0.22587 0.3958 0.2587 0	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.37575 4.18317 2.89032 2.57547 2.04663 2.39599 3.77306 2.65962	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.30687 1.2049 1.45045 1.207 3.83227 3.2191 1.22494 1.11871 0.99773 3.79465 3.21832 1.21832 1.21832 1.21832 1.21832 1.21934 1.00978 3.274518 3.74258 3.74578 3.74258 3.74578 3.74578 3.74578 3.74578 3.74578 3.74578 3.74578 3.74578 3.74578 3.74578 3.7457888 3.7457888 3.7457888 3.7457888 3.7457888 3.74578888 3.7457888 3.745788888 3.74578888 3.7457888 3.74578	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.177 0.064 0.3728 0.1175 0.064 0.3728 0.11756 0.0806 0.0806 0.0816 0.0961 0.0962 0.0816 0.0962 0.0641 0.1402 0.0862 0.0644 0.0644 0.0	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2844 0.1277 0.064 0.1077 0.064 0.343 0.1017 0.0741 0.054 0.1091 0.0794 0.0469 0.0754 0.0898 0.0754 0.0898 0.0754 0.2825 0.0793 0.0701 0.0583	0.0049 0.0049 0.0049 0.005 0.005 0.005 0.0048 0.00490.0049 0.00490000000000	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 492.8709 492.8709 492.8709 493.3128 488.6765 490.1818 490.4122 484.2693 483.4306 481.2751 482.3091 482.3091 482.5446 474.1481 472.9169 470.943 471.8151 472.855 472.9236	0.1518 0.1546 0.1537 0.1526 0.1527 0.1526 0.1526 0.1535 0.1535 0.1526 0.1535 0.1527 0.1534 0.1527 0.1533 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1523 0.1526 0.1527 0.1528 0.1527 0.1528 0.1538 0.	0.012022 0.012245 0.012245 0.012175 0.01209 0.012627 0.012627 0.012627 0.01256 0.012566 0.012566 0.012566 0.012556 0.012556 0.012556 0.012556 0.012556 0.012383 0.012353 0.012353 0.012354 0.012355 0.012351 0.012146 0.012146 0.012146 0.012155
Graders Off-Highway Tractors Off-Highway Tracto	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2020Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders200 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2021Graders500 2018Off-Highway Tractors120 2018Off-Highway Tractors250 2018Off-Highway Tractors250 2018Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2019Off-Highway Tractors250 2020Off-Highway Tractors250	120 175 250 500 750 120 175 250 500 750 120 175 250 750 120 175 250 750 1000 120 120 175 250 750 120 120 120 175 250 750 120 120 120 175 250 750 120 120 120 175 250 120 120 120 120 175 250 120 120 120 120 175 250 120 120 120 120 120 120 120 12	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.2716 0.2941 0.2941 0.2941 0.2385 0.2052 0.1396 0.4739 0.2214 0.2258 0.25588 0.25588 0.25588 0.25588 0.25588	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.9142 2.9142 2.91757 2.9142 2.91757 2.89032 2.57547 2.04663 2.35599 3.77306 2.65962 2.61341	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.30687 1.207 3.83227 3.2191 1.48044 1.207 3.732191 1.48044 1.29494 1.29494 1.29494 1.29494 1.21832 1.21832 1.21833 1.21813 1.1813 1.1813 1.1813 1.18143 1.02156 3.74258 3.21953 1.16179	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.177 0.064 0.3728 0.117 0.064 0.3728 0.1186 0.0602 0.3311 0.1586 0.0602 0.0321 0.0616 0.00762 0.0623 0.2614 0.275 0.2614 0.275 0.2	0.2838 0.1376 0.111 0.072 0.5808 0.5242 0.2484 0.1277 0.064 0.1077 0.064 0.1077 0.064 0.1071 0.0741 0.0554 0.0754 0.0455 0.1453 0.0686 0.0793 0.0794	0.0049 0.0049 0.0049 0.005 0.005 0.005 0.0048 0.00490000000000	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 492.8709 491.3128 488.6765 490.1818 490.4122 488.6765 490.1818 490.4122 484.2693 483.4306 481.2751 482.3091 482.5446 474.1481 472.9169 470.943 471.8151 472.9545 474.5155 474.5155 472.9264 474.0028	0.1518 0.1546 0.1537 0.1526 0.028 0.1594 0.1517 0.1528 0.1525 0.1526 0.1527 0.1534 0.1527 0.1524 0.1527 0.1523 0.1	0.012022 0.012245 0.012245 0.01229 0.01205 0.01209 0.014557 0.012627 0.012016 0.012258 0.012558 0.012518 0.012556 0.012558 0.012550 0.012550 0.012328 0.012328 0.012328 0.012328 0.012328 0.012328 0.012326 0.012146 0.012064 0.012064 0.012065 0.012055 0.012114
Graders Off-Highway Tractors Off-Highway Tracto	2020 2020 2020 2021 2021 2021 2021 2021	2020Graders120 2020Graders175 2020Graders250 2020Graders500 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders50 2021Graders750 2021Graders750 2021Graders750 2018Off-Highway Tractors120 2018Off-Highway Tractors250 2018Off-Highway Tractors100 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2019Off-Highway Tractors120 2020Off-Highway Tractors120 2020Off-Highway Tractors250 2020Off-Highway Tractors120 2020Off-Highway Tractors250 20210ff-Highway Tractors250 20210ff-Highway Tractors250	120 175 250 500 750 50 120 175 250 750 750 120 175 250 750 1000 120 175 250 750 750 750 750 1000 120 175 250 750 1000 120 175 250 750	0.5667 0.3519 0.322 0.319 2.2353 0.9009 0.5053 0.335 0.322 0.303 0.5219 0.3149 0.2716 0.1955 0.1291 0.4731 0.2941 0.2214 0.2215 0.2252 0.2557 0.1812 0.2552 0.2	5.53045 4.67787 3.10731 2.031 5.48468 7.12535 4.83947 4.38134 3.01257 1.808 4.78732 3.49764 3.45421 2.1656 2.35874 4.42145 3.20755 2.9142 2.17682 2.37757 4.18317 2.89032 2.57547 2.04663 2.39599 3.77306 2.65962 2.11341 1.71505	3.62102 1.34183 1.5256 1.229 7.62621 4.45175 3.55896 1.30687 1.46044 1.207 3.83227 3.2191 1.29494 1.207 3.2191 1.29494 1.099773 3.79465 3.21895 1.21835 1.21834 1.00978 3.21511 1.1813 1.13143 1.02156 3.24258 3.21959 1.16179 1.12237	0.3085 0.1495 0.1206 0.072 0.6313 0.5698 0.27 0.1388 0.117 0.3728 0.1175 0.1475 0.0640 0.0802 0.0802 0.0802 0.0806 0.0876 0.0876 0.0723 0.0643 0.0725 0.0723 0.0725 0.0725 0.0725 0.0725 0.0725 0.0725 0.0725 0.0725 0.	0.2838 0.1376 0.011 0.072 0.5808 0.5242 0.2484 0.1277 0.1077 0.1077 0.064 0.343 0.1616 0.1091 0.0654 0.0741 0.07540000000000000000000000000000000000	0.0049 0.0049 0.0049 0.005 0.005 0.005 0.005 0.00490000000000	469.3371 478.0403 475.3037 471.9795 568.299 492.9352 469.0701 478.5289 474.5386 471.8981 568.299 474.5386 471.8981 568.299 492.8709 491.3128 488.6765 490.1818 491.3128 488.6765 490.1818 491.3128 483.4306 481.2751 482.5446 474.1481 472.9169 470.943 471.81515 472.0545 471.0058 471.8056	0.1518 0.1546 0.1526 0.1526 0.1526 0.1526 0.1526 0.1526 0.1534 0.1535 0.1526 0.1533 0.1533 0.1527 0.1533 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1533 0.1526 0.1527 0.1527 0.1528 0.1527 0.1528 0.1527 0.1528 0.	0.012022 0.012245 0.012245 0.012175 0.01209 0.014557 0.012627 0.012258 0.012258 0.012258 0.012258 0.012586 0.012585 0.012585 0.012556 0.012556 0.012556 0.012283 0.012328 0.012328 0.012328 0.012329 0.012355 0.012328 0.012328 0.012355 0.012328 0.012355 0.012328 0.012355 0.012144 0.012086 0.012092

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Equipment Type	Year	Concatenate 2018Off-Highway Trucks500	HP	ROG	NOX 3.08995	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Off-Highway Trucks Off-Highway Trucks	2018 2018	2018Off-Highway Trucks500 2018Off-Highway Trucks750	500 750	0.287	3.08995	1.5595 2.17619	0.1128	0.1038	0.0049	493.5059 492.1136	0.1536	0.012642 0.012606
Off-Highway Trucks	2018	2018Off-Highway Trucks750 2018Off-Highway Trucks1000	1000	0.2966	4.85753	1.35734	0.1431	0.1310	0.0049	492.1130	0.1532	
Off-Highway Trucks	2010	2019Off-Highway Trucks175	175	0.3225	2.82463	3.32598	0.1203	0.1375	0.0040	480.3623	0.1513	0.012495
Off-Highway Trucks	2019	2019Off-Highway Trucks250	250	0.307	2.98481	1.46079	0.119	0.1095	0.0049	480.1703	0.1519	0.0123
Off-Highway Trucks	2019	2019Off-Highway Trucks500	500	0.2635	2.66851	1.48346	0.097	0.0893	0.0049	485.3832	0.1536	
Off-Highway Trucks	2019	2019Off-Highway Trucks750	750	0.3269	3.32044	2.04129	0.1286	0.1183	0.0049	483.2182	0.1529	
Off-Highway Trucks	2019	2019Off-Highway Trucks1000	1000	0.2952	4.76495	1.3561	0.1242	0.1142	0.0049	480.3479	0.152	0.012304
Off-Highway Trucks	2020	2020Off-Highway Trucks175	175	0.3099	2.62769	3.3388	0.137	0.126	0.0049	470.0967	0.152	0.012042
Off-Highway Trucks	2020	2020Off-Highway Trucks250	250	0.2748	2.50726	1.39106	0.0977	0.0899	0.0049	470.1675	0.1521	0.012044
Off-Highway Trucks	2020	2020Off-Highway Trucks500	500	0.2461	2.34677	1.41417	0.0855	0.0787	0.0049	474.5787	0.1535	0.012157
Off-Highway Trucks	2020	2020Off-Highway Trucks750	750	0.3123	3.05816	2.02683	0.1196	0.11	0.0049	472.7499	0.1529	
Off-Highway Trucks	2020	2020Off-Highway Trucks1000	1000	0.303	4.79365	1.37163	0.1252	0.1152	0.0049	469.8892	0.152	0.012037
Off-Highway Trucks	2021	2021Off-Highway Trucks175	175	0.2784	2.24626	3.32405	0.1131	0.1041	0.0049	470.2898	0.1521	0.012047
Off-Highway Trucks	2021	2021Off-Highway Trucks250	250	0.2494	2.10869	1.34839	0.0821	0.0755	0.0049	470.1932	0.1521	0.012044
Off-Highway Trucks	2021	2021Off-Highway Trucks500	500	0.2249	1.95357	1.33781	0.0717	0.0659	0.0049	474.542	0.1535	0.012156
Off-Highway Trucks Off-Highway Trucks	2021 2021	2021Off-Highway Trucks750 2021Off-Highway Trucks1000	750 1000	0.2932	2.66798 4.15817	1.93522 1.25154	0.1064	0.0979	0.0049	472.991 471.0552	0.153	0.012116
Other Construction Equipment	2021	2018Other Construction Equipment15	1000	1.1686	5.27161	5.54108	0.0988	0.0909	0.0049	471.0552 548.9388	0.1523	
Other Construction Equipment	2018	2018Other Construction Equipment15	25	1.1686	5.27161	5.54108	0.4492	0.4133	0.0054	548.9388	0.1709	
Other Construction Equipment	2018	2018Other Construction Equipment50	50	1.1686	5.27161	5.54108	0.4492	0.4133	0.0054	548.9388	0.1709	
Other Construction Equipment	2018	2018Other Construction Equipment120	120	0.5977	5.44123	3.79863	0.4166	0.3833	0.0049	490.018	0.1525	0.012552
Other Construction Equipment	2018	2018Other Construction Equipment175	175	0.4364	4.75499	3.26346	0.2502	0.2302	0.0048	487.9859	0.1519	
Other Construction Equipment	2018	2018Other Construction Equipment500	500	0.2509	3.16693	1.81261	0.1146	0.1054	0.0049	493.36	0.1536	0.012638
Other Construction Equipment	2019	2019Other Construction Equipment15	15	1.1519	5.20338	5.54123	0.4374	0.4024	0.0054	539.7349	0.1708	0.013826
Other Construction Equipment	2019	2019Other Construction Equipment25	25	1.1519	5.20338	5.54123	0.4374	0.4024	0.0054	539.7349	0.1708	
Other Construction Equipment	2019	2019Other Construction Equipment50	50	1.1519	5.20338	5.54123	0.4374	0.4024	0.0054	539.7349	0.1708	
Other Construction Equipment	2019	2019Other Construction Equipment120	120	0.5504	5.04831	3.7535	0.3789	0.3486	0.0049	482.2177	0.1526	
Other Construction Equipment	2019	2019Other Construction Equipment175	175	0.4121	4.4331	3.25619	0.2335	0.2148	0.0049	480.4518	0.152	0.012307
Other Construction Equipment	2019	2019Other Construction Equipment500	500	0.2335	2.85547	1.66739	0.1026	0.0944	0.0049	485.4127	0.1536	0.012434
Other Construction Equipment	2020	2020Other Construction Equipment15	15	1.0722	5.03626	5.40446	0.4052	0.3728	0.0054	527.9656	0.1708	
Other Construction Equipment Other Construction Equipment	2020 2020	2020Other Construction Equipment25 2020Other Construction Equipment50	25 50	1.0722	5.03626 5.03626	5.40446 5.40446	0.4052	0.3728	0.0054	527.9656 527.9656	0.1708	0.013524 0.013524
	2020	2020Other Construction Equipment120	120	0.5191	4.7712	3.73189	0.4052	0.3728	0.0054	472.2162	0.1708	0.013524
Other Construction Equipment Other Construction Equipment	2020	2020Other Construction Equipment120 2020Other Construction Equipment175	120	0.3877	4.11203	3.23528	0.3537	0.3254	0.0049	469.9837	0.1527	0.012096
Other Construction Equipment	2020	20200ther Construction Equipment173	500	0.2242	2.63672	1.6338	0.217	0.0883	0.0049	409.9837	0.152	0.012039
Other Construction Equipment	2020	20210ther Construction Equipment15	15	1.0095	4.90234	5.30749	0.3816	0.351	0.0054	527.7834	0.1707	0.012170
Other Construction Equipment	2021	20210ther Construction Equipment25	25	1.0095	4.90234	5.30749	0.3816	0.351	0.0054	527.7834	0.1707	0.01352
Other Construction Equipment	2021	20210ther Construction Equipment50	50	1.0095	4.90234	5.30749	0.3816	0.351	0.0054	527.7834	0.1707	0.01352
Other Construction Equipment	2021	2021Other Construction Equipment120	120	0.4817	4.4558	3.70304	0.3234	0.2975	0.0049	472.275	0.1527	0.012098
Other Construction Equipment	2021	2021Other Construction Equipment175	175	0.3295	3.43847	3.18275	0.1798	0.1654	0.0048	469.7642	0.1519	0.012033
Other Construction Equipment	2021	2021Other Construction Equipment500	500	0.2151	2.42822	1.59874	0.0897	0.0825	0.0049	475.2124	0.1537	0.012173
Other General Industrial Equipment	2018	2018Other General Industrial Equipment15	15	1.1544	4.97857	5.82717	0.4137	0.3806	0.0054	546.6385	0.1702	0.014003
Other General Industrial Equipment	2018	2018Other General Industrial Equipment25	25	1.1544	4.97857	5.82717	0.4137	0.3806	0.0054	546.6385	0.1702	0.014003
Other General Industrial Equipment	2018	2018Other General Industrial Equipment50	50	1.1544	4.97857	5.82717	0.4137	0.3806	0.0054	546.6385	0.1702	
Other General Industrial Equipment	2018	2018Other General Industrial Equipment120	120	0.5573	4.95455	3.87633	0.3917	0.3604	0.0048	488.2775	0.152	0.012508
Other General Industrial Equipment	2018 2018	2018Other General Industrial Equipment175 2018Other General Industrial Equipment250	175 250	0.3176	3.23673 3.64819	3.23662	0.172	0.1582	0.0049	490.1999 491.6263	0.1526	0.012557 0.012593
Other General Industrial Equipment Other General Industrial Equipment	2018	2018Other General Industrial Equipment200	500	0.2536	2.90735	1.45525 1.58301	0.1348	0.0953	0.0049	491.3207	0.153	0.012593
Other General Industrial Equipment	2018	2018Other General Industrial Equipment750	750	0.2350	2.41933	1.48303	0.0826	0.0333	0.0049	491.8763	0.1531	0.012360
Other General Industrial Equipment	2018	2018Other General Industrial Equipment1000	1000	0.2573	4.81007	1.06646		0.1066	0.0049	490.4122	0.1527	0.012562
Other General Industrial Equipment	2019	2019Other General Industrial Equipment15	15	1.0422	4.80683	5.66186	0.3737	0.3438	0.0054	537.8689	0.1702	0.013778
Other General Industrial Equipment	2019	2019Other General Industrial Equipment25	25	1.0422	4.80683	5.66186	0.3737	0.3438	0.0054	537.8689	0.1702	0.013778
Other General Industrial Equipment	2019	2019Other General Industrial Equipment50	50	1.0422	4.80683	5.66186	0.3737	0.3438	0.0054	537.8689	0.1702	0.013778
Other General Industrial Equipment	2019	2019Other General Industrial Equipment120	120	0.4997	4.49674	3.82128	0.3429	0.3155	0.0048	480.4442	0.152	0.012307
Other General Industrial Equipment	2019	2019Other General Industrial Equipment175	175	0.3017	2.99891			0.144	0.0049	482.3357	0.1526	
Other General Industrial Equipment	2019	2019Other General Industrial Equipment250	250	0.2585	3.01996		0.1058	0.0973	0.0049	483.7392	0.153	
Other General Industrial Equipment	2019	2019Other General Industrial Equipment500	500	0.2385	2.57531	1.56115	0.0923	0.0849	0.0049	483.4385	0.153	
Other General Industrial Equipment Other General Industrial Equipment	2019 2019	2019Other General Industrial Equipment750 2019Other General Industrial Equipment1000	750 1000	0.1989	2.11518 4.83364	1.47441 1.07573	0.0758	0.0697	0.0049	483.9852 482.5446	0.1531 0.1527	
Other General Industrial Equipment	2019	2019Other General Industrial Equipment15	1000	0.264	4.63364	5.50397	0.334	0.3073	0.0049	482.5446 526.1761	0.1527	
Other General Industrial Equipment	2020	2020Other General Industrial Equipment15	25	0.946	4.62219		0.334	0.3073	0.0054	526.1761	0.1702	
Other General Industrial Equipment	2020	20200ther General Industrial Equipment50	50	0.946	4.62219	5.50397	0.334	0.3073	0.0054	526.1761	0.1702	
Other General Industrial Equipment	2020	2020Other General Industrial Equipment120	120	0.446	4.06079	3.77073	0.2959	0.2722	0.0048	469.9998	0.152	0.012039
Other General Industrial Equipment	2020	2020Other General Industrial Equipment175	175	0.2683	2.57503	3.22922	0.135	0.1242	0.0049	471.8502	0.1526	
Other General Industrial Equipment	2020	2020Other General Industrial Equipment250	250	0.2368	2.66782	1.23914	0.0902	0.083	0.0049	473.2231	0.153	0.012122
Other General Industrial Equipment	2020	2020Other General Industrial Equipment500	500	0.2076	2.06187	1.34424	0.0724	0.0666	0.0049	472.929	0.153	
Other General Industrial Equipment	2020	2020Other General Industrial Equipment750	750	0.1746		1.46184	0.0622	0.0572	0.0049	473.4638	0.1531	
Other General Industrial Equipment	2020	2020Other General Industrial Equipment1000	1000	0.2707	4.85721	1.085	0.1186	0.1092	0.0049	472.0545	0.1527	
Other General Industrial Equipment	2021	2021Other General Industrial Equipment15	15	0.8314	4.42532	5.31354	0.2889	0.2658	0.0054	526.1761	0.1702	
Other General Industrial Equipment	2021	2021Other General Industrial Equipment25 2021Other General Industrial Equipment50	25 50	0.8314	4.42532 4.42532	5.31354	0.2889	0.2658	0.0054	526.1761 526.1761	0.1702	0.013478 0.013478
Other General Industrial Equipment Other General Industrial Equipment	2021 2021	2021Other General Industrial Equipment50 2021Other General Industrial Equipment120	50 120	0.8314	4.42532 3.7177	5.31354 3.74029	0.2889	0.2658	0.0054	526.1761 469.9998	0.1702	
Other General Industrial Equipment	2021	2021Other General Industrial Equipment175	120	0.4037	2.34745	3.23421	0.2559	0.2354	0.0049	469.9998	0.152	
Other General Industrial Equipment	2021	2021Other General Industrial Equipment250	250	0.2037	2.0939	1.17138	0.0696	0.0641	0.0049	473.2231	0.1520	0.012007
Other General Industrial Equipment	2021	20210ther General Industrial Equipment500	500	0.1954	1.79624	1.32956		0.059	0.0049	472.929	0.153	
		20210ther General Industrial Equipment750	750	0.166	1.38672	1.46305	0.0544	0.05	0.0049	473.4638	0.1531	
Other General Industrial Equipment	2021			0.2761	4.87557	1.09291	0.1196	0.1101	0.0049	472.0545	0.1527	
	2021 2021	2021Other General Industrial Equipment1000	1000									
Other General Industrial Equipment		20210ther General Industrial Equipment1000 20180ther Material Handling Equipment50	50	1.2894	5.18225	6.06083	0.4567	0.4201	0.0054	544.0753	0.1694	0.013937
Other General Industrial Equipment Other General Industrial Equipment	2021			-	5.18225 3.9436	6.06083 3.67482	0.4567 0.2711	0.4201 0.2494	0.0054 0.0049	544.0753 492.0058	0.1694 0.1532	
Other General Industrial Equipment Other General Industrial Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment	2021 2018 2018 2018	2018Other Material Handling Equipment50 2018Other Material Handling Equipment120 2018Other Material Handling Equipment175	50 120 175	1.2894 0.4072 0.3265	3.9436 3.33231	3.67482 3.21803	0.2711 0.1725	0.2494 0.1587	0.0049 0.0049	492.0058 490.5834	0.1532 0.1527	0.012603 0.012567
Other General Industrial Equipment Other General Industrial Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment	2021 2018 2018 2018 2018 2018	2018Other Material Handling Equipment50 2018Other Material Handling Equipment120 2018Other Material Handling Equipment175 2018Other Material Handling Equipment250	50 120 175 250	1.2894 0.4072 0.3265 0.3161	3.9436 3.33231 4.09187	3.67482 3.21803 1.3884	0.2711 0.1725 0.135	0.2494 0.1587 0.1242	0.0049 0.0049 0.0049	492.0058 490.5834 489.8174	0.1532 0.1527 0.1525	0.012603 0.012567 0.012547
Other General Industrial Equipment Other General Industrial Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment	2021 2018 2018 2018 2018 2018 2018	2018Other Material Handling Equipment50 2018Other Material Handling Equipment120 2018Other Material Handling Equipment175 2018Other Material Handling Equipment250 2018Other Material Handling Equipment500	50 120 175 250 500	1.2894 0.4072 0.3265 0.3161 0.2959	3.9436 3.33231 4.09187 3.52439	3.67482 3.21803 1.3884 1.63271	0.2711 0.1725 0.135 0.1335	0.2494 0.1587 0.1242 0.1228	0.0049 0.0049 0.0049 0.0049	492.0058 490.5834 489.8174 488.5866	0.1532 0.1527 0.1525 0.1521	0.012603 0.012567 0.012547 0.012516
Other General Industrial Equipment Other General Industrial Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment Other Material Handling Equipment	2021 2018 2018 2018 2018 2018	2018Other Material Handling Equipment50 2018Other Material Handling Equipment120 2018Other Material Handling Equipment175 2018Other Material Handling Equipment250	50 120 175 250	1.2894 0.4072 0.3265 0.3161 0.2959 0.1795	3.9436 3.33231 4.09187	3.67482 3.21803 1.3884 1.63271 1.02319	0.2711 0.1725 0.135 0.1335 0.0742	0.2494 0.1587 0.1242 0.1228 0.0683	0.0049 0.0049 0.0049 0.0049 0.0049	492.0058 490.5834 489.8174	0.1532 0.1527 0.1525 0.1521 0.1527	0.012603 0.012567 0.012547 0.012516 0.012562

