DRAFT MITIGATED NEGATIVE DECLARATION

NASSCO Floating Dry Dock Replacement and Waterfront Improvement Project

Prepared for:

PORT of SAN DIEGO
Waterfront of Opportunity

San Diego Unified Port District

April 2022

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TABLE OF CONTENTS

Attachments

Tables

LIST OF ABBREVIATIONS

Applicant	General Dynamics-NASSCO
BMP	best management practices
CDP	Coastal Development Permit
CEMP	California Eelgrass Mitigation Policy
CEQA	California Environmental Quality Act
District	San Diego Unified Port District
MICR	Maximum Individual Cancer Risk
MND	Mitigated Negative Declaration
NASSCO	General Dynamics-NASSCO
NPDES	National Pollutant Discharge Elimination System
PMP	Port Master Plan
project	Floating Dry Dock Replacement and Waterfront Improvement Project
Proponent	General Dynamics-NASSCO
RCRA	Resource Conservation and Recovery Act
ROW	right-of-way
USACE	U.S. Army Corps of Engineers

EXECUTIVE SUMMARY

This Draft Mitigated Negative Declaration (MND) has been prepared for the proposed Floating Dry Dock Replacement and Waterfront Improvement Project (project), located at the General Dynamics-NASSCO (NASSCO) shipyard on and adjacent to San Diego Bay at 2798 East Harbor Drive in San Diego, California. The regional location is shown on Figure 2-1 and the project location is shown on Figure 2-2 in Attachment A (Environmental Initial Study Checklist). The NASSCO shipyard encompasses 126 acres of tideland area that is leased from the San Diego Unified Port District (District). NASSCO is the project applicant.

The project includes replacement of the existing floating dry dock and construction of supporting infrastructure; construction of a new Repair Complex Wharf; repairs to damaged segments of revetment along the quay wall; and repair or replacement of damaged structural piles for various piers, berths, and wharfs throughout the NASSCO leasehold. Project improvements would occur on approximately 94,869 square feet (project site) of water-side facilities within the 126-acre leasehold. The project site is located within the Harbor Drive Industrial Subarea of Planning District 4, Tenth Avenue Marine Terminal, of the District's certified Port Master Plan (PMP). The land and water use designations in the PMP for the project site consist of Marine Related Industrial and Specialized Berthing.

This Draft MND has been prepared pursuant to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), the implementing regulations, the "CEQA Guidelines" (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000, et seq.), and the District's CEQA Guidelines. Specifically, this Draft MND meets the requirements of CEQA Guidelines Sections 15070 and 15071, among others, and District CEQA Guidelines Section V. The attached Environmental Initial Study Checklist (Attachment A) meets the requirements of CEQA Guidelines Section 15063 and District CEQA Guidelines Section IV. Together the Initial Study and MND meet CEQA's content requirements by including a project description; a description of the environmental setting, thresholds of significance, potential environmental impacts, and mitigation measures for any significant effects; discussion of consistency with plans and policies; and names of the document preparers.

The District is the Lead Agency pursuant to the CEQA Guidelines Section 15367 because the District manages the area as a trustee of the state and has the authority to issue a real estate agreement and non-appealable Coastal Development Permit (CDP) subject to the provisions of the California Coastal Act (Chapters 3 and 8).

ES.1 PROJECT DESCRIPTION

The project includes the following elements, which encompass approximately 2.2 acres of water-side facilities within the NASSCO leasehold:

- Removal and replacement of the existing floating dry dock and construction of supporting infrastructure;
- Improvements to the Repair Complex Wharf;
- Repairs to the quay wall revetment along stretches of shoreline throughout the NASSCO leasehold, which includes shoreline segments Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, Berth 2 to Berth 3, Berth 4 to Berth 5, and Berth 6 to Navy Base Quay Wall; and
- As-needed structural repair and/or replacement of selected piles at Berths 2, 3, 4, 5, 6, at Pier 12 and the floating dry dock approach pier, and at the Berth 1 Platform.

Overall, the proposed structures would result in a net increase in overwater coverage area within the project site, including 10,210 square feet of overwater coverage from permanent structures and 300 square feet from temporary structures. The project would also result in an increase in in-water fill at the project site, including an area of 13,231 square feet and 10,810 cubic yards. Up to 957 piles supporting the various wharves and piers would be repaired or replaced. Approximately 100 piles would be repaired or replaced per year over a period of approximately 10 years. The project would not expand the existing use of the project site or increase shipbuilding and repair operations; rather, the

project would improve the safety and efficiency of NASSCO's shipbuilding operations. The project would not result in any additional employees other than the up to 10 construction contract workers needed during construction.

Most project components (i.e., floating dry dock replacement and modification, Repair Complex Wharf improvements, and quay wall revetment repairs [berths 2-5]) would be constructed between 2023 and 2025; however, as-needed quay wall repairs may extend to 2027 and structural pile repair and replacement may extend to 2034. All proposed construction elements would be waterside (in-water and/or over water). NASSCO would be required to maintain all existing operational and maintenance BMPs in compliance with NASSCO's individual National Pollutant Discharge Elimination System (NPDES) Permit (Order R9-2016-0116) and facility BMP Plan Manual. Stormwater runoff from the NASSCO facility, including the new overwater structures, would be captured and contained in the existing stormwater diversion system for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System.

The project is needed to address deficiencies related to the age and condition of existing water-side structures, shoreline sloughing, and operational conditions at the existing dry dock. Absent these activities, the NASSCO shipyard would not be able to safely function in supporting various shipbuilding and repair operations.

ES.2 PROPOSED FINDING

The Environmental Initial Study Checklist prepared for the proposed project (see Attachment A) found that the project would not result in potentially significant adverse impacts on the following resource areas: Aesthetics, Agriculture and Forestry Resources, Air Quality, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

Impacts on the following resource areas were shown to be potentially significant:

- Air Quality: The health risk posed to nearby sensitive receptors from exposure to TAC emissions from project construction would exceed San Diego Air Pollution Control District's (SDAPCD's) Maximum Individual Cancer Risk (MICR) threshold of 10 chances in one million (**Impact-AQ-1**).
- Biological Resources: Construction noise, including pile driving, may disrupt foraging habitat for fish feeding avian species such as California Least Tern and Brown Pelican (**Impact-BIO-1**) and result in disturbance of nesting marine dependent avian species (**Impact-BIO-2**). Pile-driving has the potential to result in harassment and behavioral disruption to special-status wildlife species (**Impact-BIO-3**). In-water construction activities would temporarily increase turbidity levels, which has potential to adversely affect special-status wildlife associated with foraging activities and eelgrass habitat (**Impact-BIO-4**). The project would also result in a permanent increase in overwater coverage, which has potential to reduce foraging habitat (**Impact-BIO-5**) and adversely affect eelgrass habitat (**Impact-BIO-6**).
- Geology and Soils: The as-needed shoreline repairs has potential to cause substantial adverse effects from seismic-related ground failure if not engineered properly and could be constructed on a geologic unit or soils that are unstable or could become unstable (**Impact-GEO-1**).
- Hazards and Hazardous Materials: Construction activities have potential to result in the release of hazardous materials into the environment from the use and release of hazardous materials (**Impact-HAZ-1**), result in a significant hazard to the public or environment from upset or accident conditions involving the release of impaired sediments into the environment (**Impact-HAZ-2**), and the disturbance of a known hazardous materials site listed on a database complied pursuant to Government Code Section 65962.5 during construction activities (**Impact-HAZ-3**).
- Hydrology and Water Quality: Construction activities have potential to disturb the bay floor, causing sediment to temporarily be resuspended, thereby increasing turbidity and potentially lowering levels of dissolved oxygen, increasing salinity, increasing concentrations of suspended solids, and possibly releasing chemicals present in the sediment into the water column (**Impact-WQ-1**). Construction activities also have the potential to result in the

release of hazardous wastes and materials into the San Diego Bay from a known contaminated site, which would also potentially result in a significant water quality-related impact (Impact-WQ-2). Finally, the proposed pile removal and replacement has potential to disturb contaminated bay floor sediments associated with CAO R9-2012-0024, which may result in a potentially significant impact water quality impact (Impact-WQ-3).

Mandatory measures to mitigate these effects, which are listed and described in Section 5, *Mitigation Monitoring and Reporting Program*, would be incorporated into the project to reduce the impacts to below a level of significance.

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1 INTRODUCTION

1.1 PURPOSE OF NEGATIVE DECLARATION

CEQA Section 21064 defines a "Negative Declaration" as a well written statement briefly describing the reasons that a proposed project will not have a significant effect on the environment and does not require the preparation of an environmental impact report.

Section 21064.5 defines a "Mitigated Negative Declaration" as a negative declaration prepared for a project when the initial study has identified potentially significant effects on the environment, but (1) revision in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the lead agency that the project, as revised, may have a significant effect on the environment.

CEQA Section 21068 defines a significant effect on the environment as a substantial or potentially substantial adverse change in the environment. CEQA Section 21082.2(a) requires the lead agency to determine whether a project may have a significant effect on the environment based on substantial evidence in light of the whole record.

The District has prepared an Environmental Initial Study Checklist to address the potential environmental effects associated with the project pursuant to the requirements of CEQA, the CEQA Guidelines, and the District's CEQA Guidelines. Specifically, the Environmental Initial Study Checklist meets the requirements of CEQA Guidelines Section 15063 and the District's CEQA Guidelines Section IV. The Environmental Initial Study Checklist includes a discussion of the proposed project's effects on the existing environment. Issue areas identified as having potential impacts are discussed further and include mitigation measures that would reduce potential impacts to "Less Than Significant With Mitigation Incorporated." Project-specific information is discussed below. See Attachment A for the Environmental Initial Study Checklist.

1.2 PROJECT APPLICANT

The project applicant/proponent is General Dynamics-NASSCO (NASSCO).

1.3 PROJECT BACKGROUND AND NEED

The current floating dry dock, built in 1983, has reached the end of its useful life. The project includes replacement of the existing floating dry dock with a new floating dry dock of similar characteristics and the same functionality. Improvements to supporting infrastructure (i.e., replacing mooring dolphins and utilities and reconfiguring the existing approach pier) would be required to comply with current standards and codes. Specifically, the existing floating dry dock and mooring dolphins do not meet U.S. Navy's MIL-STD-1625D, Department of Defense Standard Practice: Safety Certification Program for Drydocking Facilities and Shipbuilding Ways for U.S. Navy Ships, which is the current standard for all floating dry docks and associated infrastructure. The proposed mooring dolphins are designed to meet the required seismic and wind loading requirements outlined in this standard. The proposed approach pier modification and subsequent mechanical and utility modifications are required to allow for the relocation of the floating dry dock during the launch of new construction vessels within the NASSCO leasehold.

The Repair Complex Wharf is landward of the existing and proposed floating dry dock. Currently, the wharf provides limited laydown and space for offices. However, it is in disrepair and would need to be replaced to fully use this area of the facility. As part of the project, NASSCO is proposing to replace the existing wharf with a new structure that would permit storage and laydown capabilities in this area of the facility.

The project would also include repair of the failed revetment and exposed shoreline present throughout the NASSCO leasehold, including shoreline segments from Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to

Building Dock, Berth 2 to Berth 3, Berth 4 to Berth 5, and Berth 6 to Navy Base Quay Wall. Proposed repairs include placement of stabilizing material (mostly rock riprap) to address existing damage and prevent future damage from wave action and to maintain existing safe operation of the NASSCO shipyard.

Finally, the project includes programmatic repair and/or replacement of damaged piles that support Berths 2, 3, 4, 5, 6, and Pier 12 and the floating dry dock approach pier and the Berth 1 Platform. The proposed repairs are necessary to restore the structural integrity of these piers, extend their service lives, and provide safe mooring berths for new construction and repair vessels.

The project is needed to address deficiencies related to the age and condition of structures, shoreline sloughing, and operational conditions at the existing dry dock. Absent these activities, the NASSCO shipyard would not be able to safely function in supporting various shipbuilding and repair operations.

1.4 PROJECT LOCATION

The project site is within the NASSCO leasehold, located at 2798 East Harbor Drive in San Diego, California. Although the NASSCO leasehold encompasses 126 acres of tideland area, project improvements would occur on approximately 2.2 acres of water-side facilities within the leasehold. The project site is located within the Harbor Drive Industrial Subarea of Planning District 4, Tenth Avenue Marine Terminal, of the District's certified PMP. The regional location is shown on Figure 2-1 and the project location is shown on Figure 2-2 in Attachment A (Environmental Initial Study Checklist).

2 PROJECT DESCRIPTION

The project includes replacement or repair to each of the components described in Section 2.1 of this MND, including the floating dry dock, Repair Complex Wharf, quay wall revetment, and structural piles. All construction activities would be completed on the waterside (in-water and/or overwater) and no landside improvements are proposed. Figure 2-3 of Attachment A for an aerial of the existing conditions and Figure 2-4 of Attachment A for the proposed site plan.

2.1 PROJECT COMPONENTS

2.1.1 Component 1 – Floating Dry Dock Replacement and Modification

The existing floating dry dock facilities consist of a floating dry dock, a pile-supported mooring dolphin, and a pile-supported approach pier with integrated mooring dolphin used for vehicle and pedestrian access to the floating dry dock. The home position for the existing floating dry dock is the primary location in which the floating dry dock is sited. The current configuration requires the floating dry dock to be relocated from the home position to another berth within the leasehold during vessel launches from the inclined building ways or building dock.

The project would include replacement of the existing 142,680-square-foot floating dry dock with a new 141,349-square-foot floating dry dock, resulting in a reduction in overwater coverage of 1,331 square feet. All coating systems within the ballast tanks as well as the exterior hull would be free of copper. The existing floating dry dock would be sold or dispositioned outside the State.

The new floating dry dock would be positioned in the same mooring location (i.e., home position) as the existing floating dry dock (See Figure 2-6 of Attachment A). However, the new floating dry dock would be repositioned to a new "Lot 20" temporary location west of Pier 12 during vessel launches from the ways and building dock (See Figure 2-7 of Attachment A). To access the floating dry dock when the dock is in its temporary position, a new 80-foot catwalk and gangway system would be constructed near Lot 20, with a permanent overwater coverage of 400 square

feet and temporary overwater coverage of 300 square feet. Approximately two new piles would be installed, encompassing an area of 4 square feet and an in-water fill volume of 6 cubic yards.

The existing mooring dolphin would be demolished, and all piles would be extracted from the seabed and disposed of at an approved disposal site outside the coastal zone. To support the siting of the new floating dry dock, the existing mooring dolphin would be replaced with four new concrete pile-supported mooring dolphins and associated fender systems. The proposed east forward and east aft dolphins would support the floating dry dock in the home position, while the proposed west forward and west aft dolphins would support the floating dry dock in the temporary Lot 20 position. The four new mooring dolphins and associated fender systems would have a combined overwater coverage of 6,818 square feet. Approximately 222 new piles would be installed, encompassing an area of 12 square feet and an in-water fill volume of 832 cubic yards.

A 545-square-foot portion of the 561-square-foot dry dock approach pier would be removed and a new fender system would be installed. The five structural piles on the existing approach pier would be repaired or replaced. The existing structural piles that require replacement would be extracted from the seabed and disposed of offsite. In addition, the existing approach pier would be modified with a new fender system, which would have an overwater coverage area of 300 square feet. Approximately 19 new piles would be installed, encompassing an area of 3 square feet and an in-water fill volume of 5 cubic yards.

Overall, the floating dry dock replacement and associated infrastructure modifications would result in a net increase in 4,170 square feet of permanent overwater coverage and 300 square feet of temporary overwater coverage. In addition, these improvements would result in a net increase of 201 piles, resulting in a net decrease in pile area of 73 square feet and a net increase of in-water fill volume of 629 cubic yards.

The concrete piles proposed to support the new mooring dolphins, dry dock approach pier, and catwalk and removable brow would be installed with a crane-supported diesel impact hammer or vibratory hammer. Concrete mooring dolphin platforms would either be cast-in-place or partially pre-cast.

The new floating dry dock and associated infrastructure would enable NASSCO employees to continue their existing shipbuilding and repair operations under safe working conditions. In addition, the new temporary Lot 20 position would improve the efficiency of NASSCO's shipbuilding operations because the floating dry dock would no longer need to be repositioned outside the NASSCO leasehold during vessel launches. The project would not result in an increase in shipbuilding and repair operations and, aside from the temporary additional of construction workers, operational activities would not result in any additional employees.

2.1.2 Component 2 – Repair Complex Wharf Replacement

The existing timber-constructed Repair Complex Wharf is located landward of the existing floating dry dock (See Figure 2-9 of Attachment A). The wharf includes approximately 12,600 square feet of timber deck planks, timber stringers, and timber pile caps. The existing wharf is not useable to support NASSCO repair operations. The existing building situated on the Repair Complex Wharf has been partially demolished and is anticipated to be fully demolished by July 2022 as part of a separate action related to structural concerns and safety.

As part of the project, all existing piles (approximately 100) would be extracted from the bay floor and disposed of at a Class II landfill for disposal. The project also includes installation of a new, larger wharf supported by concrete piles and protected by a wharf fender system. The proposed wharf would be an approximately 6,330-square-foot triangular shaped structure consisting of a concrete deck supported by 34 piles. The wharf deck would either be cast-in-place or partially pre-cast.

The concrete piles would be installed with a crane-supported diesel impact hammer or vibratory hammer. A fender system supported by 20 piles would be installed along the 140-foot-long water side edge of the proposed wharf. A sheet-piled bulkhead (i.e., retaining wall) would be installed to reinforce the shoreline adjacent to the new wharf. The sheet pile wall would be installed using a crane-supported impact or vibratory pile driver. Gravel backfill would be brought to the site using either a barge or trucked in from the uplands. The material would be placed behind

(landward of) the sheet pile wall by offloading directly from a truck or using an excavator positioned from the uplands or on a flat deck barge. See Figure 2-10 of Attachment A for construction sequencing.

Overall, the Repair Complex Wharf improvements would result in a net increase in overwater coverage of 6,040 square feet. Approximately 78 new piles would be installed, plus 293 linear feet of sheet pile, resulting in an in-water fill volume of approximately 293 cubic yards.

The new wharf would be utilized for storage and staging for military and commercial contracts, as well as mooring small work vessels. The project would facilitate streamlining operations by providing more efficient staging and storage areas. Additionally, the project would provide for greater safety by repairing or replacing the damaged and deteriorated piles and wharves. As described above, the project would not result in an increase in shipbuilding and repair operations. Moreover, aside from contract construction workers, it would not result in any additional permanent employees.

2.1.3 Component 3 – Quay Wall Revetment Repairs and Replacement

Within the NASSCO leasehold, the existing quay wall consists of layers of flat slabs or blocks, cement, cemented stone wall, and rock riprap. Areas of failed revetment and exposed shoreline are present throughout the NASSCO leasehold, including shoreline segments from Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, Berth 2 to Berth 3, Berth 4 to Berth 5, and Berth 6 to Navy Base Quay Wall.

The project would include repairs to the failed revetments along the 950 linear feet of exposed shoreline between Berth 2 and Berth 5. The project would also include repairs to an additional 1,500 linear feet of exposed shoreline segments, including Lot 20 to Pier 12, the floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base quay wall. In total, quay wall revetment repairs would occur along approximately 2,450 linear feet within the leasehold. Repairs of the revetment would include building up a new rock toe, overlaid with an approximate 9-inch layer of filter stone and 2-foot layer of quarter-ton rock riprap. Grout bags and concrete may also be placed to fill voids on the failed slope. Fill would be underlain with filter fabric.

Revetment repairs along selected segments of quay wall would be conducted from the landside, waterside, or from a combination of both. Earthmoving equipment would likely include an articulated long-reach bucket arm, skip loader, and/or front-end loader. The work would include minor regrading of the existing revetment surface, possibly including removal of irregularities or debris to provide a consistent surface for installation of geotextile fabric and concrete-filled nylon bags when conducting slope stabilization on the top of the slope. Along the slope and toe of the slope, typical materials for revetment (e.g., geotextile fabric, filter stone, and riprap) would be installed to match the existing adjacent slopes.

The project would address existing damage and prevent future damage from wave action. The revetement repairs would maintain existing safe operation of the NASSCO shipyard.

2.1.4 Component 4 – Structural Pile Repair and Replacement

Several existing structural piles that support Berths 2, 3, 4, 5, 6, and Pier 12, and the floating dry dock approach pier and the Berth 1 Platform show signs of damage. Specifically, the existing steel-jacketed concrete piles, concrete-filled steel pipe piles, and H-piles show signs of deterioration, cracking, corrosion, and wear. Throughout the leasehold, there are approximately 957 piles supporting the various wharves and piers, ranging in size from 14 to 20 inches.

Structure pile repairs and replacement at Berths 2, 3, 4, 5, 6, and Pier 12, and the floating dry dock approach pier and the Berth 1 Platform would address deficiencies in steel pipe piles, steel-jacketed concrete piles, concrete-filled steel, and steel H-piles. Approximately 100 piles would be repaired or replaced per year with a total construction duration lasting approximately 10 years. The distribution may change based on the need at the facility, but the total number driven per day would not exceed 10. If condition of the structural piles is beyond repair, the piles would be replaced in kind with the same dimension and material. The new piles would consist of precast concrete piles, steel pipe piles, and steel H-piles, resulting in an in-water fill area of approximately 3,099 cubic yards.

Structural pile replacement would occur if the condition of the piles is determined to be too damaged or degraded to be reasonably repaired and structural integrity is jeopardized. Pile replacements would be "like for like," with equivalently sized piles used for replacement. To access the pile, the top deck section would be temporarily removed. The existing pile would be extracted from the sea floor and disposed of offsite. The use of jetting may be required to facilitate pile removal. If any given pile is damaged and cannot be extracted in its entirety, the contractor would cut the pile two feet below the existing mudline. The replacement pile would be installed with a diesel impact hammer or vibratory hammer. In addition, use of jetting would be required to facilitate pile installation when there is no other more practical approach for penetrating into relatively deeper and denser sediment bay point material layers.