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Equipment Type	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Other Material Handling Equipment	2019	2019Other Material Handling Equipment120	120	0.3602	3.56573	3.63634	0.2307	0.2123	0.0049	484.1126	0.1532	0.012401
Other Material Handling Equipment	2019	2019Other Material Handling Equipment175	175	0.2796	2.77369	3.1852	0.1388	0.1277	0.0049	482.7131	0.1527	0.012365
Other Material Handling Equipment	2019	2019Other Material Handling Equipment250	250	0.3	3.81716	1.34052	0.1231	0.1133	0.0049	481.9594	0.1525	0.012346
Other Material Handling Equipment	2019	2019Other Material Handling Equipment500	500	0.2909	3.37078	1.61951	0.1278	0.1175	0.0049	480.7483	0.1521	0.012315
Other Material Handling Equipment	2019	2019Other Material Handling Equipment9999	9999	0.1899	3.58277	1.03609	0.0763	0.0702	0.0049	482.5446	0.1527	0.012361
Other Material Handling Equipment	2020	2020Other Material Handling Equipment50	50	1.2452	5.13925	6.1671	0.4392	0.4041	0.0054	523.7088	0.1694	0.013415
Other Material Handling Equipment	2020	2020Other Material Handling Equipment120	120	0.3065	3.10396	3.58938	0.1823	0.1677	0.0049	473.5884	0.1532	0.012131
Other Material Handling Equipment	2020	2020Other Material Handling Equipment175	175	0.252	2.36653	3.17089	0.1181	0.1086	0.0049	472.2193	0.1527	0.012096
Other Material Handling Equipment	2020	2020Other Material Handling Equipment250	250	0.2908	3.59889	1.31882	0.1152	0.106	0.0049	471.482	0.1525	0.012077
Other Material Handling Equipment	2020	2020Other Material Handling Equipment500	500	0.2825	3.20974	1.52346	0.1198	0.1102	0.0049	470.2972	0.1521	0.012047
Other Material Handling Equipment	2020	2020Other Material Handling Equipment9999	9999	0.2004	3.61407	1.04898	0.0783	0.072	0.0049	472.0545	0.1527	0.012092
Other Material Handling Equipment	2021	2021Other Material Handling Equipment50	50	1.1079	4.96638	5.95956	0.3956	0.364	0.0054	523.7088	0.1694	0.013415
Other Material Handling Equipment	2021	2021Other Material Handling Equipment120	120	0.2941	2.95622	3.60203	0.1657	0.1524	0.0049	473.5884	0.1532	0.012131
Other Material Handling Equipment	2021	2021Other Material Handling Equipment175	175	0.2488	2.24633	3.19638	0.1138	0.1047	0.0049	472.2193	0.1527	0.012096
Other Material Handling Equipment	2021	2021Other Material Handling Equipment250	250	0.2694	3.08193	1.30911	0.1024	0.0942	0.0049	471.482	0.1525	0.012077
Other Material Handling Equipment	2021	2021Other Material Handling Equipment500	500	0.2541	2.60166	1.44188	0.1011	0.093	0.0049	470.2972	0.1521	0.012047
Other Material Handling Equipment	2021	2021Other Material Handling Equipment9999	9999	0.0725	2.3179	0.97159	0.0195	0.0179	0.0049	472.0545	0.1527	0.012092
Pavers	2018	2018Pavers25	25	1.5386	5.12103	5.8493	0.4782	0.4399	0.0054	547.0785	0.1703	0.014014
Pavers	2018	2018Pavers50	50	1.5386	5.12103	5.8493	0.4782	0.4399	0.0054	547.0785	0.1703	0.014014
Pavers	2018	2018Pavers120	120	0.5356	5.01936	3.66032	0.3752	0.3452	0.0048	488.1812	0.152	0.012505
Pavers	2018	2018Pavers175	175	0.3387	3.7472	3.03913	0.1831	0.1684	0.0049	491.322	0.153	0.012586
Pavers	2018	2018Pavers250	250	0.1982	3.47438	1.03446	0.0922	0.0848	0.0049	491.543	0.153	0.012591
Pavers	2018	2018Pavers500	500	0.1643	2.32002	0.98125	0.0826	0.076	0.0048	484.2774	0.1508	0.012405
Pavers	2019	2019Pavers25	25	1.4176	4.91634	5.65687	0.4361	0.4012	0.0054	538.3246	0.1703	0.01379
Pavers	2019	2019Pavers50	50	1.4176	4.91634	5.65687	0.4361	0.4012	0.0054	538.3246	0.1703	0.01379
Pavers	2019	2019Pavers120	120	0.4957	4.67048	3.62215	0.3455	0.3178	0.0048	480.2509	0.1519	
Pavers	2019	2019Pavers175	175	0.2988	3.24473	3.01323	0.1589	0.1462	0.0049	483.3938	0.1529	0.012383
Pavers	2019	2019Pavers250	250	0.1868	3.11084	1.03181	0.0842	0.0774	0.0049	483.5743	0.153	0.012387
Pavers	2019	2019Pavers500	500	0.1665	2.26992	0.98586	0.081	0.0746	0.0048	476.9707	0.1509	0.012218
Pavers	2020	2020Pavers25	25	1.3182	4.76401	5.52345	0.4022	0.37	0.0054	526.2098	0.1702	0.013479
Pavers	2020	2020Pavers50	50	1.3182	4.76401	5.52345	0.4022	0.37	0.0054	526.2098	0.1702	0.013479
Pavers	2020	2020Pavers120	120	0.4697	4.42718	3.60405	0.3249	0.2989	0.0048	469.8815	0.152	0.012036
Pavers	2020	2020Pavers175	175	0.2728	2.91833	3.0097	0.1419	0.1305	0.0049	472.7746	0.1529	0.01211
Pavers	2020	2020Pavers250	250	0.1756	2.77699	1.02834	0.076	0.0699	0.0049	472.8337	0.1529	0.012112
Pavers	2020	2020Pavers500	500	0.1647	2.13394	0.98677	0.0772	0.071	0.0048	466.2059	0.1508	0.011942
Pavers	2021	2021Pavers25	25	1.2075	4.60183	5.30162	0.3699	0.3403	0.0054	526.5153	0.1703	0.013487
Pavers	2021	2021Pavers50	50	1.2075	4.60183	5.30162	0.3699	0.3403	0.0054	526.5153	0.1703	0.013487
Pavers	2021	2021Pavers120	120	0.4196	4.02622	3.56251	0.2853	0.2625	0.0048	469.7736	0.1519	0.012034
Pavers	2021	2021Pavers175	175	0.2557	2.6948	3.01647	0.1302	0.1198	0.0049	472.5552	0.1528	0.012105
Pavers	2021	2021Pavers250	250	0.1655	2.4844	1.02422	0.0697	0.0642	0.0049	472.4765	0.1528	0.012103
Pavers	2021	2021Pavers500	500	0.1639	2.05298	0.9877	0.074	0.068	0.0048	465.5908	0.1506	0.011926
Paving Equipment	2018	2018Paving Equipment25	25	0.7374	4.31244	4.41578	0.286	0.2632	0.0054	540.6115	0.1683	0.013848
Paving Equipment	2018	2018Paving Equipment50	50	0.7374	4.31244	4.41578	0.286	0.2632	0.0054	540.6115	0.1683	0.013848
Paving Equipment	2018	2018Paving Equipment120	120	0.4494	4.27034	3.60743	0.3021	0.278	0.0049	492.1184	0.1532	0.012606
Paving Equipment	2018	2018Paving Equipment175	175 250	0.2837	3.17208 3.58656	3.02602	0.1553	0.1429	0.0049	489.2024 490.6833	0.1523	0.012531 0.012569
Paving Equipment	2018 2019	2018Paving Equipment250 2019Paving Equipment25	250	0.2583	4.23779	1.28117 4.40798		0.2481	0.0049	490.6633 531.8612	0.1528	0.012569
Paving Equipment	2019	2019Paving Equipment25 2019Paving Equipment50	25 50	0.7046	4.23779	4.40798	0.2697	0.2481	0.0054	531.8612	0.1683	0.013624
Paving Equipment	2019	2019Paving Equipment120	120	0.4251	4.04152	3.59849	0.2808	0.2481	0.0034	484.387	0.1533	0.013024
Paving Equipment	2019	2019Paving Equipment120 2019Paving Equipment175	175	0.4251	2.6924	3.0109	0.2808	0.2384	0.0049	484.387	0.1533	0.012408
Paving Equipment Paving Equipment	2019	2019Paving Equipment175 2019Paving Equipment250	250	0.2341	3.25106	1.24449	0.1330	0.1229	0.0049	481.2231	0.1523	0.012327
Paving Equipment	2019	2020Paving Equipment25	25	0.6214	3.9519	4.22322	0.2169	0.1027	0.0049	520.1235	0.1527	0.012303
Paving Equipment	2020	2020Paving Equipment50	50	0.6214	3.9519	4.22322	0.2169	0.1996	0.0054	520.1235	0.1682	0.013323
Paving Equipment	2020	2020Paving Equipment120	120	0.3974	3.78064	3.58172	0.2558	0.2353	0.0049	473.3249	0.1531	0.012125
Paving Equipment	2020	2020Paving Equipment175	175	0.2475	2.55498	3.02393	0.1278	0.1176	0.0049	470.7359	0.1522	0.012058
Paving Equipment	2020	2020Paving Equipment250	250	0.2435	3.2202	1.25215		0.1018	0.0049	472.1514	0.1527	
Paving Equipment	2021	2021Paving Equipment25	25	0.5865	3.88226	4.21072	0.2004	0.1843	0.0054	520.3965	0.1683	0.01333
Paving Equipment	2021	2021Paving Equipment50	50	0.5865	3.88226	4.21072	0.2004	0.1843	0.0054	520.3965	0.1683	0.01333
Paving Equipment	2021	2021Paving Equipment120	120	0.3551	3.45065	3.5537	0.219	0.2015	0.0049	473.2205	0.153	0.012122
Paving Equipment	2021				-			0.1052	0.0049	470.6495	0.1522	0.012056
	2021	2021Paving Equipment175	175	0.2291	2.31505	3.03229	0.1143	0.1002				
Paving Equipment	2021	2021Paving Equipment175 2021Paving Equipment250	175 250	0.2291 0.2106	2.31505 2.58202	1.20904	0.0921	0.0848	0.0049	472.151	0.1527	0.012095
Paving Equipment Plate Compactors									0.0049		0.1527 0.059	0.012095 0.014557
	2021	2021Paving Equipment250	250	0.2106	2.58202	1.20904	0.0921	0.0848 0.161 0.161		472.151		
Plate Compactors	2021 2018	2021Paving Equipment250 2018Plate Compactors15	250 15	0.2106 0.661	2.58202 4.142	1.20904 3.47	0.0921 0.161	0.0848 0.161	0.008	472.151 568.3	0.059	0.014557
Plate Compactors Plate Compactors	2021 2018 2019	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15	250 15 15 15 15 15	0.2106 0.661 0.661 0.661 0.661	2.58202 4.142 4.142 4.142 4.142	1.20904 3.47 3.469 3.469 3.469	0.0921 0.161 0.161 0.161 0.161	0.0848 0.161 0.161 0.161 0.161	0.008 0.008 0.008 0.008	472.151 568.3 568.299 568.299 568.299	0.059 0.059 0.059 0.059	0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors	2021 2018 2019 2020	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15	250 15 15 15	0.2106 0.661 0.661 0.661	2.58202 4.142 4.142 4.142	1.20904 3.47 3.469 3.469	0.0921 0.161 0.161 0.161	0.0848 0.161 0.161 0.161 0.161 0.237	0.008 0.008 0.008	472.151 568.3 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.059 0.061	0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers Pressure Washers	2021 2018 2019 2020 2021 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25	250 15 15 15 15 15	0.2106 0.661 0.661 0.661 0.661	2.58202 4.142 4.142 4.142 4.142 4.142 4.728 4.661	1.20904 3.47 3.469 3.469 3.469 3.58 2.531	0.0921 0.161 0.161 0.161 0.161 0.237 0.224	0.0848 0.161 0.161 0.161 0.161 0.237 0.224	0.008 0.008 0.008 0.008 0.008 0.007	472.151 568.3 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.059 0.061 0.067	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers Pressure Washers Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers50	250 15 15 15 15 15 15 25 50	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661	2.58202 4.142 4.142 4.142 4.142 4.142 4.728 4.661 4.202	1.20904 3.47 3.469 3.469 3.469 3.58 2.531 3.542	0.0921 0.161 0.161 0.161 0.237 0.224 0.212	0.0848 0.161 0.161 0.161 0.237 0.224 0.212	0.008 0.008 0.008 0.008 0.008 0.007 0.007	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.059 0.061 0.067 0.059	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers Pressure Washers Pressure Washers Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018	2021Paving Equipment250 2013Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers50 2018Pressure Washers50 2018Pressure Washers120	250 15 15 15 15 15 25 50 120	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661 0.388	2.58202 4.142 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584	1.20904 3.47 3.469 3.469 3.469 3.58 2.531 3.542 3.26	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203	0.008 0.008 0.008 0.008 0.008 0.007 0.007 0.007	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.059 0.061 0.067 0.059 0.035	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers Pressure Washers Pressure Washers Pressure Washers Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers50 2018Pressure Washers120 2018Pressure Washers175	250 15 15 15 15 15 25 50 120 175	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309	2.58202 4.142 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132	0.008 0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers120 2018Pressure Washers175 2018Pressure Washers25	250 15 15 15 15 25 50 120 175 250	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099	2.58202 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009	0.008 0.008 0.008 0.008 0.008 0.007 0.007 0.007 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers50 2018Pressure Washers120 2018Pressure Washers120 2018Pressure Washers175 2018Pressure Washers175 2018Pressure Washers175 2018Pressure Washers175 2018Pressure Washers175 2018Pressure Washers175 2018Pressure Washers150	250 15 15 15 15 25 50 120 175 250 15	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662	2.58202 4.142 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 3.562	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224	0.008 0.008 0.008 0.008 0.008 0.007 0.007 0.007 0.006 0.006 0.006 0.008	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.035 0.027 0.008 0.059	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2013Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2019Plate Compactors15 2019Plate Compactors15 2019Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers120 2018Pressure Washers175 2018Pressure Washers155 2018Pressure Washers155 2018Pressure Washers155 2019Pressure Washers15 2019Pressure Washers25	250 15 15 15 15 25 50 120 175 250 15 25	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731	2.58202 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.596	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 3.562 2.501	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214	0.008 0.008 0.008 0.008 0.007 0.007 0.007 0.006 0.006 0.006 0.008 0.007	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers Pressure Washer P	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers20 2018Pressure Washers120 2018Pressure Washers120 2018Pressure Washers25 2018Pressure Washers25 2018Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25	250 15 15 15 25 50 120 175 250 15 25 50	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569	2.58202 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 3.562 2.501 3.457	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.008 0.007 0.007	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers120 2018Pressure Washers175 2018Pressure Washers25 2018Pressure Washers25 2018Pressure Washers25 2018Pressure Washers25 2018Pressure Washers25 2019Pressure Washers25	250 15 15 15 25 50 120 175 250 15 250 15 250 120	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569 0.337	2.58202 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 3.562 2.501 3.457 3.24	0.0921 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.174	0.0848 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.174	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.008 0.007 0.007 0.007	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.03	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2020Plate Compactors15 2021Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers120 2018Pressure Washers175 2018Pressure Washers15 2019Pressure Washers15 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers26 2019Pressure Washers27 2019Pressure Washers26 2019Pressure Washers27 2019Pressure Washers26 2019Pressure Washers27 2019Pressure Washers26 2019Pressure Washers27 2019Pressure Washers27 2019Pressure Washers27 2019Pressure Washers28 2019Pressure Washers20 2019Pressure Washers210 2019Pressure Washers210	250 15 15 15 25 50 120 175 250 15 25 50 120 15 25 50 120 175	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.662 0.731 0.569 0.337 0.28	2.58202 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.562 2.908 0.986 0.986 0.986 2.501 3.562 2.501 3.457 3.24 2.907	0.0921 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.117	0.0848 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.174 0.117	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.008 0.007 0.007 0.007 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.03 0.025	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2013Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2019Pressure Washers15 2018Pressure Washers25 2018Pressure Washers20 2018Pressure Washers120 2018Pressure Washers15 2018Pressure Washers15 2019Pressure Washers25	250 15 15 15 25 50 120 175 250 15 25 50 120 15 25 50 120 175 250	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.662 0.731 0.569 0.337 0.28 0.098	2.58202 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.617 4.596 4.053 3.295 2.67 0.265	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.542 3.26 2.908 0.986 3.562 2.501 3.457 3.24 2.907 0.986	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.174 0.117 0.009	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.174 0.117 0.009	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.027 0.003 0.027 0.008 0.059 0.066 0.051 0.03 0.025 0.008	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2013Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2019Plate Compactors15 2019Plate Compactors15 2018Pressure Washers25 2018Pressure Washers50 2018Pressure Washers120 2018Pressure Washers25 2019Pressure Washers175 2019Pressure Washers250 2019Pressure Washers175 2019Pressure Washers175 2019Pressure Washers175 2019Pressure Washers250 2019Pressure Washers250 2019Pressure Washers175 2019Pressure Washers175 2019Pressure Washers250 2019Pressure Washers175 2019Pressure Washers250 2019Pressure Washers175 2019P	250 15 15 15 25 50 120 175 250 15 25 50 120 175 250 120 175 250 15	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.662 0.731 0.569 0.328 0.328 0.309	2.58202 4.142 4.142 4.142 4.142 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67 0.265 4.516	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.562 2.908 0.986 3.562 2.501 3.457 3.24 2.907 0.986 3.546	0.0921 0.161 0.161 0.261 0.227 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.117 0.009 0.212	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.224 0.203 0.224 0.203 0.224 0.214 0.214 0.174 0.117 0.009 0.212	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.007 0.007 0.007 0.007 0.007 0.007 0.006 0.006 0.006 0.006	472.151 568.39 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.03 0.025 0.008	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers120 2018Pressure Washers120 2018Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers120 2019Pressure Washers15 2019Pressure Washers15 2020Pressure Washers15 2020Pressure Washers25	250 15 15 15 25 50 120 175 250 15 250 15 250 120 175 250 120 175 250 15 250	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.682 0.731 0.569 0.337 0.288 0.288 0.298 0.646	2.58202 4.142 4.142 4.142 4.142 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67 0.265 4.516 4.538	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 0.986 2.501 3.562 2.501 3.457 3.24 2.907 0.986 2.546 2.473	0.0921 0.161 0.161 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.184 0.174 0.117 0.009 0.212 0.205	0.0848 0.161 0.161 0.261 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.184 0.114 0.117 0.009 0.212 0.205	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.03 0.025 0.008 0.058	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers20 2018Pressure Washers120 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers25 2019Pressure Washers15 2019Pressure Washers25 2020Pressure Washers25 2020Pressure Washers25 2020Pressure Washers25 2020Pressure Washers25 2020Pressure Washers25 2020Pressure Washers25	250 15 15 15 25 50 120 175 250 15 250 15 250 120 175 250 15 250 15 25 50	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569 0.337 0.28 0.988 0.988 0.948 0.948 0.949	2.58202 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.617 4.596 4.053 3.295 2.67 0.265 4.516 4.538 3.917	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 3.562 2.501 3.457 3.24 2.907 0.986 3.546 2.473 3.393	0.0921 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.174 0.117 0.009 0.214 0.117 0.212 0.205 0.161	0.0848 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.174 0.117 0.009 0.212 0.214 0.117 0.215 0.215 0.216	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.03 0.025 0.003 0.025 0.008 0.058 0.058	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 201Plate Compactors15 201Plate Compactors15 201Plate Compactors15 201Pressure Washers15 2018Pressure Washers20 2018Pressure Washers175 2018Pressure Washers175 2018Pressure Washers15 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers120 2019Pressure Washers25 2019Pressure Washers25 2019Pressure Washers120 2019Pressure Washers25 2019Pressure Washers120 2019Pressure Washers15 2019Pressure Washers15 2019Pressure Washers15 2019Pressure Washers15 2020Pressure Washers15 2020Pressure Washers15 2020Pressure Washers25 2020Pressure Washers50 2020Pressure Washers50 2020Pressure Washers50 2020Pressure Washers51	250 15 15 15 25 50 120 175 250 15 250 15 250 120 175 250 120 175 250 15 250 15 250 15 250 15 250 15 25 50	0.2106 0.661 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569 0.337 0.28 0.098 0.646 0.721 0.499 0.298	2.58202 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67 0.265 2.67 0.265 4.516 4.538 3.917 3.036	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.56 2.908 0.986 3.562 2.501 3.457 2.501 3.457 2.501 3.457 3.24 2.907 0.986 3.546 2.473 3.393 3.325	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.132 0.009 0.224 0.117 0.009 0.212 0.161 0.151	0.0848 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.203 0.224 0.212 0.203 0.224 0.214 0.214 0.214 0.214 0.214 0.117 0.009 0.212 0.205 0.212 0.205 0.212 0.212 0.212 0.215 0.215 0.215	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006	472.151 568.3 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299 568.299	0.059 0.059 0.059 0.067 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.03 0.025 0.008 0.025 0.008 0.055 0.008 0.055 0.008	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2013Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2019Plate Compactors15 2019Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers20 2018Pressure Washers25 2019Pressure Washers25 2020Pressure Washer	250 15 15 15 25 50 120 175 250 15 25 50 120 175 250 15 25 50 120 175 250 15 25 50 120 175 50 15 15 15 15 15 15 15 15 15 15	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569 0.337 0.28 0.098 0.646 0.721 0.499 0.258	2.58202 4.142 4.142 4.142 4.142 4.28 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67 0.265 4.516 4.538 3.917 3.036 2.383	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 2.908 0.986 3.562 2.501 3.457 3.24 2.501 3.457 3.24 2.907 0.986 3.546 2.473 3.393 3.325 2.907	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.224 0.212 0.224 0.212 0.224 0.132 0.1317 0.009	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.224 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.224 0.224 0.224 0.224 0.212 0.209 0.224 0.215 0.161 0.161 0.161 0.161 0.161 0.237 0.224 0.212 0.224 0.212 0.224 0.212 0.224 0.125 0.224 0.127 0.224 0.126 0.127 0.224 0.127 0.225 0.212 0.203 0.122 0.203 0.122 0.214 0.1212 0.203 0.124 0.1212 0.203 0.0124 0.214 0.117 0.009	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.007 0.007 0.007	472.151 568.39 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.067 0.027 0.027 0.027 0.027 0.025 0.059 0.059 0.051 0.051 0.025 0.008 0.058 0.058 0.058 0.045 0.025	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Pressure Washers Pressu	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2018Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers20 2018Pressure Washers120 2018Pressure Washers25 2019Pressure Washers175 2019Pressure Washers15 2019Pressure Washers15 2019Pressure Washers15 2020Pressure Washers15 2020Pressure Washers15 2020Pressure Washers10 2020Pressure Washers120 2020Pres	250 15 15 15 25 50 120 175 250 15 25 50 120 175 250 15 25 50 120 175 250 175 250 175 250	0.2106 0.661 0.661 0.661 0.667 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569 0.337 0.28 0.098 0.646 0.721 0.499 0.298 0.298 0.298	2.58202 4.142 4.142 4.142 4.142 4.728 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67 0.265 4.516 4.538 3.917 3.036 2.383 0.265	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 3.26 2.908 0.986 3.562 2.501 3.457 3.24 2.907 0.986 3.546 2.473 3.393 3.225 2.907 0.986	0.0921 0.161 0.161 0.161 0.237 0.224 0.203 0.132 0.009 0.224 0.132 0.009 0.224 0.132 0.209 0.224 0.117 0.205 0.161 0.161 0.161 0.161 0.161 0.161 0.237 0.224 0.203 0.162 0.161 0.161 0.161 0.161 0.161 0.161 0.161 0.237 0.224 0.203 0.132 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.209 0.224 0.212 0.203 0.132 0.132 0.132 0.132 0.214 0.215 0.205 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.212 0.009 0.009 0.212 0.009 0	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.224 0.212 0.203 0.224 0.214 0.225 0.225 0.225 0.24100000000000000000000000000000000000	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.007 0.007 0.007 0.007 0.007 0.006 0.006 0.006	472.151 568.3 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.035 0.027 0.008 0.059 0.066 0.051 0.025 0.008 0.055 0.008 0.058 0.065 0.026 0.023 0.025 0.023 0.025 0.008	0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557 0.014557
Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Compactors Plate Support Washers Pressure Washers P	2021 2018 2019 2020 2021 2018 2018 2018 2018 2018 2018	2021Paving Equipment250 2013Plate Compactors15 2019Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2020Plate Compactors15 2019Plate Compactors15 2019Plate Compactors15 2018Pressure Washers15 2018Pressure Washers25 2018Pressure Washers20 2018Pressure Washers25 2019Pressure Washers25 2020Pressure Washer	250 15 15 15 25 50 120 175 250 15 25 50 120 175 250 15 25 50 120 175 250 15 25 50 120 175 50 15 15 15 15 15 15 15 15 15 15	0.2106 0.661 0.661 0.661 0.679 0.744 0.661 0.388 0.309 0.099 0.662 0.731 0.569 0.337 0.28 0.098 0.646 0.721 0.499 0.258	2.58202 4.142 4.142 4.142 4.142 4.28 4.661 4.202 3.584 2.989 0.277 4.617 4.596 4.053 3.295 2.67 0.265 4.516 4.538 3.917 3.036 2.383	1.20904 3.47 3.469 3.469 3.58 2.531 3.542 2.908 0.986 3.562 2.501 3.457 3.24 2.501 3.457 3.24 2.907 0.986 3.546 2.473 3.393 3.325 2.907	0.0921 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.009 0.224 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.224 0.212 0.224 0.212 0.224 0.132 0.1317 0.009	0.0848 0.161 0.161 0.161 0.237 0.224 0.212 0.203 0.132 0.224 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.214 0.224 0.224 0.224 0.224 0.212 0.209 0.224 0.215 0.161 0.161 0.161 0.161 0.161 0.237 0.224 0.212 0.224 0.212 0.224 0.212 0.224 0.125 0.224 0.127 0.224 0.126 0.127 0.224 0.127 0.225 0.212 0.203 0.122 0.203 0.122 0.214 0.1212 0.203 0.124 0.1212 0.203 0.0124 0.1212 0.205 0.1212 0.205 0.1611 0.104 0.105 0.009	0.008 0.008 0.008 0.008 0.007 0.007 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.007 0.007 0.007	472.151 568.39 568.299	0.059 0.059 0.059 0.061 0.067 0.059 0.067 0.027 0.027 0.027 0.027 0.025 0.059 0.059 0.051 0.051 0.025 0.008 0.058 0.058 0.058 0.045 0.025	0.014557 0.014557

Equipment Type	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Pressure Washers	2021	2021Pressure Washers50	50	0.439	3.765	3.329	0.136	0.136	0.007	568.299	0.039	0.01455
Pressure Washers	2021	2021Pressure Washers120	120	0.264	2.766	3.21	0.129	0.129	0.006	568.299	0.023	
Pressure Washers	2021	2021Pressure Washers175	175	0.238	2.118	2.907	0.093	0.093	0.006	568.299	0.021	0.014557
Pressure Washers	2021	2021Pressure Washers250	250	0.098	0.265	0.986	0.009	0.009	0.006	568.299	0.008	0.014557
Pumps	2018	2018Pumps15	15	0.766	4.762	3.58	0.256	0.256	0.008	568.299	0.069	0.014557
Pumps	2018	2018Pumps25	25	0.807	4.661	2.531	0.232	0.232	0.007	568.299	0.072	0.014557
Pumps	2018	2018Pumps50	50	0.973	4.422	4.397	0.267	0.267	0.007	568.299	0.087	0.014557
Pumps	2018	2018Pumps120	120	0.485	3.808	3.471	0.252	0.252	0.006	568.299	0.043	0.014557
Pumps	2018	2018Pumps175	175	0.338	3.035	2.974	0.14	0.14	0.006	568.299	0.03	0.014557
Pumps	2018	2018Pumps250	250	0.242	2.624	1.065	0.075	0.075	0.006	568.299	0.021	0.014557
Pumps	2018	2018Pumps500	500	0.242	2.34	1.000	0.071	0.071	0.005	568.299	0.021	0.014557
Pumps	2018	2018Pumps750	750	0.23	2.401	1.041	0.072	0.072	0.005	568.299	0.02	0.014557
Pumps	2018	2018Pumps9999	9999	0.293	4.105	1.144	0.098	0.072	0.005	568.299	0.02	0.014557
Pumps	2010	2019Pumps15	15	0.233	4.647	3.562	0.241	0.241	0.003	568.3	0.020	0.014557
	2019	2019Pumps25	25	0.740	4.596	2.501	0.241	0.241	0.000	568.3	0.007	0.014557
Pumps Pumps	2019	2019Pumps50	50	0.849	4.269	4.284	0.222	0.222	0.007	568.299	0.071	0.014557
•	2019	2019Fumps50 2019Pumps120	120	_		3.449					0.078	
Pumps	2019	2019Pumps120 2019Pumps175	120	0.429	3.497		0.217	0.217	0.006	568.299	-	0.014557
Pumps		2019Pumps175 2019Pumps250		0.309	2.711	2.974	0.124	0.124	0.006	568.299	0.027	0.014557
Pumps	2019		250	0.226	2.323	1.052	0.067	0.067	0.006	568.299	0.02	0.014557
Pumps	2019	2019Pumps500	500	0.214	2.084	1.027	0.064	0.064	0.005	568.3	0.019	0.014557
Pumps	2019	2019Pumps750	750	0.217	2.133	1.027	0.065	0.065	0.005	568.299	0.019	0.014557
Pumps	2019	2019Pumps9999	9999	0.273	3.873	1.118	0.089	0.089	0.005	568.299	0.024	0.014557
Pumps	2020	2020Pumps15	15	0.731	4.542	3.546	0.227	0.227	0.008	568.299	0.066	0.014557
Pumps	2020	2020Pumps25	25	0.769	4.538	2.473	0.212	0.212	0.007	568.299	0.069	0.014557
Pumps	2020	2020Pumps50	50	0.755	4.128	4.197	0.206	0.206	0.007	568.299	0.068	0.014557
Pumps	2020	2020Pumps120	120	0.386	3.219	3.432	0.189	0.189	0.006	568.299	0.034	0.014557
Pumps	2020	2020Pumps175	175	0.285	2.418	2.974	0.111	0.111	0.006	568.299	0.025	0.014557
Pumps	2020	2020Pumps250	250	0.212	2.050	1.042	0.060	0.060	0.006	568.299	0.019	
Pumps	2020	2020Pumps500	500	0.203	1.841	1.017	0.057	0.057	0.005	568.300		_
Pumps	2020	2020Pumps750	750	0.205	1.884	1.017	0.058	0.058	0.005	568.299	0.018	0.015
Pumps	2020	2020Pumps9999	9999	0.255	3.649	1.096	0.081	0.081	0.005	568.3	0.023	0.015
Pumps	2021	2021Pumps15	15	0.717	4.462	3.531	0.214	0.214	0.008	568.299	0.064	0.015
Pumps	2021	2021Pumps25	25	0.752	4.497	2.446	0.201	0.201	0.007	568.299	0.067	0.015
Pumps	2021	2021Pumps50	50	0.671	3.966	4.099	0.175	0.175	0.007	568.299	0.06	0.015
Pumps	2021	2021Pumps120	120	0.347	2.928	3.412	0.162	0.162	0.006	568.3	0.031	0.015
Pumps	2021	2021Pumps175	175	0.26	2.101	2.968	0.096	0.096	0.006	568.299	0.023	0.015
Pumps	2021	2021Pumps250	250	0.197	1.759	1.031	0.052	0.052	0.006	568.299	0.017	0.015
Pumps	2021	2021Pumps500	500	0.189	1.584	1.007	0.05	0.05	0.005	568.299	0.017	0.015
Pumps	2021	2021Pumps750	750	0.191	1.618	1.007	0.05	0.05	0.005	568.299	0.017	0.015
Pumps	2021	2021Pumps9999	9999	0.233	3.409	1.074	0.072	0.072	0.005	568.3	0.021	0.015
Rollers	2018	2018Rollers15	15	1.0644	4.8416	4.92335	0.3867	0.3557	0.0054	546.2905	0.1701	0.014
Rollers	2018	2018Rollers25	25	1.0644	4.8416	4.92335	0.3867	0.3557	0.0054	546.2905	0.1701	0.014
Rollers	2018	2018Rollers50	50	1.0644	4.8416	4.92335	0.3867	0.3557	0.0054	546.2905	0.1701	0.014
Rollers	2018	2018Rollers120	120	0.481	4.65049	3.60981	0.32	0.2944	0.0049	492.2118	0.1532	0.014
Rollers	2018	2018Rollers175	175	0.2652	3.18126	2.94895	0.1472	0.1355	0.0049	490.1805	0.1526	
Rollers	2018	2018Rollers250	250	0.2002	2.99492	1.24341	0.0938	0.0863	0.0049	491.6643	0.1531	0.013
Rollers	2018	2018Rollers500	500	0.2448	3.09814	2.23145	0.1191	0.1095	0.0040	497.9962	0.155	0.013
Rollers	2010	2019Rollers15	15	0.9719	4.64491	4.77841	0.3493	0.3213	0.0054	537.546	0.1701	0.013
Rollers	2019	2019Rollers25	25	0.9719	4.64491	4.77841	0.3493	0.3213	0.0054	537.546	0.1701	0.014
	2019	2019Rollers50	50	0.9719	4.64491	4.77841	0.3493	0.3213	0.0054	537.546	0.1701	0.014
Rollers	2019	2019Rollers120	120	0.4225						484.3362		
Rollers					4.17949		0.2748	0.2528	0.0049		0.1532	0.012
Rollers	2019	2019Rollers175	175	0.2309	2.69941	2.93251	0.1239	0.114	0.0049	482.4531 483.7769	0.1526	0.012
Rollers	2019	2019Rollers250	250	0.2105	2.88327	1.24854	0.0918	0.0844	0.0049		0.1531	0.012
Rollers	2019	2019Rollers500	500	0.2341	2.90839		0.1109	0.102	0.005	489.9774	0.155	0.013
Rollers	2020	2020Rollers15	15	0.9261	4.53426		0.3289	0.3026	0.0054	525.8798	0.1701	0.013
Rollers	2020	2020Rollers25	25	0.9261	4.53426		0.3289	0.3026	0.0054	525.8798	0.1701	
Rollers	2020	2020Rollers50	50	0.9261	4.53426		0.3289	0.3026	0.0054	525.8798	0.1701	
Rollers	2020	2020Rollers120	120	0.3882	3.88153	3.53135	0.2475	0.2277	0.0049	473.8594	0.1533	0.012
Rollers	2020	2020Rollers175	175	0.2152	2.45176		0.1126	0.1036	0.0049	471.9177	0.1526	
Rollers	2020	2020Rollers250	250	0.2085	2.75095		0.0892	0.082	0.0049	473.3669	0.1531	
Rollers	2020	2020Rollers500	500	0.235	2.82823	2.11346		0.1007	0.005	479.3254	0.155	0.012
Rollers	2021	2021Rollers15	15	0.8475	4.35097	4.59681	0.2938	0.2703	0.0054	525.7908	0.1701	0.013
Rollers	2021	2021Rollers25	25	0.8475	4.35097	4.59681	0.2938	0.2703	0.0054	525.7908	0.1701	0.013
Rollers	2021	2021Rollers50	50	0.8475	4.35097	4.59681	0.2938	0.2703	0.0054	525.7908	0.1701	0.013
Rollers	2021	2021Rollers120	120	0.3534	3.5889	3.50719	0.2194	0.2018	0.0049	473.9012	0.1533	
Rollers	2021	2021Rollers175	175	0.1929	2.11691	2.9256	0.0973	0.0895	0.0049	471.9799	0.1526	
Rollers	2021	2021Rollers250	250	0.1965	2.49332	1.22849	0.081	0.0746	0.0049	473.4704	0.1531	0.012
Rollers	2021	2021Rollers500	500	0.2205	2.58936		0.0997	0.0918	0.005	479.3294	0.155	0.012
Rough Terrain Forklifts	2018	2018Rough Terrain Forklifts50	50	1.0698	4.73469	4.76839	0.3585	0.3298	0.0054	545.8693	0.1699	0.014
Rough Terrain Forklifts	2018	2018Rough Terrain Forklifts120	120	0.2222	2.84496	3.26976	0.136	0.1251	0.0049	491.2107	0.1529	0.013
Rough Terrain Forklifts	2018	2018Rough Terrain Forklifts175	175	0.1637	2.34168	2.84245	0.0876	0.0806	0.0049	489.9869	0.1525	0.013
Rough Terrain Forklifts	2018	2018Rough Terrain Forklifts250	250	0.1521	2.48748	1.02948	0.0598	0.055	0.0049	491.0997	0.1529	0.013
Rough Terrain Forklifts	2018	2018Rough Terrain Forklifts500	500	0.1452	2.70063	0.95802	0.0599	0.0551	0.0048	485.9543	0.1513	0.012
Rough Terrain Forklifts	2019	2019Rough Terrain Forklifts50	50	1.009	4.55745	4.67405	0.3277	0.3015	0.0054	537.3287	0.17	0.014
Rough Terrain Forklifts	2019	2019Rough Terrain Forklifts120	120	0.2019	2.6222	3.25848	0.1168	0.1075	0.0049	483.3105	0.1529	
Rough Terrain Forklifts	2019	2019Rough Terrain Forklifts175	175	0.1493	2.05752			0.0693	0.0049	482.1188	0.1525	
Rough Terrain Forklifts	2019	2019Rough Terrain Forklifts250	250	0.1094	1.63905		0.0364	0.0335	0.0049	483.0882	0.1528	
Rough Terrain Forklifts	2019	2019Rough Terrain Forklifts500	500	0.1162	1.96109		0.0429	0.0395	0.0048	477.2539	0.151	0.012
Rough Terrain Forklifts	2010	2020Rough Terrain Forklifts50	50	0.9987	4.4946	4.68594	0.3164	0.2911	0.0054	525.6222	0.17	0.012
Rough Terrain Forklifts	2020	2020Rough Terrain Forklifts120	120	0.1892	2.45218		0.1026	0.0944	0.0034	472.9842	0.153	0.013
Rough Terrain Forklifts	2020	2020Rough Terrain Forklifts175	120	0.1429	1.86888		0.0684	0.0944	0.0049	472.9842	0.1526	
Rough Terrain Forklifts	2020	2020Rough Terrain Forklifts250	250	0.1429				0.0629	0.0049	471.7152	0.1526	
Rough Terrain Forklifts	2020	2020Rough Terrain Forklifts500	500	0.0886	1.30199		0.0366	0.0337	0.0049	465.7709	0.1528	
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Rough Terrain Forklifts Rough Terrain Forklifts	2021 2021	2021Rough Terrain Forklifts50 2021Rough Terrain Forklifts120	50 120	0.9685	4.41145		0.3038	0.2795	0.0054	525.3844 473.11	0.1699	
Kougo Lerrain Forklifts				1 0 1746	2.28534	3.25191	0.0885	0.0815	I N NN49		1 1153	

| Equipment Type Rough Terrain Forklifts Rouber Tired Dozers Rubber Tired Loaders Rubber Tire

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Rubber Tired Loaders</td><td>2019
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3.36809</td><td>0.367</td><td>0.3376</td><td>0.0048</td><td>465.6735
471.2135</td><td>0.1506</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders
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2020</td><td>2020Rubber Tired Loaders175
2020Rubber Tired Loaders250</td><td>250</td><td>0.2902</td><td>3.42116</td><td>1.26885</td><td>0.1936</td><td>0.1781</td><td>0.0049</td><td>469.5127</td><td>0.1524</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2020</td><td>2020Rubber Tired Loaders500</td><td>500</td><td>0.289</td><td>3.01666</td><td>1.6304</td><td>0.1122</td><td>0.1032</td><td>0.0048</td><td>466.7831</td><td>0.151</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2020</td><td>2020Rubber Tired Loaders750</td><td>750</td><td>0.2768</td><td>2.76722</td><td>1.39991</td><td>0.1075</td><td>0.0989</td><td>0.0048</td><td>462.193</td><td>0.1495</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2020</td><td>2020Rubber Tired Loaders1000</td><td>1000</td><td>0.3115</td><td>5.25309</td><td>1.20366</td><td>0.1385</td><td>0.1274</td><td>0.0049</td><td>469.9352</td><td>0.152</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2021</td><td>2021Rubber Tired Loaders25</td><td>25</td><td>1.3255</td><td>4.97419</td><td>6.44855</td><td>0.4092</td><td>0.3765</td><td>0.0054</td><td>524.5505</td><td>0.1697</td><td>0.013</td></tr> <tr><td>Rubber Tired Loaders</td><td>2021</td><td>2021Rubber Tired Loaders50</td><td>50</td><td>1.3255</td><td>4.97419</td><td>6.44855</td><td>0.4092</td><td>0.3765</td><td>0.0054</td><td>524.5505</td><td>0.1697</td><td>0.013</td></tr> <tr><td>Rubber Tired Loaders</td><td>2021</td><td>2021Rubber Tired Loaders120</td><td>120</td><td>0.4979</td><td>4.21491</td><td>3.8917</td><td>0.3163</td><td>0.291</td><td>0.0048</td><td>466.4213</td><td>0.1509</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2021</td><td>2021Rubber Tired Loaders175</td><td>175</td><td>0.3461</td><td>3.11886</td><td>3.35381</td><td>0.1706</td><td>0.1569</td><td>0.0049</td><td>471.0804</td><td>0.1524</td><td>0.012</td></tr> <tr><td>Rubber Tired
Loaders</td><td>2021</td><td>2021Rubber Tired Loaders250</td><td>250</td><td>0.2661</td><td>2.9977</td><td>1.24034</td><td>0.1</td><td>0.092</td><td>0.0048</td><td>469.5642</td><td>0.1519</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2021</td><td>2021Rubber Tired Loaders500</td><td>500</td><td>0.2643</td><td>2.61037</td><td>1.52922</td><td>0.0974</td><td>0.0896</td><td>0.0048</td><td>467.9277</td><td>0.1513</td><td>0.012</td></tr> <tr><td>Rubber Tired Loaders</td><td>2021</td><td>2021Rubber Tired Loaders750
2021Rubber Tired Loaders1000</td><td>750</td><td>0.2714</td><td>2.64092
4.97489</td><td>1.39703
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175</td><td>0.7009</td><td>6.6767
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3.50114</td><td>0.5101 0.262</td><td>0.4693 0.241</td><td>0.005</td><td>483.745
478.6077</td><td>0.1565</td><td>0.012</td></tr> <tr><td>Scrapers
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15</td><td>0.309</td><td>3.04
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568.3</td><td>0.059</td><td>0.015</td></tr> <tr><td>Signal Boards</td><td>2019</td><td>2019Signal Boards120</td><td>120</td><td>0.887</td><td>3.41</td><td>3.519</td><td>0.230</td><td>0.230</td><td>0.007</td><td>568.299</td><td>0.08</td><td>0.015</td></tr> <tr><td>Signal Boards</td><td>2019</td><td>2019Signal Boards175</td><td>175</td><td>0.321</td><td>2.601</td><td>3.043</td><td>0.125</td><td>0.125</td><td>0.006</td><td>568.299</td><td>0.029</td><td>0.015</td></tr> <tr><td>Signal Boards</td><td>2019</td><td>2019Signal Boards250</td><td>250</td><td>0.291</td><td>2.676</td><td>1.292</td><td>0.08</td><td>0.08</td><td>0.007</td><td>686.695</td><td>0.026</td><td>0.013</td></tr> | 2019
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120 | 0.3359 | 5.67315 | | | 0.1200 | 0.0047 | | 0.1484 | 0.012 | Rubber Tired Loaders
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120 | 1.6017 | | | 0.1541 | 0.1418 | 0.0049 | 476.3003 | 0.1464 | 0.012 | Rubber Tired Loaders
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2019Rubber Tired Loaders175 | 50
120 | | 5.43193 | 6.97769 | 0.5176 | 0.4762 | 0.0054 | 536.2254 | 0.1697 | 0.013 | Rubber Tired Loaders
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2019 | 2019Rubber Tired Loaders175 | | 1.0017 | 5.43193 | 6.97769 | 0.5176 | 0.4762 | 0.0054 | 536.2254 | 0.1697 | 0.014 | Rubber Tired Loaders
Rubber Tired Loaders | 2019
2019 | | 175 | 0.5947 | 5.00611 | 3.97887 | 0.402 | 0.3698 | 0.0048 | 475.8636 | 0.1506 | 0.012 | Rubber Tired Loaders | 2019 | 2019Rubber Tired Loaders250 | | 0.4051 | 3.85918 | 3.38084 | 0.2133 | 0.1962 | 0.0049 | 481.7364 | 0.1524 | 0.012 | | | | 250 | 0.3094 | 3.74452 | 1.30248 | 0.1255 | 0.1155 | 0.0048 | 480.0997 | 0.1519 | 0.012 | Rubber Tired Loaders | | 2019Rubber Tired Loaders500 | 500 | 0.3057 | 3.28755 | 1.7248 | 0.1227 | 0.1129 | 0.0048 | 477.0415 | 0.1509 | 0.012 | | 2019 | 2019Rubber Tired Loaders750 | 750 | 0.2932 | 3.01875 | 1.45157 | 0.1184 | 0.109 | 0.0048 | 471.1874 | 0.1491 | 0.012 | Rubber Tired Loaders | 2019 | 2019Rubber Tired Loaders1000 | 1000 | 0.3234 | 5.45926 | 1.20834 | 0.1462 | 0.1345 | 0.0049 | 480.523 | 0.152 | 0.012 | Rubber Tired Loaders | 2020 | 2020Rubber Tired Loaders25 | 25 | 1.4805 | 5.25369 | 6.76793 | 0.4741 | 0.4362 | 0.0054 | 524.6967 | 0.1697 | 0.013 | Rubber Tired Loaders | 2020 | 2020Rubber Tired Loaders50 | 50 | 1.4805 | 5.25369 | 6.76793 | 0.4741 | 0.4362 | 0.0054 | 524.6967 | 0.1697 | 0.013 | Rubber Tired Loaders | 2020 | 2020Rubber Tired Loaders120
2020Rubber Tired Loaders175 | 120
175 | 0.5555 | 4.68644
3.51735 | 3.94839
3.36809 | 0.367 | 0.3376 | 0.0048 | 465.6735
471.2135 | 0.1506 | 0.012 | Rubber Tired Loaders
Rubber Tired Loaders | 2020
2020 | 2020Rubber Tired Loaders175
2020Rubber Tired Loaders250 | 250 | 0.2902 | 3.42116 | 1.26885 | 0.1936 | 0.1781 | 0.0049 | 469.5127 | 0.1524 | 0.012 | Rubber Tired Loaders | 2020 | 2020Rubber Tired Loaders500 | 500 | 0.289 | 3.01666 | 1.6304 | 0.1122 | 0.1032 | 0.0048 | 466.7831 | 0.151 | 0.012 | Rubber Tired Loaders | 2020 | 2020Rubber Tired Loaders750 | 750 | 0.2768 | 2.76722 | 1.39991 | 0.1075 | 0.0989 | 0.0048 | 462.193 | 0.1495 | 0.012 | Rubber Tired Loaders | 2020 | 2020Rubber Tired Loaders1000 | 1000 | 0.3115 | 5.25309 | 1.20366 | 0.1385 | 0.1274 | 0.0049 | 469.9352 | 0.152 | 0.012 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders25 | 25 | 1.3255 | 4.97419 | 6.44855 | 0.4092 | 0.3765 | 0.0054 | 524.5505 | 0.1697 | 0.013 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders50 | 50 | 1.3255 | 4.97419 | 6.44855 | 0.4092 | 0.3765 | 0.0054 | 524.5505 | 0.1697 | 0.013 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders120 | 120 | 0.4979 | 4.21491 | 3.8917 | 0.3163 | 0.291 | 0.0048 | 466.4213 | 0.1509 | 0.012 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders175 | 175 | 0.3461 | 3.11886 | 3.35381 | 0.1706 | 0.1569 | 0.0049 | 471.0804 | 0.1524 | 0.012 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders250 | 250 | 0.2661 | 2.9977 | 1.24034 | 0.1 | 0.092 | 0.0048 | 469.5642 | 0.1519 | 0.012 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders500 | 500 | 0.2643 | 2.61037 | 1.52922 | 0.0974 | 0.0896 | 0.0048 | 467.9277 | 0.1513 | 0.012 | Rubber Tired Loaders | 2021 | 2021Rubber Tired Loaders750
2021Rubber Tired Loaders1000 | 750 | 0.2714 | 2.64092
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Scrapers | 2021
2018 | 2018Scrapers120 | 1000
120 | 0.2942 | 4.97489
7.03577 | 4.20429 | 0.1279 0.5425 | 0.4991 | 0.0049 | 502.8288 | 0.1524 | 0.012 0.013 | Scrapers | 2018 | 2018Scrapers125 | 175 | 0.5385 | 5.64105 | 3.56847 | 0.3029 | 0.2787 | 0.0049 | 497.3396 | 0.1548 | | Scrapers | 2018 | 2018Scrapers250 | 250 | 0.5566 | 6.56304 | 2.40704 | 0.2901 | 0.2669 | 0.0048 | 486.9908 | 0.1516 | 0.013 | Scrapers | 2018 | 2018Scrapers500 | 500 | 0.3691 | 4.56771 | 2.82811 | 0.18 | 0.1656 | 0.0049 | 490.7734 | 0.1528 | 0.012 | Scrapers | 2018 | 2018Scrapers750 | 750 | 0.2938 | 3.74582 | 1.96493 | 0.135 | 0.1242 | 0.0049 | 490.5775 | 0.1527 | 0.013 | Scrapers | 2019 | 2019Scrapers120 | 120 | 0.718 | 6.84136 | 4.19661 | 0.5255 | 0.4834 | 0.005 | 494.1 | 0.1563 | 0.013 | Scrapers | 2019 | 2019Scrapers175 | 175 | 0.51 | 5.26356 | 3.53297 | 0.2833 | 0.2606 | 0.0049 | 489.2546 | 0.1548 | | Scrapers | 2019 | 2019Scrapers250 | 250 | 0.5013 | 5.83102 | 2.23321 | 0.2567 | 0.2361 | 0.0048 | 479.0317 | 0.1516 | 0.012 | Scrapers | 2019 | 2019Scrapers500 | 500 | 0.3429 | 4.15646 | 2.59466 | 0.1629 | 0.1498 | 0.0049 | 482.7319 | 0.1527 | 0.012 | Scrapers | 2019 | 2019Scrapers750 | 750 | 0.2768 | 3.43103 | 1.82903 | 0.1232 | 0.1133 | 0.0049 | 482.5963 | 0.1527 | 0.012 | Scrapers | 2020 | 2020Scrapers120
2020Scrapers175 | 120
175 | 0.7009 | 6.6767
4.86851 | 4.19756
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478.6077 | 0.1565 | 0.012 | Scrapers
Scrapers | 2020
2020 | 2020Scrapers175
2020Scrapers250 | 250 | 0.4777 | 4.86851
5.089 | 2.06469 | | 0.241 |
0.0049 | 478.6077 468.9883 | 0.1548 | 0.012 | Scrapers | 2020 | 2020Scrapers500 | 500 | 0.3196 | 3.78254 | 2.40063 | 0.2232 | 0.2054 | 0.0048 | 408.9883 | 0.1517 | 0.012 | Scrapers | 2020 | 2020Scrapers750 | 750 | 0.2622 | 3.12592 | 1.72502 | 0.1132 | 0.1042 | 0.0049 | 471.7776 | 0.1527 | 0.012 | Scrapers | 2020 | 2021Scrapers120 | 120 | 0.7041 | 6.65882 | 4.21819 | 0.5124 | 0.4714 | 0.005 | 483.7128 | 0.1564 | 0.012 | Scrapers | 2021 | 2021Scrapers175 | 175 | 0.4319 | 4.34133 | 3.45599 | 0.2318 | 0.2133 | 0.0049 | 478.654 | 0.1548 | 0.012 | Scrapers | 2021 | 2021Scrapers250 | 250 | 0.3906 | 4.36706 | 1.88374 | 0.1891 | 0.174 | 0.0048 | 469.1258 | 0.1517 | 0.012 | Scrapers | 2021 | 2021Scrapers500 | 500 | 0.2992 | 3.44481 | 2.25454 | 0.134 | 0.1233 | 0.0049 | 472.4636 | 0.1528 | 0.012 | Scrapers | 2021 | 2021Scrapers750 | 750 | 0.2504 | 2.88702 | 1.65772 | 0.1053 | 0.0968 | 0.0049 | 471.7859 | 0.1526 | 0.012 | Signal Boards | 2018 | 2018Signal Boards15 | 15 | 0.661 | 4.142 | 3.469 | 0.161 | 0.161 | 0.008 | 568.299 | 0.059 | 0.015 | Signal Boards | 2018 | 2018Signal Boards50 | 50 | 1.018 | 4.427 | 4.657 | 0.27 | 0.27 | 0.007 | 568.299 | 0.091 | 0.015 | Signal Boards | 2018 | 2018Signal Boards120 | 120 | 0.492 | 3.723 | 3.541 | 0.252 | 0.252 | 0.006 | 568.299 | 0.044 | 0.015 | Signal Boards | 2018 | 2018Signal Boards175 | 175 | 0.351 | 2.93 | 3.043 | 0.141 | 0.141 | 0.006 | 568.299 | 0.031 | 0.015 | Signal Boards | 2018
2019 | 2018Signal Boards250
2019Signal Boards15 | 250
15 | 0.309 | 3.04
4.142 | 1.306
3.47 | 0.09 | 0.09 | 0.007 | 686.695 | 0.027 | 0.018 | Signal Boards
Signal Boards | 2019 | 2019Signal Boards15
2019Signal Boards50 | 50 | 0.661 | 4.142 | 4.538 | 0.161 0.236 | 0.161 0.236 | 0.008 | 568.299
568.3 | 0.059 | 0.015 | Signal Boards | 2019 | 2019Signal Boards120 | 120 | 0.887 | 3.41 | 3.519 | 0.230 | 0.230 | 0.007 | 568.299 | 0.08 | 0.015 | Signal Boards | 2019 | 2019Signal Boards175 | 175 | 0.321 | 2.601 | 3.043 | 0.125 | 0.125 | 0.006 | 568.299 | 0.029 | 0.015 | Signal Boards | 2019 | 2019Signal Boards250 | 250 | 0.291 | 2.676 | 1.292 | 0.08 | 0.08 | 0.007 | 686.695 | 0.026 | 0.013 |
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 | 0.4565
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 | 6.12255
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1.55549 | 0.2181
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 | 0.6912
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| Rubber Tired Dozers Rubber Tired Dozers Rubber Tired Loaders

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2018Rubber Tired Loaders50
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2018Rubber Tired Loaders175
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2018Rubber Tired Loaders750
2018Rubber Tired Loaders750
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2019Rubber Tired Loaders25
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2019Rubber Tired Loaders120
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2019Rubber Tired Loaders120
 | 500 750 1000 25 50 120 755 250 500 750 1000 25 500 750 1000 25 50 120
 | 0.4922
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| Rubber Tired Dozers Rubber Tired Loaders

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2018Rubber Tired Loaders25
2018Rubber Tired Loaders50
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2018Rubber Tired Loaders175
2018Rubber Tired Loaders250
2018Rubber Tired Loaders500
2018Rubber Tired Loaders750
2018Rubber Tired Loaders1000
2019Rubber Tired Loaders25
2019Rubber Tired Loaders25
2019Rubber Tired Loaders20
2019Rubber Tired Loaders120
2019Rubber Tired Loaders120
2019Rubber Tired Loaders120
 | 750
1000
25
50
120
175
250
500
750
1000
25
50
120
 | 0.4582
0.497
1.765
1.765
0.6553
0.448
0.3335
0.3339
0.3306
0.3359
1.6017
 | 6.12254
5.095
5.67925
5.67925
5.47032
4.36814
4.13133
3.72607
3.5437
5.67315 | 2.60396
2.057
7.29915
7.29915
4.04742
3.42332
1.34644
1.86807
1.55549 | 0.2182
0.15
0.5758
0.5758
0.4518
0.2423
0.1401
0.1395
0.14 | 0.2007
0.15
0.5297
0.5297
0.4156
0.2229
0.1289
0.1283 | 0.0049
0.005
0.0054
0.0054
0.0048
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0.0048
0.0048
 | 473.0459
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545.0529
545.0529
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| Rubber Tired Loaders

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2018Rubber Tired Loaders750
2018Rubber Tired Loaders1000
2019Rubber Tired Loaders25
2019Rubber Tired Loaders50
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2019Rubber Tired Loaders120
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 | 1000
25
50
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175
250
500
750
1000
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50
120
 | 0.497
1.765
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0.3335
0.3339
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0.3359
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 | 5.095
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5.67925
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5.67315 | 2.057
7.29915
7.29915
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1.34644
1.86807
1.55549 | 0.15
0.5758
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0.2423
0.1401
0.1395
0.14 | 0.15
0.5297
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0.4156
0.2229
0.1289
0.1283 | 0.005
0.0054
0.0054
0.0048
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 | 568.299
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 | 1.765 1.765 0.6553 0.448 0.3335 0.3306 0.3359 1.6017
 | 5.67925
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 | 545.0529
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 | 50
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 | 1.765 0.6553 0.448 0.3335 0.3339 0.3306 0.3359 1.6017
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 | 5.43193 | 6.97769 | 0.5176 | 0.4762 | 0.0054
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| Rubber Tired Loaders
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Rubber Tired Loaders

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 | 1.0017
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| Rubber Tired Loaders
Rubber Tired Loaders

 | 2019
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 | 5.00611 | 3.97887 | 0.402 | 0.3698 | 0.0048
 | 475.8636 | 0.1506 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2019 | 2019Rubber Tired Loaders250
 |
 | 0.4051
 | 3.85918 | 3.38084 | 0.2133 | 0.1962 | 0.0049
 | 481.7364 | 0.1524 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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 | |
 | 250
 | 0.3094
 | 3.74452 | 1.30248 | 0.1255 | 0.1155 | 0.0048
 | 480.0997 | 0.1519 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | | 2019Rubber Tired Loaders500
 | 500
 | 0.3057
 | 3.28755 | 1.7248 | 0.1227 | 0.1129 | 0.0048
 | 477.0415 | 0.1509 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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 | 2019 | 2019Rubber Tired Loaders750
 | 750
 | 0.2932
 | 3.01875 | 1.45157 | 0.1184 | 0.109 | 0.0048
 | 471.1874 | 0.1491 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2019 | 2019Rubber Tired Loaders1000
 | 1000
 | 0.3234
 | 5.45926 | 1.20834 | 0.1462 | 0.1345 | 0.0049
 | 480.523 | 0.152 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2020 | 2020Rubber Tired Loaders25
 | 25
 | 1.4805
 | 5.25369 | 6.76793 | 0.4741 | 0.4362 | 0.0054
 | 524.6967 | 0.1697 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2020 | 2020Rubber Tired Loaders50
 | 50
 | 1.4805
 | 5.25369 | 6.76793 | 0.4741 | 0.4362 | 0.0054
 | 524.6967 | 0.1697 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2020 | 2020Rubber Tired Loaders120
2020Rubber Tired Loaders175
 | 120
175
 | 0.5555
 | 4.68644
3.51735 | 3.94839
3.36809 | 0.367 | 0.3376 | 0.0048
 | 465.6735
471.2135 | 0.1506 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders
Rubber Tired Loaders

 | 2020
2020 | 2020Rubber Tired Loaders175
2020Rubber Tired Loaders250
 | 250
 | 0.2902
 | 3.42116 | 1.26885 | 0.1936 | 0.1781 | 0.0049
 | 469.5127 | 0.1524 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2020 | 2020Rubber Tired Loaders500
 | 500
 | 0.289
 | 3.01666 | 1.6304 | 0.1122 | 0.1032 | 0.0048
 | 466.7831 | 0.151 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2020 | 2020Rubber Tired Loaders750
 | 750
 | 0.2768
 | 2.76722 | 1.39991 | 0.1075 | 0.0989 | 0.0048
 | 462.193 | 0.1495 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2020 | 2020Rubber Tired Loaders1000
 | 1000
 | 0.3115
 | 5.25309 | 1.20366 | 0.1385 | 0.1274 | 0.0049
 | 469.9352 | 0.152 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders25
 | 25
 | 1.3255
 | 4.97419 | 6.44855 | 0.4092 | 0.3765 | 0.0054
 | 524.5505 | 0.1697 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders50
 | 50
 | 1.3255
 | 4.97419 | 6.44855 | 0.4092 | 0.3765 | 0.0054
 | 524.5505 | 0.1697 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders120
 | 120
 | 0.4979
 | 4.21491 | 3.8917 | 0.3163 | 0.291 | 0.0048
 | 466.4213 | 0.1509 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders175
 | 175
 | 0.3461
 | 3.11886 | 3.35381 | 0.1706 | 0.1569 | 0.0049
 | 471.0804 | 0.1524 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders250
 | 250
 | 0.2661
 | 2.9977 | 1.24034 | 0.1 | 0.092 | 0.0048
 | 469.5642 | 0.1519 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders500
 | 500
 | 0.2643
 | 2.61037 | 1.52922 | 0.0974 | 0.0896 | 0.0048
 | 467.9277 | 0.1513 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders

 | 2021 | 2021Rubber Tired Loaders750
2021Rubber Tired Loaders1000
 | 750
 | 0.2714
 | 2.64092
4.97489 | 1.39703
1.2055 | 0.1023 | 0.0942 | 0.0048
 | 462.0548
471.2577 | 0.1494 0.1524 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Rubber Tired Loaders
Scrapers

 | 2021
2018 | 2018Scrapers120
 | 1000
120
 | 0.2942
 | 4.97489
7.03577 | 4.20429 | 0.1279 0.5425 | 0.4991 | 0.0049
 | 502.8288 | 0.1524 | 0.012 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2018 | 2018Scrapers125
 | 175
 | 0.5385
 | 5.64105 | 3.56847 | 0.3029 | 0.2787 | 0.0049
 | 497.3396 | 0.1548 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2018 | 2018Scrapers250
 | 250
 | 0.5566
 | 6.56304 | 2.40704 | 0.2901 | 0.2669 | 0.0048
 | 486.9908 | 0.1516 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2018 | 2018Scrapers500
 | 500
 | 0.3691
 | 4.56771 | 2.82811 | 0.18 | 0.1656 | 0.0049
 | 490.7734 | 0.1528 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2018 | 2018Scrapers750
 | 750
 | 0.2938
 | 3.74582 | 1.96493 | 0.135 | 0.1242 | 0.0049
 | 490.5775 | 0.1527 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2019 | 2019Scrapers120
 | 120
 | 0.718
 | 6.84136 | 4.19661 | 0.5255 | 0.4834 | 0.005
 | 494.1 | 0.1563 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2019 | 2019Scrapers175
 | 175
 | 0.51
 | 5.26356 | 3.53297 | 0.2833 | 0.2606 | 0.0049
 | 489.2546 | 0.1548 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2019 | 2019Scrapers250
 | 250
 | 0.5013
 | 5.83102 | 2.23321 | 0.2567 | 0.2361 | 0.0048
 | 479.0317 | 0.1516 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2019 | 2019Scrapers500
 | 500
 | 0.3429
 | 4.15646 | 2.59466 | 0.1629 | 0.1498 | 0.0049
 | 482.7319 | 0.1527 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2019 | 2019Scrapers750
 | 750
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 | 3.43103 | 1.82903 | 0.1232 | 0.1133 | 0.0049
 | 482.5963 | 0.1527 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2020 | 2020Scrapers120
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175
 | 0.7009
 | 6.6767
4.86851 | 4.19756
3.50114 | 0.5101 0.262 | 0.4693 0.241 | 0.005
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| Scrapers
Scrapers

 | 2020
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2020Scrapers250
 | 250
 | 0.4777
 | 4.86851
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| Scrapers

 | 2020 | 2020Scrapers500
 | 500
 | 0.3196
 | 3.78254 | 2.40063 | 0.2232 | 0.2054 | 0.0048
 | 408.9883 | 0.1517 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2020 | 2020Scrapers750
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 | 0.2622
 | 3.12592 | 1.72502 | 0.1132 | 0.1042 | 0.0049
 | 471.7776 | 0.1527 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2020 | 2021Scrapers120
 | 120
 | 0.7041
 | 6.65882 | 4.21819 | 0.5124 | 0.4714 | 0.005
 | 483.7128 | 0.1564 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2021 | 2021Scrapers175
 | 175
 | 0.4319
 | 4.34133 | 3.45599 | 0.2318 | 0.2133 | 0.0049
 | 478.654 | 0.1548 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2021 | 2021Scrapers250
 | 250
 | 0.3906
 | 4.36706 | 1.88374 | 0.1891 | 0.174 | 0.0048
 | 469.1258 | 0.1517 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2021 | 2021Scrapers500
 | 500
 | 0.2992
 | 3.44481 | 2.25454 | 0.134 | 0.1233 | 0.0049
 | 472.4636 | 0.1528 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Scrapers

 | 2021 | 2021Scrapers750
 | 750
 | 0.2504
 | 2.88702 | 1.65772 | 0.1053 | 0.0968 | 0.0049
 | 471.7859 | 0.1526 | 0.012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2018 | 2018Signal Boards15
 | 15
 | 0.661
 | 4.142 | 3.469 | 0.161 | 0.161 | 0.008
 | 568.299 | 0.059 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2018 | 2018Signal Boards50
 | 50
 | 1.018
 | 4.427 | 4.657 | 0.27 | 0.27 | 0.007
 | 568.299 | 0.091 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2018 | 2018Signal Boards120
 | 120
 | 0.492
 | 3.723 | 3.541 | 0.252 | 0.252 | 0.006
 | 568.299 | 0.044 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2018 | 2018Signal Boards175
 | 175
 | 0.351
 | 2.93 | 3.043 | 0.141 | 0.141 | 0.006
 | 568.299 | 0.031 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2018
2019 | 2018Signal Boards250
2019Signal Boards15
 | 250
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 | 0.309
 | 3.04
4.142 | 1.306
3.47 | 0.09 | 0.09 | 0.007
 | 686.695 | 0.027 | 0.018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards
Signal Boards

 | 2019 | 2019Signal Boards15
2019Signal Boards50
 | 50
 | 0.661
 | 4.142 | 4.538 | 0.161 0.236 | 0.161 0.236 | 0.008
 | 568.299
568.3 | 0.059 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2019 | 2019Signal Boards120
 | 120
 | 0.887
 | 3.41 | 3.519 | 0.230 | 0.230 | 0.007
 | 568.299 | 0.08 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2019 | 2019Signal Boards175
 | 175
 | 0.321
 | 2.601 | 3.043 | 0.125 | 0.125 | 0.006
 | 568.299 | 0.029 | 0.015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Signal Boards

 | 2019 | 2019Signal Boards250
 | 250
 | 0.291
 | 2.676 | 1.292 | 0.08 | 0.08 | 0.007
 | 686.695 | 0.026 | 0.013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Equipment Type Signal Boards Signal Boards	Year 2020	Concatenate	HP									
		2020Signal Boards15		ROG	NOX 4.142	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Signal Doalds	2020	2020Signal Boards15 2020Signal Boards50	15 50	0.661	4.142	3.469 4.448	0.161	0.161	0.008	568.299 568.299	0.059	0.015
Signal Boards	2020	2020Signal Boards120	120	0.395	3.134	3.504	0.200	0.187	0.007	568.299	0.035	0.015
Signal Boards	2020	2020Signal Boards175	175	0.298	2.309	3.043	0.11	0.11	0.006	568.299	0.026	0.015
Signal Boards	2020	2020Signal Boards250	250	0.274	2.35	1.281	0.071	0.071	0.007	686.695	0.024	0.018
Signal Boards	2021	2021Signal Boards15	15	0.661	4.142	3.469	0.161	0.161	0.008	568.299	0.059	0.015
Signal Boards	2021	2021Signal Boards50	50	0.714	4.002	4.38	0.179	0.179	0.007	568.299	0.064	0.015
Signal Boards	2021	2021Signal Boards120	120	0.363	2.889	3.493	0.162	0.162	0.006	568.299	0.032	0.015
Signal Boards	2021	2021Signal Boards175	175	0.278	2.043	3.043	0.098	0.098	0.006	568.299	0.025	0.015
Signal Boards	2021	2021Signal Boards250	250	0.26	2.053	1.273	0.063	0.063	0.007	686.695	0.023	0.018
Skid Steer Loaders	2018	2018Skid Steer Loaders25	25	0.4871	3.88962	3.78725	0.1783	0.164	0.0054	547.5575	0.1705	0.014
Skid Steer Loaders	2018	2018Skid Steer Loaders50	50	0.4871	3.88962	3.78725	0.1783	0.164	0.0054	547.5575	0.1705	0.014
Skid Steer Loaders	2018	2018Skid Steer Loaders120	120 25	0.2158	2.86	3.28204 3.73957	0.1398	0.1286	0.0049	490.0935	0.1526	0.013
Skid Steer Loaders Skid Steer Loaders	2019 2019	2019Skid Steer Loaders25 2019Skid Steer Loaders50	50	0.4464	3.75009 3.75009	3.73957	0.1536	0.1413	0.0054	539.2667 539.2667	0.1706	0.014
Skid Steer Loaders	2019	2019Skid Steer Loaders120	120	0.1994	2.65586	3.27736	0.1217	0.1119	0.0034	482.3844	0.1700	0.014
Skid Steer Loaders	2020	2020Skid Steer Loaders25	25	0.4393	3.69113	3.76397	0.1447	0.1331	0.0054	527.7577	0.1707	0.012
Skid Steer Loaders	2020	2020Skid Steer Loaders50	50	0.4393	3.69113	3.76397	0.1447	0.1331	0.0054	527.7577	0.1707	0.014
Skid Steer Loaders	2020	2020Skid Steer Loaders120	120	0.1884	2.5046	3.2771	0.1084	0.0997	0.0049	471.9075	0.1526	0.012
Skid Steer Loaders	2021	2021Skid Steer Loaders25	25	0.4088	3.57304	3.73158	0.1263	0.1162	0.0054	527.4501	0.1706	0.014
Skid Steer Loaders	2021	2021Skid Steer Loaders50	50	0.4088	3.57304	3.73158	0.1263	0.1162	0.0054	527.4501	0.1706	0.014
Skid Steer Loaders	2021	2021Skid Steer Loaders120	120	0.178	2.36588	3.27687	0.0963	0.0886	0.0049	471.9774	0.1526	0.012
Surfacing Equipment	2018	2018Surfacing Equipment50	50	0.779	4.81982	4.35302	0.3198	0.2942	0.0055	555.7363	0.173	0.014
Surfacing Equipment	2018	2018Surfacing Equipment120	120	0.4141	4.28388	3.48871	0.2685	0.247	0.0049	491.3172	0.153	0.013
Surfacing Equipment	2018	2018Surfacing Equipment175	175	0.375	4.47527	2.97609	0.2151	0.1979	0.0049	488.4406	0.1521	0.013
Surfacing Equipment	2018	2018Surfacing Equipment250	250	0.241	3.98866	1.234	0.1127	0.1037	0.0049	494.1388	0.1538	0.013
Surfacing Equipment	2018	2018Surfacing Equipment500	500	0.1574	2.20389	1.22557	0.0761	0.07	0.0049	487.8722	0.1519	0.012
Surfacing Equipment Surfacing Equipment	2018 2019	2018Surfacing Equipment750 2019Surfacing Equipment50	750 50	0.1425	2.26863 4.41999	0.99347 4.0998	0.0783	0.072	0.0049	488.86 547.0462	0.1522	0.013
Surfacing Equipment	2019	2019Surfacing Equipment120	120	0.3553	3.82306	3.44856	0.2503	0.2303	0.0055	484.0757	0.1731	0.014
Surfacing Equipment	2019	2019Surfacing Equipment175	120	0.3553	4.23866	2.97177	0.2256	0.2076	0.0049	479.6717	0.1532	0.012
Surfacing Equipment	2019	2019Surfacing Equipment250	250	0.2165	3.39993	1.21576	0.2030	0.0927	0.0040	486.8417	0.1510	0.012
Surfacing Equipment	2019	2019Surfacing Equipment500	500	0.1455	1.89944	1.2143	0.0681	0.0626	0.0049	481.8965	0.1525	0.012
Surfacing Equipment	2019	2019Surfacing Equipment750	750	0.1419	2.17879	0.99372	0.0763	0.0702	0.0049	480.166	0.1519	0.012
Surfacing Equipment	2020	2020Surfacing Equipment50	50	0.5356	4.23906	3.93357	0.2164	0.1991	0.0055	535.5275	0.1732	0.014
Surfacing Equipment	2020	2020Surfacing Equipment120	120	0.3297	3.61216	3.43932	0.2063	0.1898	0.0049	473.8188	0.1532	0.012
Surfacing Equipment	2020	2020Surfacing Equipment175	175	0.3075	3.67232	2.93068	0.1745	0.1606	0.0048	469.2079	0.1518	0.012
Surfacing Equipment	2020	2020Surfacing Equipment250	250	0.2119	3.22243	1.21774	0.0972	0.0894	0.0049	476.4261	0.1541	0.012
Surfacing Equipment	2020	2020Surfacing Equipment500	500	0.1455	1.83755	1.21902	0.0669	0.0615	0.0049	471.6331	0.1525	0.012
Surfacing Equipment	2020	2020Surfacing Equipment750	750	0.1419	2.09374	0.99569	0.0744	0.0684	0.0049	469.6252	0.1519	0.012
Surfacing Equipment	2021	2021Surfacing Equipment50	50	0.5068	4.18875	3.93231	0.204	0.1876	0.0055	535.784	0.1733	0.014
Surfacing Equipment	2021 2021	2021Surfacing Equipment120 2021Surfacing Equipment175	120 175	0.3117	3.46112 3.09858	3.43619 2.91895	0.1905	0.1753 0.1337	0.0049	474.0906 469.1687	0.1533	0.012
Surfacing Equipment Surfacing Equipment	2021	2021Surfacing Equipment250	250	0.2067	2.99364	1.21854	0.0923	0.0849	0.0048	476.8023	0.1517	0.012
Surfacing Equipment	2021	2021Surfacing Equipment500	500	0.1408	1.75282	1.20226	0.0635	0.0584	0.0049	471.7484	0.1526	0.012
Surfacing Equipment	2021	2021Surfacing Equipment750	750	0.1251	1.59712	0.99181	0.0615	0.0566	0.0049	470.4087	0.1521	0.012
Sweepers/Scrubbers	2018	2018Sweepers/Scrubbers15	15	1.5449	5.39866	6.4442	0.5307	0.4882	0.0054	545.7578	0.1699	0.014
Sweepers/Scrubbers	2018	2018Sweepers/Scrubbers25	25	1.5449	5.39866	6.4442	0.5307	0.4882	0.0054	545.7578	0.1699	0.014
Sweepers/Scrubbers	2018	2018Sweepers/Scrubbers50	50	1.5449	5.39866	6.4442	0.5307	0.4882	0.0054	545.7578	0.1699	0.014
Sweepers/Scrubbers	2018	2018Sweepers/Scrubbers120	120	0.5995	5.13595	3.88173	0.4283	0.3941	0.0049	492.5536	0.1533	0.013
Sweepers/Scrubbers	2018	2018Sweepers/Scrubbers175	175	0.5889	6.07101	3.58832	0.3197	0.2942	0.0049	491.5213	0.153	0.013
Sweepers/Scrubbers	2018	2018Sweepers/Scrubbers250	250	0.3495	4.30158	1.60478	0.1691	0.1556	0.0049	488.409	0.152	0.013
Sweepers/Scrubbers	2019	2019Sweepers/Scrubbers15	15	1.431	5.22487	6.26782	0.4912	0.4519	0.0054	537.0023	0.1699	0.014
Sweepers/Scrubbers	2019 2019	2019Sweepers/Scrubbers25 2019Sweepers/Scrubbers50	25 50	1.431 1.431	5.22487 5.22487	6.26782 6.26782	0.4912 0.4912	0.4519	0.0054	537.0023 537.0023	0.1699	0.014 0.014
Sweepers/Scrubbers Sweepers/Scrubbers	2019	2019Sweepers/Scrubbers120	120	0.5496	4.77259	3.84602	0.3872	0.3563	0.0034		0.1533	0.014
Sweepers/Scrubbers	2019	2019Sweepers/Scrubbers175	175	0.5233	5.30082	3.4491	0.2772	0.255	0.0049		0.153	0.012
Sweepers/Scrubbers	2019	2019Sweepers/Scrubbers250	250	0.2347	2.86598	1.23013	0.0989	0.091	0.0049	480.5735	0.152	0.012
Sweepers/Scrubbers	2020	2020Sweepers/Scrubbers15	15	1.3438	5.09515	6.1554	0.4629	0.4259	0.0054	525.3284	0.1699	0.013
Sweepers/Scrubbers	2020	2020Sweepers/Scrubbers25	25	1.3438	5.09515	6.1554	0.4629	0.4259	0.0054	525.3284	0.1699	0.013
Sweepers/Scrubbers	2020	2020Sweepers/Scrubbers50	50	1.3438	5.09515	6.1554	0.4629	0.4259	0.0054	525.3284	0.1699	0.013
Sweepers/Scrubbers	2020	2020Sweepers/Scrubbers120	120	0.5199	4.4821	3.82752	0.3601	0.3313	0.0049		0.1533	0.012
Sweepers/Scrubbers	2020	2020Sweepers/Scrubbers175	175	0.4616	4.60809	3.35909	0.2371	0.2181	0.0049	473.1221	0.153	0.012
Sweepers/Scrubbers	2020	2020Sweepers/Scrubbers250	250	0.2071	2.4856	1.13655	0.079	0.0727	0.0049	470.1263	0.152	0.012
Sweepers/Scrubbers Sweepers/Scrubbers	2021 2021	2021Sweepers/Scrubbers15 2021Sweepers/Scrubbers25	15 25	1.2191 1.2191	4.84946 4.84946	5.89996 5.89996	0.4117 0.4117	0.3788	0.0054	525.3284 525.3284	0.1699	0.013
Sweepers/Scrubbers Sweepers/Scrubbers	2021	2021Sweepers/Scrubbers25 2021Sweepers/Scrubbers50	25 50	1.2191	4.84946	5.89996	0.4117	0.3788	0.0054	525.3284 525.3284	0.1699	0.013
Sweepers/Scrubbers	2021	2021Sweepers/Scrubbers120	120	0.4402	3.96194	3.75746	0.2914	0.2681	0.0054	474.1157	0.1533	0.013
Sweepers/Scrubbers	2021	2021Sweepers/Scrubbers120 2021Sweepers/Scrubbers175	175	0.3848	3.70723	3.24726	0.1872	0.1722	0.0049	473.1221	0.153	0.012
Sweepers/Scrubbers	2021	2021Sweepers/Scrubbers250	250	0.1642	1.75821	1.1084	0.055	0.0506	0.0049	470.1263	0.152	0.012
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes25	25	0.9921	4.76441	5.31043	0.3625	0.3335	0.0053	536.1115	0.1669	0.014
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes50	50	0.9921	4.76441	5.31043	0.3625	0.3335	0.0053	536.1115	0.1669	0.014
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes120	120	0.4204	4.15444	3.69155	0.2943	0.2708	0.0049	494.1237	0.1538	0.013
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes175	175	0.297	3.16806	3.13727	0.1595	0.1467	0.0048	485.7754	0.1512	0.012
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes250	250	0.2589	3.45965	1.24197	0.1116	0.1027	0.0049	489.4562	0.1524	0.013
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes500	500	0.2222	2.66877	1.44545	0.0922	0.0848	0.0048		0.1514	0.012
Tractors/Loaders/Backhoes	2018	2018Tractors/Loaders/Backhoes750	750	0.2712	3.40235	1.60068	0.1243	0.1143	0.0048	485.0099	0.151	0.012
Tractors/Loaders/Backhoes	2019	2019Tractors/Loaders/Backhoes25 2019Tractors/Loaders/Backhoes50	25	0.9202	4.60928	5.20327	0.33	0.3036	0.0053	527.6843	0.167	0.014
Tractors/Loaders/Backhoes Tractors/Loaders/Backhoes	2019 2019	2019Tractors/Loaders/Backhoes50 2019Tractors/Loaders/Backhoes120	50 120	0.9202	4.60928 3.69257	5.20327 3.63777	0.33	0.3036	0.0053	527.6843 485.8548	0.167	0.014
		2019Tractors/Loaders/Backhoes120 2019Tractors/Loaders/Backhoes175	120	0.3678	2.78412	3.12158	0.2465	0.2268	0.0049	485.8548	0.1537	0.012
			110	0.2/04	2.10412	0.12100	0.1401	0.1209	0.0040	1 -1 - 1 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1	0.1012	0.012
Tractors/Loaders/Backhoes	2019 2019		250	0.2449	3,14683	1,22027	0.102	0,0938	0.0049			0.012
	2019 2019 2019	2019Tractors/Loaders/Backhoes250	250 500	0.2449	3.14683 2.34458	1.22027	0.102 0.0816	0.0938	0.0049		0.1523	0.012
Tractors/Loaders/Backhoes Tractors/Loaders/Backhoes	2019			0.2449 0.206 0.2621						481.4206	0.1523	0.012 0.012 0.012