Proposed steel jacketed concrete pile repairs would be made to piles showing severe corrosion of the steel jackets. For piles experiencing severe corrosion and section loss, including through-thickness holes above the water line, replacement sections of concrete-filled steel pipe would be installed. Proposed steel H-pile repairs would address corrosion above the water line.

The proposed as-needed pile replacements would protect the existing piers and berths, remove wood piles with hazardous chemicals from the Bay, and provide the ability to continue to safely moor vessels.

2.2 PROJECT CONSTRUCTION

Construction of the various project components is anticipated to occur as follows:

- Floating Dry Dock Replacement and Modification: January 2023 to September 2024
- Repair Complex Wharf Improvements: September 2024 to July 2025
- Quay Wall Revetment Repairs (Berths 2-5): January 2024 to February 2024
- As-needed Quay Wall Revetment Repairs (additional 1,500 linear feet): January 2025 to December 2027 (500 linear feet per year)
- Structural Pile Repair and Replacement: January 2024 to January 2034 (100 piles per year as needed)

The anticipated construction schedule is approximate and is provided for analysis purposes. The actual start and end dates for construction of the project components may vary, but the duration is not anticipated to change.

Construction activities would occur 24 hours per day and seven days per week, in a manner consistent with the City of San Diego Noise Ordinance (Section 21.0104 of the San Diego Municipal Code). Construction work during night-time hours (between 7:00 p.m. and 7:00 a.m.) would be limited to project deliveries, formwork, welding, and other activities that would not generate disturbing, excessive, or offensive noise. Pile driving activities would only be conducted during daylight hours.

The following equipment may be required for project construction:

- floating deck barge with spud well system,
- crane for pile installation,
- tugboat to support crane barge,
- vibratory and/or diesel impact pile driver for pile installation,
- floating scows for material shuttling to crane barge,
- push boats to shuttle personnel and small equipment,
- concrete pump and boom,
- portable welding units for overwater welding, and
- diesel powered generators for barge power.

Approximately 10 construction workers would be present on the construction site each day, including one tug operator, two crane operators, one foreman, two oilers, and four laborers. Aside from construction worker commute trips, construction activities are anticipated to generate approximately two contractor vehicle truck trips per day for miscellaneous material and equipment loading. Contractor equipment and materials would primarily be mobilized and demobilized from the project site using barge or water access.

The contractor hired to perform the work would be required to park within the limits of the project site in designated equipment and material staging areas, which would ensure existing parking for NASSCO employees or other public parking would not be displaced. If needed due to limited space at various times throughout the construction activities, the contractor would use high occupancy vehicles to transport the approximately 10 construction workers from the contractor's facility to the project site and back daily.

Specific construction methods for each project component, including the floating dry dock, Repair Complex Wharf, quay wall revetment, and structural piles, are summarized in Section 2.1 of this MND and described in more detail in Attachment A. All proposed construction elements would be over water and NASSCO's own Best Management Practices Manual and its NPDES permit would apply, which include general construction BMPs related to proper disposal of construction debris, hazardous material and waste spill prevention, and construction equipment idling limits. BMPs, such as employing scaffolding or floating rafts to catch debris and using materials suitable for aquatic environments would be implemented. In addition, soft-start techniques would be employed before impact hammer pile driving. A detailed list of BMPs is included in Section 2.5.5 of Attachment A, Environmental Initial Study Checklist.

The existing floating dry dock would be sold or dispositioned outside of the State. Non-hazardous construction debris would be handled through NASSCO's current trash hauler and disposed of at local landfills located outside the coastal zone. Designated materials for recycling would be sent to accepted recycling facilities. Removal of the existing Repair Complex Wharf is anticipated to generate approximately 100 creosote-treated timber piles. In conformance with California Department of Toxic Substances Control standards, the timber piles would be separated from other waste and transported to a Class II landfill for disposal. If hazardous waste is generated, Resource Conservation and Recovery Act (RCRA) and non-RCRA hazardous waste would be removed by NASSCO's current hazardous waste haulers. All hazardous waste would be transported under a waste manifest to an authorized hazardous waste Treatment, Storage, and Disposal Facility.

As summarized in Table 1, the project would result in a net increase in overwater coverage and the in-water fill volumes at the project site.

Table 1 Overwater Coverage and In-water Fill Values

Project Component	Overwater Coverage	Estimated Fill Area	Fill Volume
Existing			
Floating Dry Dock, Mooring Dolphin, and Approach Pier	144,697 sf	92 sf	214 cy
Repair Complex Wharf	12,600 sf	100 sf	20 cy
Quay Wall Revetment	--	53,900 sf	10,700 cy
Structural Piles	--	1,488 sf	1,654 cy
Total Existing	**157,297 sf**	**55,580 sf**	**12,588 cy**
Proposed			
Floating Dry Dock, Catwalk and Removable Brow, Mooring Dolphins and Dolphin Fenders, and Approach Pier Fender	148,867 sf (permanent) 300 sf (temporary)	19 sf	843 cy
Repair Complex Wharf (Sheet Pile Wall and Backfill, Concrete Pad, and Fender System)	18,640 sf	12,003 sf (including backfill and fender piles)	11,496 cy (including backfill and pile fill)
Quay Wall Revetment Repairs and Replacement	--	53,900 sf	7,940 cy

Project Component	Overwater Coverage	Estimated Fill Area	Fill Volume
Structural Pile Repair and Replacement	--	2,789 sf	3,099 cy
Total Proposed	**167,507 sf (permanent) 300 sf (temporary)**	**68,711 sf**	**23,378 cy**
Net Total	**+10,210 sf (permanent) +300 sf (temporary)**	**+13,131 sf**	**+10,790 cy**

[1] The pile fill area and pile fill volume of the existing piles at the Repair Complex Wharf are not known because not all piles are accessible until the wharf deck is removed. Current conditions are unsafe to get an accurate count of the number of piles under the Repair Complex Wharf; however, an estimate of 100 piles has been used based on the size of the area.

2.3 PROJECT OPERATION

Implementation of the project would not expand the existing use of the project site or increase shipbuilding and repair operations. In addition, the project would not result in any additional employees during operation.

The new floating dry dock and associated infrastructure would enable NASSCO employees to continue their existing shipbuilding and repair operations under safe working conditions. In addition, the new Lot 20 temporary position would improve the efficiency of NASSCO's shipbuilding operations and reduce the number of tug boat trips because the floating dry dock would no longer need to be repositioned farther from the home position within the NASSCO leasehold during vessel launches.

NASSCO would be required to maintain all existing operational and maintenance BMPs in compliance with NASSCO's individual NPDES Permit (Order R9-2016-0116) and facility BMP Plan Manual. Stormwater runoff from the NASSCO facility, including the new overwater structures, would be captured and contained in the existing stormwater diversion system for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System.

3 ENVIRONMENTAL SETTING

The 2.2-acre project site is located within the 126-acre NASSCO leasehold at 2798 East Harbor Drive. The regional location is shown on Figure 2-1 and the project location is shown on Figure 2-2.

The NASSCO leasehold is situated in a highly industrialized area on and adjacent to the San Diego Bay, and is bordered to the north by Harbor Drive, a major north-south transportation corridor that connects the San Diego International Airport, waterfront, Convention Center, Gaslamp District, Ballpark District, and Barrio Logan. Railroad right-of-way (ROW) is located immediately north of Harbor Drive. Harborside Station on the San Diego Metropolitan Transit System Blue Line is approximately 200 feet northeast of the NASSCO leasehold and 800 feet northeast of the project site. Highways in proximity to the project site include Interstate 5, Interstate 15, and State Route 75.

The project site is within Planning District 4 (Tenth Avenue Marine Terminal) of the certified PMP. The San Diego Bay borders the project site to the south and west. Heavy industry land uses to the northwest of the project site include a ship repair facility operated by BAE Systems. Military land uses to the east and southeast of the project site include Naval Base San Diego. Land uses north of the project site across Harbor Drive and the railroad ROW include military, light industry, and commercial and office land uses. The nearest residence is approximately 1,250 feet northeast of the project site and is separated from the project site by Harbor Drive, railroad ROW, and a recycling center.

Although the NASSCO leasehold encompasses 126 acres of tideland area, project improvements would be limited to the project site, which is approximately 2.2 acres of water-side facilities within the leasehold. The existing conditions of the project components, including the floating dry dock, Repair Complex Wharf, quay wall revetment, and structural piles, are described above in Section 2.1 of this MND.

4 ENVIRONMENTAL ANALYSIS

4.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The Environmental Initial Study Checklist (Attachment A) evaluated the potential environmental impacts of the project and determined that the project would result in potentially significant impacts related to Air Quality, Biological Resources, Geology and Soils, Hazards and Hazardous Materials, and Hydrology and Water Quality. These impacts would be mitigated to below a level of significance with incorporation of the measures listed in Table 2. A full analysis/discussion of these issue areas is provided in the attached Environmental Initial Study Checklist.

4.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

Based on the Environmental Initial Study Checklist conducted for the proposed project (see Attachment A), the following effects were found to be less than significant: Aesthetics, Agriculture and Forestry Resources, Cultural Resources, Energy, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Transportation, Utilities and Service Systems, and Wildfire. A full analysis/discussion of these issue areas is provided in the attached Environmental Initial Study Checklist. No mitigation is required for these resources.

5 MITIGATION MONITORING AND REPORTING PROGRAM

The Draft Mitigation Monitoring and Reporting Program for the project is included in Table 2, which will be included as a specific condition of the project applicant's CDP for the project.

Table 2 Draft Mitigation Monitoring and Reporting Program for the Floating Dry Dock Replacement and Waterfront Improvement Project Draft Mitigated Negative Declaration

Mitigation Measure	Responsible Party	Mitigation Timing
Air Quality		
Mitigation Measure AQ-1: Construction Fleet Emissions Requirements Prior to issuance of a construction-related permit, the applicant shall submit evidence to the District that the proposed off-road construction fleet will consist of at least 75 percent of off-road diesel construction equipment (greater than 50 horsepower) that meet Tier 4 (final) California Emissions Standards for off-road diesel engines. The equipment shall be properly maintained and tuned in accordance with manufacturer specification. This shall be verified by submitting an equipment inventory to the District for off-road equipment greater than 50 horsepower that includes the engine model year, horsepower rating, projected hours of use, and the CARB equipment identification number for each piece of equipment. The submittal shall include a statement indicating compliance with MM-AQ-1 and signed verification by the Applicant and Contractor. If 75 percent of off-road construction fleet cannot meet the Tier 4 construction equipment requirement of this measure due to lack of availability in the region, the applicant shall demonstrate the details of the attempt to obtain Tier 4 equipment and shall also provide to the District an off-road equipment inventory with air quality emissions estimates calculated by a qualified air quality specialist, prior to commencement of any construction activities, indicating that the construction fleet to be used achieves an average fleetwide emission rate (g/hp/hr for NOx and PM) that does not exceed the applicable health-based threshold of 10 chances in a million for cancer risk at the nearest sensitive receptor. The qualified air quality specialist is defined as having at least 3 years of experience conducting health risk assessments using a CARB-recognized model. The submitted air quality emission calculations shall include a signed statement from the Applicant and Contractor indicating compliance with MM-AQ-1.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to use of any off-road construction equipment greater than 50 horsepower. This may be achieved prior to construction with a complete list being provided or may be achieve prior to the beginning of each phase so long as all off-road equipment greater than 50 horsepower is accounted for on the list.

Mitigation Measure	Responsible Party	Mitigation Timing
Biological Resources		
MM-BIO-1: Implement Construction Measures to Avoid or Reduce Noise-Related Foraging Impacts on California Least Tern and Other Sensitive Fish Foraging Avian Species. If pile driving activities occur between April 1st and September 15th, the project applicant shall retain a qualified biologist approved by the District to monitor during pile driving activities. The project applicant shall take specific actions, as approved by the District, to reduce or temporarily stop noise-producing activities if the qualified biologist identifies that the activities are impacting the foraging behavior of sensitive avian species. These actions shall include, but not be limited to, the following: ▶ For all pile driving activities performed during the California least tern nesting season (April 1st to September 15th), a qualified biologist shall be on site observing for foraging California least terns. If any California least terns are observed, the qualified biologist shall have the authority to halt or modify pile driving activity to ensure foraging behavior is not altered by construction. Work modifications that may limit pile driving noise impacts may include: ▪ Reducing the intensity of pile driving. ▪ Placing sound dampening panels on pile driving equipment. ▪ Restricting pile driving to periods when sensitive avian species are not present. ▪ For all pile driving projects that may impact sensitive nesting avian species refer to MM-BIO-2.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)/ Qualified Biologist	Prior to and during pile driving activities
MM-BIO-2: Implement Construction Noise Measures to Avoid or Reduce Noise Impacts on Sensitive Nesting Marine-Dependent Avian Species. To avoid impacts on nesting marine-dependent birds, during the breeding season (i.e., April 1st- September 15th), the project proponent shall implement the following measures during construction: ▶ The project proponent shall retain a qualified biologist, approved by the District, to perform a marine dependent nesting bird survey within 500 feet of the noise-generating activity 1 week prior to the start of construction utilizing heavy equipment, and, if nests are found, the qualified biologist shall perform a survey once per week during construction until use of noise-generating heavy equipment ceases. ▶ The project proponent shall submit the survey to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of these activities at the project site. ▶ The nesting surveys shall consist of a thorough inspection of the project area by a qualified biologist(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, the qualified biologist(s) shall prepare and submit to the District a letter report documenting the results of the survey. If there is a delay of more than 7 days between when the nesting bird survey is performed and construction activities begin, the qualified biologist shall resurvey to confirm that no new nests have been established. ▶ If the survey confirms nesting within 500 feet of the disturbance footprint, the project proponent shall establish a no-disturbance buffer around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified biologist determines that the nest is no longer active. The size and constraints of the no-disturbance buffer shall be determined by the qualified biologist, at the time of discovery. In addition, if the qualified biologist(s) prepares any subsequent reports, the reports shall be submitted to the District. ▶ The qualified biologist shall establish a baseline ambient sound level by measuring ambient sound levels during the time of day that work is expected to occur. The monitoring distance from the nest shall be chosen to not disturb the species. ▶ If noise-generating activities are within 500 feet and the species behavior is modified due to noise, the qualified biologist shall monitor noise levels daily, during construction activities, at a distance that would prevent the disturbance of the relevant species. Sound levels at nest	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)/ Qualified Biologist	Prior to and during pile driving activities

Mitigation Measure	Responsible Party	Mitigation Timing
sites shall not exceed 10 dBA above ambient levels. This monitoring shall occur until the nest is no longer active. ▶ If sensitive avian species begin nesting within 500 feet of noise-generating construction and the species behavior is modified, the qualified biologist shall establish a baseline ambient sound level by measuring sound levels at a distance without disturbing the species during a representative construction day. The qualified biologist shall monitor those nests daily during construction activities, until after the nesting season or a qualified biologist determines that the nest is no longer active. If the monitoring shows sound levels more than 10 dBA above the baseline ambient levels (representative construction noise included), and the species behavior is modified, the qualified biologist shall have the authority to halt or modify construction activity to ensure the behavior of sensitive nesting avian species is not altered by construction noise. ▶ If the above noted sound thresholds are exceeded, the project proponent shall implement actions recommended by the qualified biologist and approved by the District to reduce sound levels to within thresholds. ▶ If the qualified biologist determines that noise cannot be attenuated, noise-generating activities must cease until such time that adequate noise attenuation is achieved, or nesting is complete.		
MM-BIO-3: Implement Noise Reducing Measures During Pile Installation Activities to Avoid Impacts on Marine Mammals, Green Sea Turtles, and Fish. Prior to and during construction activities involving in-water impact hammer pile installation or vibratory pile installation or removal, the project proponent shall implement marine mammal, green sea turtle and fishes noise reducing measures, which 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, shall monitor an impact radius around the active pile installation areas to ensure that special-status species do not modify behavior. The qualified biologist must meet the minimum requirements as defined by the NOAA's Guidance for Developing a Marine Mammal Monitoring Plan (2017). The impact radius shall be established by determining the largest zone of influence associated with in-water construction activities occurring that workday (Zone of Influence is the area that extends out to Level B harassment area indicated in Table 4.4-1 of the IS/MND). ▶ The project proponent shall not start work if the qualified biologist observes any special-status species prior to starting pile installation until the special-status species has left the area to be affected. ▶ Pile driving activities shall only be conducted during daylight hours when biological monitors can visually observe marine mammals. ▶ Pile driving shall not exceed 10 piles per day and 1,000 strikes per pile or a combination that does not exceed a total of 10,000 strikes in 1 day. ▶ In-water pile driving shall begin with soft starts in accordance with Section 4.5 of the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019), gradually increasing the force of the pile driving. ▶ Installation of an acoustical bubble curtain, isolation casing, or another attenuation method approved by NMFS or CDFW shall be installed if monitoring to the attenuated distance identified in Table 10 (Fishes), Table 11 (Marine Mammals, and Table 12 (Green Sea Turtle) of Appendix C (i.e., *The Port of San Diego NASSCO Floating Drydock and Waterfront Improvement Project Underwater Assessment*, prepared by Illingworth and Rodkin [February 2022]) to the IS/MND. Otherwise, monitoring shall be required to the distances identified under the unattenuated condition of these same tables. ▶ The biological monitor shall note observations of the presence of sensitive marine species, including California least tern, green sea turtles, and marine mammals, within the zone of influence (see Tables 10, 11, and 12 of Appendix C of the IS/MND). Observations shall include	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)/ Qualified Marine Biologist	Prior to the commencement of any in-water project activities

Mitigation Measure	Responsible Party	Mitigation Timing
hauled out harbor seals and California sea lions. The biological monitor shall observe the site for 15 minutes prior to all pile driving activities and during all pile driving activities. If sensitive marine species are observed within the zone of influence, during or 15 minutes before pile driving, the biological monitor shall immediately notify the on-site supervisor or inspector and require that pile driving either not be initiated or temporarily cease until the animals have moved outside of the zone of influence on their own. The biological monitor shall have the authority to stop work at any time due to observed animal behavior or uncertainty regarding potential to harm an animal due to pile driving activities or noise generated from the activity. ▶ "Shutdown zones" have been established for sensitive marine species. If a sensitive marine species enters the shutdown zone during active pile driving, the biological monitor shall stop pile driving. These shutdown zones are provided in Table 4.4-1 of the IS/MND. ▶ If weather or sea conditions restrict the biological monitor's ability to observe marine mammals or sea turtles within the zone of influence, then pile driving activities shall cease until conditions improve. ▶ The biological monitor shall maintain records of the species, date, and time of any marine mammal or sea turtle sightings, as well as species behavior, and communications with the contractor during pile driving.		
MM-BIO-4: Implement Construction Measures to Eliminate Water Quality Impairment Impacts on California Least Tern, Other Sensitive Fish Foraging Avian Species, and Eelgrass. During all in-water construction activities that would disturb sediment, the project applicant shall implement the following construction measures in accordance with applicable Federal, State, and local regulations, including but not limited to CWA Sections 401 and 404, Rivers and Harbors Act Section 10, and applicable NPDES permit conditions, and Stormwater Management and Discharge Control Ordinance: ▶ The project applicant shall implement contractor education for vessel operations. Vessel operators shall be trained that any contact with the bottom from the vessel, barges, anchors, or spuds can suspend sediment that results in water quality and turbidity impacts that limit the ability of fish foraging avian species to locate prey and disrupt eelgrass productivity. Additionally, vessel operators shall be instructed to minimize activities that direct propeller wash toward shallow areas with substrates that can be suspended and result in increased turbidity. ▶ The project applicant shall deploy a turbidity curtain around the pile driving or other sediment-disturbing activity areas to restrict the visible surface turbidity plume to the area of construction. The turbidity curtain shall consist of a hanging ballast-weighted curtain with a surface float line and shall extend from the surface into the water column without disturbing the bottom based on the lowest tidal elevation and swing of the curtain within the water column. The turbidity curtain shall meet the specifications for design, installation, use, performance, and/or modification outlined in the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019). The goal of this measure is to minimize the area in which visibility of prey by California least terns and other sensitive fish foraging avian species (e.g., California brown pelican) is obstructed. ▶ If impacts on eelgrass due to water quality cannot be mitigated through contractor education and deployment of silt curtains, the project applicant shall implement mitigation measures for losses to eelgrass in accordance the California Eelgrass Mitigation Policy and with MM-BIO-6. ▶ The project applicant shall implement MM-WQ-1, Monitoring Turbidity and Constituents of Concern During Construction-Related Sediment Disturbance and MM-WQ-2, Implement Best Management Practices During Construction-Related Sediment Disturbance	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)/ Qualified Biologist	Prior to the commencement and throughout the duration of any in-water project activities