		Constants										NO
Equipment Type	Year	Concatenate 2020Tractors/Loaders/Backhoes50	HP	ROG 0.8296	NOX	CO 5.03491	PM10 0.2878	PM2.5 0.2648	SO2 0.0053	CO2	CH4 0.1668	N2O
Tractors/Loaders/Backhoes Tractors/Loaders/Backhoes	2020 2020	2020Tractors/Loaders/Backhoes120	50 120	0.8296	4.39784 3.32571	3.60147	0.2878	0.2648	0.0053	515.874 475.1543	0.1668	0.013
Tractors/Loaders/Backhoes	2020	2020Tractors/Loaders/Backhoes120	175	0.2455	2.41467	3.10518	0.12103	0.1119	0.0043	467.5132	0.1512	0.012
Tractors/Loaders/Backhoes	2020	2020Tractors/Loaders/Backhoes250	250	0.2252	2.73794	1.19592	0.0898	0.0826	0.0049	470.4998	0.1522	0.012
Tractors/Loaders/Backhoes	2020	2020Tractors/Loaders/Backhoes500	500	0.1937	2.07976	1.35815	0.073	0.0672	0.0048	468.2447	0.1514	0.012
Tractors/Loaders/Backhoes	2020	2020Tractors/Loaders/Backhoes750	750	0.2678	3.11926	1.60984	0.1174	0.108	0.0048	468.6602	0.1516	0.012
Tractors/Loaders/Backhoes	2021	2021Tractors/Loaders/Backhoes25	25	0.756	4.22643	4.90172	0.2545	0.2341	0.0053	515.1213	0.1666	0.013
Tractors/Loaders/Backhoes	2021	2021Tractors/Loaders/Backhoes50	50	0.756	4.22643	4.90172	0.2545	0.2341	0.0053	515.1213	0.1666	0.013
Tractors/Loaders/Backhoes	2021	2021Tractors/Loaders/Backhoes120	120	0.2959	2.995	3.57072	0.1766	0.1625	0.0049	475.3621	0.1537	0.012
Tractors/Loaders/Backhoes Tractors/Loaders/Backhoes	2021 2021	2021Tractors/Loaders/Backhoes175 2021Tractors/Loaders/Backhoes250	175 250	0.221	2.06221 2.36922	3.0907 1.18606	0.1041 0.08	0.0958	0.0048	467.5285 470.5716	0.1512	0.012
Tractors/Loaders/Backhoes	2021	2021Tractors/Loaders/Backhoes500	250 500	0.2094	1.776	1.34147	0.08	0.0736	0.0049	469.3025	0.1522	0.012
Tractors/Loaders/Backhoes	2021	2021Tractors/Loaders/Backhoes750	750	0.2474	2.75417	1.43254	0.1041	0.0958	0.0048	466.4564	0.1509	0.012
Trenchers	2018	2018Trenchers15	15	1.0387	4.95997	5.01831	0.4093	0.3766	0.0054	548.3607	0.1707	0.012
Trenchers	2018	2018Trenchers25	25	1.0387	4.95997	5.01831	0.4093	0.3766	0.0054	548.3607	0.1707	0.014
Trenchers	2018	2018Trenchers50	50	1.0387	4.95997	5.01831	0.4093	0.3766	0.0054	548.3607	0.1707	0.014
Trenchers	2018	2018Trenchers120	120	0.6581	5.91527	3.85487	0.45	0.414	0.0049	493.715	0.1537	0.013
Trenchers	2018	2018Trenchers175	175	0.4704	5.12742	3.33134	0.2613	0.2404	0.0048	485.9254	0.1513	0.012
Trenchers	2018	2018Trenchers250	250	0.419	5.29554	1.84856	0.2119	0.1949	0.0049	491.5649	0.153	0.013
Trenchers	2018	2018Trenchers500 2018Trenchers750	500	0.256	3.21114	1.97444 0.96632	0.1212 0.0286	0.1115	0.0049	489.6281 494.6426	0.1524	0.013
Trenchers Trenchers	2018 2019	2019Trenchers15	750 15	0.094	4.78464	4.89183	0.0286	0.0263	0.0049	494.6426 539.1037	0.154	0.013 0.014
Trenchers	2019	2019Trenchers25	25	0.9551	4.78464	4.89183	0.3767	0.3466	0.0054	539.1037	0.1706	0.014
Trenchers	2019	2019Trenchers50	50	0.9551	4.78464	4.89183	0.3767	0.3466	0.0054	539.1037	0.1706	0.014
Trenchers	2019	2019Trenchers120	120	0.6314	5.69508	3.83677	0.4306	0.3961	0.0049	485.3635	0.1536	0.012
Trenchers	2019	2019Trenchers175	175	0.4598	4.95976	3.34151	0.2547	0.2343	0.0048	478.1294	0.1513	0.012
Trenchers	2019	2019Trenchers250	250	0.4048	5.04653	1.81019	0.2032	0.187	0.0049	484.1167	0.1532	0.012
Trenchers	2019	2019Trenchers500	500	0.2544	3.12824	1.98689	0.1181	0.1086	0.0049	482.1648	0.1526	0.012
Trenchers	2019	2019Trenchers750	750	0.0781	0.70662	0.95644	0.0152	0.014	0.0049	484.5422	0.1533	0.012
Trenchers	2020	2020Trenchers15	15	0.9049	4.67651	4.8331	0.3561	0.3276	0.0054	527.0962	0.1705	0.014
Trenchers	2020	2020Trenchers25	25	0.9049	4.67651	4.8331	0.3561	0.3276	0.0054	527.0962	0.1705	0.014
Trenchers	2020	2020Trenchers50 2020Trenchers120	50 120	0.9049	4.67651 5.51952	4.8331 3.83272	0.3561 0.4132	0.3276	0.0054	527.0962 475.1265	0.1705	0.014
Trenchers	2020 2020	2020Trenchers120	120	0.6102	4.46042	3.32968	0.4132	0.3802	0.0049	475.1265	0.1537	0.012
Trenchers Trenchers	2020	2020Trenchers250	250	0.392	4.40042	1.77405	0.2281	0.2098	0.0048	407.7348	0.1513	0.012
Trenchers	2020	2020Trenchers500	500	0.2325	2.775	1.85932	0.1052	0.0968	0.0049	470.6367	0.1522	0.012
Trenchers	2020	2020Trenchers750	750	0.0701	0.56006	0.95004	0.009	0.0083	0.0049	472.6556	0.1529	0.012
Trenchers	2021	2021Trenchers15	15	0.809	4.45891	4.66576	0.3133	0.2882	0.0054	527.0165	0.1704	0.013
Trenchers	2021	2021Trenchers25	25	0.809	4.45891	4.66576	0.3133	0.2882	0.0054	527.0165	0.1704	0.013
Trenchers	2021	2021Trenchers50	50	0.809	4.45891	4.66576	0.3133	0.2882	0.0054	527.0165	0.1704	0.013
Trenchers	2021	2021Trenchers120	120	0.556	5.10594	3.78912	0.3707	0.3411	0.0049	475.287	0.1537	0.012
Trenchers	2021	2021Trenchers175	175	0.4066	4.27237	3.30363	0.2188	0.2013	0.0048	467.7343	0.1513	0.012
Trenchers	2021	2021Trenchers250	250	0.3563	4.36036	1.66826	0.1718	0.1581	0.0049	473.8538	0.1533	0.012
Trenchers Trenchers	2021 2021	2021Trenchers500 2021Trenchers750	500 750	0.2213	2.49105 0.47513	1.86493 0.94677	0.1002	0.0922 0.0083	0.0049	470.701 472.5289	0.1522 0.1528	0.012
Welders	2021	2018Welders15	15	0.766	4.762	3.58	0.256	0.0083	0.0049	568.3	0.1528	0.012
Welders	2018	2018Welders25	25	0.807	4.661	2.531	0.232	0.232	0.007	568.299	0.072	0.015
Welders	2018	2018Welders50	50	1.21	4.607	5.092	0.311	0.311	0.007	568.299	0.109	0.015
Welders	2018	2018Welders120	120	0.564	3.98	3.648	0.29	0.29	0.006	568.299	0.05	0.015
Welders	2018	2018Welders175	175	0.402	3.176	3.123	0.162	0.162	0.006	568.299	0.036	0.015
Welders	2018	2018Welders250	250	0.292	2.751	1.118	0.084	0.084	0.006	568.299	0.026	0.015
Welders	2018	2018Welders500	500	0.277	2.43	1.08	0.08	0.08	0.005	568.299	0.025	0.015
Welders	2019	2019Welders15	15	0.748	4.647	3.562	0.241	0.241	0.008	568.299	0.067	0.015
Welders	2019	2019Welders25 2019Welders50	25 50	0.787	4.596	2.501	0.222	0.222	0.007	568.299 568.299	0.071	0.015
Welders	2019	2019Welders120	120	0.503	3.648	3.623	0.273	0.273	0.007	568.299	0.095	0.015
Welders	2019	2019Welders120	120	0.303	2.832	3.122	0.143	0.143	0.000	568.3	0.033	0.015
Welders	2019	2019Welders250	250	0.276	2.432	1.104	0.075	0.075	0.006	568.299	0.024	0.015
Welders	2019	2019Welders500	500	0.264	2.163	1.065	0.072	0.072	0.005	568.3	0.023	0.015
Welders	2020	2020Welders15	15	0.731	4.542	3.546	0.227	0.227	0.008	568.299	0.066	0.015
Welders	2020	2020Welders25	25	0.769	4.538	2.473	0.212	0.212	0.007	568.299	0.069	0.015
Welders	2020	2020Welders50	50	0.937	4.304	4.84	0.238	0.238	0.007	568.299	0.084	0.015
Welders	2020	2020Welders120	120	0.455	3.351	3.605	0.216	0.216	0.006	568.299	0.041	0.015
Welders	2020	2020Welders175	175	0.344	2.523	3.122	0.127	0.127	0.006	568.299	0.031	0.015
Welders	2020	2020Welders250	250	0.261	2.143	1.093	0.066	0.066	0.006	568.299	0.023	0.015
	2020	2020Welders500	500 15	0.252	1.91	1.055	0.064	0.064	0.005	568.299	0.022	0.015
Welders		2021\\/cld===15		U./17	4.462	3.531	0.214	0.214	0.008	568.299	0.064	0.015
Welders	2021	2021Welders15 2021Welders25			4 407	2 / / 6	0.201	0.201	0.007	568 200	0.067	0.015
Welders Welders	2021 2021	2021Welders25	25	0.752	4.497	2.446	0.201	0.201	0.007	568.299	0.067	0.015
Welders Welders Welders	2021 2021 2021	2021Welders25 2021Welders50	25 50	0.752 0.829	4.133	4.708	0.203	0.203	0.007	568.299	0.074	0.015
Welders Welders	2021 2021	2021Welders25	25	0.752								
Welders Welders Welders Welders	2021 2021 2021 2021	2021Welders25 2021Welders50 2021Welders120	25 50 120	0.752 0.829 0.411	4.133 3.042	4.708 3.579	0.203 0.184	0.203 0.184	0.007	568.299 568.299	0.074 0.037	0.015 0.015

EMFAC													
Model	Year Concat	ROG	NOX	CO	PM10	PM2.5	PM10 BWTW	PM2.5 BWTW	SO2	CO2(pav)	CH4	N20	
LDA/LDT1/LDT2	2018 LDA/LDT1/LDT22018	0.03	0.12	1.10	0.00	0.00	0.04	0.00	0.00	347	0.005	0.01	
T6Heavy	2018 T6Heavy2018	0.09	2.92	0.30	0.01	0.01	0.14	0.02	0.01	1214	0.07	0.03	
T7SC	2018 T7SC2018	0.14	5.38	0.54	0.04	0.04	0.10	0.14	0.02	1664	0.10	0.04	
LDA/LDT1/LDT2	2019 LDA/LDT1/LDT22019	0.02	0.11	0.99	0.00	0.00	0.04	0.02	0.00	337	0.004	0.00	
T6Heavy	2019 T6Heavy2019	0.08	2.83	0.30	0.01	0.01	0.14	0.06	0.01	1211	0.07	0.03	
T7SC	2019 T7SC2019	0.13	4.95	0.52	0.03	0.03	0.10	0.04	0.02	1647	0.09	0.04	regional travel -
LDA/LDT1/LDT2	2020 LDA/LDT1/LDT22020	0.02	0.10	0.91	0.00	0.00	0.04	0.02	0.00	326	0.004	0.00	aggregated rates
T6Heavy	2020 T6Heavy2020	0.08	2.72	0.31	0.01	0.01	0.14	0.06	0.01	1205	0.07	0.03	
T7SC	2020 T7SC2020	0.11	4.11	0.44	0.02	0.02	0.10	0.04	0.02	1632	0.09	0.04	
LDA/LDT1/LDT2	2021 LDA/LDT1/LDT22021	0.02	0.09	0.85	0.00	0.00	0.04	0.02	0.00	315	0.004	0.00	
T6Heavy	2021 T6Heavy2021	0.08	2.47	0.30	0.01	0.01	0.14	0.06	0.01	1202	0.07	0.03	
T7SC	2021 T7SC2021	0.10	3.63	0.43	0.02	0.02	0.10	0.04	0.02	1614	0.09	0.04	
T6Heavy_5	2018 T6Heavy_52018	0.48	9.67	1.59	0.03	0.03	0.14	0.14	0.02	2280	0.13	0.06	water trucks-5mph
T6Heavy_5	2019 T6Heavy_52019	0.47	9.84	1.62	0.03	0.02	0.14	0.14	0.02	2272	0.13	0.06	water trucks-5mph
T6Heavy_5	2020 T6Heavy_52020	0.46	9.98	1.63	0.023	0.022	0.14	0.14	0.02	2261	0.13	0.06	water trucks-5mph
T6Heavy_5	2021 T6Heavy_52021	0.43	9.90	1.62	0.019	0.018	0.14	0.14	0.02	2248	0.13	0.06	water trucks-5mph
T7SC_5	2018 T7SC_52018	1.263	18.894	3.365	0.134	0.128	0.14	0.14	0.02	3273	0.19	0.08	end dumps-5mph
T7SC_5	2019 T7SC_52019	1.167	18.371	3.306	0.115	0.110	0.14	0.14	0.02	3231	0.18	0.08	end dumps-5mph
T7SC_5	2020 T7SC_52020	0.837	16.880	3.009	0.049	0.046	0.14	0.14	0.02	3182	0.18	0.08	end dumps-5mph
T7SC_5	2021 T7SC_52021	0.795	16.312	3.025	0.041	0.039	0.14	0.14	0.02	3138	0.18	0.08	end dumps-5mph

EMFAC web tool for all but CH4 and N2O

EMFAC-PL for gas CH4; ran just LDA/LDT; weighted by 50/25/25 split GRP for diesel CH4 and N2O (ratio to CO2 per gallon)

OFFROAD Equipment Type	Horsepower	CMOD High	Load Factor
Aerial Lifts	63	50	0.31
Air Compressors	78	120	0.48
Bore/Drill Rigs	221	250	0.50
Cement and Mortar Mixers	9	15	0.56
Concrete/Industrial Saws	81	120	0.73
Cranes	231	250	0.29
Crawler Tractors	212	250	0.43
Crushing/Proc. Equipment	85	120	0.78
Dumpers/Tenders	16	15	0.38
Excavators	158	175	0.38
Forklifts	89	120	0.20
Generator Sets	84	120	0.74
Graders	187	175	0.41
Off-Highway Tractors	124	120	0.44
Off-Highway Trucks	402	500	0.38
Other Construction Equipment	172	175	0.42
Other General Industrial Equipment	88	120	0.34
Other Material Handling Equipment	168	175	0.40
Pavers	130	120	0.42
Paving Equipment	132	120	0.36
Plate Compactors	8	15	0.43
Pressure Washers	13	15	0.30
Pumps	84	120	0.74
Rollers	80	120	0.38
Rough Terrain Forklifts	100	120	0.40
Rubber Tired Dozers	247	250	0.40
Rubber Tired Loaders	203	250	0.36
Scrapers	367	500	0.48
Signal Boards	6	15	0.82
Skid Steer Loaders	65	120	0.37
Surfacing Equipment	263	250	0.30
Sweepers/Scrubbers	64	75	0.46
Tractors/Loaders/Backhoes	97	120	0.37
Trenchers	78	120	0.50
Welders	46	50	0.45

Source: CalEEMOd Users Guide (2016.3.1)

	HP	kW	LF
dewater pumps	6.711409396	5	0.75
tower crane	100.6711409	75	0.25
crane low-rise	80.53691275	60	0.25
concrete pump	80.53691275	60	0.75
man/mtl tower	13.42281879	10	0.5
man/mtl low rise	13.42281879	10	0.5
man/mtl public low rise	13.42281879	-	10 0.5

AC Cold Planer

225 other construction

http://www.cat.com/en_US/products/new/equipment/cold-planers/cold-planer/18252346.html

SDG&E rate

	Total	non	renewable	
yr	CO2e	%	%	YOY % change
2018	531.31	57%	43%	
2030	372.85	40%	60%	-30%
2050	0.00	0%	100%	-100%
2022	480.71	52%	48%	-10%
2025	430.28	46%	54%	-19%
	AR4 GWP	bal-Warmi	ng-Potential-Va	alues%20%28Feb%2016%202016%29_1.pdf

MT/MWh 0.218

lb to MT 0.000454

Future Year extrapolation based on 2018 rate, not 2014

Power L	abel
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https://www.energy.ca.gov/pcl/labels/2017_labels/SDG_and_E_2017_PCL.pdf

SDGE ERRA 2018 EF	0.241 MT/MWh	531.31 lbs/MWH
SDGE ERRA 2014 EF	0.284 MT/MWh	626.11 lbs/MWH

https://www.sdge.com/sites/default/files/regulatory/A.19-04-010%20Application%20-%20November%20Update%20PUBLIC.pdf

			Version: July 20:	9									
2018 PC	OWER CONTEN	IT LABEL											
San	Diego Gas & E	lectric		Terr	plate D-5: History of Revenue, Cos	ts, and Emission	s Intensity						
https:/	//www.sdge.com/b	ill-inserts											
ENERGY RESOURCES	2018 SDG&E	2018 SDG&E	2018 CA	Line	Information	2013	2014	2015	2016	2017	2018	2019 (forecast)	2020 (forecast)
	Power Mix	EcoChoice Mix	Power Mix**	1	Total GHG Costs (5)	\$61,221,829	\$64,361,474	\$60,409,838	\$56,269,888	\$61,779,274	564,111,229	\$37,535,744	\$71,440,374
Eligible Renewable	43%	100%	31%	2	Total GHG Revenues (5)	(\$82,453,505)	(\$76,756,698)	(\$79,929,224)	(\$81,558,628)	(\$92,539,677)	(\$93,727,555)	(\$103,152,050)	(\$112,372,776)
Biomass & Biowaste	2%	0%	2	_									 All and the Contracting
Geothermal	0%	0%	Ę	3	Emissions Intensity (MTCO2e/MWh) *	0.322	0,284	0.269	0.242	0.243	0.241		
Eligible Hydroelectric	0%	0%	2										
Solar	20%	100%	11										
Wind	21%	0%	11		BE Emissions Intensities are calcluated based on a adjusted for RPS Compliance banking or modificat			ciated with consumpr	ntion in that year. It				
Coal	0%	0%	3%	is not	adjusted for KPS Compliance banking or modificat	ions to RPS Adjsutmer	its in that year.						
Large Hydroelectric	0%	0%	11%										
Natural Gas	29%	0%	35%										
Nuclear	0%	0%	9%										
Other	<1%	0%	<1%										
Unspecified sources of power*	27%	0%	11%										
TOTAL	100%	100%	100%										
* "Unspecified sources of power" m	eans electricity fron	n transactions that a	are not traceable	0									
spe	ecific generation sou	irces.											
** Percentages are estimated ann	ually by the Californ	nia Energy Commiss	sion based on the										
electricity generated in California and	d net imports as rep	orted to the Quarter	rly Fuel and Ener	av.									
Report database ar													
For specific information about this	Sar	n Diego Gas & Elec	tric										
electricity product, contact:		800-411-7343											
For general information about the	http://	/www.energy.ca.go	w/pcl/										
Power Content Label, please visit:	nttp:/	/www.energy.ca.go											
For additional questions, please contact the California Energy Commission at:		e in California: 844-4 e California: 916-65											

VOC emissions from Architectural Coatings - MITIGATED!!!!

Emissions based on Calculation Details in CalEEMod Users Guide, Appendix A, pages 15-16

Eac = Efac x F x Apaint

EFac = Cvoc / 454 (g/lb) x 3.875 (L/GAL) / 180 (sqft)

Unmitigated	Phase 2.6	Phase 3.4	Phase 4.4	<u>description</u>
VOC Emissions (lbs/day)	24	2	10	pounds of VOC per day; unmitigated
VOC Emissions (ton/year)	3	0	0	
Eexterior (day)	18	2	8	
Einterior (day)	6	1	3	
Eexterior (annual)	4,869	331	612	
Einterior (annual)	1,623	110	204	
FF autorian	0.00055	0.00356	0.00356	
EF -exterior	0.00356	0.00356	0.00356	emission factor (lbs per sq. ft.)
EF - interior	0.00356	0.00356	0.00356	emission factor (lbs per sq. ft.)
November (16)	014 725	c2 000	111.000	
New construction (sf)	911,736	62,000	114,660	The hotel tower, including the associated retail and public access plaza, would be approximatel
Days of coatings	276	211	81	
Construction SF per day	3,303	294	1,416	ft2
Fraction exterior	75%	75%	75%	exterior fraction of surface area. Default is 75% of area is exterior surface and 25% interior
Fraction interior	25%	25%	25%	interior fraction of surface area. Default is 75% of area is exterior surface and 25% interior
Hacton menor	23/0	2370	2370	
Cext	75	75	75	Exterior VOC content (g/L)
Cint	75	75	75	Interior VOC content (g/L)
scaling factor for A - surface painting	2	2	2	
g/lb	453.59236	453.59236	453.59236	
liters per gallon	3.87541178	3.87541178	3.87541178	
	180	180	180	

Waterside Construction Sheets

Waterside Calculations for Marina

							Engine	e Specs						Pc	ounds per Da	y						Total	Tons				Metric T	Fons Tota	al
				time to																									
				anchor	travel																								
			distance	barge	speed		kw (or		time																				
		#	(mi)	(hr)	(knot)	engine	hp	load	(hrs)	days	ROG	NOX	CO	DPM	PM2.5	SOx	CO2	CH4	N2O	ROG	NOX	CO	DPM	PM2.5	SOx	CO2	CH4	N2O	CO2e
tugs	barge drop-off	1	4	1	6	main	1491	0.31	1.6	1	1.4	8.8	8.9	0.2	0.2	0.0	1049.6	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.48	0.00	0.00	0.48
	barge removal	1	4	1	6	main	1491	0.31	1.6	1	1.4	8.8	8.9	0.2	0.2	0.0	1049.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.00	0.00	0.48
	barge drop-off	1	4	1	6	aux	132	0.43	1.6	1	0.3	1.4	1.0	0.1	0.0	0.0	128.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.00	0.00	0.06
	barge removal	1	4	1	6	aux	132	0.43	1.6	1	0.3	1.4	1.0	0.1	0.0	0.0	128.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.00	0.00	0.06
skiff	arrival	2	4		6	main	44.7	0.45	1.2	1	1.3	0.3	18.2	0.0	0.0	0.0	66.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.00	0.00	0.03
	depart	2	4		6	main	44.7	0.45	1.2	1	1.3	0.3	18.2	0.0	0.0	0.0	66.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.00	0.00	0.03
	dock movements	2		1		main	44.7	0.45	2	198	2.2	0.6	31.3	0.0	0.0	0.0	114.1	0.0	0.0	0.2	0.1	3.1	0.0	0.0	0.0	10.25	0.00	0.00	10.39
Push Boat	arrival	1	4		6	main	335.6	0.45	0.6	1	0.2	3.1	2.8	0.1	0.1	0.0	251.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.00	0.00	0.12
	depart	1	4		6	main	335.6	0.45	0.6	1	0.2	3.1	2.8	0.1	0.1	0.0	251.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.00	0.00	0.12
	barge movements	1		1		main	335.6	0.45	2	39	0.7	5.3	4.9	0.2	0.2	0.0	434.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	7.68	0.00	0.00	7.75
	arrival		4		6	aux	39.7	0.43	0.6	1	0.0	0.2	0.1	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.00	0.01
	depart		4		6	aux	39.7	0.43	0.6	1	0.0	0.2	0.1	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.00	0.01
	barge movements			1		aux	39.7	0.43	2	39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
Crane	on barge	1				-	275	0.2881	8	198	0.1	0.4	2.5	0.0	0.0	0.0	660.9	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	59.35	0.02	0.00	60.29
Jet Pump	on barge	1				-	350	0.74	8	198	0.3	1.2	4.6	0.0	0.0	0.0	2596.0	0.1	0.1	0.0	0.1	0.5	0.0	0.0	0.0	233.15	0.01	0.01	235.12
									Maxir	num Day																			
		С	rane&Pum	p active,	skiff/pus	hboat arr	ival, and	skiff/pusl	hboat mo	ove barge	4.7	10.9	64.4	0.4	0.3	0.0	4136.9	0.3	0.1										
						Bar	ge arrival	or remov	/al plus w	orkboats/	3.2	13.7	31.1	0.4	0.3	0.0	1510.2	0.0	0.1									(pha	se 1 only)
										max	4.7	13.7	64.4	0.4	0.3	0.0	4136.9	0.3	0.1	0.3	0.3	3.9	0.0	0.0	0.0	311.8	0.0	0.0	314.9
																										п	haca 2 -		214 02

			Engine	Specs						Ро	unds per Da	v						Total	Tons				Metric T	ons Tota	I
time to anchor	travel		0	·							·														
barge	speed		kw (or		time																				
(hr)	(knot)	engine	hp	load	(hrs)	days	ROG	NOX	CO	DPM	PM2.5	SOx	CO2	CH4	N2O	ROG	NOX	CO	DPM	PM2.5	SOx	CO2	CH4	N2O	CO2e
1	6	main	1491	0.31	1.6	1	1.4	8.8	8.9	0.2	0.2	0.0	1049.6	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.48	0.00	0.00	0.48
1	6	main	1491	0.31	1.6	1	1.4	8.8	8.9	0.2	0.2	0.0	1049.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.00	0.00	0.48
1	6	aux	132	0.43	1.6	1	0.3	1.4	1.0	0.1	0.0	0.0	128.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.00	0.00	0.06
1	6	aux	132	0.43	1.6	1	0.3	1.4	1.0	0.1	0.0	0.0	128.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.00	0.00	0.06
	6	main	44.7	0.45	1.2	1	1.3	0.3	18.2	0.0	0.0	0.0	66.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.00	0.00	0.03
	6	main	44.7	0.45	1.2	1	1.3	0.3	18.2	0.0	0.0	0.0	66.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.00	0.00	0.03
1		main	44.7	0.45	2	198	2.2	0.6	31.3	0.0	0.0	0.0	114.1	0.0	0.0	0.2	0.1	3.1	0.0	0.0	0.0	10.25	0.00	0.00	10.39
	6	main	335.6	0.45	0.6	1	0.2	3.1	2.8	0.1	0.1	0.0	251.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.00	0.00	0.12
	6	main	335.6	0.45	0.6	1	0.2	3.1	2.8	0.1	0.1	0.0	251.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.00	0.00	0.12
1		main	335.6	0.45	2	39	0.7	5.3	4.9	0.2	0.2	0.0	434.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	7.68	0.00	0.00	7.75
	6	aux	39.7	0.43	0.6	1	0.0	0.2	0.1	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.00	0.01
	6	aux	39.7	0.43	0.6	1	0.0	0.2	0.1	0.0	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.00	0.01
1		aux	39.7	0.43	2	39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
		-	275	0.2881	8	198	0.1	0.4	2.5	0.0	0.0	0.0	660.9	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	59.35	0.02	0.00	60.29
		-	350	0.74	8	198	0.3	1.2	4.6	0.0	0.0	0.0	2596.0	0.1	0.1	0.0	0.1	0.5	0.0	0.0	0.0	233.15	0.01	0.01	235.12
					Maxin	num Day																			
p active, s	skiff/push	nboat arri	ival, and s	skiff/push	nboat mo	ove barge	4.7	10.9	64.4	0.4	0.3	0.0	4136.9	0.3	0.1										
		Barg	e arrival	or remov	al plus w	orkboats	3.2	13.7	31.1	0.4	0.3	0.0	1510.2	0.0	0.1									(phas	se 1 only)
						max	4.7	13.7	64.4	0.4	0.3	0.0	4136.9	0.3	0.1	0.3	0.3	3.9	0.0	0.0	0.0	311.8	0.0	0.0	314.9
																						DŁ	$2 \sim 2 -$		21/02

Phase 2 = Phase 1+2 Total= 314.93 629.86

e 39

<u>29</u> 12 nly) .9

Emission Factor Summary

Vessel	engine	unit	NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O
Tug	Main	g/kwh	5.47	0.11	0.10	0.88	5.55	0.01	652.00	0.01	0.03
	Aux	g/kwh	6.96	0.27	0.25	1.49	5.29	0.01	652.00	0.01	0.03
Skiff	Main	g/kwh	3.28	0.06	0.06	12.25	176.46	0.01	642.77	0.01	0.03
Pushboat	Main	g/kwh	7.91	0.27	0.25	1.05	7.30	0.01	652.00	0.02	0.02
	Aux	g/kwh	7.42	0.45	0.32	1.60	5.97	0.01	652.00	0.02	0.03
Crane	-	g/hphr	7.42	0.45	0.32	1.60	5.97	0.01	652.00	0.02	0.03
JetPump	-	g/hphr	7.42	0.45	0.32	1.60	5.97	0.01	652.00	0.02	0.03

Tug Emission Factor

Tug size and tier from applicant

Assumes tug is "Assist Tug" characteristics (i.e., load and cumulative hours)

model year	2012 (Tier 3)		
Propulsion	1491 kW	2000 hp	from Applicant
Auxiliary	132 kW	177 hp	est. based on average Assist Tug aux to main engine proportion in Maritime Inventory (in pro

Method taken from 2013 Port of Long Beach Inventory Assumes tugs are fully deteriorated Tugs are Tier 3 per Applicant

Emission Factor (g/kwh)

											Useful	Annual	Det Cap
		NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O	Life	Hours	Years
<u>Main</u>	ZH	5.48	0.11	0.10	1.15	5.00	0.17	652	0.018	0.031			
	FCF	0.948	0.852	0.852	0.72	1	0.043	1	0.72	0.95			
	ZH, ULSD-corrected	5.2	0.1	0.1	0.8	5.0	0.01	652	0.0	0.0			
	DR & Cumulative Hours										21	2274	5.28
	DF	0.21	0.67	0.67	0.25	0.44	-	-	-	-			
	EF, fuel-corrected	5.47	0.11	0.10	0.88	5.55	0.01	652	0.01	0.03			
<u>Aux</u>	ZH	7.13	0.29	0.27	2.00	5.00	0.17	652.00	0.018	0.031			
	FCF	0.948	0.852	0.852	0.72	1	0.043	1	0.72	0.948			
	ZH, ULSD-corrected	6.8	0.2	0.2	1.4	5.0	0.01	652	0.0	0.0			
	DR & Cumulative Hours										23	2486	4.83
	DF	0.14	0.44	0.44	0.16	0.28	-	-	-	-			
	EF, fuel-corrected	6.96	0.27	0.25	1.49	5.29	0.01	652	0.01	0.03			

rogress)

Skiff and Pushboat Emission Factor

Skiff and Push Boat size and non-tiered from applicant Assumes outboard rec engine for skiff; diesel inboard for pushboat

		<u>skiff</u>	push
model year		1999	2007
Propulsion	kw	56	336
Auxiliary	kw	0	40

Deteriorated Emission Factors or Skiff (from PWC model), g/hp-hr

	ME ROG	ME CO	<u>ME NOx</u>	ME PM	<u>AE ROG</u>	<u>AE CO</u>	<u>AE NOx</u>	<u>AE PM</u>	<u>CO2</u>	<u>SO2</u>	ME CH4	<u>ME N2O</u>	<u>AE CH4</u>	<u>AE N2O</u>
for lookup>	ROG	CO	NOX	DPM					CO2	SOX	CH4	N2O		
skiff (g/hphr)	9.135628	131.5855018	2.444249	0.047844	8.996636	68.87169	3.03182598	0.060368	479.3132	0.006997	0.009664	0.021915	0.01557	0.023117

Emission Factor for Push Boat (g/kwhr)										Useful	Annual	Det Cap
	NOx	DPM	PM2.5	ROG	СО	SOx	CO2	CH4	N2O	Life	Hours	Years
<u>Main</u> ZH	6.84	0.20	0.18	1.15	5.00	0.17	652	0.03	0.02			
FCF	0.948	0.8	0.8	0.72	1	0.043	1	0.72	0.95			
ZH, ULSD-corrected	6.5	0.2	0.1	0.8	5.0	0.01	652	0.0	0.0			
DR & Cumulative Hours										17	675	17.78
DF	0.21	0.67	0.67	0.25	0.44	-	-	-	-			
EF, fuel-corrected	7.91	0.27	0.25	1.05	7.30	0.01	652	0.02	0.02			
<u>Aux</u> ZH	7.13	0.40	0.29	2.00	5.00	0.17	652.00	0.031	0.032			
FCF	0.948	0.852	0.852	0.72	1	0.043	1	0.72	0.948			
ZH, ULSD-corrected	6.8	0.3	0.2	1.4	5.0	0.01	652	0.0	0.0			
DR & Cumulative Hours										23	750	16
DF	0.14	0.44	0.44	0.16	0.28	-	-	-	-			
EF, fuel-corrected	7.42	0.45	0.32	1.60	5.97	0.01	652	0.02	0.03			

Crane and Jet Pump emission rates

Carl Moyer, Table D-12

Controlled Off-Road Diesel Engines Emission Factors (g/bhp-hr)(a)

lorsepower	Road Diesel Engines Em	NOx	ROG	PM10		Loads (From Caleemod)
25-49	1	5.26	1.74	0.480	-	Crane 0.2881
	2	4.63	0.29	0.280		Pumps 0.74
	4 Interim	4.55	0.12	0.128		
	4f	2.75	0.12	0.008		
50-74	1	6.54	1.19	0.552	-	
	2	4.75	0.23	0.192		
	3(b)	2.74	0.12	0.192		
	4 Interim	2.74	0.12	0.112		
	4f	2.74	0.12	0.008		
75-99	1	6.54	1.19	0.552		
	2	4.75	0.23	0.192		
	3	2.74	0.12	0.192		
	4 Phase-Out	2.74	0.12	0.008		
	4 Phase-In/	2.14	0.11	0.008		
	Alternate NOx					
	4f	0.26	0.06	0.008		
100-174	1	6.54	0.82	0.274		
	2	4.17	0.19	0.128		
	3	2.32	0.12	0.112		
	4 Phase-Out	2.32	0.12	0.008		
	4 Phase-In/	2.15	0.06	0.008		
	Alternate NOx					
	4f	0.26	0.06	0.008		
175-299	1	5.93	0.38	0.108	-	
	2	4.15	0.12	0.088		
	3	2.32	0.12	0.088		
	4 Phase-Out	2.32	0.12	0.008		
	4 Phase-In/	1.29	0.08	0.008		
	Alternate NOx					
	4f	0.26	0.06	0.008	Crane	CO, SOX, GHGs same as unmtigiate
300-750	1	5.93	0.38	0.108		
	2	3.79	0.12	0.088		
	3	2.32	0.12	0.088		
	4 Phase-Out	2.32	0.12	0.008		
	4 Phase-In/ Alternate	1.29	0.08	0.008		
	NOx					
	4f	0.26	0.06	0.008	Jet Pump	
751+	1	5.93	0.38	0.108		
	2	3.79	0.12	0.088		
	4 Interim	2.24	0.12	0.048		
	4f	2.24	0.06	0.016		

Caleemod Efs

Equipment Type	Year	Concatenate	HP	ROG	NOX	CO	PM10	PM2.5	SO2	CO2	CH4	N2O
Cranes	2020	2020Cranes250	250	0.38	4.56	1.79	0.19	0.17	0.00	472.95	0.15	0.01
Cranes	2020	2020Cranes500	500	0.32	3.86	2.66	0.15	0.14	0.00	472.56	0.15	0.01
Pumps	2020	2020Pumps250	250	0.21	2.05	1.04	0.06	0.06	0.01	568.30	0.02	0.01
Pumps	2020	2020Pumps500	500	0.20	1.84	1.02	0.06	0.06	0.01	568.30	0.02	0.01

Replace NOX, ROG< and PM with Tier 4 rates (use for calcs)

Equipment Type	Year	Concatenate	HP	ROG	NOX	СО	DPM	PM2.5	SOx	CO2	CH4	N2O
Cranes	2020	2020Cranes250	250	0.06	0.26	1.79	0.01	0.01	0.00	472.95	0.15	0.01
Pumps	2020	2020Pumps500	500	0.06	0.26	1.02	0.01	0.01	0.01	568.30	0.02	0.01

changed to tier 4

Vessel Type Specific Factors, ARB, from 2010 updated CHC model

Vessel_Type	mber of ma	iumber auxil	in Engine Lo	iary Engine	Annual Hour	Annual Ho	ine Useful Li	igine Useful
Tow Boats	2.1	1.17	0.68	0.43	1,993.00	2,964.62	26	25
Tug Boats	1.92	1.59	0.5	0.31	2,274.06	2,486.21	21	22.5
Ferries	2.01	1.23	0.42	0.43	1,842.64	1,254.17	20	20
Others	1.11	0.46	0.52	0.43	778.71	805.39	23	22
Work Boats	1.46	0.32	0.45	0.43	674.99	750.00	17	23
Pilot Vessels	1.7	0.14	0.51	0.43	1,030.71	994.00	19	25
Crew and Supply	2.5	1.1	0.45	0.43	787.52	3,035.80	22	22
Charter Fishing	1.77	0.75	0.52	0.43	1,622.28	2,077.00	16	15
Commercial Fishing	1.12	0.46	0.27	0.43	1,249.86	1,633.45	21	15

			На	rborcraft U	LSD Correc	tion Factor	s	
Years	ROG	СО	NOx	PM2.5	SOx	CO2	CH4	N2O
Pre-1995	0.720	1.000	0.930	0.720	0.043	1.000	0.720	0.930
1996-2010	0.720	1.000	0.948	0.800	0.043	1.000	0.720	0.948
2011 +	0.720	1.000	0.948	0.852	0.043	1.000	0.720	0.948

ae to me ratio, 2016 ei			
workboats	0.507	/923	
	hp	kw	
main		450	336

aux

53.29944 2007 my

annual use

40

450 ho

Carbon Monoxide Hotspot Sheets

JOB:	POSD FAL			
RUN:	CALINE4 RUN	(WORST	CASE	ANGLE)
POLLUTANT:	Carbon Monoxide	•		,

I. SITE VARIABLES

U=	0.5	M/S	Z0=	100.	СМ		ALT=	0.	(M)
BRG=	WORST	CASE	VD=	0.0	CM/S				• •
CLAS=	7	(G)	VS=	0.0	CM/S				
MI XH=	1000.	Ň ĺ	AMB=	0.0	PPM				
SI GTH=	15.	DEGREES	TEMP=	13.9	DEGREE	(C)			

II. LINK VARIABLES

		*		COORDI		(M)	*	TUDE		EF	Н	W
	DESCRI PTI ON	_*_	X1	Y1	X2	Y2	*	TYPE	VPH	(G/MI)	(M)	(M)
Α.	WBA	*	1000	5	0	5	*	AG	1150	4.0	0.0	17.0
Β.	SBA	*	-7	1000	-7	0	*	AG	1878	4.0	0.0	20.6
С.	SBD	*	-7	0	-7	-1000	*	AG	1990	4.0	0.0	20.6
D.	NBA	*	5	-1000	5	0	*	AG	601	4.0	0.0	17.0
Ε.	NBD	*	5	0	5	1000	*	AG	1639	4.0	0.0	17.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORD X	I NATES Y	(M) Z
1. R_001 2. R_002 3. R_003 4. R_004	* * * *	-18 14 -18 14	14 14 -4 -3	1.8 1.8 1.8 1.8 1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

	*	BRG	* *	PRED CONC	* *		CO	NC/LI (PPM)	NK	
RECEPTOR	*	(DEG)	*	(PPM)	*	А	В	`C ´	D	Е
1. R_001 2. R_002	*	9. 351.	- * * *	1.3 1.4	*	0.0	0.9	0.0	0.0	0.4
3. R_003 4. R_004	*	9. 351.	* *		*	0.0 0.3	0.9 0.5	0. 1 0. 0	0.0 0.0	0.4 0.8

1 EXI T

JOB: POSD FAL RUN: CALINE4 RUN (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

 $\begin{array}{cccccc} U=& 0.5 \text{ M/S} & Z0=100. \text{ CM} & \text{ALT}=& 0. \ (M) \\ BRG= WORST CASE & VD=& 0.0 \text{ CM/S} \\ CLAS=& 7 \ (G) & VS=& 0.0 \text{ CM/S} \\ MIXH=& 1000. \text{ M} & \text{AMB}=& 0.0 \text{ PPM} \\ SIGTH=& 15. \text{ DEGREES} & \text{TEMP}=& 13.9 \text{ DEGREE} \ (C) \end{array}$

II. LINK VARIABLES

III. RECEPTOR LOCATIONS

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

* * PRED * CONC/LINK * BRG * CONC * (PPM) RECEPTOR * (DEG) * (PPM) * A B C D E

1 EXIT

JOB: POSD FAL RUN: CALINE4 RUN (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

 $\begin{array}{cccccc} U=& 0.5 \text{ M/S} & Z0=100. \text{ CM} & \text{ALT}=& 0. \ (M) \\ BRG= WORST CASE & VD=& 0.0 \text{ CM/S} \\ CLAS=& 7 \ (G) & VS=& 0.0 \text{ CM/S} \\ MIXH=& 1000. \text{ M} & \text{AMB}=& 0.0 \text{ PPM} \\ SIGTH=& 15. \text{ DEGREES} & \text{TEMP}=& 13.9 \text{ DEGREE} \ (C) \end{array}$

II. LINK VARIABLES

III. RECEPTOR LOCATIONS

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

* * PRED * CONC/LINK * BRG * CONC * (PPM) RECEPTOR * (DEG) * (PPM) * A B C D E

1. R_001	* 9.* 1.2* 0.0 0.9 0.0 0.0 0.4
2. R_002	* 351. * 1.3 * 0.0 0.4 0.0 0.0 0.9
3. R_003	* 9.* 1.2* 0.0 0.8 0.0 0.0 0.4
4. R_004	* 351. * 1.6 * 0.3 0.4 0.0 0.0 0.8

1 EXIT

JOB: POSD FAL RUN: CALINE4 RUN (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

 $\begin{array}{cccccc} U=& 0.5 \text{ M/S} & Z0=100. \text{ CM} & \text{ALT}=& 0. \ (M) \\ BRG= WORST CASE & VD=& 0.0 \text{ CM/S} \\ CLAS=& 7 \ (G) & VS=& 0.0 \text{ CM/S} \\ MIXH=& 1000. \text{ M} & \text{AMB}=& 0.0 \text{ PPM} \\ SIGTH=& 15. \text{ DEGREES} & \text{TEMP}=& 13.9 \text{ DEGREE} \ (C) \end{array}$

II. LINK VARIABLES

III. RECEPTOR LOCATIONS

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

* * PRED * CONC/LINK * BRG * CONC * (PPM) RECEPTOR * (DEG) * (PPM) * A B C D E

1. R_001	* 9.* 1.3 * 0.0 0.9 0.0 0.0 0.4
2. R_002	* 351. * 1.3 * 0.0 0.5 0.0 0.0 0.9
3. R_003	* 9.* 1.3 * 0.0 0.8 0.1 0.0 0.4
4. R_004	* 351. * 1.6 * 0.3 0.5 0.0 0.0 0.8

1 EXIT

JOB: POSD FAL RUN: CALINE4 RUN (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

 $\begin{array}{cccccc} U=& 0.5 \text{ M/S} & Z0=100. \text{ CM} & \text{ALT}=& 0. \ (M) \\ BRG= WORST CASE & VD=& 0.0 \text{ CM/S} \\ CLAS=& 7 \ (G) & VS=& 0.0 \text{ CM/S} \\ MIXH=& 1000. \text{ M} & \text{AMB}=& 0.0 \text{ PPM} \\ SIGTH=& 15. \text{ DEGREES} & \text{TEMP}=& 13.9 \text{ DEGREE} \ (C) \end{array}$

II. LINK VARIABLES

III. RECEPTOR LOCATIONS

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

* * PRED * CONC/LINK * BRG * CONC * (PPM) RECEPTOR * (DEG) * (PPM) * A B C D E

1 EXIT

JOB: POSD FAL RUN: CALINE4 RUN (WORST CASE ANGLE) POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

 $\begin{array}{cccccc} U=& 0.5 \text{ M/S} & Z0=100. \text{ CM} & \text{ALT}=& 0. \ (M) \\ BRG= WORST CASE & VD=& 0.0 \text{ CM/S} \\ CLAS=& 7 \ (G) & VS=& 0.0 \text{ CM/S} \\ MIXH=& 1000. \text{ M} & \text{AMB}=& 0.0 \text{ PPM} \\ SIGTH=& 15. \text{ DEGREES} & \text{TEMP}=& 13.9 \text{ DEGREE} \ (C) \end{array}$

II. LINK VARIABLES

III. RECEPTOR LOCATIONS

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

* * PRED * CONC/LINK * BRG * CONC * (PPM) RECEPTOR * (DEG) * (PPM) * A B C D E

1. R_001	* 9.* 0.7 * 0.0 0.5 0.0 0.0 0.2
2. R_002	* 191. * 0.7 * 0.2 0.0 0.3 0.1 0.1
3. R_003	* 9.* 0.7 * 0.0 0.4 0.0 0.0 0.2
4. R_004	* 350. * 0.9 * 0.2 0.2 0.0 0.0 0.4

1 EXIT

Attachment 3 Transportation Memo



October 22, 2020

Megan Hamilton Port of San Diego Development Services 3165 Pacific Highway San Diego, CA 9210

Subject: Fifth Avenue Landing Project Evaluation

Dear Ms. Hamilton,

The purpose of this letter is to evaluate the proposed changes to the Fifth Avenue Landing project (Proposed Project) that have occurred since the end of the public review period of the Proposed Project's December 2017 Draft Environmental Impact Report (Draft EIR), which came to a close in January 2018. In addition to the Proposed Project, several alternatives were carried forward for analysis in the Draft EIR, including the Reduced Density Alternative (Alternative 5) and the Below Grade Parking Alternative (Alternative 6). This letter will review the changes in proposed land uses, as well as compare assumed trip generation for the Proposed Project and these two alternatives that were analyzed within the Draft EIR to the anticipated trip generation will be provided in the forthcoming Final EIR based on the proposed changes to the project description. Based on this comparison it will be determined if the transportation findings outlined in the Draft EIR are still relevant or if additional transportation analysis is required.

Proposed Project

Trip Generation

Draft EIR

The following land uses were assumed for the Proposed Project in the December 2017 Draft EIR:

- An 850-room, approximately 498-foot-high, 44-story, market-rate hotel tower.
- Approximately 55,583 square feet of meeting space.
- Up to 565-bed approximately 82-foot-high, 5-story, lower-cost, visitor-serving hotel.
- Approximately 6,000 square feet of retail development along the Embarcadero Promenade.
- Approximately 1.96 acres (85,490 square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel.
- Approximately 263 onsite parking spaces (combination of striped and valet parking spaces).
- A two-phase expanded marina with up to 50 new slips (approximately 23 slips in Phase I and 27 slips in Phase II) that, combined with the existing 12 slips, would total up to 62 slips.



 An optional connecting bridge from the hotel rooftop public plaza and park area to the San Diego Convention Center (SDCC) that would require potential concurrence of the City of San Diego (City) and an amendment to the existing Convention Center Management Agreement for the SDCC by and between the City of San Diego and the District (District Document No. 37944) (Management Agreement) prior to implementation

Table 1 displays the trip generation that was assumed for the Proposed Project in the December 2017 DraftEIR.

Land Use	Units	Trip Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Hotel (w/convention facilities/restaurant)	850 Rooms	9/Room	7,650	6%	459	(6:4)	275	184	8%	612	(6:4)	367	245
Lower Cost Visitor Serving Hotel	565 Beds	1/Bed ¹	565	6%	34	(6:4)	20	14	8%	46	(6:4)	28	18
Marina	50 Slips	4/Slips	200	3%	6	(5:5)	3	3	7%	14	(5:5)	7	7
Public Open Space	1.26 Acres ³	60/Acres ²	75	0%	0	N/A	0	0	11%	8	(4:6)	3	5
		Total	8,490		499		298	201		680		405	275

Table 1: Proposed Project Trip Generation – Draft EIR

Notes:

Source: Draft Fifth Avenue Landing EIR, December 2017

The 6,000 sf of retail is anticipated to serve hotel guests and not attract outside patrons. Therefore, it was not included in the project trip generation.

¹ Lower Cost Visitor Serving Hotel trip generation rate was based on the rate provided in the Fort Ord Youth Hostel Initial Study, July 17, 2015

² The City of San Diego Trip Generation Rate for Beach, Ocean or Bay was utilized for this land use

³Total Public open space is 1.96 acres; however, only the net increase of open space (1.26 acres) needs to be analyzed since the existing 0.7 acres is accounted for under baseline conditions.

As shown, the Proposed Project land uses included in the Draft EIR are anticipated to generate a total of 8,490 daily trips, including 499 (298-in / 201-out) AM peak hour trips, and 680 (405-in / 275-out) PM peak hour trips.

Final EIR

The following are the Proposed Project land uses that will be assumed within the forthcoming Final EIR:

- An 843-room, approximately 498-foot-high, 44-story, market-rate hotel tower.
- Approximately 69,100 square feet of meeting space.
- Up to 228 beds (220-rooms), approximately 82-foot-high, 5-story, lower-cost, visitor-serving hotel.
- Approximately 7,749 square feet of retail development along the Embarcadero Promenade.
- Approximately 2.26 acres (98,448 square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel.
- Approximately 260 onsite parking spaces (combination of striped and valet parking spaces).
- A two-phase expanded marina with up to 50 new slips (approximately 23 slips in Phase I and 27 slips in Phase II) that, combined with the existing 12 slips, would total up to 62 slips.
- An optional connecting bridge from the hotel rooftop public plaza and park area to the San Diego Convention Center (SDCC) that would require potential concurrence of the City of San Diego



(City) and an amendment to the existing Convention Center Management Agreement for the SDCC by and between the City of San Diego and the District (District Document No. 37944) (Management Agreement) prior to implementation.

Table 2 displays the trip generation that would be associated with the Proposed Project land uses that will
be assumed in the Final EIR. Trip generation rates for the Proposed Project were developed utilizing
Table 5: Centre City Cumulative Trip Generation Rates from the City of San Diego's Trip Generation
Manual (City of San Diego, May 2003).

Land Use	Units	Trip Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Hotel (w/convention facilities/restaurant)	843 Rooms	9/Room	7,587	6%	456	(6:4)	274	182	8%	607	(6:4)	364	243
Lower Cost Visitor Serving Hotel	228 Beds	1/bed	228	6%	14	(6:4)	8	6	8%	19	(6:4)	11	8
Marina	50 Slips	4/Slips	200	3%	6	(5:5)	3	3	7%	14	(5:5)	7	7
Public Open Space	1.56 Acres ³	60/Acres ²	94	0%	0	N/A	0	0	11%	10	(4:6)	4	6
	8,109		476		285	191		650		386	264		

Table 2: Proposed Project Trip Generation – Final EIR

Notes:

The 7,749 sf of retail is anticipated to serve hotel guests and not attract outside patrons. Therefore, it was not included in the project trip generation.

¹ Lower Cost Visitor Serving Hotel trip generation rate was based on the rate provided in the Fort Ord Youth Hostel Initial Study, July 17, 2015

² The City of San Diego Trip Generation Rate for Beach, Ocean or Bay was utilized for this land use

³Total Public open space is 1.96 acres; however, only the net increase of open space (1.26 acres) needs to be analyzed since the existing 0.7 acres is accounted for under baseline conditions.

As shown, the Proposed Project land uses that will be included in the Final EIR are anticipated to generate a total of 8,109 daily trips, including 476 (285-in / 191-out) AM peak hour trips, and 650 (386-in / 264-out) PM peak hour trips.

Parking Generation

Per the *Tidelands Parking Guidelines, San Diego Unified Port District, January 5, 2001*, regarding hotel land uses, the minimum parking requirement is 0.5 spaces per room. Based on the 843 proposed hotel rooms, the project is required to provide 422 on-site parking stalls. Hostel land uses are shown to require a total of 0.0625 spaces per bed¹. Based on the 228 beds proposed for the lower-cost visitor serving hotel, a total of 15 parking spaces are required. Marina land uses, which require a 0.33 parking spaces per slip, require an additional 21 parking spaces. **Table 3** summarizes the required number of parking spaces in which the Proposed Project must provide for automobiles.

¹ Hostel parking rate based on City of San Francisco Municipal Code.



Land Use	Units	Rate	Min # of Auto Spaces (Base)							
Hotel	843 Rooms	0.5 / Room	422							
Hostel	228 Beds	0.0625 / Bed ¹	15							
Marina	62 slips	0.33 / Slip	21							
		Total	458							

Table 3: Unadjusted Parking Spaces Required

Source: Tidelands Parking Guidelines, San Diego Unified Port District, January 5, 2001

Note:

¹Rate from City of San Francisco Municipal code

As shown, a total of 458 parking spaces are required, prior to the application of further adjustment factors from the Tidelands Parking Guidelines.

Further adjustment factors were applied to the parking demand rate for the Proposed Project based on Tables 1 and 2 of the *Tidelands Parking Guidelines – San Diego Unified Port District January 5, 2001*. **Table 4** displays the unadjusted demand rate for a hotel, hostel, and marina land uses, as well as the assumed adjustment factors used to develop the final adjusted parking demand rate. The adjustment factors are based on Proposed Project features as well as the Proposed Project location.

Adjustment	Adjustment Reason	Percent	Change (Spaces)					
Parking Rate (Unadjusted)	Per Table 1 of the Tidelands Parking Guidelines	100%	458					
Proximity to Transit	The Proposed Project is located within 0.25 miles of the Gaslamp Quarter Trolley Station.	-12%	-55					
Access to Airport	The Proposed Project does not have access the airport.	0%	0					
Shared Parking Potential	The Proposed Project does not intend to rely on outside parking options.	0%	0					
Proximity to Public Waterfront Amenities for Public Access	The Proposed Project is located along the waterfront and has direct access to the Embarcadero Promenade.	20%	92					
Displacement of Existing Parking	The Proposed Project will not displace any existing parking.	0%	0					
Existing Parking Shortfall/Surplus	This will be determined via this parking analysis.	0%	0					
Employee Trip Reduction Programs	The project proposed to park all employees off site.	0%	0					
Dedicated Airport Shuttle Service	An airport shuttle is not proposed.	0%	0					
Dedicated Water Transportation Service	48 additional boat slips will be added as a project feature.	-10%	-46					
Total Adjusted Rate 449								

Table 4: Parking Rate Adjustments

Source: Tidelands Parking Guidelines – San Diego Unified Port District January 5, 2001



As shown, based on the project location and proposed features, the parking demand rate reduced by 9 spaces to 449 spaces required. This is more than the 260 spaces that will provided on-site; therefore, the Propose Project will not provide a sufficient number of parking spaces on site.

Conclusion

As shown in Tables 1 and 2, the Proposed Project land uses that will be included in the Final EIR are projected to generate fewer trips, both daily and during the peak hours, than what was assumed in the December 2017 Draft EIR. Therefore, the transportation analysis and findings contained in the December 2017 Draft EIR will remain relevant, and is more conservative, when applied to the Proposed Project land uses that will be assumed in the Final EIR. As such, no additional transportation related analysis is required. Additionally, the Proposed Project land uses included in the Final EIR will not change any of the transportation related impacts or mitigation measures identified in the Draft EIR.

As noted in Table 4, the final Proposed Project land uses will not provide a sufficient number of parking spaces on-site. This finding is also consistent with the findings outlined in the December 2017 Draft EIR. Therefore, the Proposed Project land uses included in the Final EIR will not change any of the parking related impacts or mitigation measures identified in the Draft EIR

Alternative 5 - Reduced Density Alternative

Draft EIR

The following was assumed for the Reduced Density Alternative in the December 2017 Draft EIR:

Under the Reduced Density Alternative, the hotel tower would be reduced by 20%, from 850 rooms to 680 rooms, and the lower-cost, visitor-serving hotel would be reduced by 20%, from 565 beds to 452 beds. The height of the hotel tower would be reduced from 498 feet (44 stories) to 428 feet (38 stories). With the reduction in hotel rooms, the number of required onsite parking spaces would be reduced by approximately 93 spaces. All other project components of the proposed project including the retail along the Embarcadero Promenade, public plaza and park areas, ballroom, parking structure, and marina expansion would remain the same as the proposed project under Alternative 5. The Reduced Density Alternative is intended to avoid or substantially lessen proposed project–related significant impacts related to circulation and parking by reducing the number of hotel guests that would use the site. In addition, Alternative 5 would result in a 20% reduction in air quality emissions, GHG emissions, and energy consumption.

Table 5 displays the trip generation that was assumed for the Reduced Density Alternative in the December2017 Draft EIR.



Table 5. Reduced Density Alternative Trip Generation – Draft Erk													
Land Use	Units	Trip Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Hotel (w/convention facilities/restaurant)	Rooms	9/Room	6,120	6%	386	(6:4)	221	147	8%	490	(6:4)	294	196
Lower Cost Visitor Serving Hotel	Beds	1/Bed ¹	452	6%	28	(6:4)	17	11	8%	37	(6:4)	22	15
Marina	50 Slips	4/Slips	200	3%	6	(5:5)	3	3	7%	14	(5:5)	7	7
Public Open Space	1.26 Acres	60/Acres ²	75	0%	0	N/A	0	0	11%	8	(4:6)	3	5
	6,847		402		241	161		549		326	223		

Table 5: Reduced Density Alternative Trip Generation – Draft EIR

Source: Draft Fifth Avenue Landing EIR, December 2017

Notes:

The 6,000 sf of retail is anticipated to serve hotel guests and not attract outside patrons. Therefore, it was not included in the project trip generation.

¹ Lower Cost Visitor Serving Hotel trip generation rate was based on the rate provided in the Fort Ord Youth Hostel Initial Study, July 17, 2015

² The City of San Diego Trip Generation Rate for Beach, Ocean or Bay was utilized for this land use

As shown, the Reduced Density Alternative land uses included in the Draft EIR are anticipated to generate a total of 6,847 daily trips, including 402 (241-in / 161-out) AM peak hour trips, and 549 (326-in / 223-out) PM peak hour trips.

Final EIR

The following was assumed for the Reduced Density Alternative in the forthcoming Final EIR:

Under the Reduced Density Alternative, the hotel tower would be reduced by 20%, from 843 rooms to 675 rooms, and the lower-cost, visitor-serving hotel would be reduced by 20%, from 228 beds to 183 beds. The height of the hotel tower would be reduced from 498 feet (44 stories) to 428 feet (38 stories). With the reduction in hotel rooms, the number of required onsite parking spaces would be reduced by approximately 86 spaces. All other project components of the proposed project including the retail along the Embarcadero Promenade, public plaza and park areas, ballroom, parking structure, and marina expansion would remain the same as the proposed project under Alternative 5. The Reduced Density Alternative is intended to avoid or substantially lessen proposed project–related significant impacts related to circulation and parking by reducing the number of hotel guests that would use the site. In addition, Alternative 5 would result in a 20% reduction in air quality emissions, GHG emissions, and energy consumption.

Table 6 displays the trip generation that would be associated with the Reduced Density Alternative land uses that will be assumed in the Final EIR. Trip generation rates for the Reduced Density Alternative were developed utilizing *Table 5: Centre City Cumulative Trip Generation Rates* from the City of San Diego's Trip Generation Manual (City of San Diego, May 2003).



	Table 0. Neddced Density Alternative Trip Generation – Thai Elix												
Land Use	Units	Trip Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Hotel (w/convention facilities/restaurant)	675 Rooms	9/Room	6,075	6%	365	(6:4)	219	146	8%	486	(6:4)	292	194
Lower Cost Visitor Serving Hotel	183 Beds	1/bed	183	6%	11	(6:4)	7	4	8%	15	(6:4)	9	6
Marina	50 Slips	4/Slips	200	3%	6	(5:5)	3	3	7%	14	(5:5)	7	7
Public Open Space	1.56 Acres	60/Acres ²	94	0%	0	N/A	0	0	11%	10	(4:6)	4	6
	6,552		382		229	153		525		312	213		

Table 6: Reduced Density Alternative Trip Generation – Final EIR

Notes:

The 7,749 sf of retail is anticipated to serve hotel guests and not attract outside patrons. Therefore, it was not included in the project trip generation.

¹ Lower Cost Visitor Serving Hotel trip generation rate was based on the rate provided in the Fort Ord Youth Hostel Initial Study, July 17, 2015

² The City of San Diego Trip Generation Rate for Beach, Ocean or Bay was utilized for this land use

As shown, the Reduced Density Alternative that will be outlined in the Final EIR is anticipated to generate a total of 6,552 daily trips, including 382 (229-in / 153-out) AM peak hour trips, and 525 (312-in / 213-out) PM peak hour trips.