Mitigation Measure	Responsible Party	Mitigation Timing
MM-BIO-5: Implement Overwater Coverage Mitigation in Coordination with the Appropriate Resource Agencies and the District to Compensate for Loss of Open Water Habitat. Prior to construction activities that may result in overwater coverage, the project applicant shall comply with the following: 1. The project applicant shall consult with the appropriate resource agencies, including but not limited to, NMFS, USFWS, RWQCB, and/or USACE, regarding mitigation of impacts associated with loss of beneficial uses from overwater coverage, loss of open water habitat function, and shading. The project applicant shall secure all applicable permits for the mitigation of overwater coverage prior to commencement of waterside construction. One or more of the appropriate resource agencies may require additional or greater mitigation than specified in this mitigation measure. 2. The project applicant shall implement one of the following mitigation options, or a combination thereof. These options provide the minimum mitigation for overwater coverage impacts and/or shading impacts. One or more of the appropriate resource agencies may require additional or greater mitigation than specified in this mitigation measure. A. Remove an amount of existing overwater coverage within San Diego Bay that is equivalent to the proposed project's net increase in overwater coverage. This would replace the area affected by the project at a 1:1 mitigation ratio, subject to the District's review and approval. B. Restore or create an amount of eelgrass habitat within San Diego Bay equivalent to the proposed project's net increase in overwater coverage at a suitable location within San Diego Bay, at a 1:1 ratio for eelgrass consistent with the CEMP, which would offset the net increase in overwater coverage by improving the habitat structure and primary productivity at the restoration site. (Note, the 1:1 ratio is suitable mitigation for open water impacts. The 1.2:1 ratio is appropriate for impacts on eel grass as identified in MM-BIO-6. These should not be confused.) The restoration or creation of eelgrass habitat shall require the project applicant to prepare a mitigation plan for the District's review and approval. The mitigation plan at a minimum shall include a description of the restoration site, mitigation requirements, planting plan (e.g., transplant sites, donor sites, reference site), restoration methods (e.g., plant collection or purchase, transplant units), timing of the restoration work, and a monitoring program to include a mitigation success criteria. The mitigation project shall secure all applicable permits and all applicable District Real Estate agreements for the mitigation site prior to commencement of construction. Additionally, all fill materials proposed for discharge into San Diego Bay for the development of the mitigation site shall meet the requirements of the USACE's Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (Inland Testing Manual). C. If a suitable mitigation bank within the Coastal Zone that is not yet available becomes available in the future, prior to construction of the proposed project, the project applicant shall purchase overwater coverage credits to offset the net increase in overwater coverage. D. Subject to the Board of Port Commissioners' approval and findings, the project applicant may purchase an amount of credits from the District's shading credit program established pursuant to BPC Policy 735 equivalent to that of the project's final shading total (i.e., to the satisfaction of the appropriate resource agencies). F. As specified in MM-BIO-6, for overwater coverage, a qualified biologist shall conduct eelgrass surveys per the CEMP to determine potential impacts on eelgrass from construction. If pre- versus post-construction eelgrass surveys determine that overwater structures will shade and impact eelgrass, then mitigation for the loss of eelgrass will be conducted pursuant to the CEMP at a 1.2:1 mitigation ratio based on the amount of impacted eelgrass.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)/ Qualified Marine Biologist	Prior to construction activities that may result in overwater coverage,

Mitigation Measure	Responsible Party	Mitigation Timing
MM-BIO-6: Implement Eelgrass Mitigation and Monitoring in Compliance with the California Eelgrass Mitigation Policy. The project applicant shall comply with all requirements of the California Eelgrass Mitigation Policy (CEMP) (NMFS 2014). If impacts on eelgrass occur based on a comparison of pre- and post-construction eelgrass surveys as specified in this mitigation measure, NASSCO shall retain a qualified marine biologist to develop an eelgrass mitigation and monitoring plan in compliance with the CEMP (NMFS 2014). The mitigation and monitoring plan shall be submitted to the District and NMFS for approval and shall be implemented to compensate for any loss of eelgrass. Specific requirements of this mitigation include the following: ▶ Prior to the commencement of any in-water construction activities, a qualified marine biologist retained by NASSCO and approved by the District shall conduct a preconstruction eelgrass survey. Surveys for eelgrass will be conducted during 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 next growing season. The project applicant shall provide the preconstruction eelgrass survey to the District and the NMFS as well as regulatory points of contact for agencies that will be required to provide project permits such as the CCC, USACE, and San Diego RWQCB. ▶ Within 30 days of completion of in-water construction activities, a qualified marine biologist retained by NASSCO and approved by the District shall conduct a post construction eelgrass survey during the active eelgrass growing season (March 1st – October 31st). If construction ends during the non-growing season (November 1 to February 28), the monitoring shall be delayed until the resumption of the growing season. The postconstruction survey shall evaluate potential eelgrass impacts associated with construction. Upon completion of the postconstruction survey, the qualified marine biologist shall submit the survey report to the District and resource agencies within 30 days. ▶ If impacts on eelgrass are detected, NASSCO shall implement the following: ▪ A qualified marine biologist retained by NASSCO and approved by the District shall develop an eelgrass mitigation plan for in-kind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and NMFS within 60 days following the postconstruction survey. ▪ Mitigation for eelgrass impacts shall be at a ratio of no less than 1.2:1, as required by the CEMP. ▪ 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 CEMP. ▪ The qualified biologist shall submit the monitoring reports and spatial data to the District and NMFS within 30 days after the completion of each monitoring period. The monitoring reports shall include all specific requirements identified in the CEMP. ▶ At least two years of annual post-construction eelgrass surveys shall be conducted during the active eelgrass growing season. The additional annual surveys shall evaluate the potential for structural shading on eelgrass. ▶ If impacts on eelgrass are detected during the 2-year post-construction period, the project proponent shall provide additional mitigation for eelgrass impacts by transplanting eelgrass at a suitable restoration site at a ratio of 1.2:1. Conservative mitigation planning can avoid this additional mitigation through planning for long-term impacts and providing eelgrass transplantation prior to monitoring and evaluation of all impacts.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)/ Qualified Marine Biologist	Prior to the commencement of pile driving or other in-water project activities; within 30 days post construction; at least two years of annual post construction eelgrass surveys from the date construction is complete; annual performance monitoring of eel grass mitigation for five years after implementation of the mitigation

Mitigation Measure	Responsible Party	Mitigation Timing
Geology and Soils		
MM-GEO-1: Supplemental Geotechnical Investigation. The project applicant shall complete a supplemental Geotechnical Investigation prior to the completion of any as-needed shoreline repairs from Lot 20 to Pier 12, the floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base quay wall. The applicant shall incorporate any recommendations from the Geotechnical Investigation into the project design to ensure that all structures are engineered to specifications based on site-specific geotechnical conditions. Should the Engineer of Record (licensed Professional Engineer) determine there is sufficient available information to properly design the as-needed shoreline repairs, such determination will be clearly documented and provided to the District for review and approval. Should the District concur with the determination not to prepare a Supplemental Geotechnical Investigation, this measure will not be required.	Project Applicant/Licensed Professional Geotechnical Engineer or Engineering Geologist	Prior to commencing as-needed shoreline repairs
Hazards and Hazardous Materials		
MM-HAZ-1: Secondary Containment Structures. The project applicant shall require its contractor to ensure that oils and fuels are contained in secondary containment structures during any demolition or construction activities so that spills and leaks are contained and prevented from entering the San Diego Bay. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	During any demolition and construction work
MM-HAZ-2: Hazards-related Worker Training. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to provide training to construction workers on specific task areas, including potential hazards resulting from accidental oil and/or fuel spills, and proper equipment operation. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of any demolition or construction activities
MM-HAZ-3: Equipment Inspection. Prior to commencing any demolition or construction activities, the contactor and equipment operators shall conduct equipment inspections prior to use to identify and address wear, faulty parts, and leaks. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of any demolition or construction activities
MM-HAZ-4: Proper Equipment Instrumentation. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to identify required instrumentation for each piece of equipment to avoid spillage of material from the barge. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of any demolition or construction activities
MM-HAZ-5: Hazardous Materials Monitoring. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to assign construction personnel to visually monitor for oil and fuel spills during construction. If oil spilled oil or fuel is detected, all equipment shall be shut down and the source of the spill shall be identified, contained, and reported. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of any demolition or construction activities and during construction
MM-HAZ-6: Oil/Spills Kits. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to inform construction workers as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The barge shall have a full complement of oil/fuel kits on-board to allow for quick and timely implementation of spill containment. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of any demolition or construction activities

Mitigation Measure	Responsible Party	Mitigation Timing
MM-HAZ-7: Barge Loading Procedures. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to identify barge load limits and loading procedures and shall mark the appropriate draft level on the materials barge hull. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of any demolition or construction activities
MM-HAZ-8: Removed Pile Placement. When placing pulled and removed piles and debris in the barge, the project applicant shall require its contractor to employ a flattop barge with containment walls and "skip tubs" to prevent any sediment, wood, or metal debris from falling into the water. The contractor shall locate the barge as close to shore as possible when transferring materials and/or debris on and off of the work barge. If necessary, traps shall be utilized to prevent debris from falling into the water. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	During any demolition and construction work
MM-HAZ-9: Removed Material Clean-up. The project applicant shall require its contractor to clean up marine growth from removed material before disposal. The project applicant shall also require its contractor to clean up debris generated from construction activities. The contractor shall restore any piers utilized for materials staging to pre-construction conditions. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	During any demolition and construction work
MM-HAZ-10: Implement a (Waterside) Sediment Management Program. The project applicant 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 oversee the implementation of a Sediment Management Program. The Sediment Management Program will be implemented prior to and throughout the duration of waterside construction activities for the proposed project. The Sediment Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below: A. *Sampling Analysis Plan* (SAP): Prior to in-water demolition or construction that may potentially disturb sediment, a licensed Professional Engineer shall (1) delineate the area of potential disturbance (Disturbance Area); (2) develop an SAP; and (3) perform sediment sampling. The SAP shall set forth the methodology to be used, the locations where sampling would occur, analysis of the contaminants of concern (COC), and proper decontamination and disposal procedures. The sediment samples shall be tested for the presence of the COCs identified in the CAO R9-2012-0024. The sampling area and sampling methodology shall identify sample locations determined to be appropriate, at the discretion of the District and [Regional Water Quality Control Board] RWQCB (or other applicable agencies), to adequately characterize any Disturbance Area associated with project elements. All sediment sampling and analysis must occur prior to sediment-disturbing construction activity and shall be performed in accordance with the requirements of the SAP. The SAP must be submitted to the RWQCB for review and approval, and to the District for concurrence. The results of all sediment sampling shall be documented in a report and submitted to the RWQCB for their review and approval prior to any marine-side sediment-disturbing activities. B. *Marine Sediment Contamination Characterization Report (Sediment Characterization Report)*: Prior to in-water construction, the licensed Professional Engineer shall prepare a Sediment Characterization Report delineating the vertical and lateral extent and concentration of the project site's potential COCs in areas where pile driving or removal and other sediment-disturbing activities are proposed as part of this project. The Sediment Characterization Report shall be developed taking into account the site assessment reports, final cleanup	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to and throughout the duration of waterside construction activities with potential to disturb sediment

Mitigation Measure	Responsible Party	Mitigation Timing
reports, and post-remediation monitoring reports associated with the San Diego Shipyard Sediment Cleanup – South Shipyard, and sediment sampling performed per the SAP. The project applicant shall submit the Sediment Characterization Report to the RWQCB (and any other appropriate regulatory agencies) for approval as representative of sediment conditions in Disturbance Areas. C. *Contaminated Sediment Management Plan (Sediment Management Plan):* If contaminated sediment is identified in the Sediment Characterization Report in any of the proposed project Disturbance Area, the project applicant shall prepare a Sediment Management Plan for the District's and RWQCB's approval. Once approved, the Sediment Management Plan shall be implemented by the project applicant and be subject to oversight by the appropriate overseeing regulatory agencies, including the District. The Sediment Management Plan shall describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the gravelly-sand or sand-covered contaminated sediment, or disturbing contaminated sediment, as identified in the Sediment Characterization Report, and the monitoring that will occur postconstruction. D. *In-Water Activity Specific Procedures (Pile Installation or Removal):* Pile installation or removal shall be conducted in a manner that implements applicable permit requirements, including the [Clean Water Act] CWA Section 404 permit and CWA Section 401 Water Quality Certification. Impact hammer pile driving, internal jetting, or spudding may be required based on the type of pile installation, or removal, that occurs. Internal jetting shall not be allowed unless the project applicant can demonstrate, to the District's satisfaction, there are no feasible alternatives to the use of internal jetting. Spudding shall not be allowed unless the project applicant can demonstrate, to the District's satisfaction, there are no feasible alternatives to the use of spudding. If no alternatives to spudding are feasible, when spuds are lifted during in-water construction, they shall be lifted slowly—at least a quarter of the speed that spuds are lifted during normal operation. Before the spud reaches the subsurface of the Bay floor during removal, the operator shall conduct spud extraction in 2-minute intervals (repeated 2-minute extraction followed by 2-minute pause) to reduce the disturbance of Bay sediment. E. *Post-Construction Sampling and Analysis:* At the conclusion of construction activities within a Disturbance Area, the project applicant shall conduct post-construction sediment sampling that adequately characterizes potential contamination resulting from construction activities (and dredging activities if the in-water construction occurred within a dredging area) to determine if in-water construction or disturbance activities resulted in COCs in excess of the levels above the levels set forth in CAO R9-2012-0024. The project applicant shall prepare, for submittal to and approval by the District and RWQCB, a Post-Construction Sampling Plan that shall outline the methodology to be used, the locations where sampling would occur, and the COCs to be analyzed consistent with CAO R9-2012-0024.		
MM-HAZ-11: Implement Post-Waterside Construction Remediation. If, after the completion of any in-water construction work, consistent with the requirements of mitigation measure MM-HAZ-10, site sampling shows that concentrations of COCs exceed those set forth in CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), the project applicant shall propose remediation consistent with CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), subject to approval by the RWQCB, and any other agencies with jurisdiction over the site contamination, and concurrence by the District. The project applicant's remediation approaches may include, but are not limited to, dredging, placement of sand cover, or Enhanced Monitored Natural Recovery sand containing active carbon. 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 applicant shall monitor the remediation for its effectiveness, consistent with the standards set forth by CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), for a period consistent with guidance from the regulatory agency with jurisdiction. A monitoring report shall be submitted to the District and	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	After the completion of in-water construction work that disturbed sediment

Mitigation Measure	Responsible Party	Mitigation Timing
the RWQCB for their review on a monthly basis, or at a frequency determined appropriate by the relevant agency overseeing the remediation activities. If, after the completion of any in-water construction work within a Disturbance Area, consistent with the requirements of mitigation measure MM-HAZ-10, concentrations of COCs in the area of potential contamination do not exceed those levels set forth in CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), no further mitigation is required.		
Hydrology and Water Quality		
MM-WQ-1: Monitor Turbidity and Constituents of Concern During Construction-Related Sediment Disturbance. Prior construction activities in water that would disturb the bay floor, the project proponent shall retain a water quality monitor, approved by the District, who shall prepare a water quality monitoring plan and shall conduct water quality monitoring to demonstrate to the satisfaction of the District and the RWQCB that construction activities do not violate the Basin Plan or applicable water quality objectives. Approval of the plan by the District and appropriate regulatory agencies is required before field activities can be initiated. The plan shall incorporate: (1) all permit-specific regulatory monitoring and reporting requirements and (2) a detailed description of the proposed water quality monitoring program. The plan will clearly identify the project boundaries, and chemical constituents of concern and water quality thresholds; and provide a detailed description of the water quality monitoring to be conducted prior to, during, and after construction activities to ensure compliance with this mitigation measure. The monitoring plan will be robust enough to ensure that any exceedances of water quality objectives are identified. Depending upon the scope of the project and the potential for the release of project-derived contaminants, the water quality monitoring shall include visual inspections of turbidity and debris as well as water-column monitoring using appropriate and calibrated water quality monitoring field equipment to measure, at a minimum: turbidity, dissolved oxygen, pH, temperature, and salinity. If water column monitoring indicates exceedances of water quality thresholds (e.g., turbidity or dissolved oxygen), then water column samples shall be collected and analyzed for project-specific chemicals of concern. The project proponent shall use a State of California Environmental Laboratory Accreditation Program (ELAP)–certified laboratory for all analytical testing except in those instances where measurements such as water temperature and pH can be determined immediately in the field and not jeopardize the samples by exceeding transportation time to the lab for analysis. The designated water quality monitor shall stop work to ensure that turbidity does not extend outside of the immediate construction area. If turbidity is 20 percent higher outside the work area versus inside the work area, the water quality monitor may direct the temporary halt of construction activities. Depending upon the requirements in the permit, the project proponent may be required to alert the regulatory agencies if a water quality violation is observed. In addition, the project proponent shall coordinate water quality monitoring efforts and shall provide copies of all monthly water quality monitoring data to the RWQCB and District throughout the duration of project construction, as outlined in the reporting schedule of the agency-approved monitoring plan or project-specific permits.	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	Prior to the commencement of pile removal or pile driving
MM-WQ-2: Implement Best Management Practices During Construction-Related Sediment Disturbance. During construction activities, BMPs shall be implemented by the project proponent and shall include the following: The project proponent shall not stockpile material on the bottom of the San Diego Bay floor and shall not sweep or level the bottom surface with the bucket. ▶ The project proponent shall use and maintain silt curtains for sediment disturbing construction activities that encircle the area of construction activities and shall minimize the times in which these curtains are temporarily opened (allowing only necessary openings for operation of the curtain), to contain suspended sediments. The floating silt curtain shall consist of connected lengths of fabric. A continuous length of floating silt curtain shall be arranged to fully surround the construction equipment. The silt curtain	Project Applicant (NASSCO)/ Contractor (NASSCO Construction Contractor)	During sediment disturbance

Mitigation Measure	Responsible Party	Mitigation Timing
shall be supported by a floating boom in open water areas (such as along the bayward side of the dredging areas). Along pier edges, the project proponent shall have the option of connecting the silt curtain directly to the structure. The project proponent shall continuously monitor the silt curtain for damage, dislocation, or gaps and immediately fix any locations where it is no longer continuous or where it has loosened from its supports. The bottom of the silt curtain shall be weighted with ballast weights or rods affixed to the base of the fabric that do not touch the Bay floor at the lowest tide even with curtain float/swing. Where the District determines it is feasible and applicable, the floating silt curtains shall be anchored and deployed from the surface of the water to just above the substrate allowing for tidal action. If deemed necessary by the District once project construction details and plans are available, silt curtains with tidal flaps shall be installed to facilitate curtain deployment in areas of higher flow. Based on a determination by the District and the Federal and/or State permitting agencies (as applicable), air curtains may be used in conjunction with silt curtains to contain resuspended sediment and allow barges containing dredge material or empty barges to transit into and out of the work area, without the need to open and close silt curtains. ▶ Based on a determination of the District and applicable Federal and/or State permitting agency (as applicable), air curtains in conjunction with silt curtains may be used to contain resuspended sediment, and allow barges containing dredge material or empty barges to transit into and out of the work area without the need to open and close silt curtain gates. ▶ In-Water Activity–Specific Procedures (Pile Installation or Removal). The project proponent shall conduct pile installation or removal in a manner that implements applicable permit requirements, including the CWA Section 404 permit and CWA Section 401 Water Quality Certification. The following additional measures shall be required based on the type of pile installation, or removal, that occurs. ▪ Impact Hammer Pile Driving or Jetting Turbidity curtains shall be installed by the proponent consistent with the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019). ▪ Spudding Spuds lifted during in-water construction shall be lifted slowly—at least a quarter of the speed that spuds are lifted during normal operation. Before the spud reaches the subsurface of the Bay floor during removal, the operator shall conduct spud extraction in 2-minute intervals (repeated 2-minute extraction followed by 2-minute pause) to reduce the disturbance of Bay sediment.		

6 FINDINGS

The project would not result in potentially significant adverse impacts related to Aesthetics, Agriculture and Forestry Resources, Cultural Resources, Energy, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. With the incorporation of mitigation measures and the adoption of the mitigation monitoring and reporting program, the project would have no significant impact on the environment with respect to Air Quality, Biological Resources, Geology and Soils, Hazards and Hazardous Materials, and Hydrology and Water Quality.

7 DOCUMENTATION

The attached Environmental Initial Study Checklist (see Attachment A) and additional appendices provide documentation in support of the above findings.

8 REFERENCES

References for the Mitigated Negative Declaration and the Environmental Initial Study Checklist are included in Section 5, References, of the Environmental Initial Study Checklist (Attachment A).

9 CERTIFICATION

The Draft Mitigated Negative Declaration and supporting documents are on file with and may be reviewed during regular business hours in the Office of the District Clerk of the San Diego Unified Port District, 3165 Pacific Highway, San Diego, California 92101. The District administration offices are open Monday through Thursday and every other Friday from 8:00 a.m. to 5:00 p.m.

Prepared by:	April 27, 2022	M Hamilton
	Date	Megan Hamilton, Senior Planner
Draft Report:	April 27, 2022	Wileen C Manaois
	Date	Wileen Manaois, Director, Development Services
Final Report:	TBD	TBD
	Date	Wileen Manaois, Director, Development Services

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Attachment A

Environmental Initial Study Checklist

DRAFT ENVIRONMENTAL INITIAL STUDY CHECKLIST

NASSCO Floating Dry Dock Replacement and Waterfront Improvement Project

Prepared for:

PORT of SAN DIEGO
Waterfront of Opportunity

San Diego Unified Port District

April 2022

DRAFT ENVIRONMENTAL INITIAL STUDY CHECKLIST

NASSCO Floating Dry Dock Replacement and Waterfront Improvement Project

Prepared for:

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

Contact:

Megan Hamilton
619.686.8113

Prepared by:

Ascent Environmental
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Charlie Richmond
619.838.5225

April 2022

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TABLE OF CONTENTS

Appendices

Figures

Tables

LIST OF ABBREVIATIONS

°C	degrees Celsius
2017 Scoping Plan	2017 Climate Change Scoping Plan
AB	Assembly Bill
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee modeling system
AFY	acre-feet per year
ALUCP	Airport Land Use Compatibility Plan
AQIA	Air Quality Impact Analysis
CAA	federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFÉ	corporate average fuel economy
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEMA	California Emergency Management Agency
Caltrans	California Department of Transportation
CAO	Cleanup and Abatement Order
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCA	California Coastal Act
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDO	Cease and Desist Actions
CEC	California Energy Commission
CEMP	California Eelgrass Mitigation Policy
CERP	Community Emission Reduction Plan
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geologic Survey
CH_4	methane
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COC	contaminants of concern
CRHR	California Register of Historical Resources
CWA	Clean Water Act
cy	cubic yards

dB	decibels
diesel PM	particulate matter contained in diesel exhaust
District	San Diego Unified Port District
DOC	California Department of Conservation
DTSC	California Department of Toxic Substances Control
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EO	Executive Order
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
ESHA	Environmentally Sensitive [Habitat] Area
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
FR	Federal Register
GHG	greenhouse gas
GWP	global warming potential
HARP2	Hotspots Analysis and Reporting Program Version 2
HHI	health hazard index
HPD	Port of San Diego Harbor Police Department
HRA	health risk assessment
HU	hydrologic unit
I-15	Interstate 15
I-5	Interstate 5
in/sec	inches per second
L_{eq}	Equivalent Continuous Sound Level
L_{max}	Maximum Sound Level
LOS	level of service
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MCAS	Maritime Clean Air Strategy
mgd	million gallons per day
MHPA	Multi-Habitat Planning Area
MICR	maximum individual cancer risk
MLLW	mean lower low water
MMPA	Marine Mammal Protection Act
$MMTCO_2e$	million metric tons of CO_2e
MRZ	Mineral Resource Zone

MSCP	Multiple Species Conservation Program
MT	metric ton
$MTCO_2e$	metric tons of CO_2e
MTS	San Diego Metropolitan Transit System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NASSCO	General Dynamics-NASSCO
NCCP	natural community conservation plan
NED	National Elevation Dataset
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEHHA	California Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
PAH	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyl
PCT	polychlorinated terphenyls
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns in diameter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in diameter
PMP	Port Master Plan
PPV	peak particle velocity
project	Floating Dry Dock Replacement and Waterfront Improvement Project
RAQS	San Diego Regional Air Quality Strategy
RCRA	Resource Conservation and Recovery Act
RES	Regional Energy Strategy
RMS	root-mean-square
ROW	right-of-way
RPS	Renewables Portfolio Standard
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SDAB	San Diego Air Basin

SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas and Electric Company
SDPD	City of San Diego Police Department
SDUSD	San Diego Unified School District
SIP	California State Implementation Plan
SLC	California State Lands Commission
SLR	Sea Level Rise
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SPL	sound pressure level
SR 75	State Route 75
SWDS	Storm Water Diversion System
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
T-BACT	Toxics Best Available Control Technology
Technical Advisory	*Technical Advisory on Evaluating Transportation Impacts in CEQA*
TIS	*NASSCO Floating Dry Dock and Waterfront Improvement Project Transportation Impact Study*
TMDL	total maximum daily load
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
USC	University of Southern California
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds

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1 INTRODUCTION

The following Environmental Initial Study Checklist addresses the environmental impacts associated with the General Dynamics-NASSCO (NASSCO) Floating Dry Dock Replacement and Waterfront Improvement Project (project). This Environmental Initial Study Checklist has been prepared in accordance with the California Environmental Quality Act (CEQA), as amended, the State CEQA Guidelines, and the San Diego Unified Port District's CEQA Guidelines.