Parking Generation

Per the *Tidelands Parking Guidelines, San Diego Unified Port District, January 5, 2001*, regarding hotel land uses, the minimum parking requirement is 0.5 spaces per room. Based on the 843 proposed hotel rooms, the project is required to provide 338 on-site parking stalls. Hostel land uses are shown to require a total of 0.0625 spaces per bed². Based on the 228 beds proposed for the lower-cost visitor serving hotel, a total of 12 parking spaces are required. Marina land uses, which require a 0.33 parking spaces per slip, shall require an additional 21 parking spaces. **Table 7** summarizes the required number of parking spaces in which the Proposed Project must provide for automobiles.

	· · · · · · · · · · · · · · · · · · ·										
Land Use	Units	Rate	Min # of Auto Spaces (Base)								
Hotel	675 Rooms	0.5 / Room	338								
Hostel	183 Beds	$0.0625 / \text{Bed}^1$	12								
Marina	62 slips	0.33 / Slip	21								
		Total	371								

Table 7: Unadjusted Parking Spaces Required

Source: Tidelands Parking Guidelines, San Diego Unified Port District, January 5, 2001

Note:

¹Rate from City of San Francisco Municipal code

As shown, a total of 371 parking spaces are required, prior to the application of further adjustment factors from the Tidelands Parking Guidelines.

Further adjustment factors were applied to the parking demand rate for the Proposed Project based on Tables 1 and 2 of the *Tidelands Parking Guidelines – San Diego Unified Port District January 5, 2001*. **Table 8** displays the unadjusted demand rate for a hotel, hostel, and marina land use, as well as the assumed

² Hostel parking rate based on City of San Francisco Municipal Code.



adjustment factors used to develop the final adjusted parking demand rate. The adjustment factors are based on Proposed Project features as well as the Proposed Project location.

Adjustment	Adjustment Reason	Percent	Change (Spaces)					
Parking Rate (Unadjusted)	Per Table 1 of the Tidelands Parking Guidelines	100%	371					
Proximity to Transit	The Proposed Project is located within 0.25 miles of the Gaslamp Quarter Trolley Station.	-12%	-45					
Access to Airport	The Proposed Project does not have access the airport.	0%	0					
Shared Parking Potential	The Proposed Project does not intend to rely on outside parking options.	0%	0					
Proximity to Public Waterfront Amenities for Public Access	The Proposed Project is located along the waterfront and has direct access to the Embarcadero Promenade.	20%	74					
Displacement of Existing Parking	The Proposed Project will not displace any existing parking.	0%	0					
Existing Parking Shortfall/Surplus	This will be determined via this parking analysis.	0%	0					
Employee Trip Reduction Programs	The project proposed to park all employees off site.	0%	0					
Dedicated Airport Shuttle Service	An airport shuttle is not proposed.	0%	0					
Dedicated Water Transportation Service	48 additional boat slips will be added as a project feature.	-10%	-37					
Total Adjusted Rate 30								

Table 8: Parking Rate Adjustments

Source: Tidelands Parking Guidelines – San Diego Unified Port District January 5, 2001

As shown, based on the project location and proposed features, the parking demand rate reduced by 8 spaces to 363 spaces required. This is more than the 260 spaces that will provided on-site; therefore, the Propose Project will not provide a sufficient number of parking spaces on site.

Conclusion

As shown in Tables 5 and 6, the Reduced Density Alternative land uses that will be included in the Final EIR are projected to generate fewer trips than those assumed in the December 2017 Draft EIR, which was circulated for public review and comment. Therefore, the transportation analysis and findings contained in the December 2017 Draft EIR will remain relevant, and can be assumed to be more conservative, when applied to the Reduced Density Alternative land uses contained in the Final EIR. As such, no additional transportation related analysis is be required. Additionally, the Reduced Density Alternative land uses, included in the Final EIR, will not change any of the impacts or mitigation measures identified in the Draft EIR.

As noted in Table 8, the final Reduced Density Alternative will not provide a sufficient number of on-site parking spaces. This is consistent with the findings outlined in the December 2017 Draft EIR. Therefore,



the Reduced Density Alternative land uses included in the Final EIR will not change any of the parking related impacts or mitigation measures identified in the Draft EIR.

Alternative 6 – Below Grade Parking Alternative

Under the Below Grade Parking Alternative, 478 parking spaces would be provided in a concrete parking structure, which would include a subterranean parking level approximately 12 feet below grade. The parking structure would span from the lower-cost visitor-serving hotel to the first major storm water discharge outfall. The below grade parking structure would provide a total of 478 parking spaces. The P1 level would include 190 standard stall spaces, 9 Americans with Disabilities Act (ADA) spaces, and 64 valet spaces. The P2 level would include 167 standard spaces and 48 valet spaces. Valet parking would be provided between the drive aisles on both the P1 and P2 levels. Public parking would be provided on both the P1 and P2 levels. The entrance to the parking structure would be located on Convention Way and public parking signage would be provided along Convention Way. Electrical car charging stations would also be incorporated into the parking structure. All other project components proposed under the proposed project would be implemented under Alternative 6, including the development of the market rate hotel tower, lower-cost visitor-serving hotel, retail along the Embarcadero Promenade, ballroom, public plaza and park areas, and expansion of the marina. The Below Grade Parking Alternative is intended to avoid or substantially lessen the significant parking impacts of the proposed project.

Conclusion

As noted in the alternative description above, the assumed land uses under the Below Grade Parking Alternative are assumed to be identical as to those under the Proposed Project. Therefore, as noted under the Proposed Project analysis, the transportation analysis and findings contained in the December 2017 Draft EIR will remain relevant, and can be assumed to be more conservative, when applied to the Below Grade Parking Alternative land uses contained in the Final EIR. As such, no additional transportation related analysis is required. Additionally, the Below Grade Parking Alternative land uses, included in the Final EIR, will not change any of the impacts or mitigation measures identified in the Draft EIR.

As noted in Table 4, the Proposed Project land uses, which are consistent with the land uses under the Below Grade Parking Alternative, will require 449 parking spaces. This is less than the 478 parking spaces that will be provided on-site under the Below Grade Parking Alternative; therefore, this alternative will provide sufficient on-site parking. This is consistent with the findings outlined in the December 2017 Draft EIR. Therefore, the Reduced Density Alternative land uses included in the Final EIR will not change any of the parking related impacts or mitigation measures identified in the Draft EIR.

Sincerely,

Stephen Cook, TE CA TE: 2528 Chen Ryan Associates

Attachment 4 Updated Project Description

3.1 Introduction

Fifth Avenue Landing, LLC, as the project proponent, is proposing a commercial and recreational bayside redevelopment on approximately 18 acres (approximately 784,100 square feet) (project or proposed project). As proposed, the project would include construction and operation of the following.

- An 850843-room, approximately 498-foot-high, 44-story, market-rate hotel tower.
- Approximately <u>55,58369,100</u> square feet of meeting space.
- Up to 565-bed <u>220-room</u>, approximately 82-foot-high, 5-story, lower-cost, visitor-serving hotel.
- Approximately <u>6,0007.749</u> square feet of retail development along the Embarcadero Promenade.
- Approximately <u>1.962.26</u> acres (<u>85,49098,448</u> square feet) of public plaza and park areas throughout the project site, which would replace 0.7 acre (30,300 square feet) of public park/plaza located within the area proposed for the lower-cost, visitor-serving hotel.
- Approximately <u>263-260</u> onsite parking spaces (combination of striped and valet parking spaces).
- A two-phase expanded marina with up to 50 new slips (approximately 23 slips in Phase I and 27 slips in Phase II) that, combined with the existing 12 slips, would total up to 62 slips.
- An optional connecting bridge from the hotel rooftop public plaza and park area to the San Diego Convention Center (SDCC) that would require potential concurrence of the City of San Diego (City) and an amendment to the existing Convention Center Management Agreement for the SDCC by and between the City of San Diego and the District (District Document No. 37944) (Management Agreement) prior to implementation.

This chapter's contents include the project need and purpose, project objectives, project description, and necessary project approvals. A detailed description of the project site location and existing conditions is provided in Chapter 2, *Environmental Setting*, which includes a location map provided as Figure 2-2.

The project was presented to the Board for preliminary project review on March 8, 2016. At that time, the Board authorized staff to commence the environmental review process.

3.2 Project Need and Purpose

The District's 2012–2017 COMPASS Strategic Plan establishes the goal of providing a "vibrant waterfront destination where residents and visitors converge." Currently, the Centre City Embarcadero (Embarcadero) is the waterfront area for an urban region supporting over 2.7 million people. The pierside maritime activities of commercial fishing boats, merchant ships, Navy vessels,

and pleasure craft contribute to the fabric of the Embarcadero. The existing project site contains two parking lots, one of which is used for overflow parking and setup and breakdown associated with the SDCC, a 30,300-square-foot park area, a water transportation center (WTC) ticket booth, a public bathroom, a portion of the Embarcadero Promenade, a 12-slip marina, a water transportation ferry service, and an on-call water transportation service. The project site is currently not seen as a destination in and of itself; visitors currently pass by it on their way to another location or it is used as a staging area for SDCC operations. As a result, the project site, in its current state, does not address the goal of the COMPASS Strategic Plan and more can be done to create a more vibrant waterfront destination.

The purpose of the proposed project is to further activate the Embarcadero by (1) providing additional overnight accommodations for visitors to the Embarcadero, the SDCC, downtown San Diego, and the numerous waterfront amenities in the area; (2) providing additional accommodations for a wide range of visitors (the proposed project would include both a market-rate hotel tower and lower-cost, visitor-serving hotel to ensure overnight visitors have a range of options at the waterfront); (3) expanding recreational amenities within the Embarcadero area, including an increase of from approximately 0.7 acre to 1.96-2.26 acres of public plaza and park areas, and expanding the existing marina; and (4) maintaining and activating the existing promenade by providing visitor-serving retail such as cafés, gift shops, and outdoor eateries. Each of these components would encourage visitors to see the project site as a destination, rather than as an area to pass through.

The proposed 850843-room market-rate hotel tower would meet or exceed the service quality of standard of the Hilton San Diego Bayfront, Marriott Marquis San Diego Marina, and Manchester Grand Hyatt hotels. Public access would be enhanced by providing way-finding signage, which would allow and encourage visitors to access the waterfront from the downtown area more easily, and provide activities and services to increase their length of stay along the waterfront.

3.3 **Project Objectives**

The District project proponent has identified the following objectives for the proposed project.

- 1. Provide for the development and operation of a full-service hotel of a size, quality, and location appropriate for first-class convention operations that is a financially viable operation and is of a similar size and stature as nearby hotels such as the Hilton San Diego Bayfront Hotel (approximately 1,200 rooms), Manchester Grand Hyatt Hotel (approximately 1,625 rooms), and Marriott Marquis San Diego Marina Hotel (approximately 1,355 rooms).
- 2. Provide lower-cost, visitor-serving accommodations to allow greater access and enjoyment by the public that complies with Board Policy 775, *Guidelines for the Protection, Encouragement, and, Where Feasible, Provision of Lower Cost Visitor and Recreational Facilities.*
- 3. Provide for infill development on District tidelands that: (a) is compatible with surrounding uses; (b) maximizes the economic benefit to the District and City of San Diego and surrounding region by maximizing hotel room revenue, restaurant and retail sales, and hotel and retail sales taxes; and (c) generates sufficient leasehold revenue to support the District's participation in financing its mission of developing a balance between economic benefits, environmental stewardship, and public safety on behalf of the citizens of California.

- 4. Increase activation at the project site and along the bayfront by providing public plaza and park spaces, accompanied by visitor-serving retail, an expanded marina, a new water transportation center, and continuing operation of the existing public in-Bay water transportation system.
- 5. Provide new public vista opportunities of San Diego Bay from vantage points such as the San Diego Convention Center (SDCC) and proposed public plaza and park areas.
- 6. Improve public access by providing linkages from the City to the waterfront and Embarcadero Promenade by providing wayfinding signage at multiple entry points, including potential development of a pedestrian bridge that connects the project site with the SDCC and the Gaslamp Quarter of downtown San Diego.
- 7. Pursue Leadership in Energy and Environmental Design (LEED) Silver certification or achieve an equivalent level of sustainability by incorporating sustainable practices in all elements of project design and construction, leading to a reduction in energy use, water use, and solid waste generation as compared to standard hotel and visitor-serving developments.

3.4 Proposed Project Description

The proposed project includes landside and waterside components as well as an amendment to the Port Master Plan (PMP) Planning District 3, Centre City Embarcadero (see Section 3.4.10 for details). The landside components include a market-rate hotel tower; lower-cost, visitor-serving hotel; a new WTC; an onsite parking structure; and several enhanced public spaces and amenities: an optional connecting bridge to the public viewing areas of the SDCC, open space plazas and parks, and visitor-serving retail development. The waterside components include a marina expansion with additional slips and continuing operation of the existing public in-Bay water transportation system. Figure 3-1 provides an overall site plan for the proposed project, while Figure 3-2 through Figure 3-4 provide renderings of the project from landside and waterside angles.

Table 3-1 identifies the land uses proposed as part of the proposed project. The subsections that follow the table describe the key components in further detail.

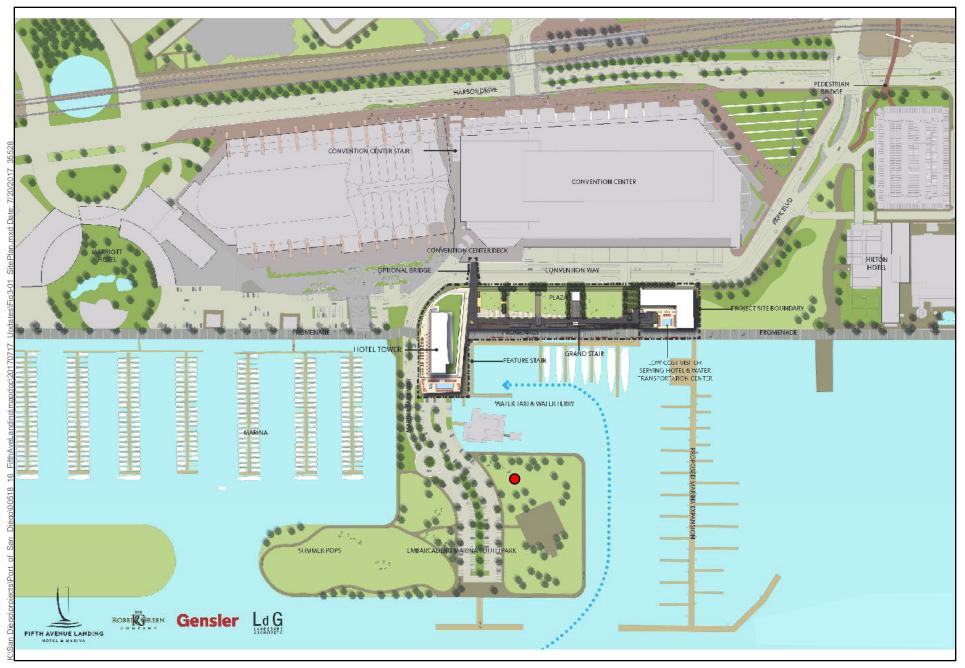


Figure 3-1 Proposed Project Site Plan Fifth Avenue Landing Project

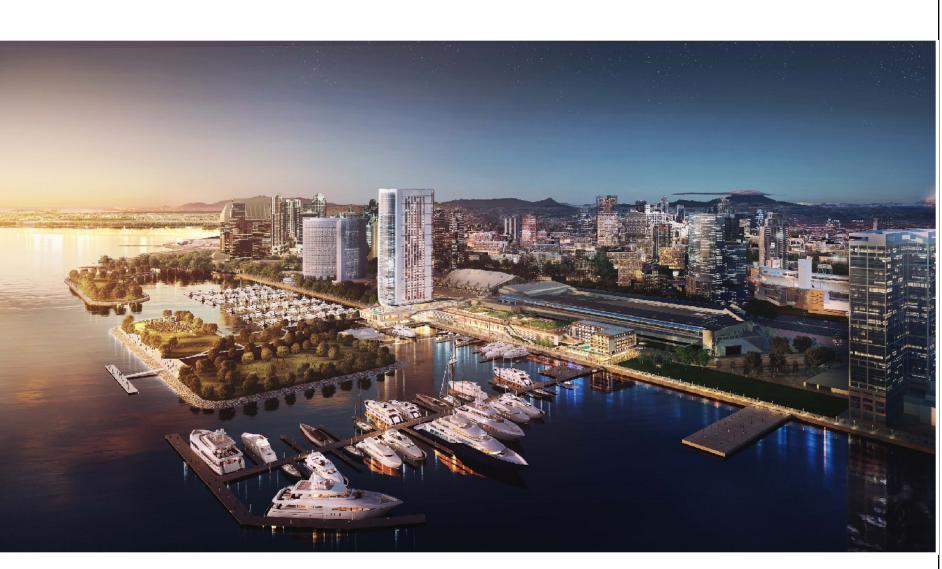


Figure 3-2 Proposed Project Rendering Fifth Avenue Landing Project



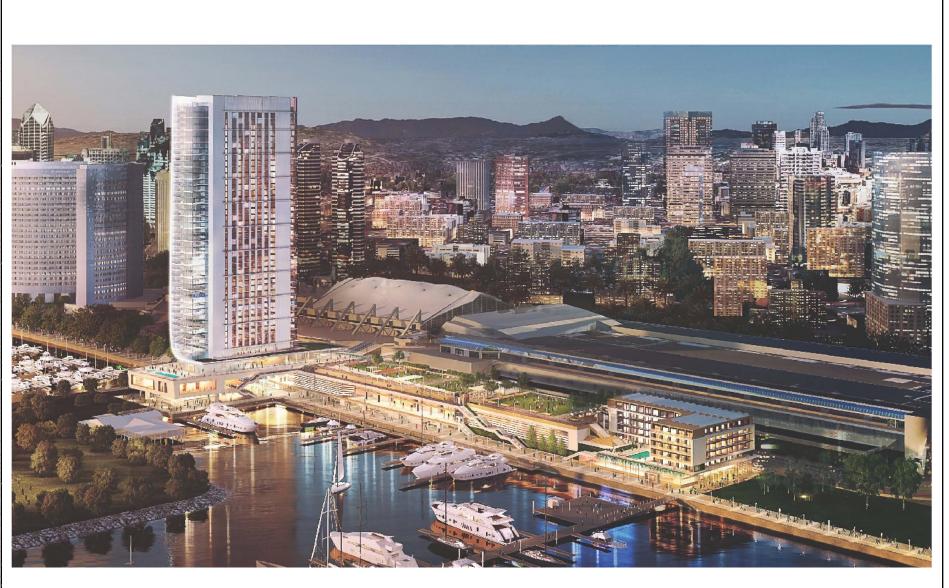


Figure 3-3 Landside Overview Rendering Fifth Avenue Landing Project





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Figure 3-4 Proposed Marina Expansion Rendering Fifth Avenue Landing Project



Proposed Project Components	Approximate Size (Square Feet)	Description	Location
Market-Rate Hotel Tower (44- stories, 498 feet high)	796,000911.736 gross square feet (not including public plaza, <u>-and</u> park areas <u>, and</u> public promenade)	 850-843 rooms 55,58369,100 square feet of meeting space, including: 15,99130,196-square-foot ballroom 8,67518,720 square feet of junior ballrooms 30,917 20,184 square feet of additional meeting rooms 30,18840,705 square feet of prefunction space 82,30095,258-square-foot rooftop public plaza and park area. Includes a multifunctional plaza and lawn, public park plaza, and public park plaza and public observation terrace 3,190-square-foot at-grade public promenade Feature Staircase and Grand Staircase from rooftop public plaza 	Northwestern portion of the project site
Lower-Cost, Visitor-Serving Hotel with Water Transportation Center (WTC) (5 stories, 82 feet high)	 Hotel: 8060,000 gross square feet WTC: 6,1272,000 square feet 	 565 beds220 rooms 3,903-square-foot at-grade public pedestrian walkway WTC consisting of an accessory office, business center, marina guest lounge, ticketing, and marina crew restroom and showersgym for hotel guests and 	Southeastern portion of the project site
Optional Connection Bridge to the SDCC	1,882 square feet (length of 85 feet and a width at the narrow end of 18 feet and wide end of 26 feet)	 marina users Optional bridge that provides direct pedestrian connection from the project site to the SDCC 	Connects view deck of the SDCC to the proposed rooftop plaza
Hotel Exterior Space	85,49098,448 gross square feet (1.96<u>2.26</u> acres) and optional 1,882-square-foot bridge	See Table 3-2 and Figure 3-12 below	Throughout the project site
Visitor-Serving Retail Storefronts	6,000<u>7,749</u> square feet	 Five visitor-serving retail storefronts Open-air cafés, food and beverage outlets, gift shops, etc. 	Along promenade and masking proposed parking structure

Table 3-1. Proposed Project Components

Proposed Project Components	Approximate Size (Square Feet)	Description	Location
Marina Expansion	Additional 57,696 square feet <u>consisting of</u> <u>31,564 square feet</u> <u>in Phase 1 and</u> <u>26,132 square feet</u> <u>in Phase 2</u>	See Figures 3-14 and 3-15 below	Within the adjacent Bay
Parking Structure (approximately 20 feet high from ground floor)	85,340<u>79,780</u> square feet	 Approximately 263-260 spaces for either striped or valet Ground-level parking structure 	 Between market- rate hotel tower and low-cost visitor serving hotel Beneath hotel meeting space and rooftop public plaza and park area

3.4.1 Market-Rate Hotel Tower

The proposed project would include the construction of an approximately 850<u>843</u>-room marketrate hotel tower and open-air pedestrian archway that spans the Embarcadero Promenade. The market-rate hotel tower would rise approximately 498 feet above mean sea level and would total 44 stories in height. The market-rate hotel tower, including the associated retail, restaurant, and meeting space, would be approximately 796,000<u>911,736</u> gross square feet. In addition to the 850 <u>843</u> guest rooms, specific components of the market-rate hotel tower are described in Table 3-1. Figures 3-5 and 3-6 provide the proposed hotel stacking plan and cross-section.

The market-rate hotel tower design is inspired by sail structures of the latest generation of America's Cup sailboats. This design would be a recognition of the maritime uses of San Diego Bay and the high-tech nature of the America's Cup sailboats. A rendering of the proposed hotel is provided as Figure 3-7.

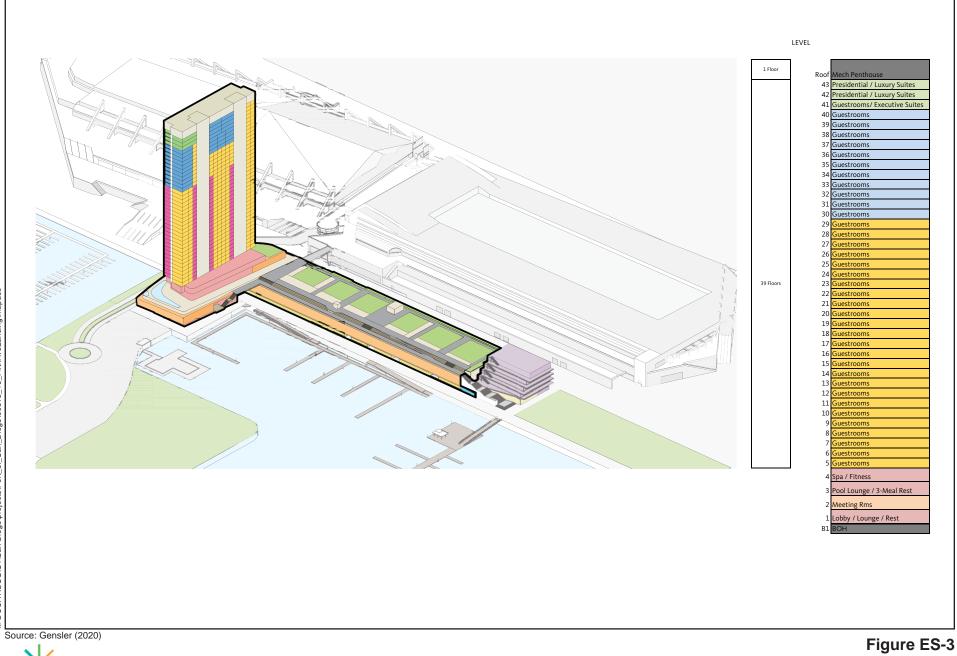
As depicted on Figure 3-8, the open-air pedestrian archway would span the Embarcadero Promenade as visitors approach the market-rate hotel tower and would connect the market-rate hotel tower to its ballroom and meeting facilities, located above the proposed parking structure. The archway would be approximately 43 feet wide, reach a height of approximately 40 feet, and include a smaller glass bridge at a lower height, which would span the Embarcadero Promenade to allow visitors to cross onto the plaza and access other project amenities. The depth and height of the archway would allow pedestrians to experience Bay views, and its design would provide visual connection between the northern and southern portions of the Embarcadero Promenade.

Servicing of the proposed market-rate hotel tower would be accomplished by incorporating up to three loading docks near the north SDCC garage entrance.

3.4.2 Lower-Cost, Visitor-Serving Hotel with Water Transportation Center

The proposed project includes the construction by the project proponent of an approximately 565-bed 220-room lower-cost, visitor-serving hotel, renderings of which are shown on Figures 3-9 and 3-10. The proposed hotel would be a five-story, L shaped structure and would reach an approximate height of 82 feet, with retail abutting the Embarcadero Promenade along the eastern side of the building. This hotel would be near the Hilton San Diego Bayfront Hotel and its bayside park, and include an approximately 3,903-square-foot at-grade public pedestrian walkway. The lower-cost, visitor-serving hotel would be situated on its own leasehold parcel as a stand-alone development.

Additionally, an approximately <u>6,1272,000</u>-square-foot <u>water transportation center (</u>WTC) would be integrated into the building footprint of the lower-cost, visitor-serving hotel and would consist of an accessory office/marina business center <u>and marina guest lounge</u> to operate the WTC (<u>3,3271,000</u> square feet), ticketing (<u>600-400</u> square feet), <u>gym for hotel guests and marina users</u> (the gym would not be open for monthly memberships to the public) (1,000 square feet), <u>and</u> marina crews restroom/showers (600 square feet), <u>and a marina guest lounge (600 square feet)</u>, all of which are illustrated on Figure 3-11. The WTC would serve marina customers and their boats as well as provide operational support for the marina and the existing water transportation ferry service. Parking for the WTC would be provided within the proposed parking garage (see Section 3.4.7, *Parking*).



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Figure ES-3 Proposed Hotel Tower Stacking Diagram Fifth Avenue Landing Project

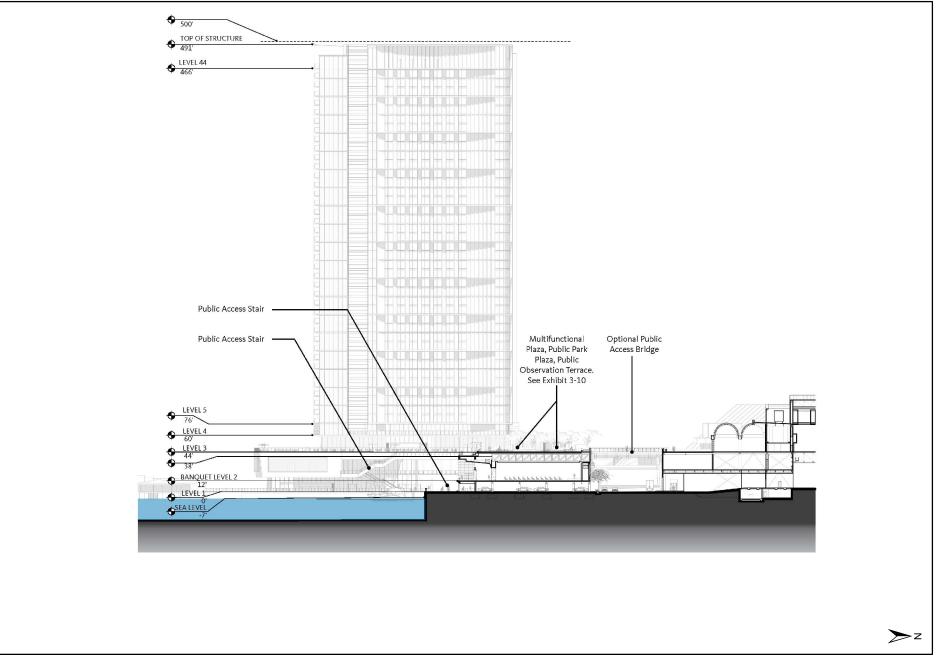


Figure 3-6 Hotel Tower and Public Access Plaza Cross-Section Fifth Avenue Landing Project





Figure 3-7 Hotel Tower Rendering Fifth Avenue Landing Project





Figure 3-8 Open-Air Pedestrian Archway Rendering Fifth Avenue Landing Project







Figure 3-9 Proposed Lower-Cost Visitor-Serving Hotel Rendering Fifth Avenue Landing Project





Figure 3-10 Proposed Lower-Cost Visitor-Serving Hotel Rendering Fifth Avenue Landing Project





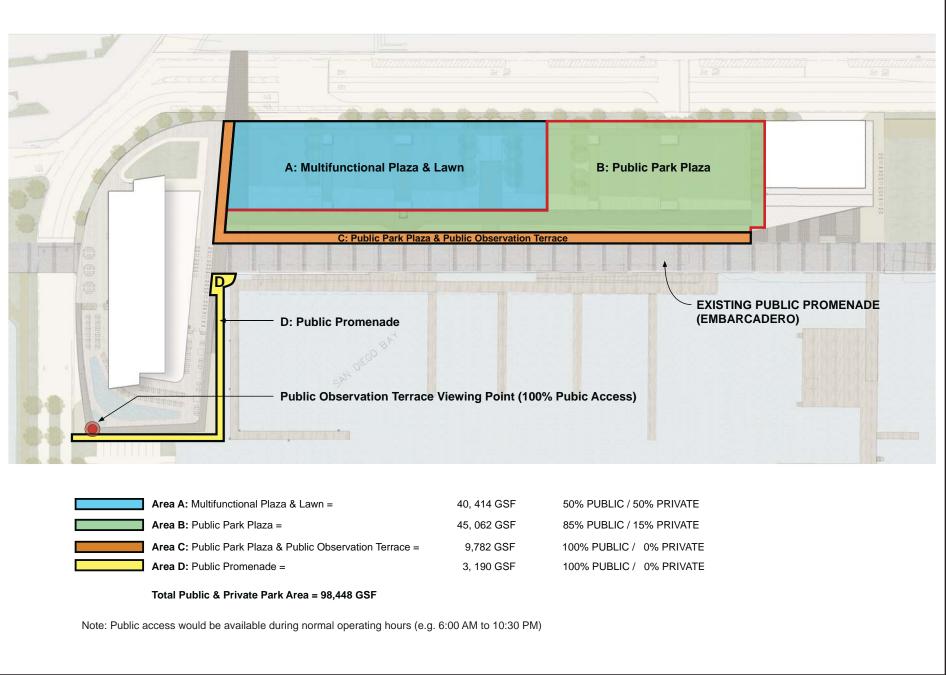
3.4.3 Optional Connecting Bridge to the San Diego Convention Center

As an optional project feature, the proposed project may potentially include a new public access bridge connecting the proposed market-rate hotel tower rooftop public plaza and park area to the SDCC view deck. This optional bridge connection would provide visitors with elevated and expansive views of the entire north and mid-Bay and would allow for travel to the City's Gaslamp Quarter. This optional bridge would be approximately 1,882 square feet with a length of 85 feet and a width at the narrow end of 18 feet and wide end of 26 feet. The paving materials for the proposed bridge would be designed to be integrated with the proposed rooftop public plaza and park area and may consist of a variety of enhanced materials including integral color decorative finished concrete, precast pavers, and/or stone accent paving. In addition, planting material would be included along the bridge in either integrated or free-standing planters. The guardrails are proposed to be constructed of painted metal or stainless steel or a combination of these along with solid planter walls. Concurrence of the District, and potentially the City of San Diego as the contractual managing entity of the SDCC, would be required prior to implementing this portion of the proposed project. An amendment to the Management Agreement between the District and the City of San Diego may also be required. Therefore, the bridge is identified as optional in this EIR. The EIR analyzes the project with and without the optional public access bridge component.

3.4.4 Public Plaza and Park Areas and Design Features

The proposed project would increase the total area of public plaza and park areas from approximately 30,300 square feet (0.70 acre) to approximately $\frac{85,490}{98,448}$ square feet ($\frac{1.96}{2.26}$ acres). The public plaza and park areas would serve as resting and viewing areas for visitors and would include interpretive signage and public art. All the proposed public plaza and park areas would be designed with a combination of hardscape, drought-tolerant landscape, grass lawns, and artificial turf. In total, the proposed project would include four public plaza and park areas and a public promenade spread throughout the project site. Table 3-2 identifies each of the public plaza and park areas and the percentages of public and private usage of the areas. Figure 3-12 depicts the plaza and park area locations and Table 3-2 provides further detail on each. The proposed project would also maintain the existing 35-foot-wide Embarcadero Promenade across the site. The existing promenade does not count toward the proposed project's public plaza and park area described in Table 3-1. The proposed project would enhance the existing Embarcadero Promenade by providing retail adjacent to the promenade; increased seating areas; public restrooms; connection of lowercost, visitor-serving hotel and market-rate hotel tower with the promenade with small plazas or lobbies; and access to the parking structure from the promenade; additionally, an optional pedestrian bridge would serve to connect pedestrian circulation from Downtown San Diego and SDCC to the Promenade.