1.1 INITIAL STUDY INFORMATION SHEET

1. **Project Title:** NASSCO Floating Dry Dock Replacement and Waterfront Improvement Project

2. **Lead Agency Name and Address:** San Diego Unified Port District (District)
   3165 Pacific Highway
   San Diego, CA 92101

3. **Contact Person and Phone Number:** Megan Hamilton, (619) 686-8113

4. **Project Location:** 2798 East Harbor Drive, San Diego, California

5. **Project Sponsor's Name and Address:** General Dynamics-NASSCO
   2798 East Harbor Drive, San Diego, California

6. **Port Master Plan Designation:** Marine Related Industrial (Land) and Specialized Berthing (Water)

7. **Description of Project:**

   NASSCO is proposing the Floating Dry Dock Replacement and Waterfront Improvement Project (project) located at the NASSCO shipyard on and adjacent to San Diego Bay at 2798 East Harbor Drive in San Diego, California (project site). The project includes the following elements:

   - Removal and replacement of the existing floating dry dock and construction of supporting infrastructure;
   - Improvements to the Repair Complex Wharf;
   - Repairs to the quay wall and revetment along stretches of shoreline throughout the NASSCO leasehold, which includes shoreline segments Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, Berth 2 to Berth 3, Berth 4 to Berth 5, and Berth 6 to Navy Base Quay Wall; and
   - As-needed structural repair and/or replacement of selected piles at Berths 2, 3, 4, 5, 6, at Pier 12 and the floating dry dock approach pier, and at the Berth 1 Platform.

   These project elements are described in more detail in Section 2.

   Implementation of the project would not expand the existing use of the project site or expand existing shipyard operations, including any increase in capacity to service or build more ships.

9. **Surrounding Land Uses and Setting:** Located approximately 1.3 miles southeast of Downtown San Diego, the project site is situated in a highly industrialized area on and adjacent to the San Diego Bay. The NASSCO shipyard is bordered to the north by Harbor Drive, a major north-south transportation corridor that connects the San Diego International Airport, waterfront, Convention Center, Gaslamp District, Ballpark District, and Barrio Logan. Railroad right-of-way (ROW) is located immediately north of Harbor Drive. Harborside Station on the San Diego Metropolitan Transit System (MTS) Blue Line is approximately 200 feet northeast of the NASSCO shipyard and 800 feet northeast of the project site. Highways in proximity to the project site include Interstate 5 (I-5), Interstate 15 (I-15), and State Route 75 (SR 75).

   The San Diego Bay borders the project site to the south and west. Heavy industry land uses to the northwest of the project site include a ship repair facility operated by BAE Systems. Military land uses to the east and southeast of the project site include Naval Base San Diego. Land uses north of the project site across Harbor Drive and the railroad ROW include military, light industry, and commercial and office land uses. The nearest residence is approximately 1,180 feet northeast of the project site and is separated from the project site by Harbor Drive, railroad ROW, and a recycling center.

10. **Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)**

    The District is the primary approval authority for the project. District discretionary approvals would include the following:

    - Approval of the project
    - Adoption of the Mitigated Negative Declaration
    - Adoption of the Mitigation Monitoring and Reporting Program

    Additional subsequent approvals and other permits that may be required from local, regional, state, and federal agencies include, but are not limited to the following:

    - U.S. Army Corps of Engineers (USACE) – Individual or Nationwide Permit, potentially Nationwide #3 for the repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by Title 33 of the Code of Federal Regulations (CFR), Section 330.3 (33 CFR 330.3), provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification, per the Clean Water Act (CWA) Section 404 Permit (33 U.S. Code Section 1341) and Rivers and Harbors Act Section 10 Permit
    - California Coastal Commission (CCC)– Approval of project elements outside the Port Master Plan limits (i.e., installation of west offshore mooring dolphin)
    - San Diego Regional Water Quality Control Board (RWQCB) – Stormwater Construction General Permit (including the development and implementation of a Storm Water Pollution Prevention Plan) and CWA Section 401 Water Quality Certification
    - San Diego County Air Pollution Control District – Permits for Diesel Generators
    - City of San Diego – Issuance of ministerial permits (e.g., grading)

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

    No California Native American tribes have requested consultation pursuant to Public Resources Code section 21080.3.1.

2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

General Dynamics-NASSCO (NASSCO) is proposing the Floating Dry Dock Replacement and Waterfront Improvement Project (project) located at the NASSCO shipyard on and adjacent to San Diego Bay at 2798 East Harbor Drive in San Diego, California. The NASSCO shipyard leasehold encompasses 5,507,621 square feet (126 acres) of tideland area that is leased from the San Diego Unified Port District (District). Project improvements would occur within the existing NASSCO leasehold on approximately 94,869 square feet (2.2 acres) (project site), including 26,158 square feet of overwater coverage (permanent and temporary) and 68,711 square feet of fill area. The project includes the following elements:

- Removal and replacement of the existing floating dry dock and construction of supporting infrastructure;
- Improvements to the Repair Complex Wharf;
- Repairs to the quay wall and revetment along stretches of shoreline throughout the NASSCO leasehold, which includes shoreline segments from Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, Berth 2 to Berth 3, Berth 4 to Berth 5, and Berth 6 to Navy Base Quay Wall; and
- As-needed structural repair and/or replacement of selected piles at Berths 2, 3, 4, 5, 6, at Pier 12 and the floating dry dock approach pier, and at the Berth 1 Platform.

These project elements are described in more detail in Section 2.4. Implementation of the project would not result in an expansion of the existing use of the project site or an increase in shipbuilding and repair operations. This chapter's contents also include the project background and need, project objectives, project site and location, existing conditions, best management practices, and potential permits and approvals required for the project.

2.1 PROJECT BACKGROUND AND NEED

The current floating dry dock, built in 1983, has reached the end of its useful life. The project includes replacement of the existing floating dry dock with a new floating dry dock of similar characteristics and the same functionality. Improvements to supporting infrastructure (i.e., replacing mooring dolphins and utilities and reconfiguring the existing approach pier) would be required to comply with current standards and codes. Specifically, the existing floating dry dock and mooring dolphins do not meet U.S. Navy's MIL-STD-1625D, Department of Defense Standard Practice: Safety Certification Program for Drydocking Facilities and Shipbuilding Ways for U.S. Navy Ships, which is the current standard for all floating dry docks and associated infrastructure. The proposed mooring dolphins are designed to meet the required seismic and wind loading requirements outlined in this standard. The proposed approach pier modification and subsequent mechanical and utility modifications are required to allow for the relocation of the floating dry dock during the launch of new construction vessels within the NASSCO leasehold.

The Repair Complex Wharf is landward of the existing and proposed floating dry dock. Currently, the wharf provides limited laydown and space for offices. However, it is in disrepair and would need to be replaced to fully use this area of the facility. As part of the project, NASSCO is proposing to replace the existing wharf with a new structure that would permit storage and laydown capabilities in this area of the facility.

The project would also include repair of the failed revetment and exposed shoreline present throughout the NASSCO leasehold, including shoreline segments from Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, Berth 2 to Berth 3, Berth 4 to Berth 5, and Berth 6 to Navy Base Quay Wall. Proposed repairs include placement of stabilizing material (mostly rock riprap) to address existing damage and prevent future damage from wave action and to maintain existing safe operation of the NASSCO shipyard.

Finally, the project includes programmatic repair and/or replacement of damaged piles that support Berths 2, 3, 4, 5, 6, and Pier 12 and the floating dry dock approach pier and the Berth 1 Platform. The proposed repairs are necessary to restore the structural integrity of these piers, extend their service lives, and provide safe mooring berths for new construction and repair vessels.

The project is needed to address deficiencies related to the age and condition of structures, shoreline sloughing, and operational conditions at the existing dry dock. Absent these activities, the NASSCO shipyard would not be able to safely function in supporting various shipbuilding and repair operations.

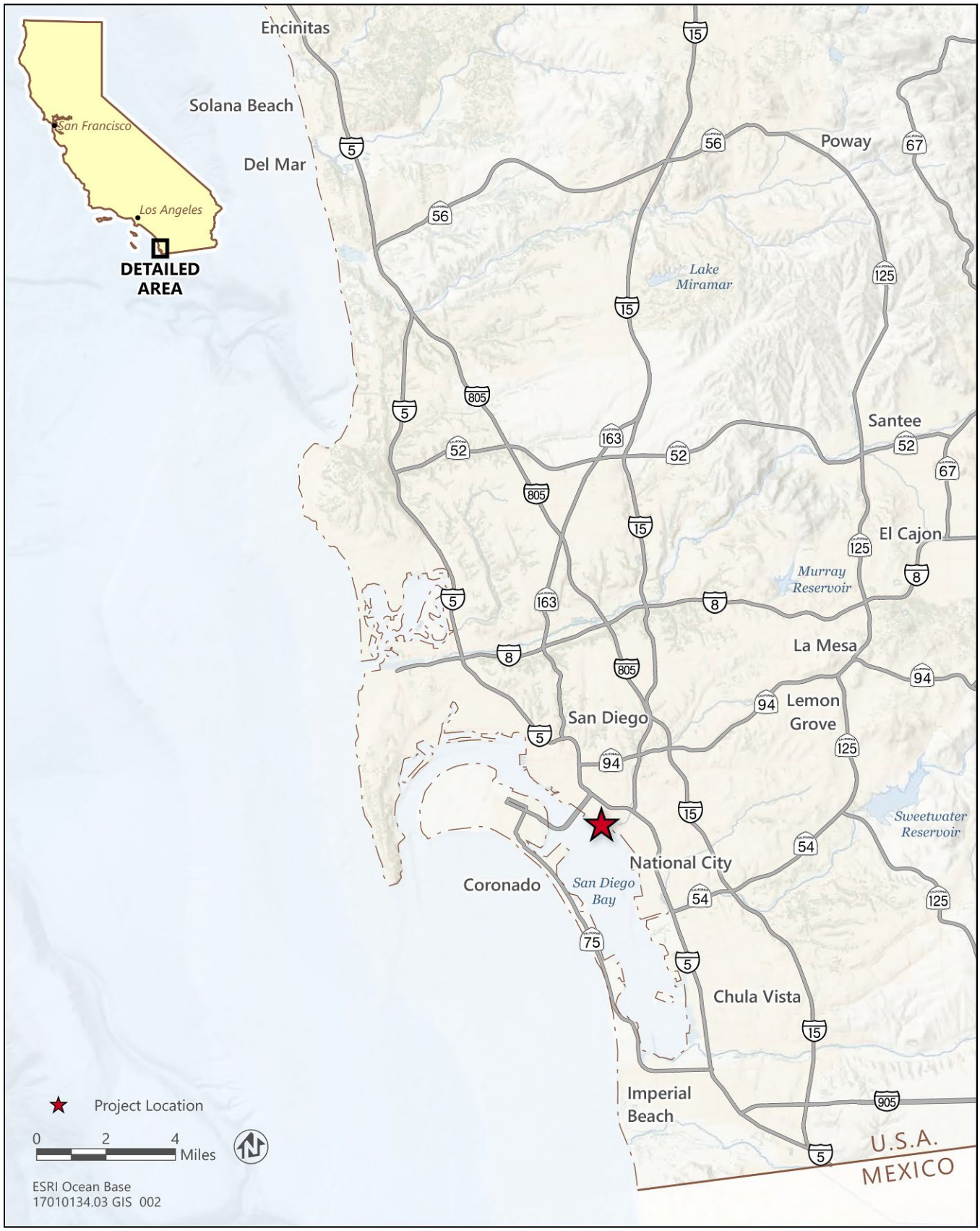
2.2 PROJECT LOCATION

The 2.2-acre project site is located within the 126-acre NASSCO leasehold at 2798 East Harbor Drive. The regional location is shown on Figure 2-1 and the project location is shown on Figure 2-2.

The NASSCO leasehold is situated in a highly industrialized area on and adjacent to the San Diego Bay, and is bordered to the north by Harbor Drive, a major north-south transportation corridor that connects the San Diego International Airport, waterfront, Convention Center, Gaslamp District, Ballpark District, and Barrio Logan. Railroad right-of-way (ROW) is located immediately north of Harbor Drive. Harborside Station on the San Diego Metropolitan Transit System Blue Line is approximately 200 feet northeast of the NASSCO leasehold and 800 feet northeast of the project site. Highways in proximity to the project site include Interstate 5, Interstate 15, and State Route 75.

The project site is within Planning District 4 (Tenth Avenue Marine Terminal) of the certified PMP. The San Diego Bay borders the project site to the south and west. Heavy industry land uses to the northwest of the project site include a ship repair facility operated by BAE Systems. Military land uses to the east and southeast of the project site include Naval Base San Diego. Land uses north of the project site across Harbor Drive and the railroad ROW include military, light industry, and commercial and office land uses. The nearest residence is approximately 1,250 feet northeast of the project site and is separated from the project site by Harbor Drive, railroad ROW, and a recycling center.

Although the NASSCO leasehold encompasses 126 acres of tideland area, project improvements would be limited to the project site, which is approximately 2.2 acres of water-side facilities within the leasehold. The specific shipyard facilities proposed for repair or improvement under the project are described in Section 2.4 and shown on Figure 2-3. The proposed site plan is shown on Figure 2-4.

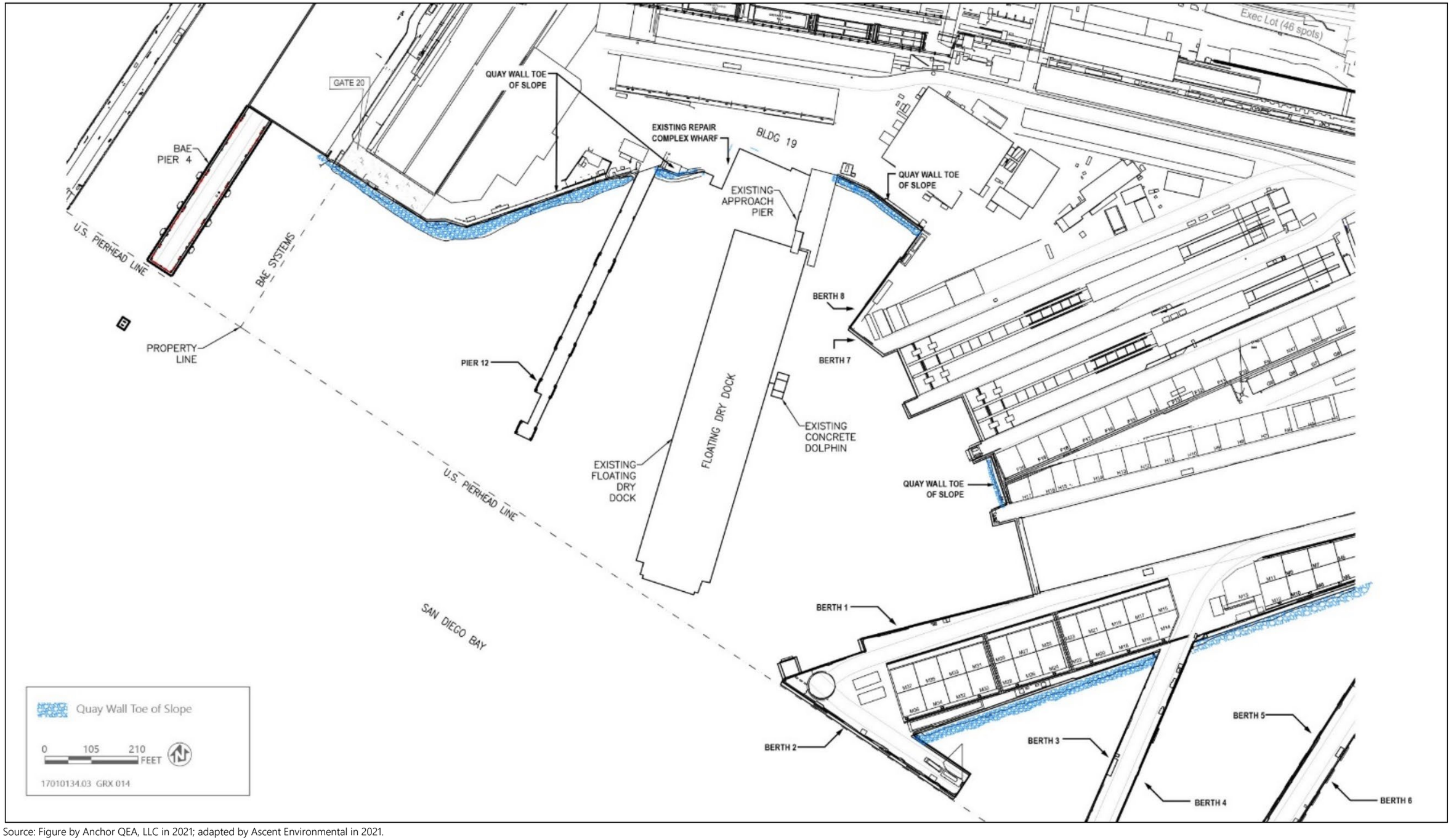


Source: adapted by Ascent Environmental in 2021

Figure 2-1 Regional Location

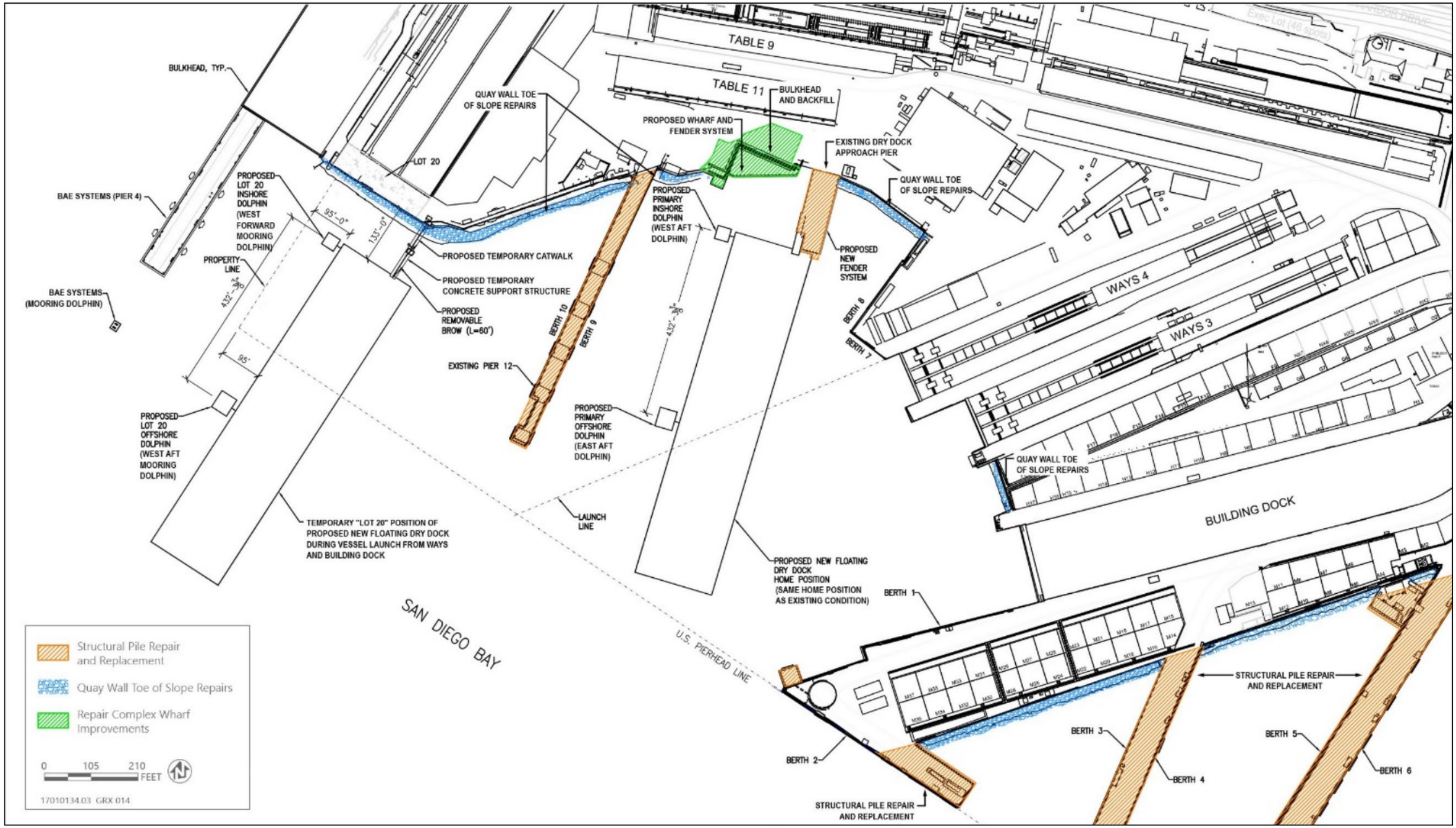
Source: adapted by Ascent Environmental in 2021

Figure 2-2 Project Location



Source: Figure by Anchor QEA, LLC in 2021; adapted by Ascent Environmental in 2021.

Figure 2-3 Existing Facilities



Source: Figure by Anchor QEA, LLC in 2021; adapted by Ascent Environmental in 2021.

Figure 2-4 Proposed Site Plan

2.3 PROJECT COMPONENTS

The project includes replacement or repair to each of the components described below, including the floating dry dock, Repair Complex Wharf, revetment along the quay wall, and structural piles associated with berths and piers throughout the NASSCO leasehold. The following sections include a description of the existing conditions, proposed improvements, and construction methods for each of the project components. Existing shipyard facilities proposed for repair or improvement under the project are shown on Figure 2-3. The proposed site plan is shown on Figure 2-4.

2.3.1 Component 1 – Floating Dry Dock Replacement and Modification

EXISTING CONDITIONS

The existing floating dry dock facilities consist of a floating dry dock, a pile-supported mooring dolphin (Figure 2-5), and a pile-supported approach pier with integrated mooring dolphin used for vehicle and pedestrian access to the floating dry dock. The existing floating dry dock is approximately 820 feet by 174 feet for a total area of 142,680 square feet. The existing mooring dolphin is approximately 56 feet by 26 feet for a total area of 1,456 square feet. The existing approach pier is approximately 33 feet by 17 feet for a total area of 1,561 square feet.

As shown in Figure 2-3, the home position for the existing floating dry dock is the primary location in which the floating dry dock is sited. The current configuration requires the floating dry dock to be relocated from the home position to another berth within the leasehold during vessel launches from the inclined building ways or building dock. Figure 2-3 shows the configuration of the floating dry dock under normal conditions. Figure 2-8 in the following section shows the trajectories from ingress and egress of vessels from the ways and building dock.

Source: Photograph by Anchor QEA, LLC in 2020.

Figure 2-5 View Looking North Showing Existing Dolphin Supporting the Dry Dock

PROPOSED IMPROVEMENTS

To support the siting of the new floating dry dock, the existing mooring dolphin would be removed and replaced with four new concrete pile-supported mooring dolphins and associated fender systems (see Figure 2-4). The proposed east forward and east aft dolphins would support the floating dry dock in the home position, while the proposed west forward and west aft dolphins would support the floating dry dock in the temporary "Lot 20" position (see Figures 2-6 and 2-7). Structural piles on the existing approach pier would be repaired or replaced. In addition, a portion of the floating dry dock approach pier would be removed, and a new fender system would be installed. The project would also include a new temporary catwalk and gangway system for the new Lot 20 temporary position. The new floating dry dock would not require any additional draft (i.e., the distance between the waterline and the deepest point of the floating dry dock) as compared to the existing NASSCO floating dry dock; therefore, no additional or new dredging would be required. In addition, no new dredging would be required for the new Lot 20 temporary position.

The replacement floating dry dock would be 828.54 feet long and 170.60 feet wide (slightly narrower and longer than the existing dry dock) and would have the same lifting capacity as the existing dry dock (35,000 long tons). Two 50-ton electric wing wall cranes would be installed to support ship repair operations. The entire area of the floating dry dock is contained to ensure that all stormwater can be collected and is outfitted with 178,000 gallons of onboard stormwater storage capacity. All coating systems within the ballast tanks as well as the exterior hull would be free of copper. Lastly, the installed diesel generators would be U.S. Environmental Protection Agency (EPA) Tier 4-rated[1] and would be outfitted with a closed-loop cooling water system.

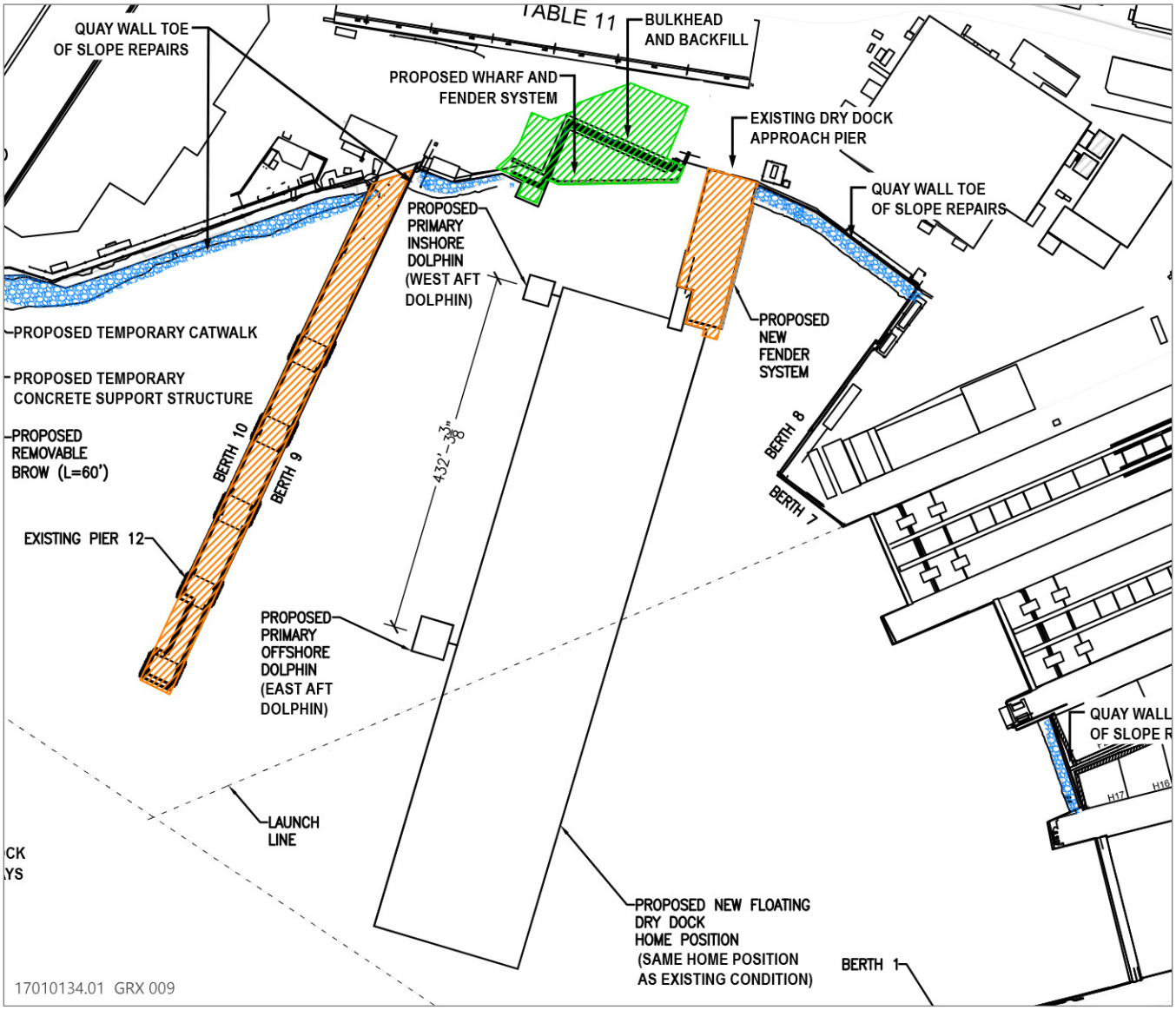
The new floating dry dock would be positioned in the same mooring location as the existing floating dry dock, as shown in Figure 2-3. The home position would continue to be the primary location in which the floating dry dock would be sited. The current configuration requires the floating dry dock to be relocated from the home position to another berth farther from the home position during vessel launches from the inclined building ways or building dock (see Figure 2-8). As a result of the project improvements, the new floating dry dock would instead be repositioned to the Lot 20 temporary location west of Pier 12 during vessel launches from the ways and building dock (see Figures 2-4 and 2-7). Approximately four vessel launches would occur each year. During each vessel launch, the new floating dry dock would be temporarily relocated to the Lot 20 location for up to several days. Although the temporary positioning of the floating dry dock during vessel launches would change from existing conditions, no changes in operational activities would occur with the exception of reduced tug boat use due to the closer temporary position to the home position.

The proposed new dolphins would be identical for the home and Lot 20 temporary locations (see Figures 2-4, 2-6, and 2-7). The east and west aft mooring dolphins would each be supported by 56 24-inch precast piles. The east and west forward mooring dolphins would each be supported by 22 24-inch octagonal precast concrete piles. The depth of the reinforced concrete pad for all four dolphins would be approximately 6 feet. Each of the four proposed dolphins includes a fender system to protect the floating dry dock when moored at both the home and Lot 20 temporary locations. Each fender system consists of fender piles, rubber fender units, timber whalers, and timber chocks installed along the length of each dolphin concrete pad. The wood fender blocks require a chemical preservative treatment to reduce the rate of wood rot and corrosion for materials within the water. The treatment would be in accordance with American Wood Protection Association UC5B Marine Use (Material Subject to Marine Borer Exposure) with waterborne preservative. As required by the USACE, all chemically treated wood that is in contact with the water and within the tidal zone would be wrapped to prevent the chemical contact with the water. To ensure worker safety, all treated wood would be handled by a licensed contractor in accordance with applicable regulations, including Division 20, Chapter 6.5, and Title 22, Division 4.5 of the California Health and Safety Code and Occupational Safety and Health Administration (OSHA) standards listed in 29 CFR 1910 Subpart H.

To access the floating dry dock when the dock is in its temporary position, an 80-foot catwalk and gangway system would be constructed near Lot 20. The outboard end of the catwalk and the inboard end of the gangway would be supported by a concrete cap constructed on a pair of 16-inch round or square concrete piles. A 60-foot removable brow would connect the catwalk to the floating pontoon when positioned in the temporary location (see Figures 2-4 and 2-7).

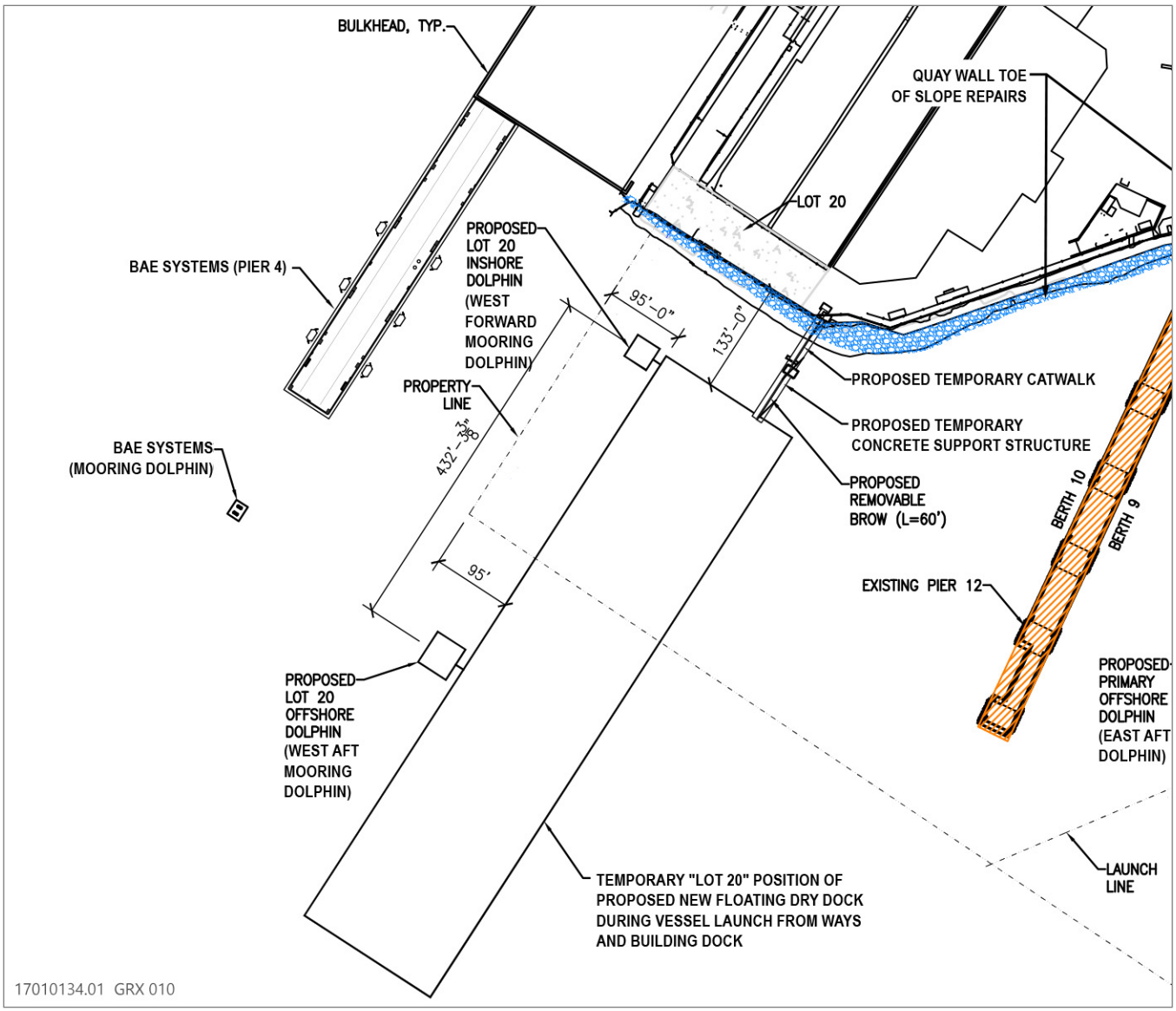
[1] Although the project is committed to Tier 4 diesel generators, the CDP will stipulate that Tier 4 diesel generators must be used to ensure use.

The existing drydock approach pier would be modified by removing a 33-foot-long by 16.5-foot-wide section at the waterward end. A new floating dry dock approach pier fender system would be installed to protect the floating dry dock approach pier, consisting of 19 fender piles, rubber fender units, timber whalers, and timber chocks installed along a 150-foot length along the eastern side of the approach pier. Like the dolphin fender systems, the wood fender blocks require a chemical preservative treatment to reduce the rate of wood rot and corrosion for materials within the water. As described above, the treatment would also be in accordance with American Wood Protection Association UC5B Marine Use (Material Subject to Marine Borer Exposure) with waterborne preservative and the same California Health and Safety Code and OSHA requirements mentioned previously would apply.



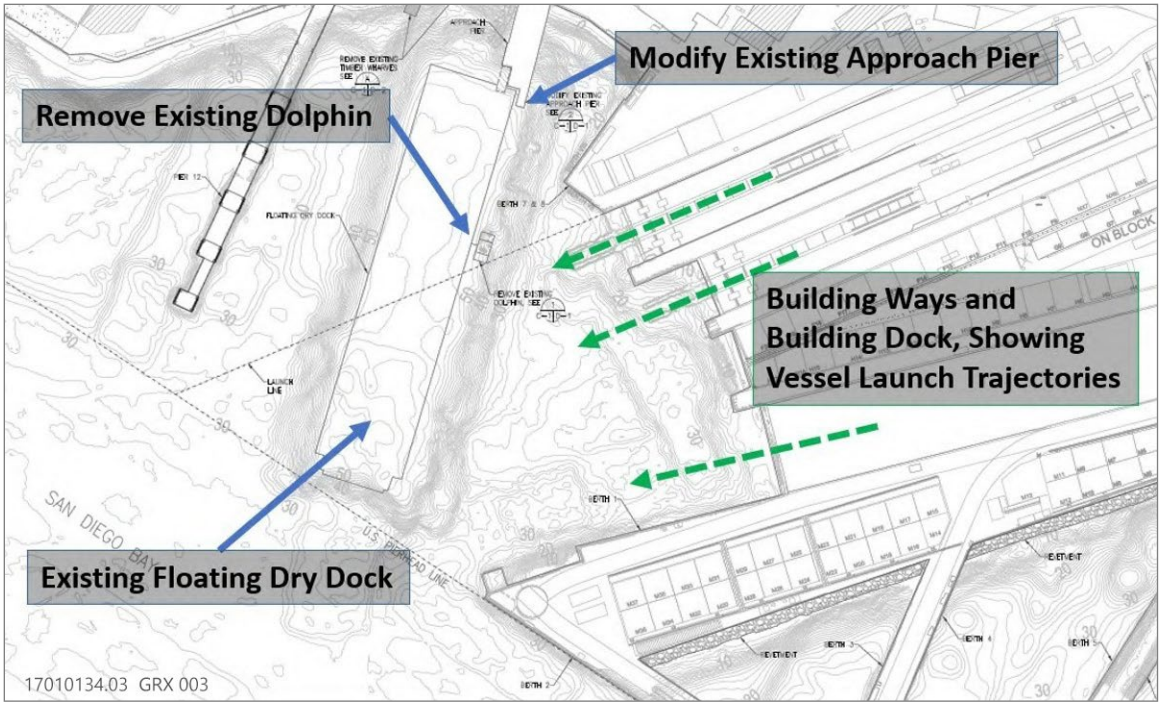
Source: Figure by Anchor QEA, LLC in 2021; adapted by Ascent Environmental in 2021.

Figure 2-6 Home Position Project Elements



Source: Figure by Anchor QEA, LLC in 2021; adapted by Ascent Environmental in 2021.

Figure 2-7 Temporary "Lot 20" Project Elements



Source: Figure by Anchor QEA, LLC in 2020.

Figure 2-8 Vessel Trajectories from Ways and Building Dock

A comparison of the existing and proposed overwater coverage, pile counts, and fill values for each of the floating dry dock components is provided in Table 2-1.

Table 2-1 Comparison of Floating Dry Dock and Associated Infrastructure

Project Component	Estimated Overwater Coverage Area	Estimated In-Water Fill			
		Pile Type	Pile Quantity	Fill Area	Fill Volume
Existing					
Floating Dry Dock	142,680 sf	NA	NA	NA	NA
Mooring Dolphin	1,456 sf	20-inch precast concrete	37	81 sf	188 cy
Approach Pier	561 sf	20-inch precast concrete	5	11 sf	26 cy
Total Existing	*144,697 sf*	*NA*	*42*	*92 sf*	*214 cy*
Proposed					
Floating Dry Dock	141,349 sf	NA	NA	NA	NA
Catwalk and Removable Brow	400 sf (permanent), 300 sf (temporary)	16-inch round or square precast concrete	2	4 sf	6 cy
West Aft Dolphin	2,070 sf	24- inch octagonal precast concrete	56	NA (beneath deck)	252 cy
East Aft Dolphin	2,070 sf	24- inch octagonal precast concrete	56	NA (beneath deck)	334 cy
West Forward Dolphin	900 sf	24- inch octagonal precast concrete	22	NA (beneath deck)	99 cy
East Forward Dolphin	900 sf	24- inch octagonal precast concrete	22	NA (beneath deck)	130 cy
West Aft Dolphin Fender	243 sf	HP14 x 89	18	3 sf	5 cy
East Aft Dolphin Fender	243 sf	HP14 x 89	18	3 sf	6 cy
West Forward Dolphin Fender	196 sf	HP14 x 89	15	3 sf	3 cy
East Forward Dolphin Fender	196 sf	HP14 x 89	15	3 sf	3 cy
Approach Pier Fender	300 sf	HP14 x 89	19	3 sf	5 cy

Project Component	Estimated Overwater Coverage Area	Estimated In-Water Fill			
		Pile Type	Pile Quantity	Fill Area	Fill Volume
Total Proposed	*148,867 sf (permanent), 300 sf (temporary)*	*NA*	*243*	*19 sf*	*843 cy*
Net Change	**+4,170 sf (permanent), 300 sf (temporary)**	NA	**+201**	**-73 sf**	**+629 cy**

CONSTRUCTION METHODS

The existing mooring dolphin, which is supported by 37 20-inch precast concrete piles, would be demolished. In addition, a 33-foot-long by 16.5-foot-wide section at the end of the existing dry dock approach pier would also be demolished. This section of pier is approximately 545 square feet in plan area and is supported by five 20-inch precast concrete piles. The existing piles would be removed from the seabed using vibratory extraction. The use of jetting, subject to any restrictions associated with mandatory mitigation measures, may be required to facilitate pile removal. If any given pile is damaged and cannot be extracted in its entirety, the contractor would cut the pile at or up to two feet below the existing mudline. The removed piles would be disposed of at an approved disposal site outside the coastal zone.

The existing floating dry dock would be sold outside of the United States or dispositioned in Ensenada, Mexico. The new floating dry dock would be constructed outside of the United States as well. Tugboats would be required to transport the existing and new floating dry docks to and from the NASSCO leasehold.