As depicted on Figure 3-12, in addition to the proposed public plaza and park areas, the proposed project provides public access throughout the project site and to connect to surrounding uses. One of the public access features includes the construction of a walkway around the market-rate hotel tower in order to maintain public access to the views along the San Diego Bay.



Source: Gensler (2020)

Figure 3-12 Proposed Public Access Areas Fifth Avenue Landing Project

Figure 3-12 Key	Title	Area (square feet) ¹	Location	Access	Available to Public
A	Multifunctional Plaza and Lawn	35,940<u>40,414</u>	Above the ballrooms, meeting rooms, and parking structure ²	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	50% public access/50% private access/Managed by Operator
В	Public Park Plaza	39,860<u>45,062</u>	Above the ballrooms, meeting rooms, and parking structure ²	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	85% public access/15% private access/Managed by Operator
С	Public Park Plaza and Public Observation Terrace	6,500<u>9,782</u>	Marina overlook	Ground-level via the public Embarcadero Promenade; market-rate hotel tower; SDCC via the Optional Connecting Bridge	100% public access
D	Public Promenade	3,190	Approximately 10-foot- wide walkway along the southeast portion of the market-rate hotel tower; will include a public viewing deck.	Ground-level via the public Embarcadero Promenade	100% public access
	Total	85,490<u>98,448</u>			

¹ Values are approximate.

² This plaza and park area would be on the roof of the market-rate hotel tower ballroom and parking structure, described in Section 3.4.1, *Market-Rate Hotel Tower*.

Note: A more detailed description of these areas can be found on Figure 3-16, Landscape Concept Site Plan.

3.4.5 Visitor-Serving Retail Storefronts

The proposed project would include up to five visitor-serving retail storefronts consisting of openair cafés, food and beverage outlets, gift shops, and other visitor-serving retail establishments along the Embarcadero Promenade. These retail venues would total approximately <u>6,0007,749</u> square feet and are intended to encourage activation of the existing Embarcadero Promenade. Figure 3-13 provides a site plan of the proposed retail storefronts.

3.4.6 Marina Expansion

The proposed project marina expansion would include waterside and landside components (see Figure 3-1). The waterside components include adding new vessel slip space, constructing a new pile-supported pier, possibly constructing a breakwater with wave attenuation panels, and improving public access to the waterfront. The landside component involves removing the existing office trailer, WTC ticket booth, public restroom, and pavement; and reconstructing the bulkhead and anchors.¹

The existing vessel slip space, which consists of three 170-foot slips, four 125-foot slips, two 115foot slips, one 233-foot slip, and two130-foot slips, would be expanded by an additional 57,696 square feet of pile-supported dock space. The marina would be constructed in two phases. Phase I (approximately 31,564 square feet) would add 23 new marina slips ranging in size from 50 feet to 200 feet and would be constructed during the hotel construction timeframe. These slips would be accessible from the proposed pile-supported dock, which would be approximately 20 feet in width and extend approximately 439 feet for Phase I. A breakwater with wave attenuation panels may be included as part of the proposed project to reduce wave energy coming into the marina. The breakwater, located at the end of the proposed dock, would be approximately 400 linear feet and 20 feet in width.

Phase II <u>(approximately 26,132 square feet)</u> would provide an additional 27 slips ranging in size from 50 feet to 240 feet and would be constructed when market conditions allow, approximately 5 years after the hotels are in operation, but is not anticipated to occur any sooner. Total buildout would allow for 50 additional slips, for a combined total of 62 slips, including the existing 12 slips, to accommodate both small and large vessels. These slips would be accessible from the proposed pilesupported dock, which would be approximately 20 feet in width and extend approximately 922 feet into the San Diego Bay for Phase II with a breakwater of approximately 630 linear feet and 20 feet in width. Each slip would have shoreside power, as well as connections to the City's water and sewer systems.

The possible fleet mix of the expanded marina would allow for smaller boats to be integrated into the marina while at the same time allowing larger vessels to dock. Figures 3-14 and 3-15 depict the proposed Phase I and Phase II marina layouts, respectively, and the proposed dock and slip lengths and quantities. The proposed fleet mix may change slightly, but Figures 3-14 and 3-15 represent the worst-case scenario (i.e., resulting in the most impacts) for purposes of the EIR analysis.

Improvements to public access as a result of the proposed project include signage and dock space for larger and smaller vessels.

¹ Note that the existing marina office would be replaced with the WTC and enhanced as part of the lower-cost, visitor-serving hotel development component described in Section 3.4.2.

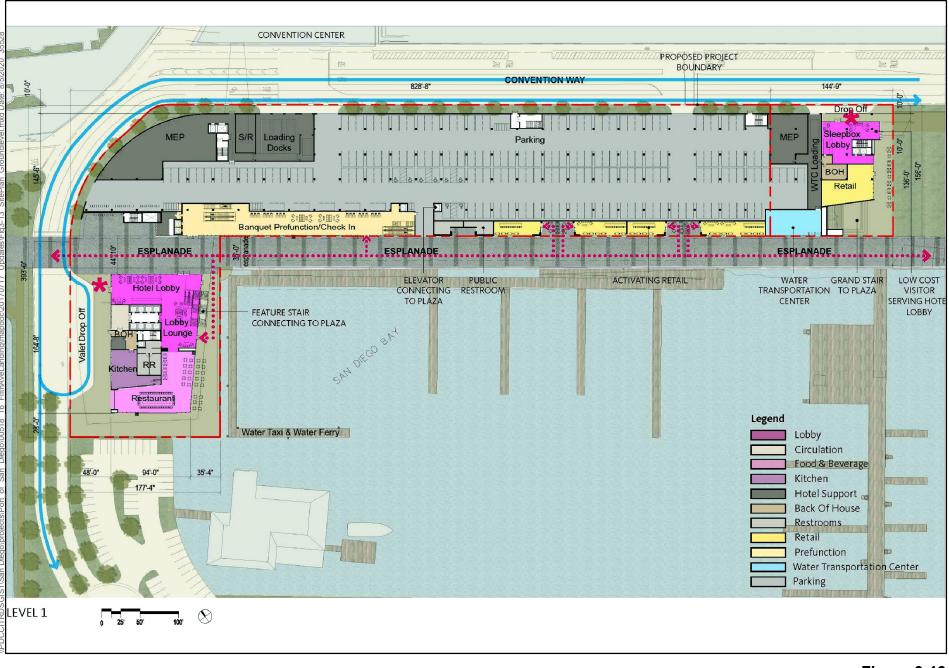
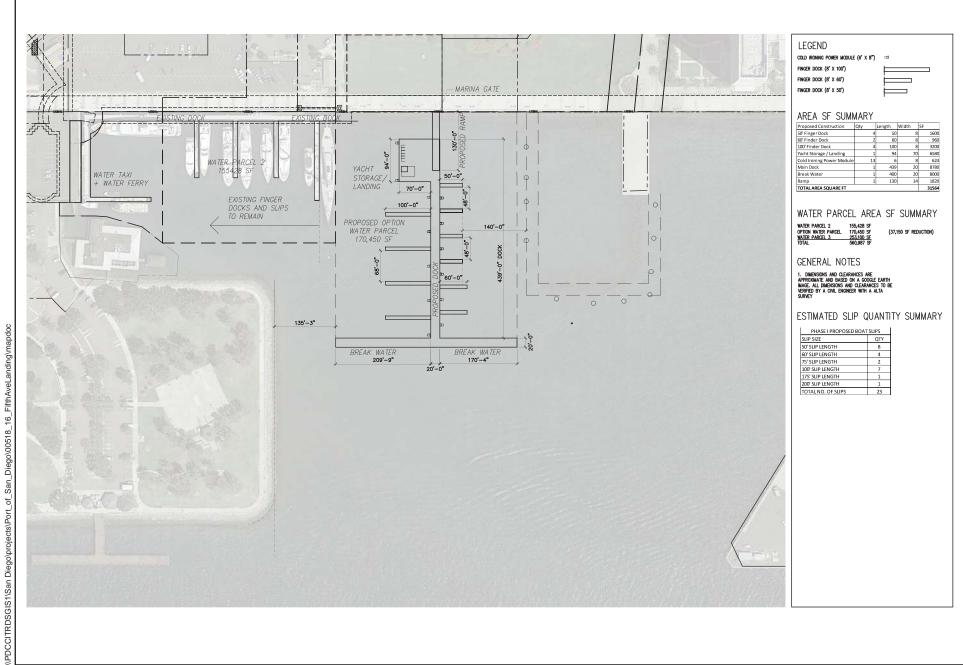


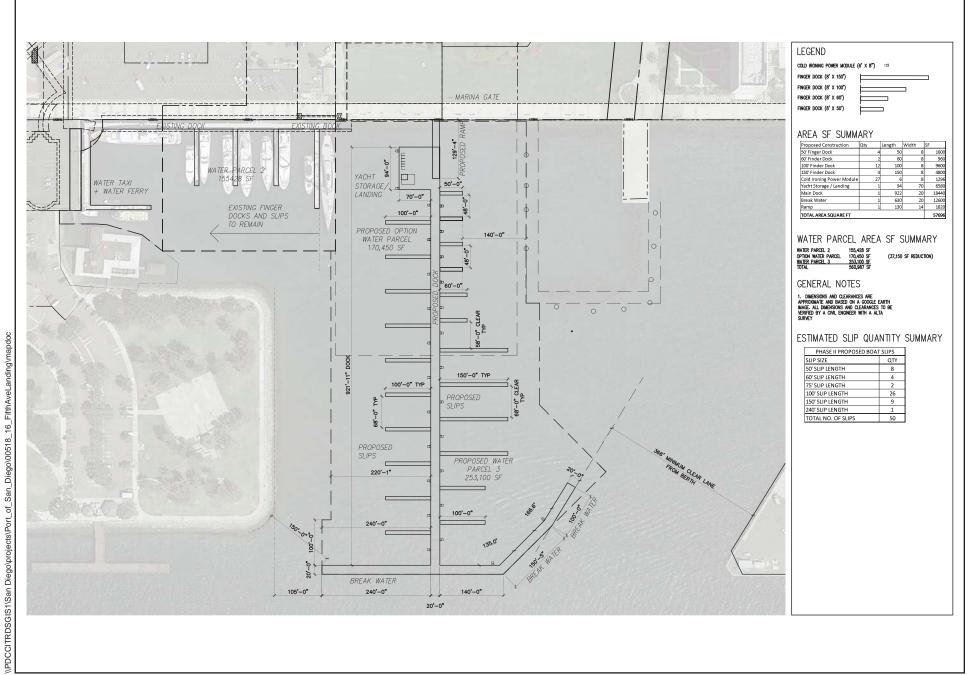
Figure 3-13 Proposed Site Plan at the Ground Level Fifth Avenue Landing Project



Source: Gensler (2020)

/ICF

Figure 3-14 Proposed Phase I Marina Expansion Fifth Avenue Landing Project



Source: Gensler (2020)



Figure 3-15 Proposed Phase II Marina Expansion Fifth Avenue Landing Project The proposed landside marina improvements would include relocating the existing marina office to the promenade level of the lower-cost, visitor-serving hotel (see Section 3.4.2 for a description of the new water transportation center). In 2015, the ferry service transported approximately 290,000 passengers, and in 2016 it transported approximately 222,672 passengers. There currently are no plans to expand the ferry service; accordingly, no expansion is analyzed in this EIR. In addition, the project site operates an existing water taxi service, which is a pre-arranged service that provides transportation throughout the Bay to groups of no fewer than 20 people. The service is typically only used a few times per year. This service would continue to be operated at the project site with the implementation of the proposed project.

3.4.7 Parking

A one-level parking structure would be incorporated into the development between the market-rate hotel tower and the lower-cost, visitor-serving hotel. As depicted on Figure 3-13, the parking structure would be constructed at ground level and would be beneath the market-rate hotel tower meeting space/ballrooms and the rooftop public plaza and park area. The proposed visitor-serving retail (as described in Section 3.4.5, *Visitor-Serving Retail Storefronts*) would mask the parking structure from public view along the promenade. The capacity for approximately 263-260 onsite parking spaces, both striped and valet parking, would be provided, and access to the proposed parking structure would be provided on Convention Way.

The proposed parking structure would incorporate the use of natural light, LED lighting, and natural Bay breezes to cool the garage. Limited mechanical systems would be needed to ventilate or provide fresh air to the garage. Approximately 29 electric car charging stations would also be installed to accommodate electric vehicles.

As part of the existing ARC lease between the SDCC Corporation and the District for the project site, the project proponent has the right to seek 110 parking spaces in the offsite District-owned SDCC garage contingent upon availability, amendments to the existing Management Agreement, and the District issuing a lease agreement to the project proponent for the use of the 110 offsite parking spaces. At this time, there is no excess parking available in the SDCC garage and it is not reasonably foreseeable that such parking would be available to the project proponent. However, in the event 110 parking spaces become available and the remaining aforementioned conditions are satisfied, the EIR analyzes the proposed project with and without the offsite parking spaces.

Nearby parking facilities may be available for shared parking; however, the project proponent currently does not have any contractual rights to use any other parking garage, and no parking has been set aside for the proposed project. Parking supply and demand are discussed in detail in Chapter 4, Section 4.12, *Transportation, Circulation, and Parking*.

3.4.8 Onsite Circulation and Wayfinding

Visitors and hotel guests would access the project site from Harbor Drive and Park Boulevard, which turns into Convention Way. Convention Way would retain its current alignment and would be used for car and truck access to the project site during construction and operation of the proposed project.

Public signage along the promenade would illustrate San Diego Bay history, including its past and present working waterfront, interpretive signage, and location and wayfinding maps. This signage

would conform to the South Embarcadero Urban Design Guidelines and California Coastal Access signage statewide program. These guidelines include utilizing banners on street lights and minimizing signs that obstruct views of the San Diego Bay.

Signage off tidelands would be designed with input from and in cooperation with the SDCC, City of San Diego, and the District. Signage locations are proposed to include areas along Harbor Drive, Fifth Avenue, Convention Way, and the Gaslamp and Ballpark Districts.

3.4.9 Landscape and Water Quality Design Features

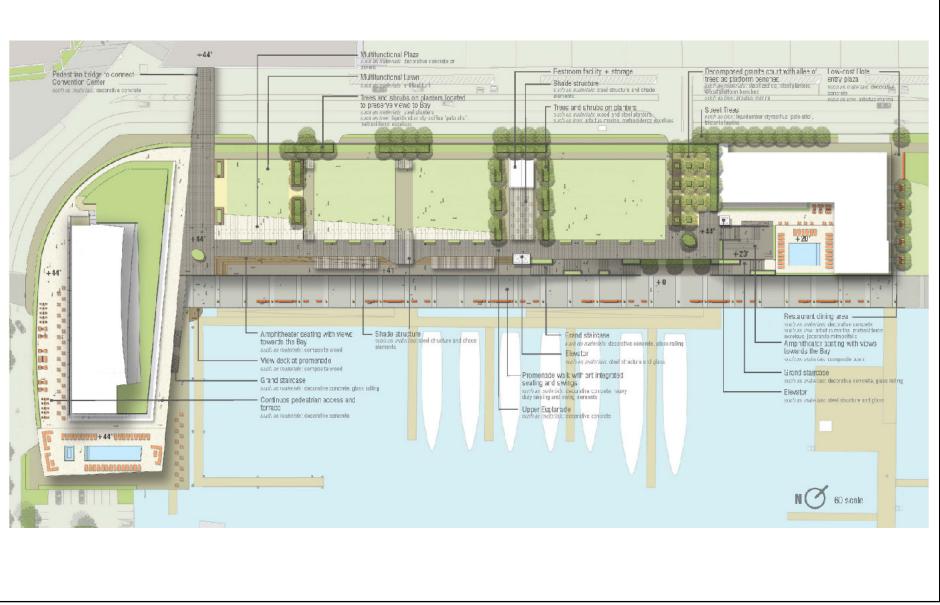
The proposed project would require the removal of 39 ornamental trees located within the existing parking lot area and park/plaza area. Figure 3-16 provides the conceptual landscape plan for the proposed project. The proposed project would include <u>multiple-75</u> trees, <u>as well as and</u>_shrubs, throughout the project site. Figures 3-17 and 3-18 provide the existing and proposed impervious and pervious surfaces on the site. The proposed project would include stormwater protection systems, including the capture of runoff and various landscape measures to improve Bay water quality. Landscaping would consist of drought-tolerant <u>and non-invasive plants acceptable to the State of California</u>. <u>California Native Plant Society</u>, and the California Invasive Plant Council. In addition, <u>- and</u>-most runoff water would be recaptured through a filtered system that employs landscape troughs and other measures. Permeable surfaces would be used in place of concrete or asphalt where feasible.

The marina would be a zero-discharge facility. A marina Best Management Practice Plan would be drafted and implemented to ensure that marina operations do not degrade Bay water quality. The plan would be approved by the District prior to commencement of the marina development. Components of the plan include the use of educational materials that would be provided to boat owners and their crews. Docking agreements would contain specific use restrictions to prevent degradation of water quality. The marina operator would restrict boat repairs and cleaning operations. Hull bottom scraping and the use of toxic detergents used to clean vessels would be prohibited, and no overwater repairs would be allowed. Refueling would occur off site. The marina's onsite manager would enforce these restrictions and discharge any dock user who fails to comply with these restrictions after verbal warnings have been provided.²

3.4.10 Port Master Plan Amendment

As discussed further in Chapter 2, *Environmental Setting*, the current certified PMP designates a portion of the landside portion of the project site for the SDCC Phase III expansion. In addition, other land and water uses proposed as part of the project are not consistent with the existing PMP land and water use designations. Therefore, the proposed project proposes an amendment to PMP Planning District 3, Centre City Embarcadero. This PMP Amendment (PMPA) is proposed to change portions of the existing land and water use designations and to update the PMP maps, text, and tables to reflect the proposed project and corresponding land and water uses (see Figure 3-19). In addition, as shown in Figure 3-19, the PMPA identifies up to eight new designated vista areas to replace the five existing designated vista areas that would <u>be</u> displaced by the proposed project.

² These features and measures are also included within mitigation measure MM-HWQ-1 in Section 4.8, *Hydrology and Water Quality.*

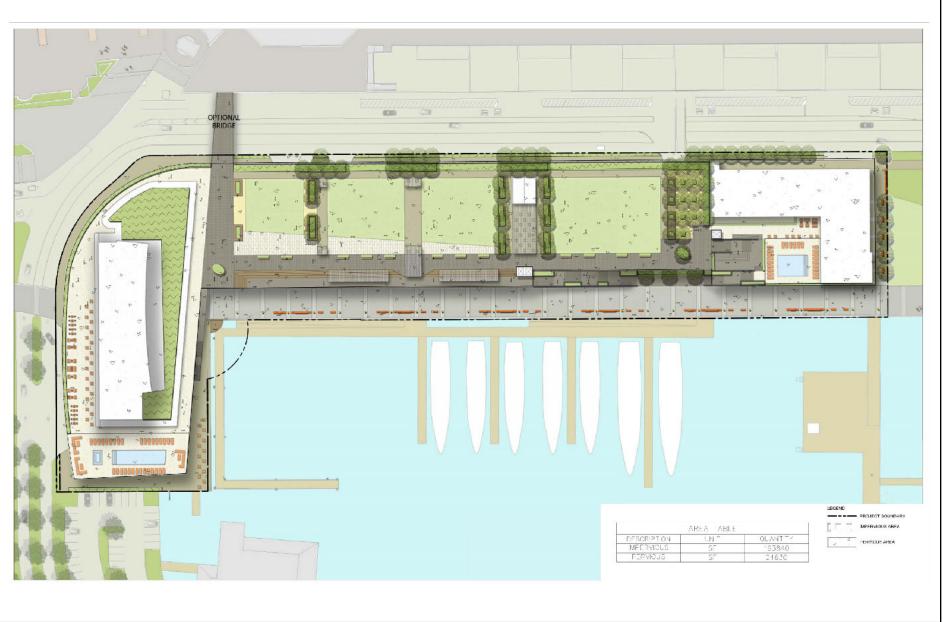


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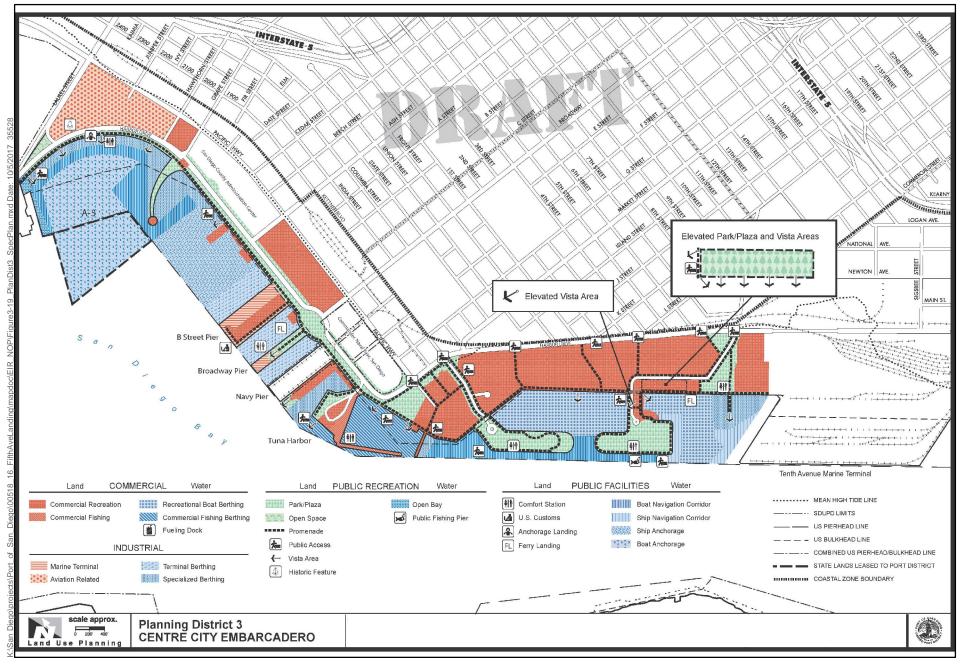


Figure 3-19 Proposed Planning District 3 Precise Plan Fifth Avenue Landing Project The proposed PMPA land and water use designation changes include, but are not limited to, the following.

- Commercial Recreation to Street
- Street to Commercial Recreation
- Specialized Berthing to Recreational Boat Berthing
- Ship Navigation Corridor to Recreational Boat Berthing
- Promenade to Commercial Recreation
- Park to Commercial Recreation
- Commercial Recreation to Park

The proposed PMPA is provided in Appendix C.

3.4.11 Project Construction

Construction of the hotels and Phase I of the marina expansion are anticipated to occur during approximately 24 to 30 months and would be completed as early as 2021. Construction activities would occur between 7 a.m. and 7 p.m. in compliance with City of San Diego building code and regulations.³ Construction staging and laydown activities would occur within the project site. All proposed staging areas are paved or heavily disturbed with no existing vegetation. During construction, once all of the landside buildings are under construction, staging would have to occur off site. Offsite staging would be at the R.E. Staite property located at 2145 Belt Street, San Diego. This site is heavily disturbed with no existing vegetation because the site is already used as a construction staging location for R.E. Staite's construction equipment. Construction parking is also proposed at the R.E. Staite site. Shuttles would be used to transport the construction workers to the project site and/or public transportation incentives would be provided.

As discussed above, the marina expansion would be constructed in two phases (Phase I and Phase II). The Phase I marina expansion would be constructed at the same time the market-rate hotel tower is constructed and would take approximately 6 to 9 months to be completed. However, the construction of the Phase II marina expansion would be market driven and customer dependent. It is anticipated that the Phase II marina expansion would be constructed within approximately 5 years after the market-rate hotel tower is constructed and is not anticipated to be constructed before then. Phase II of the marina expansion construction is expected to include similar equipment and occur over a similar timeframe (e.g., 6–9 months) as Phase I.

Demolition, grading, and pouring of foundations would occur first. All of the existing landside uses on the project site would be demolished to accommodate the construction of the proposed project. The existing 35-foot-wide Embarcadero Promenade would be maintained during construction and in the event that there is a temporary disruption that portion of the promenade would be diverted within the project site. In total, approximately 5 acres would be graded that would require demolition of approximately 1,711 cubic yards of the parking lot, 1,407 cubic yards of the hardscape, and 38,350 cubic yards of other materials, including concrete from existing buildings. Approximately 98% of the asphalt would be recycled on site, as well as 25% of the hardscape. In

³ When the District has not adopted its own code or regulation on a specific topic, it defers to the corresponding member city's codes and regulations for the same.

addition, construction within the landside area would require the removal of 39 existing ornamental trees located on the project site.

The type of construction materials that are anticipated to be used for the proposed project consist of structural steel and concrete; electrical and mechanical systems; interior and finish materials; landscaping and security systems; and interior furnishings, fixtures, and equipment. Material delivery would occur daily throughout the construction period. Some construction components may arrive by sea, such as steel beams, and be offloaded to either the Tenth Avenue Marine Terminal or at the nearby marina.

For the landside development, standard construction equipment would be used, such as earthmoving equipment and pile drivers. Dewatering pumps, cranes, and concrete pump-towers would also be utilized. Several construction cranes may be set in place during construction to support steel beam placement and concrete pouring. The foundations for all major structure would be pile supported, similar to other bayside, multi-story structures. Approximately 1,200 piles would be utilized for construction of the landside portion of the project site, and would be driven to a depth of approximately 60 feet.

The waterside development construction equipment would include the use of Derek barges, push boats, anchors or spuds, and equipment to either internal jetting or straight pile driving the piles. For the marina expansion, approximately 188 piles (623 square feet) would be driven to depths ranging from 50 to 90 feet. With the addition of the breakwater, the proposed project would result in approximately 13,623 square feet of bay fill. Specifically, Phase I would require approximately 60 piles (199 square feet) and Phase II, which includes the breakwater, would require approximately 128 piles (424 square feet).

Construction of the proposed project would not require permanent dewatering. Short-term dewatering may be necessary during construction of the foundations for the market-rate hotel tower and its related project elements. The proposed project would comply with dewatering requirements imposed by the San Diego Regional Water Quality Control Board.

During construction of the proposed project the Embarcadero Promenade fronting the project site would remain open but would be temporarily narrowed from 35 feet to 15 feet. However, for approximately 18 months during construction of the market-rate hotel tower lobby, which spans the promenade, pedestrian traffic would be routed along Convention Way. All closures, construction, and delivery schedules would be coordinated with the District and the SDCC.

The workforce during the construction phase would range from 500 to 1,100 construction workers, with a daily average around 186 workers. Construction workers would be incentivized to use public transportation and be required to park in an offsite parking facility.

3.4.12 Project Operation

The proposed project would operate as a fully functioning market-rate hotel and lower-cost, visitorserving hotel, marina, WTC, publicly accessible waterfront with retail options, and publicly accessible plaza and park areas. The usage of the public plaza and park areas is described in detail above in Table 3-2. In addition to hotel rooms, the hotels would provide space within the hotel and on the public plaza and park area for special events such as weddings and conferences. The marina would allow for a variety of vessels to dock as well as amenities for visitors such as ticketing, restrooms, and a gym, which would only be used by hotel guests and users of the marina. The retail options could include restaurants, cafés, coffee shops, and other visitor-serving uses.

3.4.12.1 Operating Equipment

The proposed project would include operating equipment for the proposed project components. The proposed market-rate hotel tower and associated functional rooms, amenities, meeting rooms, and ballrooms would be served by a central plant, which would include a conventional emergency generator, central chiller, a cooling tower, a boiler plant, dedicated outside air-handling systems, air-handling units, fans, and a domestic hot water plant. The lower-cost, visitor-serving hotel would be served by self-contained air units, air-handling units, exhaust and building fans, and a domestic hot water plant. The parking structure would have openings in the façade and walkway to allow fresh air to be drawn into the structure, and exhaust fans would be provided to discharge vehicle exhaust. The visitor-serving retail storefronts would be served by self-contained air units. In addition, the WTC would be served by dedicated air units. Finally, all buildings, including the parking structure, would include fire sprinklers.

3.4.12.2 Utilities

Detailed utility demand and supply is provided in Chapter 4, Section 4.14, *Utilities and Energy*. As discussed further in Section 4.14, the proposed project includes the following offsite infrastructure improvements.

- Removal of the sewer main on the project site and relocation to Convention Way (approximately 550 linear feet of new 12-inch sewer pipeline)
- Upgrade of the existing 10-inch sewer pipeline within Convention Way to a 12-inch main pipeline all the way to West Harbor Drive (approximately 1,500 linear feet)
- Relocation of a portion of the storm drain from the project site to Marina Park Way (approximately 250 linear feet)
- Upsizing of the existing 15-inch West Harbor Drive trunk sewer at the intersection of West Harbor Drive and Park Boulevard to a 30-inch sewer main is planned to be completed by the Ballpark Village project. However, in the event that this is not completed prior to the occupancy of the hotels, the proposed project would be required to complete the upsize.
- The existing electrical circuit on Convention Way does not have sufficient capacity; therefore, the proposed project would be required to tie into the Sampson Street Substation for electrical power. This would require trenching from the project site, out along Convention Way to Harbor Drive, and along Harbor Drive to the Sampson Street Substation, for a total trenching distance of approximately 1.4 miles. It may also be necessary to add a new switch and/or transformer at the Sampson Street Substation to accommodate the proposed project's energy demand.

3.4.12.3 Projected Workforce

The proposed project would result in the employment of approximately 610 total permanent individuals. The market-rate hotel tower would be a full-service hotel with a high employee to guest and guest room ratio. It is estimated to provide approximately 600 jobs, including maintenance staff, hotel management, facilities, and cleaning crews. The lower-cost, visitor-serving hotel is estimated to provide approximately nine jobs and the marina will continue to provide one job.

3.5 **Project Review and Approvals**

The District is the lead agency under CEQA and responsible for permitting and carrying out the proposed project. The following permits and approvals would be required to implement the proposed project.

3.5.1 San Diego Unified Port District

- Certification of the EIR.
- Adoption of the mitigation monitoring and reporting program.
- Adoption of the Findings of Fact.
- Adoption of the Statement of Overriding Considerations, if applicable.
- Approval and adoption of the PMPA.
- Concept approval of the proposed project.
- Approval of new lease agreements.
- Authorization for issuance of a coastal development permit.
- Amendment to the Management Agreement for the Pedestrian Bridge and, if they become available in the future, use of the 110 parking spaces located within the SDCC.

3.5.2 <u>California</u> Coastal Commission

• Certification of, and final action on, the PMPA.

3.5.3 Resource Agencies

A review and issuance of permits may be required for the implementation of the proposed project from the following resource agencies.

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- California Regional Water Quality Control Board
- California Department of Fish and Wildlife
- National Marine Fisheries Service

3.5.4 Federal Aviation Administration

• Issuance of a determination under Federal Aviation Regulations, Part 77.

3.5.5 San Diego County Regional Airport Authority, Airport Land Use Commission

• Issuance of a consistency determination.

3.5.43.5.6 City of San Diego

- Amendment of the existing Management Agreement for the optional pedestrian bridge and, if they become available in the future, use of the 110 parking spaces located within the SDCC.
- Issuance of ministerial permits (e.g., grading, building, electrical).