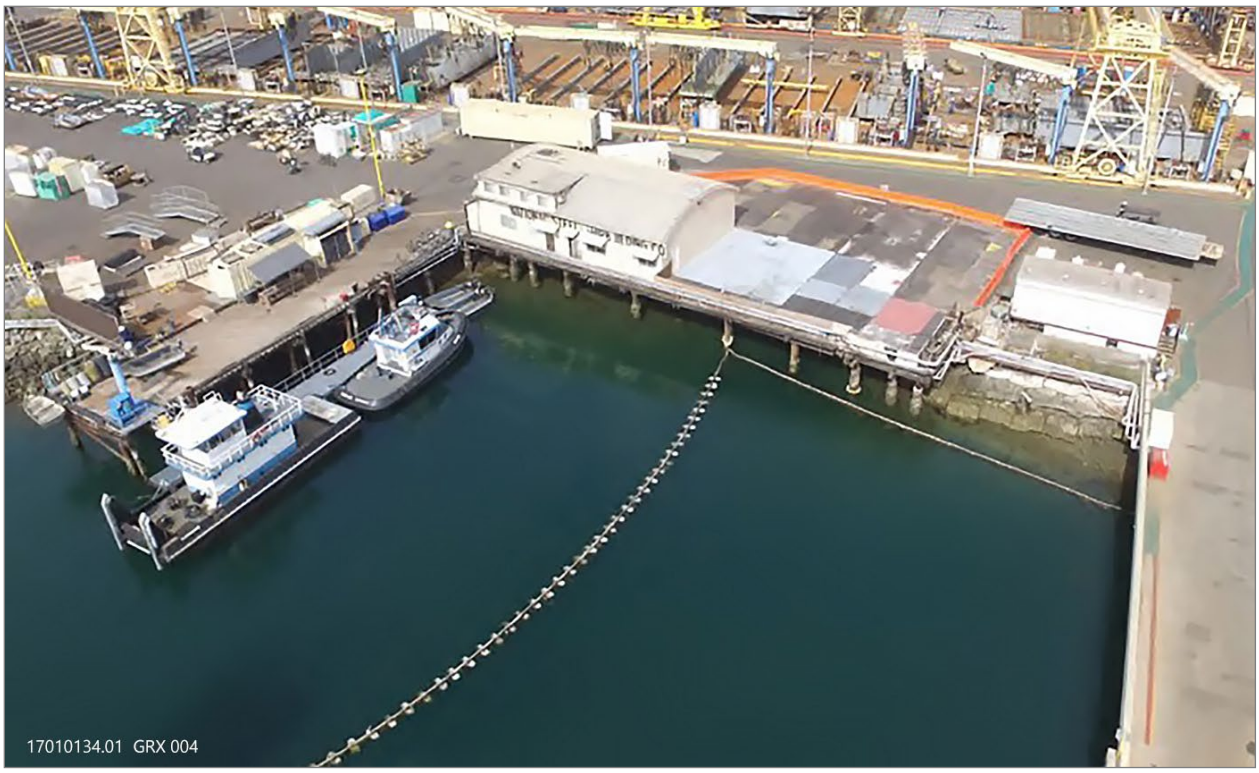
During construction of the new floating dry dock infrastructure, the new floating dry dock may be positioned at the temporary Lot 20 mooring facility upon delivery and until construction of the permanent mooring location is completed, which may be for a period up to six months. There may be a period of transition when both the existing floating dry dock and the new floating dry dock would be berthed within the NASSCO leasehold to allow shipbuilding and repair activities within the existing floating dry dock to be completed before fully transitioning to the new floating dry dock. During this transition period, only one floating dry dock would be operational.

The concrete piles proposed to support the new mooring dolphins, dry dock approach pier, and catwalk and removable brow would be installed with a crane-supported diesel impact hammer or vibratory hammer. Internal jetting may be used to facilitate pile installation by penetrating into relatively deeper and denser material layers; however, jetting would only be allowed if NASSCO can demonstrate to the District's satisfaction that there are no feasible alternatives to the use of internal jetting. Concrete mooring dolphin platforms would either be cast-in-place or partially pre-cast. For a cast-in-place system, construction would consist of installing the timber formwork, supported by steel-friction collars attached to the concrete piles. After the forms are set up, reinforcing steel would be installed. Concrete trucks would deliver concrete to the project site, and a pump truck would place the concrete into the forms. Timber forms and steel-friction collars would be removed after the concrete has cured for several days. Construction of the concrete decks would likely be divided into several concrete pours.

2.3.2 Component 2 - Repair Complex Wharf Replacement

EXISTING CONDITIONS

The existing timber-constructed Repair Complex Wharf includes approximately 12,600 square feet of timber deck planks, timber stringers, and timber pile caps. The piles generally consist of a mix of round timber piles, round timber piles encased with a concrete jacket, steel H-piles (i.e., structural beams that are square in dimension and typically used for deep foundations), and concrete-filled steel pipe piles. In its current condition, the timber wharf is not useable to support repair operations. The existing building situated on the Repair Complex Wharf has been partially demolished and is anticipated to be fully demolished in accordance with the existing demolishing permit. The location of the Repair Complex Wharf area is shown on Figure 2-3 and a photograph of the existing Repair Complex Wharf is shown on Figure 2-9.



Source: Photograph by Anchor QEA, LLC in 2020.

Figure 2-9 Existing Repair Complex Wharf

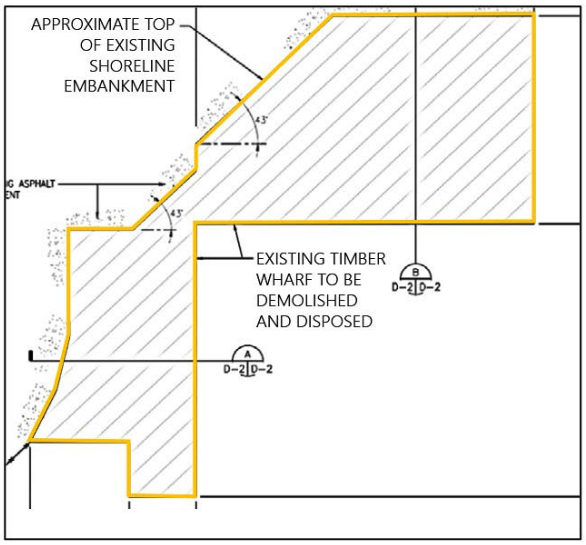
PROPOSED IMPROVEMENTS

The Repair Complex Wharf improvements entail replacement of the formerly existing timber wharf with a larger wharf supported by concrete piles and protected by a wharf fender system. A sheet-piled bulkhead (i.e., retaining wall) would be installed to reinforce the shoreline adjacent to the improved wharf.

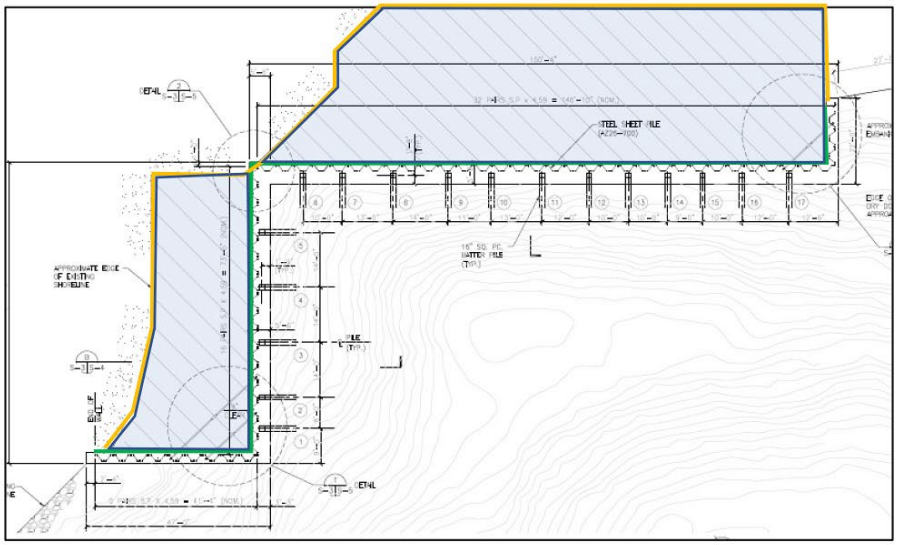
The proposed wharf would be a triangular shaped structure with a plan area of approximately 6,330 square feet (see Figure 2-4). The wharf would consist of a concrete deck supported by 34 24-inch octagonal vertical precast concrete piles. The deck thickness would be nominally 20 inches. A fender system would be installed along the 140-foot-long water side edge of the proposed wharf. The fender system would be supported by 20 HP 14x89 piles (i.e., an H-pile with a 14-inch-wide section that weighs 89 pounds). The fender deck would consist of rubber fender units, timber whalers, and timber chocks. Wood preservation treatment would be the same as previously described, and in accordance with American Wood Protection Association UC5B Marine Use (Material Subject to Marine Borer Exposure) with waterborne preservative.

The existing building situated on the wharf (Building 19) would be demolished prior to project construction. Demolition of Building 19 would occur as part of a separate action to improve vehicle and pedestrian traffic flow throughout the NASSCO shipyard, which was previously analyzed and permitted by the District (ICF 2018). The remaining wharf deck, supporting piles, and other supporting infrastructure (e.g., utilities) would be demolished and replaced as part of the project. The project would include removal and disposal of approximately 100 supporting piles. These piles will be disposed of at an approved disposal site outside the coastal zone, which, if necessary, would occur at an appropriate landfill that accepts hazardous waste (see Section 2.5.4 for additional information). Following pile removal, a steel sheet-piled bulkhead would be installed along the 293-foot shoreline face adjacent to the proposed wharf. The bulkhead would be laterally supported by precast batter piles and restrained laterally by a series of 18-inch square precast concrete batter piles installed at a 3:1 sloped angle towards the water. The sheet piles would be capped by a reinforced concrete beam 5.5 feet wide and 4 feet deep. Gravel backfill and compacted granular backfill would be placed at the location of the existing wharf behind the sheet pile bulkhead to match the elevation of existing upland paving. Following installation of the sheet pile bulkhead and placement of backfill, the new pile-supported concrete wharf and fender system would be constructed just south of the existing wharf. Construction sequencing to replace the Repair Complex Wharf is presented in Figure 2-10.

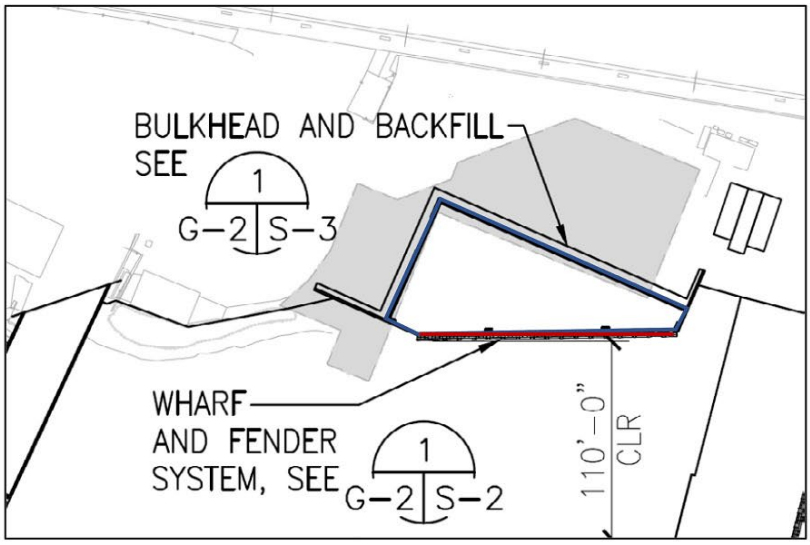
1. Demolish existing wharf and supporting piles



2. Install sheetpile wall and backfill with compacted granular soil



3. New pile-supported concrete wharf and fender system



Source: Figure by Anchor QEA, LLC in 2020; adapted by Ascent Environmental in 2021.

Figure 2-10 Repair Complex Wharf Construction Sequencing

The proposed overwater coverage, pile counts, and fill values for each of the proposed Repair Complex Wharf improvement components is provided in Table 2-2.

Table 2-2 Repair Complex Wharf Improvements

Project Feature	Estimated Overwater Coverage Area	Estimated Fill						
		Pile Type	Pile Quantity	Pile Area	Pile Fill Volume	Backfill Material	Backfill Area	Backfill Volume
Existing								
Repair Complex Wharf	12,600 sf	Mix of round timber piles, round timber piles encased with a concrete jacket, steel H-piles, and concrete-filled steel pipe piles	100[1]	100 sf	20 cy	Existing (NA)	Existing (NA)	Existing (NA)
Proposed								
Repair Complex Wharf Sheet pile Wall and Backfill	12,000 sf	Steel sheet pile	128 sheet pile sections (293 linear feet)	216 sf (beneath wharf)	182 cy	Sheet pile wall and compacted granular backfill	12,003 sf	11,496 cy
Repair Complex Wharf (Concrete Pad)	6,330 sf	24-inch octagonal precast concrete piles	34	96 sf (beneath wharf)	70 cy	NA	NA	NA
		18-inch square precast concrete batter piles	24	54 sf (beneath pile cap and wharf)	38 cy	NA	NA	NA
Repair Complex Wharf (Fender System)	310 sf	HP14x89 Fender Pile	20	3 sf	3 cy	NA	NA	NA
Total Proposed	18,640 sf	NA	78 piles plus 293 linear feet of sheet pile	3 sf (only includes fender system)	293 cy	NA	12,003 sf	11,496 cy
Net Change	**+6,040 sf**	NA	-22 piles/+293 linear feet of sheet pile	+272 sf	+566 cy	NA	+12,203 sf	+11,496 cy

[1] The pile fill area and pile fill volume of the existing piles at the Repair Complex Wharf are not known because not all piles are accessible until the wharf deck is removed. Current conditions are unsafe to get an accurate count of the number of piles under the Repair Complex Wharf; however, an estimate of 100 piles has been used based on the size of the area.

CONSTRUCTION METHODS

The existing pile supported timber Repair Complex Wharf structure would be demolished and all materials disposed of offsite. The total wharf area to be demolished is approximately 12,600 square feet consisting of timber deck planks, timber stringers, and timber pile caps. The piles consist of a mix of round timber piles, round timber piles encased with a concrete jacket, and concrete filled steel pipe piles. As described in Section 2.3.1 above, the existing piles would be removed from the bay floor using vibratory extraction. The replacement pile would be installed with a diesel impact hammer or vibratory hammer. Internal jetting may be used to facilitate pile installation by penetrating into relatively deeper and denser material layers; however, jetting would only be allowed if NASSCO can demonstrate to the District's satisfaction that there are no feasible alternatives to the use of internal jetting. If any given pile is damaged and cannot be extracted in its entirety, the contractor would cut the pile at or up to two feet below the existing mudline. The removed piles would be disposed of at an approved disposal site outside the coastal zone.

The sheet pile wall would be installed using a crane-supported impact or vibratory pile driver. Gravel backfill would be brought to the site using either a barge or trucked in from the uplands. The material would be placed behind (landward of) the sheet pile wall by offloading directly from a truck or using an excavator positioned from the uplands or on a flat deck barge.

The concrete piles, wharf fender piles, and sheet piles would be installed with the same method described above for the floating dry dock dolphins. The wharf deck would also be constructed with the same method described above for the concrete mooring dolphin platforms (either cast- in-place or pre-cast).

2.3.3 Component 3 – Quay Wall Revetment Repairs and Replacement

EXISTING CONDITIONS

The project would include repairs to the quay wall and supporting revetments in front of the quay wall at several areas, including Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base Quay Wall (Figure 2-3 and Figure 2-11). Existing conditions within these areas are summarized in the following sections.

Berth 2 and Berth 3 Revetment

An approximately 550-foot-long section of sloping revetment extends between Berth 2 and Berth 3 (Figure 2-3). The revetment between Berths 2 and 3 is constructed from concrete elements, including layers of flat slabs or blocks forming a steeply sloped wall (approximate 2:1 slope; Figure 2-11). Portions of the sloped revetment slabs and blocks are cemented together, and some areas contain additional rock riprap at the toe of slope. At the top of the revetment, there is an approximately 4-foot-high vertical cemented stone wall. Numerous utility pipes are present on the stone wall.

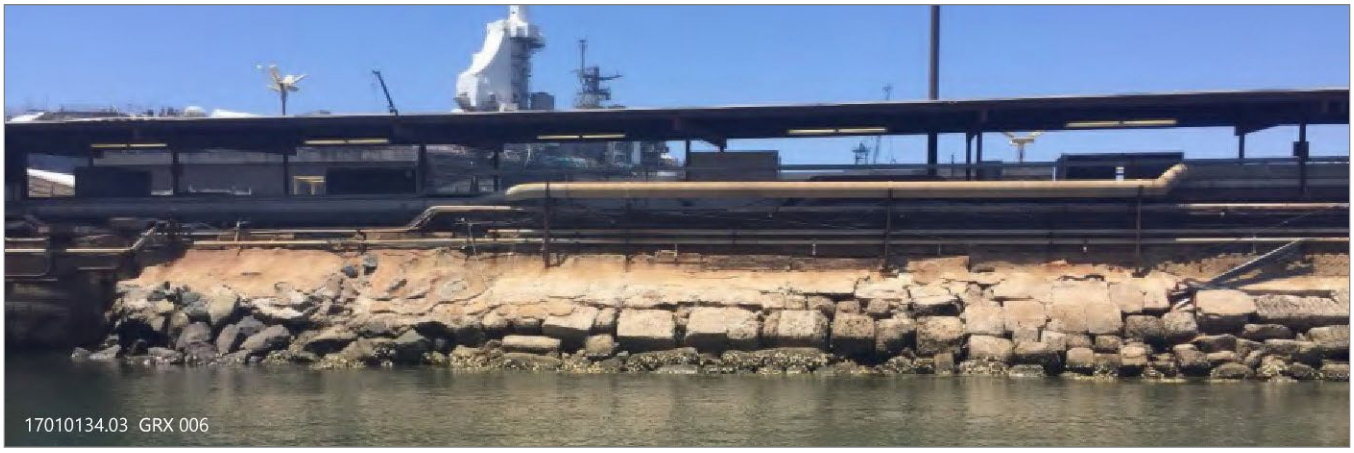
The 300-foot western portion of revetment connects the Berth 2 pier with the Berth 3 pier (Figure 2-11). This western revetment length is constructed from large square and rectangular concrete blocks stacked to form a sloped wall. The top 6 to 8 feet of the sloped revetment is covered with a layer of binding cement mortar, which has mostly fractured and broken away. Towards the middle of the western revetment, the style of revetment changes to layered flat concrete slabs similar to other revetment areas throughout the facility. The first approximately 100 feet of this section of revetment has undergone repair using a cement mortar to fill voids. The remaining 200 feet of layered concrete slab revetment is considered to be in fair condition.

Berth 4 and Berth 5 Revetment

An approximately 400-foot-long section of revetment extends between Berth 4 and Berth 5 (Figure 2-3). This length of revetment is constructed from layers of concrete slabs. Some of the slabs near the waterside launch rail have partially collapsed (Figure 2-11). Directly east of this collapsed area, a previous repair is visible where an additional layer of riprap was placed and voids were grouted. The observed quay wall revetment distress is likely caused by wave action and pressure created by tidal fluctuations. The areas that show major distress at both revetments appear to be in areas more directly exposed to prevailing bay current and wave action and less sheltered by adjacent pier structures.

Source: Photograph by Anchor QEA, LLC in 2020.

Revetment Between Berth 2 and Berth 3.



Source: Photograph by Anchor QEA, LLC in 2020.

West End of Berth 2 and Berth 3 Revetment.

Source: Photograph by Anchor QEA, LLC in 2020.

Collapsed Portion of Berth 4 and Berth 5 Revetment.

Figure 2-11 Existing Quay Wall Revetment

PROPOSED IMPROVEMENTS

The project would include repairs to the failed revetments along the 950 linear feet of exposed shoreline between Berth 2 and Berth 5 (Figure 2-4). The project would also include repairs to an additional 1,500 linear feet of exposed shoreline segments, including Lot 20 to Pier 12, the floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base quay wall. In total, quay wall revetment repairs would occur along approximately 2,450 linear feet within the leasehold. Repairs of the revetment would include building up a new rock toe, overlaid with an approximate 9-inch layer of filter stone and 2-foot layer of quarter-ton rock riprap. Grout bags and concrete may also be placed to fill voids on the failed slope. Fill would be underlain with filter fabric. Fill values associated with the quay wall and revetment repair are provided in Table 2-3.

Table 2-3 Proposed Revetment Repairs Along Quay Wall

Project Feature	Backfill Quantities			
	Material	Length	Area	Volume
Revetment Repairs Along Quay Wall	Filter fabric, filter stone, quarter-ton rip rap	2,450 feet	53,900 sf	7,940 cy

CONSTRUCTION METHODS

Revetment repairs along selected segments of quay wall would be conducted from the landside, waterside, or from a combination of both. Earthmoving equipment would likely include an articulated long-reach bucket arm, skip loader, and/or front-end loader. The work would include minor regrading of the existing revetment surface, possibly including removal of irregularities or debris to provide a consistent surface for installation of geotextile fabric and concrete-filled nylon bags when conducting slope stabilization on the top of the slope. Along the slope and toe of the slope, typical materials for revetment (e.g., geotextile fabric, filter stone, and riprap) would be installed to match the existing adjacent slopes.

2.3.4 Component 4 – Structural Pile Repair and Replacement

EXISTING CONDITIONS

Several existing structural piles that support Berths 2, 3, 4, 5, 6, and Pier 12, and the floating dry dock approach pier and the Berth 1 Platform show signs of damage. Specifically, the existing steel-jacketed concrete piles, concrete-filled steel pipe piles, and H-piles show signs of deterioration, cracking, corrosion, and wear. Throughout the leasehold, there are approximately 957 piles supporting the various wharves and piers, ranging in size from 14 to 20 inches. A summary of piles at each location is presented in Table 2-4.

PROPOSED IMPROVEMENTS

Structure pile repairs and replacement at Berths 2, 3, 4, 5, 6, and Pier 12, and the floating dry dock approach pier and the Berth 1 Platform would address deficiencies in steel pipe piles, steel-jacketed concrete piles, concrete-filled steel, and steel H-piles. Approximately 100 piles would be repaired or replaced per year with a total construction duration lasting approximately 10 years. The distribution may change based on the need at the facility, but the total number would not exceed 100 per year and 10 per day (Table 2-4). If condition of the structural piles is beyond repair, the piles would be replaced in kind with the same dimension and material.

Table 2-4 Structural Piles Proposed for Repair or Replacement

Structure	Range of Water Depth (MLLW)	Number of Piles	Type of Pile	Existing Pile Fill Area (sf)	Proposed Jacketed Pile Fill Area (sf)	Net Change (sf)	Existing Pile Volume (cy)	Proposed Pile Fill Volume (cy)	Net Change (cy)
Dry Dock Approach Pier	+8 to -55	76	20-inch square precast concrete	211	304	+93	234	338	+104
Berth 2 Extension	+8 to -14	91	16-inch square precast concrete (19) 16-inch octagonal precast concrete (60) 13-inch-diameter steel pipe (12)	133	230	+97	148	256	+108
Berths 3/4	+6 to -28	195	16-inch octagonal precast concrete	287	515	+228	319	572	+253
Platform Extension to Berths 3/4	-27 to -30	14	13-inch-diameter steel pipe pile	13	22	+9	14	24	+10
Berths 5/6	+8 to -30	344	16-inch octagonal precast concrete (96) 18-inch octagonal precast concrete (246) 14-inch steel H-pile (2)	599	1,030	+431	666	1,144	+478
Hatch Platform at Berth 5	+8 to -12	12	14-inch steel H-pile	2.2	27	+24.8	2	30	+28
Dry Dock Mooring Dolphin	-45 to -55	37	20-inch square precast concrete	66	148	+82	73	164	+91
Pier 12	0 to -26	188	12-inch square precast concrete (56) 12-inch diameter steel pipe (119) 12-inch square precast concrete (8) 12-inch steel H-pile (5)	177	513	+336	197	570	+373
Total	--	**957**	--	**1,488**	**2,789**	**+1,301**	**1,654**	**3,099**	**+1,445**

CONSTRUCTION METHODS

Structural Pile Replacement

Structural pile replacement would occur if the condition for piles is judged to be too damaged or degraded to be reasonably repaired. Pile replacements would be "like for like," with equivalently sized piles used for replacement. To access the pile, the top deck section would be temporarily removed. As described above, existing piles would be removed from the bay floor using vibratory extraction. The use of jetting, subject to any restrictions associated with mandatory mitigation measures, may be required to facilitate pile removal. If any given pile is damaged and cannot be extracted in its entirety, the contractor would cut the pile at or up to two feet below the existing mudline. The removed piles would be disposed of at an approved disposal site outside the coastal zone. The replacement pile would be installed with a diesel impact hammer or vibratory hammer.

Steel-jacketed Concrete Pile

Proposed steel jacketed concrete pile repairs would be made to piles showing severe corrosion of the steel jackets. Deteriorated steel jackets would be removed, repairs would be made to the underlying concrete, and new pile jackets would be installed. Delaminated and spalled areas would be demolished and filled with grout in conjunction with the installation of a new steel jacket. New pile jackets would include sacrificial cathodic protection (i.e., a form of corrosion protection with demonstrated ability to extend the service life of concrete piles in coastal environments).

A summary of the sequence of the proposed repairs is as follows:

1. Temporary scaffolding and/or floating platforms would be used for pile repairs.
2. In spalled areas, deteriorated concrete would be removed in a similar manner as is described above for underdeck concrete repair. Any debris collected during the work would be disposed at an approved disposal location.
3. Selected cracks would be injected with an epoxy resin or paste if the adjacent concrete is sound.
4. All concrete piles would receive a zinc cathodic protection jacket.

Concrete-filled Steel Pipe Pile

For piles experiencing severe corrosion and section loss, including through-thickness holes above the water line, replacement sections of concrete-filled steel pipe would be installed. The existing steel pile would be cut and removed at the water line to a point where section loss is no longer present. Next, a welded/mechanical ring connection would be installed in conjunction with the jacket installation to tie the new pile section to the existing pile section. Sacrificial bulk anodes would be installed to protect the below-water portions of the exposed steel. The method of jacket installation for the steel pipe is similar to the method that would be used to replace steel jackets on concrete piles, as discussed above.

Steel H-Pile

Proposed steel H-pile repairs would address corrosion above the water line. The existing steel pile would be cut and removed at the water line to a point where section loss is no longer present. Next, a welded/mechanical ring connection would be installed in conjunction with the jacket installation to tie the new pile section to the existing pile section. The jacket type would be similar to the structural concrete jacket described above. Sacrificial bulk anodes would be installed to protect the below-water portions of the exposed steel.

A summary of the sequence of the proposed H-pile repairs is as follows:

1. Pile surfaces would be cleaned by water blasting or a rotary abrading device to remove all loose clinging material, heavy scaling, marine growth, oil, debris, and other bond-inhibiting materials.
2. Protective corrosion-free jackets (cathodic protection pile jacket) would be installed with compressible sealing strip at the bottom.

3. Temporary supports, braces, and standoffs would be provided to hold jacket forms in position until grout has been placed and cured.
4. The interior of the jacket would be filled with cementitious grout that is designed to cure underwater. Grouting would be done within 24 hours after completion of cleaning operations and allowed to cure for at least 6 hours.
5. Reinforcing steel would be integrated into the grouted annular space between the fiberglass jacket and the H-piles to provide additional support.

2.4 COVERAGE AND FILL VOLUME SUMMARY

Table 2-5 summarizes net overwater coverage and fill volumes for the project. Note that Table 2-5 assumes that structural piles would be repaired, not replaced. If repair is infeasible, the replaced pile would match the existing pile and would not result in any net increase in fill or overwater coverage.

Table 2-5 Overwater Coverage and In-water Fill Values

Project Component	Overwater Coverage	Fill Area	Fill Volume
Existing			
Floating Dry Dock, Mooring Dolphin, and Approach Pier	144,697 sf	92 sf	214 cy
Repair Complex Wharf	12,600 sf	100 sf[1]	20 cy[1]
Quay Wall	--	53,900 sf	10,700 cy
Structural Piles	--	1,488 sf	1,654 cy
Total Existing	**157,297 sf**	**55,580 sf**	**12,588 cy**
Proposed			
Floating Dry Dock, Catwalk and Removable Brow, Mooring Dolphins and Dolphin Fenders, and Approach Pier Fender	148,867 sf (permanent) 300 sf (temporary)	19 sf	843 cy
Repair Complex Wharf (Sheet Pile Wall and Backfill, Concrete Pad, and Fender System)	18,640 sf	12,003 sf (including backfill and fender piles)	11,496 cy (including backfill and pile fill)
Quay Wall Revetment Repairs and Replacement	--	53,900 sf	7,940 cy
Structural Pile Repair and Replacement	--	2,789 sf	3,099 cy
Total Proposed	**167,507 sf (permanent) 300 sf (temporary)**	**68,711 sf**	**23,378 cy**
Net Total	**+10,210 sf (permanent) +300 sf (temporary)**	**+13,131 sf**	**+10,790 cy**

[1] The pile fill area and pile fill volume of the existing piles at the Repair Complex Wharf are not known because not all piles are accessible until the wharf deck is removed. Current conditions are unsafe to get an accurate count of the number of piles under the Repair Complex Wharf; however, an estimate of 100 piles has been used based on the size of the area.

2.5 PROJECT CONSTRUCTION

2.5.1 Construction Schedule

Construction of the various project components is anticipated to occur as follows:

- Floating Dry Dock Replacement and Modification: January 2023 to September 2024
- Repair Complex Wharf Improvements: September 2024 to July 2025
- Quay Wall Revetment Repairs (Berths 2-5): January 2024 to February 2024

- As-needed Quay Wall Revetment Repairs (additional 1,500 linear feet): January 2025 to December 2027 (500 linear feet per year)
- Structural Pile Repair and Replacement: January 2024 to January 2034 (100 piles per year as needed)

The anticipated construction schedule is approximate and is provided for analysis purposes. The actual start and end dates for construction of the project components may vary, but the duration is not anticipated to change.

Construction activities would occur 24 hours per day and seven days per week, in a manner consistent with the City of San Diego Noise Ordinance (Section 21.0104 of the San Diego Municipal Code). Construction work during night-time hours (between 7:00 p.m. and 7:00 a.m.) would be limited to project deliveries, formwork, welding, and other activities that would not generate disturbing, excessive, or offensive noise. Pile driving activities would only be conducted during daylight hours.

2.5.2 Construction Equipment and Workers

It is anticipated that the following equipment would be required to implement the project:

- Floating deck barge with spud well system
- Crane for pile installation
- Tugboat to support crane barge
- Vibratory and/or diesel impact pile driver for pile installation
- Floating scows for material shuttling to crane barge
- Push boats to shuttle personnel and small equipment
- Concrete pump and boom
- Portable welding units for overwater welding
- Diesel powered generators for barge power

Up to 10 construction workers would be present on the construction site each day, including one tug operator, two crane operators, one foreman, two oilers, and four laborers. Aside from construction worker commute trips, construction activities are anticipated to generate approximately two contractor vehicle truck trips per day for miscellaneous material and equipment loading. Contractor equipment and materials would generally be mobilized and demobilized from the water side of the project site and by using a barge.

2.5.3 Construction Staging and Parking

Existing designated areas at or near the construction site would be utilized for staging or laydown. Material delivery, staging, and maneuvering of materials in water would be conducted by deck barges and tugboats. All proposed construction elements would be over water and would require specific safety standards and best management practices (BMP). Construction would adhere to established construction BMPs as detailed in Section 2.5.5.

The contractor hired to perform the work would be required to park within the limits of the project site in designated equipment and material staging areas, which would ensure existing parking for NASSCO employees or other public parking would not be displaced. If needed due to limited space at various times throughout the construction activities, the contractor would use high occupancy vehicles to transport the approximately 10 construction workers from the contractor's facility to the project site and back daily.

2.5.4 Construction Waste and Disposal

The existing floating dry dock would be sold or dispositioned outside of the State. Non-hazardous construction trash and debris would be sent to approved recycling facilities in compliance with Assembly Bill (AB) 939, AB 341, and the City's Construction and Demolition (C&D) Debris Deposit Ordinance. A minimum of 65 percent of the construction waste would be recycled in accordance with the City of San Diego C&D Debris Deposit Ordinance. Remaining non-hazardous trash and debris that cannot be recycled would be handled through NASSCO's current trash hauler, Republic Services, and disposed at local landfills located outside the coastal zone. These landfills may include Republic Services Sycamore and Otay Landfills in San Diego County, California.

Removal of the existing Repair Complex Wharf is anticipated to generate approximately 100 creosote-treated timber piles. In conformance with California Department of Toxic Substances Control standards, the timber piles would be managed, manifested, and transported to a permitted landfill for disposal.

If other hazardous waste is generated, Resource Conservation and Recovery Act (RCRA) and non-RCRA hazardous waste would be removed by NASSCO's current hazardous waste haulers, Univar Solutions or US Ecology. All hazardous waste would be transported under a waste manifest to an authorized hazardous waste Treatment, Storage, and Disposal Facility. These facilities may include US Ecology/Univar Solutions Clearfield Plant in Clearfield, Utah; Clean Harbors Buttonwillow LLC in Buttonwillow, California; or US Ecology Nevada in Beatty, Nevada.

2.5.5 Construction Best Management Practices

During construction, BMPs would be implemented, as presented in the following subsections. During the District's project review and approval process, all BMPs would be incorporated as conditions of project approval in the CDP. The applicant would be responsible for meeting the conditions of the CDP and the District would be responsible for enforcing compliance. Where either the mitigation measure or BMP includes a more stringent requirement related to an identical issue and both cannot be successfully accomplished, the more stringent of the two shall take precedent.

GENERAL CONSTRUCTION BEST MANAGEMENT PRACTICES

Currently, all stormwater runoff from the facility, including from overwater structures, is captured and contained for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System. During construction, the contractor shall comply with permit conditions imposed by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and other regulatory agencies. The following standard BMPs would be implemented:

- Floating debris will be removed from the water and disposed of properly.
- Disposal of construction and trash debris into the intertidal zone or nearshore waters is prohibited.
- All construction-related equipment will be maintained in good-working order to minimize the potential for hazardous waste spills.
- Current hazardous material spill prevention and cleanup plans will be maintained on site.
- Food-related trash items, such as wrappers, cans, bottles, and food scraps, will be disposed of in white skip tub containers and removed from the project site daily.
- Materials or supplies will be stored in a manner to avoid entrapment of wildlife and will be checked for the presence of wildlife before movement or use.
- Temporary portable restroom facilities may be used to ensure reasonable access to restroom facilities for construction workers. If used, temporary portable restroom facilities will be placed away from watercourses and storm drains.
- A scaffolding system or floating rafts will be placed under the wharf and pier to catch demolition debris.

- NASSCO will perform the waste determination on removed treated timber piles and pile stubs to determine the level of disposal facility that would be required.
- Temporary erosion and sedimentation control measures will be implemented throughout the project construction period, where applicable.
- All debris will be transported to, and disposed of, at an appropriate upland disposal site, or recycled, if appropriate.
- Excavated material will be disposed of at an upland disposal site. Wet and water-bearing materials will be dewatered before hauling off-site.
- Idling time and dust suppression requirements for commercial vehicles and construction equipment will comply with San Diego County Air Quality Management District. Idling will not be allowed for more than a 5-minute period, and temporary areas of disturbance will be treated with water or dust suppressant to prevent visible emissions of dust.
- Areas disturbed by construction activities, including staging areas, will be restored after construction. Restoration may include regrading, repaving, and other measures deemed appropriate. Disturbed areas will be restored as quickly as feasible at the end of the construction period to minimize the potential for windblown dust. Site restoration will be implemented in accordance with NASSCO's individual National Pollutant Discharge Elimination System (NPDES) permit.
- Temporary traffic control plan guidelines and BMPs will be implemented from the contractor's Traffic Control Plan and NASSCO's Facility Traffic Control BMPs. The contractor will develop a Traffic Control Plan, which will include approved state and local traffic truck routes to major highways and will apply to local roadways and streets outside of the NASSCO facility. The NASSCO Facility Traffic Control BMPs will govern inside the NASSCO facility.

BIOLOGICAL RESOURCES BEST MANAGEMENT PRACTICES

The following biological resource BMPs are from NASSCO's BMP Plan and would be implemented:

- The contractor will be required to avoid covering and disturbing any low-relief boulders that may support higher numbers of intertidal organisms, where possible.
- Consistent with the California Coastal Act and California Eelgrass Mitigation Policy (CEMP), a pre-construction eelgrass and Caulerpa taxifolia survey will be performed in the project area 30 to 60 days before commencement of proposed in- or over-water construction activities; a post-construction survey shall be performed if eelgrass is located during the pre-construction survey.
- Equipment operators and all other project workers are prohibited from harassing any marine mammals, turtles, birds including waterfowl, or fish in the project area.
- A scaffolding system or floating rafts will be used for containment of debris from underdeck repairs. Scaffolding will be covered with plywood panels to contain debris, and debris will be removed at end of each shift.
- Cementitious repair material will be placed in dry conditions at available low tides.

PILE DRIVING AND REPAIR BEST MANAGEMENT PRACTICES

Pile installation or removal shall be conducted in a manner that meets applicable permit requirements, including those required by the Clean Water Act Section 404 permit and Clean Water Act Section 401 Water Quality Certification. The measures described below are required based on the type of pile installation, or removal, that occurs.

Impact (and Vibratory) Hammer Pile Driving

- The pile driving contractor will conduct a visual scan before commencing any pile-driving operations to ensure no sensitive species are within the immediate vicinity of pile hammering and will employ soft-start techniques for any impact pile driving.

Pile Repairs

- For repairs below ordinary high water, only materials suitable for use in aquatic environments will be used, including, but not limited to, cementitious grout designed to cure underwater and multipurpose marine epoxy grout and binder.
- The contractor will employ ports with gauges and additional ports, vents, and valves necessary to ensure a successful grouting operation resulting in a dense annular grout that meets the requirements of the form manufacturer.
- Temporary supports and braces, as well as non-corrosive standoffs, will be used to maintain the jackets in required positions.

2.6 PROJECT OPERATION

Except for the proposed west offshore mooring dolphin that would serve the temporary Lot 20 position, all waterside improvements would occur within the existing NASSCO leasehold. The new floating dry dock and associated infrastructure would enable NASSCO employees to continue their existing shipbuilding and repair operations under safe working conditions. In addition, the new temporary Lot 20 position would improve the efficiency of NASSCO's shipbuilding operations and reduce the hours tugboats operate because of the closer temporary position location of the floating dry dock and easier positioning during vessel launches. The project would not result in an expansion of the existing use of the site, an increase in shipbuilding and repair operations, or additional employees, other than those needed during construction.

NASSCO operates under an individual NPDES Permit (Order R9-2016-0116), maintains a facility BMP Plan Manual, and has a fully contained stormwater diversion system where discharging to the receiving water does not occur. NASSCO would be required to maintain all existing operational and maintenance BMPs. Stormwater runoff from the new floating dry dock would be collected, contained, and treated within NASSCO's stormwater diversion system before being released to the San Diego Metropolitan Sewer System. In addition, the floating dry dock would be outfitted with 178,000 gallons of onboard stormwater storage capacity.

All coating systems within the proposed ballast tanks and the exterior hull would be free of copper. The new diesel generators would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. The new floating dry dock would be outfitted with an extensive electrical distribution system in an effort to reduce the quantity of temporary diesel air compressors utilized for production operations, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps.

2.7 UTILITIES

The project would require the existing mechanical and electrical utilities to be replaced and reconfigured in order to support the existing demands of dockside operations. The utilities consist of fresh water, salt water, compressed air, compressed gases, and electrical, which are routed from existing distribution systems throughout the project site. Change in demand on municipal systems is not required for the implementation of the project.

2.8 POTENTIAL PERMITS AND APPROVALS REQUIRED

The permits and approvals required for the project are summarized in Table 2-6.

Table 2-6 List of Required Permits and Approvals

Agency	Permit or Approval
U.S. Army Corps of Engineers	▶ Authorize individual/nationwide Clean Water Act Section 404 Permit (33 U.S. Code Section 1341) ▶ Rivers and Harbors Act Section 10 Permit
California Coastal Commission	▶ Approval of Coastal Development Permit for project elements outside the U.S. Pierhead Line (i.e., installation of west offshore mooring dolphin and temporary repositioning of floating dry dock in "Lot 20" position during vessel launches from the inclined building ways or building dock) ▶ Right of Entry for construction activities on piers adjacent to U.S. Pierhead Line
San Diego Regional Water Quality Control Board	▶ Clean Water Act Section 401 Water Quality Certification
San Diego County Air Pollution Control District	▶ Permits for Diesel Generators
San Diego Unified Port District	▶ Approval of the project ▶ Authorization of Coastal Development Permit ▶ Adoption of the Mitigated Negative Declaration in compliance with CEQA ▶ Adoption of Mitigation Monitoring and Reporting Program ▶ Real Estate Agreement for west offshore mooring dolphin (Lot 20 position) that would be located outside the U.S. Pierhead Line

3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

An Initial Study is conducted by a Lead Agency to determine if a project may have a potentially significant effect on the environment. An Environmental Impact Report (EIR) must be prepared if an Initial Study indicates that further analysis is needed to determine whether a significant impact will occur or if there is substantial evidence in the record that a project may have a significant effect on the environment. The environmental factors checked below would be potentially affected by this project, involving at least one impact that may require mitigation to reduce the impact from "Potential Impact" to "Less than Significant with Mitigation." The potential impacts and mitigation are described in the Initial Study Checklist.

☐ Aesthetics	☐ Agriculture and Forest Resources	☒ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☒ Hazards / Hazardous Materials
☒ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

On the basis of this initial evaluation:

☐ I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Wileen C. Manaois
Director, Development Services

April 27, 2022
Date

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4 ENVIRONMENTAL INITIAL STUDY CHECKLIST

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a) the significance criteria or threshold, if any, used to evaluate each question; and
    b) the mitigation measure identified, if any, to reduce the impact to less than significance.

4.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics.				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

4.1.1 Environmental Setting

The project site is within the NASSCO shipyard, located on and adjacent to the San Diego Bay and under the jurisdiction of the San Diego Unified Port District (District). The project site is within a developed industrial area, approximately 1.3 miles southeast of Downtown San Diego. The visual character of the project site and surrounding area is defined by the existing industrial uses to the west, military uses to the south and east, transportation corridor to the north, and commercial and residential uses in the adjacent community of Barrio Logan further north. Views of the project site from nearby surrounding areas are generally obstructed by security fencing and intervening office buildings within the NASSCO shipyard although cranes and vessels can be seen in the background. Views of the project site from within the NASSCO shipyard include the existing dry dock and other associated facilities, Repair Complex Wharf, large ships, shipbuilding equipment (i.e., overhead cranes), working piers, berths, lighting, and permanent and modular buildings.

4.1.2 Discussion

a) Have a substantial adverse effect on a scenic vista?

Less-than-significant impact. Within the District's jurisdiction, the District Port Master Plan (PMP) designates vista areas, which are defined as "points of natural beauty, photo vantage points, and other panoramas" (San Diego Unified Port District 2020a). The PMP is intended to guide development within vista areas to preserve and enhance these areas of scenic and visual importance.

The project site is within Planning District 4 (Tenth Avenue Marine Terminal) of the PMP, which does not contain any designated vista areas (see Figure 13 of the PMP). The nearest designated vista areas are approximately 1.3 miles to the northwest of the project site within Planning District 6 (Coronado Bayfront). These vista areas are located along

the San Diego Bay waterfront with southeast facing views of the San Diego–Coronado Bridge. These vista areas offer limited views of the project site based on the distance to the project site and the intervening Coronado Bridge and BAE Systems shipyard. In addition, the PMP identifies vista areas located along the Embarcadero waterfront in Planning District 3 (Centre City/Embarcadero), approximately 1.6 miles northwest of the project site. These vista areas face southwest towards the City of Coronado and do not offer views of the project site.