Attachment 5 Utilities and Solid Waste Memos



Subject: Fifth Avenue Landing – Estimated Waste Calculations **Date:** October 14, 2020

HOTEL PROGRAM WASTE VOLUME ESTIMATES

Fifth Ave Landing Waste			Total	SOLID	RECYCLE	COMPOSTABLE
Projections	Level	SF Total	Lbs./Day	WASTE	WASTE	WASTE
RESTAURANT	P1	4,397	219.85	87.94	65.96	65.96
KITCHEN	P1	1,744	87.20	34.88	26.16	26.16
LOBBY LOUNGE	P1	2,401	24.01	9.60	7.20	7.20
HOTEL LOBBY	P1	3,869	38.69	15.48	11.61	11.61
BANQUET PRE-FUNCTION DROP-						
OFF	P1	8,712	104.54	41.82	31.36	31.36
ENGINEERING	P2	719	5.03	2.01	1.51	1.51
HOTEL OFFICES	P2	4,650	32.55	13.02	9.77	9.77
MENS LOCKERS	P2	1,607	19.28	7.71	5.79	5.79
WOMENS LOCKERS	P2	1,607	19.28	7.71	5.79	5.79
LAUNDRY	P2	1,603	19.24	7.69	5.77	5.77
EMPLOYEE DINING	P2	1,712	85.60	34.24	25.68	25.68
EMPLOYEES KITCHEN	P2	1,584	79.20	31.68	23.76	23.76
HOUSEKEEPING	P2	2,532	30.38	12.15	9.12	9.12
BANQUET STORAGE	P2	2,905	20.34	8.13	6.10	6.10
HOTEL STORAGE	P2	4,184	29.29	11.72	8.79	8.79
MEETING ROOM	L2	1,761	12.33	4.93	3.70	3.70
MEETING ROOM	L2	1,408	9.86	3.94	2.96	2.96
MEETING ROOM	L2	1,180	8.26	3.30	2.48	2.48
MEETING ROOM	L2	2,162	15.13	6.05	4.54	4.54
MEETING ROOM	L2	2,712	18.98	7.59	5.70	5.70
MEETING ROOM	L2	2,187	15.31	6.12	4.59	4.59
PRE-FUNCTION	L2	6,492	77.90	31.16	23.37	23.37
MEETING ROOM	L2	4,083	28.58	11.43	8.57	8.57
MEETING BOH	L2	6,218	74.62	29.85	22.38	22.38
PRE-FUNCTION	L2	10,193	122.32	48.93	36.69	36.69
PRE-FUNCTION	L2	13,094	157.13	62.85	47.14	47.14
JUNIOR BALLROOM	L2	18,720	187.20	74.88	56.16	56.16
BANQUET KITCHEN	L2	6,845	68.45	27.38	20.54	20.54
GRAND BALLROOM	L2	30,196	301.96	120.78	90.59	90.59
POOL DECK	L3	11,746	704.76	281.90	211.43	211.43
POOL BAR	L3	3,588	215.28	86.11	64.58	64.58
3-MEAL RESTAURANT	L3	6,580	394.80	157.92	118.44	118.44
KITCHEN	L3	2,096	104.80	41.92	31.44	31.44



			Total	SOLID	RECYCLE	COMPOSTABLE
Fifth Ave Landing Waste Continued	Level	SF Total	Lbs./Day	WASTE	WASTE	WASTE
MEETING ROOM	L3	391	2.74	1.09	0.82	0.82
MEETING ROOM	L3	600	4.20	1.68	1.26	1.26
MEETING ROOM	L3	3,700	25.90	10.36	7.77	7.77
PRE-FUNCTION	L3	2,214	26.57	10.63	7.97	7.97
CLUB LOUNGE	L4	2,710	135.50	54.20	40.65	40.65
SPA	L4	9,732	97.32	38.93	29.20	29.20
FITNESS CENTER	L4	4,230	42.30	16.92	12.69	12.69
GREEN ROOF	L4	3,100	31.00	12.40	9.30	9.30
Hotel Room Waste Projections	Units	Est. Waste/Rm				-
ICONIC HOTEL ROOMS	843	2.5	2,107.50	843.00	632.25	632.25
		TOTALS				
TOTAL POUNDS / DAY			5,805.18	2,554.28	1,915.71	1,915.71
LBS TO CU FT CONVERSION			1,161.04	510.86	383.14	383.14

43.00

18.92

14.19

14.19

LOW COST VISITOR SERVING PROGRAM WASTE VOLULME ESTIMATES

CU FT TO CU YARDS CONVERSION

				SOLID	RECYCLE	COMPOSTABLE
Visitor Serving Waste Projections		SF Total	Lbs./Day	WASTE	WASTE	WASTE
ACTIVATING RETAIL		7,749	302.21	120.88	90.66	90.66
WATER TRANSPORTATION CENTER		2,000	100.00	40.00	30.00	30.00
AT-GRADE PEDESTRIAN WALKWAY		3,903	39.03	15.61	11.71	11.71
Hotel Waste Projections	Units	Est. Waste/Rm				-
LOW COST VISITOR SERVING HOTEL						
ROOMS	220	2	440.00	176.00	132.00	132.00
		TOTALS			-	
TOTAL POUNDS / DAY			881.24	387.75	290.81	290.81
LBS TO CU FT CONVERSION			176.25	77.55	58.16	58.16
CU FT TO CU YARDS CONVERSION			6.53	2.87	2.15	2.15



CONSOLIDATED WASTE STREAM VOLUMES

Compaction/Reduction Ratio	
General Waste Compaction Ratio 3:1	3
Recycle Waste Compaction Ratio 2:1	2
Organic Waste Processed 7:1	7
Volume After Compaction	Cubic Yard
Cubic Yards Per Day General Waste (Compacted)	7.26
Cubic Yards Per Day Recycle Waste (Compacted)	8.17
Cubic Yards Per Day Recycle Waste (Uncompacted)	16.34
Cubic Yards Per Day Organic Waste (Unprocessed)	16.34
Cubic Yards Per Day Organic Waste (Processed)	2.33
Cubic Yards Per Day Universal Waste (Uncompacted)	0.50

WASTE CONTAINMENT RECOMMENDATIONS

General Waste Days Held (Compacted)	3				
Recycle Waste Days Held (Compacted)	3				
Recycle Waste Days Held (Un-Compacted)	1				
Organic Waste Days Held (Unprocessed)	1				
Organic Waste Days Held (Processed)	2				
Universal Days Held	5				
Volume Held	Cubic Yard				
General Waste (Compacted) Cubic Yards Held	21.79				
Recycle Waste (Compacted) Cubic Yards Held	24.52				
Recycle Waste (Un-Compacted) Cubic Yards Held					
Organic Waste (Unprocessed) Cubic Yards Held					
Organic Waste (Processed) Cubic Yards Held					
Universal Waste Cubic Yards Held					
Container Size					
Estimated container size (cu. yd) - General Waste (Compacted)	30.00				
Estimated container size (cu. yd) - Recycle Waste (Uncompacted)	0.47				
Estimated container size (cu. yd) - Recycle Waste (Compacted)	30.00				
Estimated container size (cu. yd) - Organic Waste (Unprocessed)	0.33				
Estimated container size (cu. yd) - Organic Waste (Processed)	0.33				
Estimated container size (cu. yd) - Universal Waste	0.47				



Estimated # of 30 CY compactor/containers General Waste	0.73
Estimated # of 96-gallon toters Recycle Waste (Uncompacted)	35
Estimated # of 30 CY compactor/containers Recycle Waste	0.82
Estimated # of 65-gallon toters Organic Waste (Unprocessed)	49.53
Estimated # of 65-gallon toters Organic Waste (Processed)	14.15
Estimated # of 95-gallon toters Universal Waste	1.58

The following recommendations are based on estimated waste volumes:

- a. One (1) 30 cubic yard compactor/container will hold three (3) days' worth of compacted general waste.
- b. One (1) 30 cubic yard compactor/container will hold three (3) days' worth of compacted recycled waste.
- c. Thirty-Five (35) 96-gallon wheeled toters will hold one (1) days' worth of un-compacted recycled waste.
- d. Fifty (50) 65-gallon wheeled toters will hold one (1) days' worth of unprocessed food waste.
- e. Fifteen (15) 65-gallon wheeled toters will hold two (2) days' worth of processed food waste. This assumes that food waste is being processed using pulpers/extractors at a 7:1 reduction ratio.
- f. Two (2) 96-gallon wheeled toters will hold one (5) days' worth of universal waste.

SPACE REQUIREMENTS

Estimated Space Requirements	SF
Estimated Square Feet for General Waste Holding (Compacted)	221
Estimated Square Feet for Recycle Waste Holding (Uncompacted)	303
Estimated Square Feet for Recycle Waste Holding (Compacted)	221
Estimated Square Feet for Organic Waste Holding (Unprocessed)	499
Estimated Square Feet for Organic Waste Holding (Processed)	142
Estimated Square Feet for Universal Waste Holding	16

Organic Waste

• Food waste suitable for composting. Processed indicates a method available at the point of use or in a centralized location which extracts moisture and significantly reduces the volume of waste.

Universal Waste

- Batteries
- Pesticides
- Mercury-containing equipment (including many thermostats)
- Lamps containing mercury (e.g. fluorescent lamps, including compact fluorescent lamps)





END.

MEMORANDUM

То:	Kevin Heinly Gensler	From:	
	225 Broadw	ay, Suite 100 cc:	
	San Diego,	CA 92101	
	619.557.2500		
	Kevin_Heinly@)gensler.com	
Projec	ct Name:	Fifth Landing Hotel	
Projec	t Number:	04.16.00690	
Subje	ct:	Revised EIR Reporting Needs - Energy, Water, Noise	

Kevin,

Per the environmental impact reporting requirements, we have determined the following in support of the Fifth Landing Hotel project needs for electricity, natural gas, water, wastewater, and noise pollution criteria. This document revises the previous document dated July 24, 2017, based on revised planning documents for the project.

September 4, 2020

Michael Weller Dennis Berlien, Glumac

<u>Electricity Use</u>: Projections for the future Marina usage (after expansion) are based on an increase proportional to the increased slip length (a factor of 6470/1490 = 4.34). Projections for the new buildings were calculated by the Energy Star Target Finder tool, which compares input building characteristics to utility bill data from actual buildings of a similar type in similar climates. Refer to Attachment A for documentation of Target Finder input assumptions and output reports. Table 1 below shows estimated annual electricity use for each building.

- Marina
 - Existing usage: 1,342,558 kWh per year
 - Projected expansion usage: 5,829,765 kWh per year
- Market Rate Hotel
 - o 911,736 gsf, 843 room hotel
 - 600 employees
 - 3,000 meals served per year
 - o 9,732 gsf spa
 - 4,230 gsf fitness center
 - o 69,100 gsf of conference and meeting space
 - 79,780 gsf parking garage energy estimated by assuming 0.10 W/gsf lighting power and 0.03 W/gsf average operating exhaust power; assumed operational 8,760 hours per year (90,882 kWh, value added to Target Finder estimate)
- Low Cost Hotel
 - o 60,000 gsf, 220 room hotel
 - Assumed Target Finder default of 19 employees
- Retail
 - o 7,749 gsf total (multiple retail stores)
 - Assumed 105 hours of operation per week and 7 workers
- Water Transportation Center
 - o 2,000 gsf
 - Assumed 120 hours of operation per week and 20 workers
- Total
 - o 16,840,751 kWh per year



Fifth Landing Hotel Page 2 of 6

Table 1 - Estimated Annual Electricity Use, in kWh							
Month	Marina Expansion	Market Rate Hotel	Low Cost Hotel	Activating Retail	Water Transportation Center	Total	
Jan	349,675	859,024	60,683	14,029	1,443	1,284,855	
Feb	598,827	775,892	54,810	12,672	1,304	1,443,505	
Mar	855,212	859,024	60,683	14,029	1,443	1,790,392	
Apr	642,362	831,313	58,725	13,577	1,397	1,547,375	
May	352,585	859,024	60,683	14,029	1,443	1,287,764	
Jun	509,966	831,313	58,725	13,577	1,397	1,414,979	
Jul	366,133	859,024	60,683	14,029	1,443	1,301,312	
Aug	342,563	859,024	60,683	14,029	1,443	1,277,742	
Sep	421,106	831,313	58,725	13,577	1,397	1,326,118	
Oct	556,342	859,024	60,683	14,029	1,443	1,491,521	
Nov	627,473	831,313	58,725	13,577	1,397	1,532,485	
Dec	207,522	859,024	60,683	14,029	1,443	1,142,702	
Total	5,829,765	10,114,312	714,493	165,186	16,995	16,840,751	

<u>Natural Gas Use</u>: Projections for the future Marina usage (after expansion) are based on an increase proportional to the increased slip length (a factor of 6470/1490 = 4.34). Projections for the new buildings were calculated by the Energy Star Target Finder tool, which compares input building characteristics to utility bill data from actual buildings of a similar type in similar climates. Refer to Attachment A for documentation of Target Finder input assumptions and output reports. Table 2 below shows estimated annual natural gas use for each building.

- Marina
 - Existing usage: 24,020 therms per year
 - Projected expansion usage: 104,302 therms per year
- Market Rate Hotel
 - o 911,736 gsf, 843 room hotel
 - Kitchen: Assuming 3,000 meals served per day
 - o 9,732 gsf Spa
 - Onsite Laundry: Limited laundry; assuming 1 pound of laundry per guestroom per day (307,695 lbs)
 - Pool: 14,910 therms per year (added to Target Finder projection)
- Low Cost Hotel
 - o 60,000 gsf, 220 room hotel
 - Onsite Laundry: Limited laundry; assuming about 0.5 pound of laundry per guestroom per day (40,150 lbs)
- Retail
 - o 7,749 gsf total (multiple retail stores)
 - Assumed 105 hours of operation per week and 7 workers
 - Water Transportation Center
 - 2,000 gsf
 - Assumed 120 hours of operation per week and 20 workers
- Total
 - o 552,909 therms per year.

Month	Marina Expansion	Market Rate Hotel	Low Cost Hotel	Activating Retail		Total
Jan	6,470	35,512	2,441	114	Center 31	44,568
Feb	6,470					40,895
Mar	12,658	35,512	2,441	114	31	50,756
Apr	12,658	34,366	2,362	114	31	49,532
May	6,817	35,512	2,441	114	31	44,915
Jun	6,817	34,366	2,362	114	31	43,691
Jul	4,038	35,512	2,441	114	31	42,136
Aug	4,038	35,512	2,441	114	31	42,136
Sep	10,291	34,366	2,362	114	31	47,165
Oct	10,291	35,512	2,441	114	31	48,389
Nov	11,876	34,366	2,362	114	31	48,750
Dec	11,876	35,512	2,441	114	31	49,974
Total	104,302	418,126	28,742	1,366	374	552,909

able 2 - Estimated Annual Natural Gas Use, in therms

<u>Water Use:</u> Projections for the future Marina usage (after expansion) are based on an increase proportional to the increased slip length (a factor of 6470/1490 = 4.34). Projections for indoor water utilization come from 55 gallons/ft²-yr, and 102 gallons/room-day, based on median data from Energy Star Portfolio Manager; each value represents a different metric to approximate total annual water volume. We have used each calculation and taken the average of the results to calculate the estimated annual volume of water anticipated for the development. Exterior irrigation water consumption from municipal water averages 0.222 gallons per sq. ft. of landscaping per month based on calculations from "A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California" published by the California Department of Water Resources (see Attachment B for more details). Table 3 below shows the breakdown of estimated water consumption by building.

- Marina
 - Existing usage: 1,796,696 gallons per year
 - Projected expansion usage: 7,801,760 gallons per year
- Parcel A:
 - 55 gallons per sq. ft. = 50,145,480 gallons per year
 - 102 gallons per room per day = 31,384,890 gallons per year
 - Total (average of two numbers above): 40,765,185 gallons per year
- Parcel B:
 - \circ 55 gallons per sq. ft. = 3,300,000 gallons per year.
 - 102 gallons per room per day, and assume 50% bed utilization = 4,095,300 gallons per year.
 - Total (average of two numbers above): 3,697,650 gallons per year.
- Site Irrigation:
 - 19,640 gsf of irrigated site area.
 - Total: 2.67 gallons per sq. ft. annually = 52,345 gallons per year based on calculations from the California Department of Water Resources Guide (see Attachment B).
- Total:
 - o 52,316,941 gallons per year.

Fifth Landing Hotel Page 4 of 6

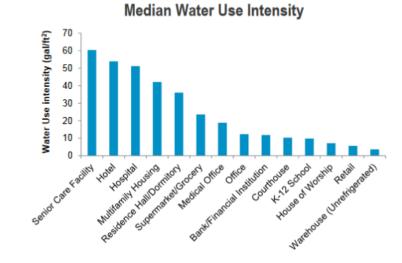


Figure 1 – Median Water Use Intensity (WUI) from Portfolio Manager (Source: Energy Star)

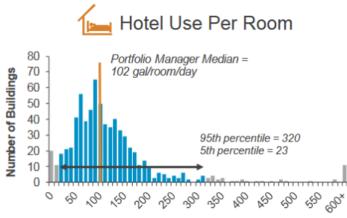




Figure 2 – Hotel Water Usage from Portfolio Manager (Source: Energy Star)

Month	Marina Expansion	Market Rate Hotel	Low Cost Hotel	Site Irrigation	Activating Retail	Water Transportation Center	Total
Jan	483,956	3,462,249	314,047	0			4,260,252
Feb	483,956	3,127,192	283,655	0			3,894,804
Mar	946,800	3,462,249	314,047	0			4,723,095
Apr	946,800	3,350,563	303,916	91		Included in Hotel Water Use	4,601,371
Мау	509,940	3,462,249	314,047	8,673	Included in		4,294,909
Jun	509,940	3,350,563	303,916	11,538	Hotel Water		4,175,957
Jul	302,066	3,462,249	314,047	12,308	Use		4,090,670
Aug	302,066	3,462,249	314,047	11,160	Calculations	Calculations	4,089,522
Sep	769,782	3,350,563	303,916	7,519	Calculations		4,431,781
Oct	769,782	3,462,249	314,047	1,056			4,547,134
Nov	888,335	3,350,563	303,916	0			4,542,815
Dec	888,335	3,462,249	314,047	0			4,664,631
Total	7,801,760	40,765,185	3,697,650	52,345			52,316,941

Table 3 - Estimated Annual Water Consumption, in gallons

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Fifth Landing Hotel Page 5 of 6

<u>Water Effluent to Sanitary System:</u> Assuming building and marina water will discharge to sanitary system. Table 4 below shows the breakdown of estimated water effluent to the sanitary system by building.

- Marina Water Use Becoming Effluent
 - Existing effluent: 1,796,696 gallons per year.
 - Projected expansion effluent: 7,801,760 gallons per year.
- New Building Use Becoming Effluent
 - Parcel A: 40,765,185 gallons per year.
 - Parcel B: 3,697,650 gallons per year.
 - Total: 44,462,835 gallons per year.
- Total
 - o 52,264,595 gallons per year.

Table 4 – Estimated Annual Water Effluent to Sanitary System, in gallons							
Month	Marina Expansion	Market Rate Hotel	Low Cost Hotel	Activating Retail	Water Transportation Center	Total	
Jan	483,956	3,462,249	314,047			4,260,252	
Feb	483,956	3,127,192	283,655			3,894,804	
Mar	946,800	3,462,249	314,047			4,723,095	
Apr	946,800	3,350,563	303,916		lu alu da dúa	4,601,279	
May	509,940	3,462,249	314,047			4,286,236	
Jun	509,940	3,350,563	303,916	Included in	Included in	4,164,420	
Jul	302,066	3,462,249	314,047	Hotel Water Use	Hotel Water	4,078,362	
Aug	302,066	3,462,249	314,047	Calculations	Use	4,078,362	
Sep	769,782	3,350,563	303,916		Calculations	4,424,262	
Oct	769,782	3,462,249	314,047			4,546,078	
Nov	888,335	3,350,563	303,916			4,542,815	
Dec	888,335	3,462,249	314,047			4,664,631	
Total	7,801,760	40,765,185	3,697,650			52,264,595	

<u>Water Effluent to Storm System:</u> Assume stormwater and landscape irrigation water will discharge to storm system. Table 5 below shows the breakdown of estimated water effluent to the stormwater system by building.

- Site Irrigation
 - Total: 52,345 gallons per year (see above).
 - Stormwater Becoming Effluent
 - 10.34 inches of rainfall per year, on 188,448 sq. ft. of site area. 162,379 cubic feet of storm water. 7.48 gallons per cubic foot of water.
 - Total Storm Water: 1,214,598 gallons per year.
 - o Rainfall data referenced from https://rainfall.weatherdb.com/
- Total Effluent
 - o 1,266,943 gallons per year.

Table 5 – Estimated Annual Water Effluent to Storm System,					
Month	Site Irrigation	Storm Water	Total		
Jan	0	232,583	232,583		
Feb	0	266,648	266,648		
Mar	0	212,613	212,613		
Apr	91	91,623	91,715		
May	8,673	14,096	22,769		
Jun	11,538	8,223	19,760		
Jul	12,308	3,524	15,832		
Aug	11,160	2,349	13,509		
Sep	7,519	17,620	25,139		
Oct	1,056	66,956	68,012		
Nov	0	118,641	118,641		
Dec	0	179,723	179,723		
Total	52,345	1,214,598	1,266,943		

nucl Water Effluent to Storm System in calls

Noise Pollution: The following equipment will have produce noise from the rooftop with an expected sound level, in dB, projected from the building.

- Generator: Maximum 105 dB with design considerations for muffler and/or location within parking garage to minimize noise to the atmosphere when operating. Sound criteria provided by Tognum Group MTU Onsite Energy generators.
- Rooftop Exhaust Fans: Multiple fans, estimated up to 6 located on the various roofs of the • proposed development. Each fan with maximum sound criteria at outlet of: 100 dB 1 foot away, 90 dB 3 feet away, and 86 dB at 5 feet away using perforated liner in exhaust fan acoustical casing. Sound criteria provided by Twin City Fans.
- Air Handling Units: Multiple air handlers, estimated with up to eight (8) air handling units • located on various roofs of the development. Air handler sound criteria will range from 90 to 95 dB depending on unit capacity. Sound criteria provided by Energy Labs.
- Cooling Tower: Up to three (3) multiple cell cooling towers. Each tower with maximum • sound criteria of 107 dB at 1.5 meters away from tower. Sound criteria provided by Evapco.

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Attachment A

Energy Star Target Finder Inputs and Outputs

Below are Target Finder Output Reports for:

- Market Rate Hotel
- Low Cost Hotel
- Retail
- Water Transportation Center

🔻 Hotel Use 🧹 Edit Name

Hotel refers to buildings renting overnight accommodations on a room/suite and nightly basis, and typically include a bath/shower and other facilities in guest rooms. Hotel properties typically have daily services available to guests including housekeeping/laundry and a front desk/concierge.

Hotel does not apply to properties where more than 50% of the floor area is occupied by fractional ownership units such as condominiums or vacation timeshares, or to private residences that are rented out on a daily or weekly basis. Hotel properties should be majority-owned by a single entity and have rooms available on a nightly basis. Condominiums or Time Shares should select the Multifamily Housing property use.

Gross Floor Area should include all interior space within the building(s), including guestrooms, halls, lobbies, atriums food preparation and restaurant space, conference and banquet space, fitness centers/spas, indoor pool areas, laundry facilities, elevator shafts, stairways, mechanical rooms, storage areas, employee break rooms, and back-of-house offices.

Property Use Detail	Value
🚖 Gross Floor Area	* 911,736 Sq. Ft. ✔
A Number of Rooms	843 Use a default
A Number of Workers on Main Shift	600 Use a default
😭 Cooking Facilities	Yes Use a default
Gross Floor Area Used for Food Preparation	2096 Sq. Ft. 🗸 🗌 Use a default
Aumber of Commercial Refrigeration/Freezer Units	20.97 Use a default
Number of Guest Meals Served Per Year	3000
Hours Per Day Guests Onsite	15 To 19 🗸
Type of Laundry Facility	Both linens and terry 🗸
Amount of Laundry Processed Onsite Annually	307695 Pounds V
Full-Service Spa Floor Area	9732 Sq. Ft. 🗸
Gym/Fitness Center Floor Area	4230 Sq. Ft. 🗸
Gross Floor Area that is Conference Space	69100 Sq. Ft. 🗸
😭 Percent That Can Be Heated	All of it - 100% 🗸 🗌 Use a default
★ Percent That Can Be Cooled	All of it - 100% 🗸 🗌 Use a default

Figure A1 – Target Finder Inputs for the Market Rate Hotel

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F

Electric - Grid (45.9%) Natural Gas (54.1%)	
	Edit

Metrics Comparison for Your Design and/or Target

Metric	Design Project Design Target*		Median Property*	
ENERGY STAR score (1-100)	Not Available	65	50	
Source EUI (kBtu/ft²)	Not Available	151.5	172.2	
Site EUI (kBtu/ft²)	Not Available	81.7	92.9	
Source Energy Use (kBtu)	Not Available	138,165,671.8	156,966,594.0	
Site Energy Use (kBtu)	Not Available	74,531,520.0	84,673,410.0	
Energy Cost (\$)	Not Available	1,934,194.53	2,197,390.40	
Total GHG Emissions (Metric Tons CO2e)	0.0	4,409.8	5,009.9	

* To perform calculations for your design target, we use the fuel mix that you've entered for your design energy estimates. If you have not entered estimated design energy, we'll use the average for your state. To perform calculations for the national median, we will assume the fuel mix and operational details of your property measurement in use, if available. Otherwise, we will use your design estimates.

Figure A2 – Target Finder Outputs for the Market Rate Hotel

Property Use Detail	Value
😭 Gross Floor Area	* 7,749 Sq. Ft. 🗸
★ Weekly Operating Hours	105 🗌 Use a default
😭 Number of Workers on Main Shift	12 Use a default
A Number of Open or Closed Refrigeration/Freezer Units	10 Use a default
Length of All Open or Closed Refrigeration/Freezer Units	0 Ft. 🗸 🗹 Use a default
A Number of Walk-in Refrigeration/Freezer Units	1 Use a default
Area of All Walk-in Refrigeration/Freezer Units	Sq. Ft. 🗸
★ Single Store	Yes 🗸 🗌 Use a default
The Exterior Entrance to the Public	Yes 🗸 🗌 Use a default
Number of Computers	7 Use a default
Number of Cash Registers	10 Use a default
Cooking Facilities	Yes 🗸
😭 Percent That Can Be Heated	All of it - 100% 🗸 🗌 Use a default
😭 Percent That Can Be Cooled	All of it - 100% 🗸 🗌 Use a default
This Use Detail is used to calculate the 1-100 ENERGY STAR Score.	·

Figure A3 – Target Finder Inputs for Retail

F

1

Electric - Grid (80.5%) Natural Gas (19.5%) Edit

Metrics Comparison for Your Design and/or Target

Metric	Design Project	Design Target*	Median Property*
ENERGY STAR score (1-100)	Not Available	70	50
Source EUI (kBtu/ft²)	Not Available	222.2	276.0
Site EUI (kBtu/ft²)	Not Available	90.4	112.2
Source Energy Use (kBtu)	Not Available	1,722,075.8	2,138,673.8
Site Energy Use (kBtu)	Not Available	700,347.5	869,772.9
Energy Cost (\$)	Not Available	27,042.32	33,584.29
Total GHG Emissions (Metric Tons CO2e)	0.0	44.6	55.4

* To perform calculations for your design target, we use the fuel mix that you've entered for your design energy estimates. If you have not entered estimated design energy, we'll use the average for your state. To perform calculations for the national median, we will assume the fuel mix and operational details of your property measurement in use, if available. Otherwise, we will use your design estimates.

Figure A4 – Target Finder Output Data for Retail



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Fifth Landing Hotel

V Hotel Use / Edit Name

Hotel refers to buildings renting overnight accommodations on a room/suite and nightly basis, and typically include a bath/shower and other facilities in guest rooms. Hotel properties typically have daily services available to guests including housekeeping/laundry and a front desk/concierge.

Hotel does not apply to properties where more than 50% of the floor area is occupied by fractional ownership units such as condominiums or vacation timeshares, or to private residences that are rented out on a daily or weekly basis. Hotel properties should be majority-owned by a single entity and have rooms available on a nightly basis. Condominiums or Time Shares should select the Multifamily Housing property use.

Gross Floor Area should include all interior space within the building(s), including guestrooms, halls, lobbies, atriums food preparation and restaurant space, conference and banquet space, fitness centers/spas, indoor pool areas, laundry facilities, elevator shafts, stairways, mechanical rooms, storage areas, employee break rooms, and back-of-house offices.

Property Use Detail	Value
😭 Gross Floor Area	* 60,000 Sq. Ft. ♥
The second secon	220 Use a default
🗙 Number of Workers on Main Shift	19.2 Vse a default
🗙 Cooking Facilities	No 🗸 🗌 Use a default
Gross Floor Area Used for Food Preparation	0
* Number of Commercial Refrigeration/Freezer Units	0 Use a default
Number of Guest Meals Served Per Year	0
Hours Per Day Guests Onsite	15 To 19 🗸
Type of Laundry Facility	Linens only
Amount of Laundry Processed Onsite Annually	40150 Pounds V
Full-Service Spa Floor Area	0 Sq. Ft. 🗸
Gym/Fitness Center Floor Area	0 Sq. Ft. 🗸
Gross Floor Area that is Conference Space	0 Sq. Ft. 🗸
😭 Percent That Can Be Heated	All of it - 100% 🗸 🗌 Use a default
😭 Percent That Can Be Cooled	All of it - 100% 🗸 🗌 Use a default

Figure A4 – Target Finder Input for the Low Cost Hotel

Electric - Grid (45.9%) Natural Gas (54.1%) Edit

Metrics Comparison for Your Design and/or Target

Metric	Design Project	Design Target*	Median Property*
ENERGY STAR score (1-100)	Not Available		50
Source EUI (kBtu/ft²)	Not Available	164.1	178.4
Site EUI (kBtu/ft²)	Not Available	88.5	96.3
Source Energy Use (kBtu)	Not Available	9,848,769.1	10,705,857.9
Site Energy Use (kBtu)	Not Available	5,312,779.0	5,775,124.0
Energy Cost (\$)	Not Available	137,873.86	149,872.34
Total GHG Emissions (Metric Tons CO2e)	0.0	314.3	341.7

* To perform calculations for your design target, we use the fuel mix that you've entered for your design energy estimates. If you have not entered estimated design energy, we'll use the average for your state. To perform calculations for the national median, we will assume the fuel mix and operational details of your property measurement in use, if available. Otherwise, we will use your design estimates.

Figure A5 – Target Finder Output Data for the Low Cost Hotel

▼ Transportation Terminal/Station Use 🧹 Edit Name

Transportation Terminal/Station applies to buildings used primarily for accessing public or private transportation. This includes train stations, bus stations, airports, and seaports. These terminals include areas for ticket purchases, and embarkation/disembarkation, and may also include public waiting areas with restaurants and other concessions.

Gross Floor Area should include all space within the building(s), including boarding areas, waiting areas, administrative space, kitchens used by staff, lobbies, restaurants, cafeterias, stairways, atria, elevator shafts, and storage areas. This should *not include* any exterior spaces associated with the terminals, such as drop-off areas, outdoor platforms, or outdoor loading docks/bays.

Property Use Detail	Value
Gross Floor Area	° 2,000
Weekly Operating Hours	120
Number of Workers on Main Shift	20
Number of Computers	10

Figure A6 – Target Finder Input for the Water Transportation Center

F

Electric - Grid (60.8%) Natural Gas (39.2%)	
	Edit

Metrics Comparison for Your Design and/or Target

Metric	Design Project	Design Target*	Median Property*
ENERGY STAR score (1-100)	Not Available	Not Available	50
Source EUI (kBtu/ft²)	Not Available	100.8	112.0
Site EUI (kBtu/ft²)	Not Available	47.7	53.0
Source Energy Use (kBtu)	Not Available	201,613.2	224,014.6
Site Energy Use (kBtu)	Not Available	95,400.7	106,000.8
Energy Cost (\$)	Not Available	2,993.87	3,326.53
Total GHG Emissions (Metric Tons CO2e)	0.0	5.8	6.5

* To perform calculations for your design target, we use the fuel mix that you've entered for your design energy estimates. If you have not entered estimated design energy, we'll use the average for your state. To perform calculations for the national median, we will assume the fuel mix and operational details of your property measurement in use, if available. Otherwise, we will use your design estimates.

Figure A7 – Target Finder Output Data for the Water Transportation Center

Attachment B

Water consumption from landscape irrigation was calculated using the methodology from "A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California" published by University of California Cooperative Extension and California Department of Water Resources, August 2000. Available online on the California Department of Water Resources website at:

http://www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf

A worksheet is provided in the Guide to simplify the calculation process (see below). Note that the worksheet only calculates the "Total Water to Apply (TWA)" for one month. Table B1 below shows evapotranspiration and TWA for each month for San Diego.

Month	ET_o	ET_L	TWA (in/mo)	Rainfall (in/mo)	Net TWA (gal/sf/mo)	Total
Jan	1.86	0.28	0.33	2.00	0.00	0
Feb	2.24	0.33	0.39	1.98	0.00	0
Mar	3.41	0.51	0.60	1.63	0.00	0
Apr	4.50	0.67	0.79	0.78	0.00	91
May	5.27	0.78	0.92	0.21	0.44	8,673
Jun	5.70	0.85	1.00	0.05	0.59	11,538
Jul	5.89	0.88	1.03	0.02	0.63	12,308
Aug	5.58	0.83	0.98	0.06	0.57	11,160
Sep	4.50	0.67	0.79	0.17	0.38	7,519
Oct	3.41	0.51	0.60	0.51	0.05	1,056
Nov	2.40	0.36	0.42	0.97	0.00	0
Dec	1.86	0.28	0.33	1.77	0.00	0
Total	46.62	6.93	8.16	10.15	2.67	52,345

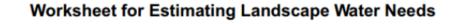
 Table B1 – Landscape Irrigation Water Consumption by Month (gallons)

The following assumptions were used to determine the variables in the Worksheet:

 k_s = species factor = 0.25 – assuming low water consumption plants (drought-tolerant plants to help meet the California Green Building Code "CALGreen").

 k_d = density factor = 0.85 – assuming a mix of plants with an average to low leaf/green coverage k_{mc} = microclimate factor = 0.7 – assuming some shading from the hotel towers which will reduce evapotranspiration

 ET_{\circ} = reference evapotranspiration = daily values from Appendix A of the Guide, converted to monthly values for the Worksheet and Table B1.



ks = species factor kd = density factor

Step 1: Calculate the Landscape Coefficient (KL)

 K_L formula: $K_L = k_s \times k_d \times k_{mc}$

	kmc = microclimate factor
k _s = <u>0.25</u> (range = 0.1-0.9) (see WUCOLS li	st for values)
k _d = <u>0.85</u> (range = 0.5-1.3) (see Chapter 2)	
$k_{mc} = 0.7$ (range = 0.5-1.4) (see Chapter 2)	
$K_{L} = 0.25 \times 0.85 \times 0.7 = 0.149.$ (ks) (kd) (kmc)	
Step 2. Calculate Landscape Evapotranspiration (E	TL)
ET∟ formula: ET∟ = K∟ x ET₀	K _L = landscape coefficient ET₀ = reference evapotranspiration
$K_L = 0.149$ (calculated in Step 1)	
$ET_0 = 0.19$ inches (listed in Appendix A for m	onth and location)(July - reference month)
$ET_{L} = 0.32 \times 0.19 = 0.88$ inches. (KL) (ET ₀)	
Step 3. Calculate the Total Water to Apply (TWA)	
TWA formula: TWA = <u>ETL</u> IE	. ETL = landscape evapotranspiration . IE = irrigation efficiency
$ET_{L} = 0.88$ (calculated in Step 2)	
IE = <u>0.85</u> (measured, estimated, or set) (s	ee Chapter 5)
TWA = \underline{ET}_{L} = <u>1.03</u> inches (for July - reference) IE	nce month)

Figure B1 – Landscape Irrigation Water Consumption Worksheet

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