During project construction, large equipment, such as cranes, floating deck barges, and pile drivers, would be temporarily present within the project site. Construction equipment would be visually compatible with the existing character of the project site and surrounding areas, which contain equipment for ongoing maritime industrial operations. Moreover, there are limited views of the project site from designated vista areas due to the direction of the viewsheds, distance to the project site, and presence of intervening structures. The construction equipment would not be large enough to dominate existing viewsheds or block scenic views. Following construction, the project site would be returned to a similar condition as the existing setting. The project would not introduce new permanent structures that would dominate existing viewsheds or block scenic views during project operation. Therefore, the project would not result in a substantial adverse effect on a scenic vista and impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less-than-significant impact. The nearest state scenic highway that is officially designated by the California Department of Transportation (Caltrans) is the San Diego–Coronado Bridge (Coronado Bridge), which is a 1.4-mile segment on State Route 75 (SR-75) located approximately 0.6 mile northwest of the project site (Caltrans 2019). Coronado Bridge spans the San Diego Bay, connecting the City of San Diego to the City of Coronado. For traveling motorists, Coronado Bridge offers existing views of the San Diego Bay and Downtown San Diego to the northeast, including high-rise residential, commercial, and urban developments. Looking southeast from Coronado Bridge, the project site is partially visible behind the adjacent ship repair facility operated by BAE Systems. Views of the project site include a variety of maritime industrial facilities such as large ships, mooring dolphins, docks, piers, permanent and modular buildings, cranes, and associated equipment associated with the NASSCO shipyard.

As discussed in Section 4.1.2(a) above, large equipment, such as cranes, floating deck barges, and pile drivers, would be temporarily present within the project site during construction. This equipment may be partially visible from portions of the Coronado Bridge. However, these visual elements would not be readily noticeable because of the distance to the project site. Moreover, the project site includes existing equipment and facilities for ongoing maritime industrial operations within the NASSCO shipyard. The construction equipment that would be temporarily introduced to the project site would be similar in size, color, and scale to the existing elements. Furthermore, viewer groups on the Coronado Bridge would be limited to motorists traveling on the roadway. Viewer sensitivity would be considered low because motorists would generally focus on the roadway and would have momentary, distant views of the project site.

Project construction would occur within the NASSCO leasehold, except for the installation of the west offshore mooring dolphin, which would occur outside the District's jurisdiction. No project elements would encroach onto Caltrans right-of-way. Project construction would not have potential to damage scenic resources, such as trees, rock outcroppings, or historic buildings associated with views from the Coronado Bridge. Following construction, the project site would be returned to a similar condition as the existing setting. As with existing operations, operational activities would not encroach onto Caltrans right-of-way and would not affect views from the Coronado Bridge. Therefore, the project would not substantially damage scenic resources within a state scenic highway and impacts would be less than significant.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less-than-significant impact. The project site is in an urbanized area that is developed entirely with maritime-related industrial uses. The land use designation for the project site is Marine Related Industrial (Land) and Specialized Berthing (Water).

As discussed in Section 4.1.2(b) above, the project site includes existing equipment and facilities for ongoing maritime industrial operations within the NASSCO shipyard. Construction equipment that would be temporarily introduced to the project site would be similar in appearance and scale to the existing site conditions and equipment. Similarly, the appearance and scale of the proposed project components would resemble the appearance and scale of the existing components that were identified for repair or replacement (e.g., floating dry dock and supporting infrastructure, Repair Complex Wharf, quay wall and revetment, and structural piles). Therefore, construction and operation of the proposed project would not result in a noticeable visual change in the industrial quality of the project site.

The project would not expand the existing use of the project site or expand existing shipyard operations, including any increase in capacity to service or build more ships. In addition, the project would not require changes to existing land use designations. Furthermore, as evaluated in Section 4.1.2(a) above, the project would not conflict with policies identified in the PMP for preserving visual access and vista areas. Therefore, the project would not conflict with applicable zoning and other regulations governing scenic quality and impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-significant impact. The project site is within the NASSCO shipyard in a developed industrial area. Existing light sources in the project site include outdoor security lighting throughout the shipyard and on-site vehicles, as well as spillover lighting from existing buildings, adjacent industrial and military land uses, and streetlamps and vehicles from nearby roadways.

The project would require some nighttime construction activities, such as project deliveries, formwork, and welding. Additional temporary light sources may be required to illuminate work areas; however, lighting would be directed on-site and would be of similar intensity to existing light sources throughout the NASSCO shipyard and adjacent land uses. Following construction, the project site would be returned to a similar condition as the existing setting. During operations, the project would not introduce permanent light sources or new structures with highly reflective materials. Therefore, the project would not create new sources of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant.

Required Mitigation Measures

The project would not result in significant impacts on aesthetics. Mitigation measures are not required.

4.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

4.2.1 Environmental Setting

The project site is within the NASSCO shipyard and is developed entirely with maritime-related industrial uses. The land use designation for the project site is Marine Related Industrial (Land) and Specialized Berthing (Water). Land uses in proximity to the project site include heavy and light industry, military, and commercial and office land uses. No agricultural land or operations are located on or adjacent to the project site. The project site is classified as Urban and Built-Up Land by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (DOC 2018, City of San Diego 2007: Figure 3.1-1). No portions of the project site or adjacent parcels are held under Williamson Act contracts (City of San Diego 2007: Figure 3.1-1). There are no areas within or adjacent to the project site that are zoned forestland or timberland.

4.2.2 Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No impact. According to the DOC Farmland Mapping and Monitoring Program, the project site is classified as Urban and Built-Up Land. The nearest land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is approximately 7.5 miles southeast of the project site (DOC 2018). Project construction and operation would be contained within the NASSCO leasehold. Therefore, the project would not convert Important Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No impact. The land use designation for the project site is Marine Related Industrial (Land) and Specialized Berthing (Water). The project site is not zoned for agricultural use and no agricultural resources or operations exist within the project site or adjacent areas. No Williamson Act contracts apply to the project site (City of San Diego 2007: Figure 3.1-1). Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No impact. As discussed in Section 4.2.2(b) above, the land use designation for the project site is Marine Related Industrial (Land) and Specialized Berthing (Water). The project site is not zoned for forestland, timberland, or zoned Timberland Production. There is no timberland present on or adjacent to the project site. Therefore, the project would not conflict with existing zoning for forest land or timberland and no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. As discussed in Section 4.2.2(c) above, no forest land or timberland resources exist on or adjacent to the project site, which is in an urbanized portion of the City of San Diego. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. As discussed in Sections 4.2(a) through (d) above, no agricultural, forestland, or timberland resources exist on or adjacent to the project site. Therefore, the project would not result in changes to the existing environment that could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

Required Mitigation Measures

The project would not result in significant impacts associated with agricultural or forest resources. Mitigation measures are not required.

4.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Are significance criteria established by the applicable air district available to rely on for significance determinations?		☒ Yes		☐ No
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

The project site is located in the San Diego Air Basin (SDAB), which encompasses all of San Diego County and is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality and odor conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

AMBIENT AIR QUALITY

Criteria Air Pollutants

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants, which are known to be harmful to human health and the environment. These pollutants are: carbon monoxide (CO), lead, nitrogen dioxide (NO_2), ozone, particulate matter with an aerodynamic diameter less than or equal to 10 microns in diameter (PM_{10}) and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in diameter ($PM_{2.5}$), and sulfur dioxide (SO_2). The State of California has also established California Ambient Air Quality Standards (CAAQS) for these six pollutants, as well as sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. NAAQS and CAAQS were established to protect the public with a margin of safety, from adverse health impacts caused by exposure to air pollution. A brief description of the source and health effects of criteria air pollutants is provided below in Table 4.3-1.

Table 4.3-1 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	Increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	Permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	Reduced capacity to pump oxygenated blood; headache, dizziness, fatigue, nausea, vomiting, death	Permanent heart and brain damage
Nitrogen dioxide (NO_2)	Combustion devices (e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines), industrial processes, and fires	Coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; aggravation of existing heart disease leading to death	Chronic bronchitis, emphysema, decreased lung function
Sulfur dioxide (SO_2)	Combustion devices (e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines), industrial processes, and fires	Irritation of upper respiratory tract, increased asthma symptoms, aggravation of existing heart disease leading to death	Chronic bronchitis, emphysema
Respirable particulate matter (PM_{10}), Fine particulate matter ($PM_{2.5}$)	Fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO_2 and ROG	Breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	Alterations to the immune system, carcinogenesis
Lead	Metal processing, piston-engine aircraft or other vehicles operating on leaded fuel	Reproductive/developmental effects (fetuses and children)	Numerous effects including neurological, endocrine, and cardiovascular effects

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases, used interchangeably with volatile organic compounds (VOC) in CEQA documents.

[1] "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

[2] "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Source: U.S. EPA 2019

Attainment Area Designations

The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified with respect to the NAAQS and CAAQS. Under the CAA and the CCAA, both the California Air Resources Board (CARB) and U.S. EPA use ambient air quality monitoring data to designate the attainment status of an air basin relative to the CAAQS and NAAQS for each criteria air pollutant. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." "Unclassified" is used in an area that cannot be classified based on available information as meeting or not meeting the standards. The SDAB is currently classified as a Nonattainment Area with respect to the 1-hour ozone CAAQS and the 8-hour ozone CAAQS and NAAQS (SDAPCD 2020, 2021; U.S. EPA 2020). Additionally, the SDAB is also classified as a Nonattainment Area with respect to the $PM_{2.5}$ and PM_{10} CAAQS. Attainment designations for the SDAB are shown in Table 4.3-2 for each criteria pollutant.

Table 4.3-2 Ambient Air Quality Standards and Current SDAB Attainment Status

Pollutant	Averaging Time	California (CAAQS)[a,b]		National (NAAQS)[c]	
		Standards	SDAB Attainment Status	Standards - Primary[b,d]	SDAB Attainment Status
Ozone	1-hour	0.090 ppm (180 µg/m^3)	Nonattainment	—	—
	8-hour	0.070 ppm (137 µg/m^3)	Nonattainment	0.070 ppm (137 µg/m^3)	Nonattainment
Carbon monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment
	8-hour	9 ppm[f] (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Attainment
	1-hour	0.18 ppm (339 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Attainment
Sulfur dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	Attainment	—	—
	3-hour	—	Attainment	—	—
	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
Respirable particulate matter (PM_{10})	Annual arithmetic mean	20 µg/m^3	Attainment	—	—
	24-hour	50 µg/m^3	Nonattainment	150 µg/m^3	Unclassified/Attainment
Fine particulate matter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	Nonattainment	12 µg/m^3	Unclassified/Attainment
	24-hour	—	—	35 µg/m^3	Unclassified/Attainment
Lead[e]	Calendar quarter	—	—	1.5 µg/m^3	Attainment
	30-Day average	1.5 µg/m^3	Attainment	—	—
	Rolling 3-Month Average	—	—	0.15 µg/m^3	Attainment
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m^3)	Unclassified	No national standards	
Sulfates	24-hour	25 µg/m^3	Attainment		
Vinyl chloride[e]	24-hour	0.01 ppm (26 µg/m^3)	Unclassified		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km	Unclassified		

Notes: µg/m^3 = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million (by volume).

[a] California standards for ozone, carbon monoxide, SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[c] National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than 1. The $PM_{2.5}$ 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[d] National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[e] The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. This allows for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: U.S. EPA 2020; SDAPCD 2020; and SDAPCD 2021a

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined as an air pollutant that may pose a hazard to human health cause or contribute to an increased likelihood of serious illness or mortality. TACs are usually present in minute quantities in the ambient air; however, their high toxicity may pose a threat to public health even at low concentrations.

A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage. Exposure to TACs may also result in short-term acute affects such as eye watering, respiratory irritation, coughing, running nose, throat pain, or headaches.

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter contained in diesel exhaust (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel PM poses the greatest health risk among these 10 TACs mentioned. Based on receptor modeling techniques, CARB estimated the average statewide cancer risk associated with diesel PM concentrations to be 360 excess cancer cases per million people in the year 2020 (CARB 2000:15). Overall, statewide emissions of diesel PM are forecasted to decline by 71 percent between 2000 and 2035 (CARB 2013:3-8).

SENSITIVE RECEPTORS

Sensitive receptors include land uses where exposure to pollutants could result in health-related risks to individuals more susceptible to air pollution, such as children, the elderly, and individuals with pre-existing respiratory illness and/or cardiovascular disease. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and the potential for increased and prolonged exposure of individuals to pollutants.

The project is located in a primarily industrial area that borders San Diego Bay to the west, the communities of Logan Heights and Barrio Logan to the north and northeast, and Cesar Chavez and Chicano Parks to the northwest. The nearest sensitive receptors within the City of San Diego include residents in the Barrio Logan community, just across Harbor Drive and the BNSF rail line north of the project site. The closest residence is located on the north side of Main Street just west of South 27th Street, approximately 1,180 feet north of the nearest project site boundary. The nearest school, the Logan Memorial Educational Campus, bordered on the south by Logan Avenue between South 28th and South 29th Streets, is located approximately 3,010 feet north of the project site. The nearest residential areas in the City of Coronado are located across San Diego Bay, approximately 1.4 miles west of the project site and are not discussed further due to their distance from the site.

4.3.2 Regulatory Setting

LOCAL

Criterial Air Pollutants

SDAPCD attains and maintains air quality conditions in the SDAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of SDAPCD includes the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. SDAPCD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA and Clean Air Act Amendments, and the CCAA.

The CCAA requires air districts to submit air quality plans for areas that do not meet CAAQS for ozone, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$. SDAPCD has attained all CAAQS with the exception of ozone, PM_{10}, and $PM_{2.5}$ (SDAPCD 2020). The CCAA does not currently require attainment plans for PM_{10} and $PM_{2.5}$. Additionally, the SDAB has not attained the federal NAAQS for ozone. For the attainment and maintenance of ozone, in October of 2020, SDAPCD adopted its 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone (Attainment Plan), which examined air quality conditions and documents efforts made by SDAPCD to improve air quality (SDAPCD 2020). The Attainment Plan demonstrates how the SDAB will further reduce air pollutant emissions, including ozone precursors volatile organic compounds (VOC) and oxides of nitrogen (NO_X), in order to attain and maintain the NAAQS and CAAQS for ozone, and includes the San Diego Regional Air Quality Strategy (RAQS), which addresses State requirements. The Attainment Plan is submitted to CARB for approval, and then to U.S. EPA as a revision to the San Diego portion of the California State Implementation Plan (SIP) for attaining ozone standards.

Neither the City of San Diego nor the District has adopted CEQA thresholds for significance for air quality. SDAPCD does not provide specific quantitative thresholds for determining the significance of air quality impacts under CEQA. However, the SDAPCD does specify Air Quality Impact Analysis (AQIA) trigger levels for new or modified stationary sources (SDAPCD Rules 20.2 and 20.3). If these incremental levels for stationary sources are exceeded, an AQIA must be performed for the source.

SDAPCD Rule 20.2, which outlines these trigger levels states that any project that results in an emissions increase equal to or greater than any of these levels, must:

> "demonstrate through an AQIA … that the project will not (A) cause a violation of a State or national ambient air quality standard anywhere that does not already exceed such standard, nor (B) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, nor (C) cause additional violations of a State ambient air quality standard anywhere the standard is already being exceeded, nor (D) prevent or interfere with the attainment or maintenance of any State or national ambient air quality standard." (SDAPCD 2019a)

For projects with stationary-source emissions that are below these criteria, no AQIA is typically required, and project level emissions are presumed to be less than significant. For CEQA purposes, these trigger levels are commonly used by San Diego agencies to determine whether a project's total emissions (e.g., stationary and fugitive emissions, as well as emissions from mobile sources) would result in a significant impact to air quality (Table 4.3-3; County of San Diego 2007). SDAPCD's trigger levels are tied to achieving or maintaining attainment designations with respect to the NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health and public welfare.

Table 4.3-3 San Diego Air Pollution Control District Pollutant Trigger Levels

Pollutant	Emission Rate		
	lb/hr	lb/day	tons/yr
Carbon monoxide (CO)	100	550	100
Oxides of nitrogen (NO_X)	25	250	40
Particulate matter (PM_{10})	—	100	15
Particulate matter ($PM_{2.5}$)	—	55*	10*
Oxides of sulfur (SO_X)	25	250	40
Lead and lead compounds	—	3.2	0.6
Volatile organic compounds (VOC)	—	75**	13.7***

Notes: lb/hr = pounds per hour; lb/day = pounds per day; tons/yr = tons per year

According to the County of San Diego, the hourly and yearly levels are most appropriately used in situations when temporary emissions like emergency generators or other stationary sources are proposed as a part of a project. The daily levels are most appropriately used for the standard construction and operational emissions.

* U.S. EPA "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005. Also used by the South Coast Air Quality Management District.

** Threshold based on the threshold of significance threshold for volatile organic compounds (VOC) from the South Coast Air Quality Management District for the Coachella Valley.

*** 13.7 Tons Per Year threshold based on 75 lb/day multiplied by 365 days/year and divided by 2000 lb/ton.

Source: County of San Diego 2007, SCAQMD 2019

Toxic Air Contaminants

Toxic air pollutants are regulated through SDAPCD Regulation XII. A health risk assessment (HRA) was done to determine the risks posed by TAC emissions generated during the construction phase of the project. This HRA was conducted according to the guidance presented in SDAPCD Supplemental Guidelines for Submission of Health Risk Assessments (SDAPCD 2019a; 2019b), as well as South Coast Air Quality Management District (SCAQMD) Modeling Guidance for AERMOD (SCAQMD 2017), California Office of Environmental Health Hazard Assessment (OEHHA) Air Toxic Hot Spot Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015), and guidance from the California Air Resources Board (CARB 2015 2019). An increase in the maximum individual cancer risk (MICR) due to project-related TAC emissions that exceeds the SDAPCD threshold of one chance in one million without application of Toxics Best Available Control Technology (T-BACT), 10 chances in one million with application of T-BACT, or a chronic or acute health hazard index (HHI) greater than one, would pose an excessive health risk to nearby receptors and would thus be considered a significant impact (SDAPCD 2019b).

Maritime Clean Air Strategy

The Maritime Clean Air Strategy (MCAS) is a strategic planning document, adopted by the Board of Port Commissioners (Board) on October 12, 2021, that identifies short-term and long-term goals and objectives intended to facilitate achievement of a clean, sustainable, and modern seaport (San Diego Unified Port District 2021a). The goals and objectives of the MCAS are aspirational, non-binding, and will be pursued through a variety of means—some of which are unknown at this time due to factors such as technological limitations and availability. As such, all of the goals and objectives are subject to feasibility and technological advances. Additionally, as the MCAS is a strategic plan, implementation of the MCAS is subject to future Board actions, as well as regular check-ins on a variety of topics including feasibility of implementation.

In alignment with its Vision Statement, "Health Equity for All," the MCAS is intended to guide future District decision-making and "provide a planning framework for potential future actions that may be implemented to achieve the goals and objectives identified in the MCAS." The MCAS also recognizes that various means may be employed or pursued by the District to reduce emissions, including the adoption of regulatory standards, purchase of equipment, or strategic partnerships. Accordingly, an individual project does not necessarily impede or obstruct achievement of

the MCAS's goals or the ability of the District to consider, approve, and implement projects and/or initiatives aimed at achieving the MCAS goals and objectives. The MCAS explains, for instance, that it "is also anticipated that technological advances will result in additional options for implementation toward achievement of near-term goals and objectives." To that end, the MCAS represents a strategy to be pursued by the District, through a variety of future means, including specific measures, projects, and initiatives.

Community Emissions Reduction Plan

The Portside Community's Community Emissions Reduction Plan (CERP) was adopted by the SDAPCD on July 16, 2021, and CARB on October 14, 2021 (SDAPCD 2021b). The CERP is a "plan for action to reduce air pollutant emissions and community exposure to those emissions in the Portside Community." The CERP specifies "aspirational goals," describes a variety of actions and strategies to achieve those goals and identifies governmental and organizational entities responsible for implementation of those actions. The goals in the CERP are aspirational and are intended to guide the community businesses, organizations, and government agencies partnering in the implementation of the CERP to support health and environmental justice in the Portside Community. While there might not be a clear path to reach some of these goals, the goals identify the direction for the community to achieve emission reductions beyond regulatory requirements. As technology evolves and data continues to be collected, the goals in the CERP may be adjusted accordingly.

4.3.3 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less-than-significant impact. The SDAB is currently designated as nonattainment with respect to the NAAQS and CAAQS for ozone, and the CAAQS for PM_{10} and $PM_{2.5}$. Air quality planning for San Diego county is under the jurisdiction of SDAPCD, which has adopted the 2020 SDAB Attainment Plan to reduce emissions of VOC and NO_X, which are both ozone precursors (SDAPCD 2020). The Attainment Plan is first submitted to CARB for approval and then to U.S. EPA as a revision to the San Diego portion of the California SIP, with the goal of ultimately achieving attainment status with respect to the NAAQS and CAAQS. The San Diego RAQS is included in the Attainment Plan and thus consistency with the RAQS is also required. The Attainment Plan relies on emissions forecasts based on demographic and economic growth projections provided by city and county general plans. Projects whose growth is included in the projections used in the formulation of the Attainment Plan are consistent with the Attainment Plan and would not interfere with its implementation.

The current project would involve repairing, replacing, and improving existing waterfront structures including the Floating Dry Dock, the Repair Complex Wharf, and other marine-related infrastructure. Upon completion of construction activities, normal operations would resume, but with greater operational efficiency due to the shorter distance to the temporary moorage site of the dry dock at Lot 20, requiring less tug-assistance and thus reduced emissions. The existing floating dry dock utilizes Tier 0 diesel generators, while the replacement floating dry dock would utilize diesel generators that would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. In addition, the new floating dry dock would be outfitted with an extensive electrical distribution system in an effort to reduce the quantity of temporary diesel air compressors utilized for production operations, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps. These improvements would reduce diesel emissions when compared to existing conditions.

The project would not result in an expansion of the existing use of the site or an increase in shipbuilding and repair operations. Moreover, additional employees would not be needed once the project is operational. Thus, the project would not include components that would induce growth or change the use of the site. Because the current project would not modify land uses or result in an unanticipated increase in the residential population, the project would be consistent with SDAPCD's Attainment Plan and potential impacts related to a conflict with the Attainment Plan would be less than significant.

As discussed in Section 4.3.2, the MCAS and the CERP propose goals to reduce air pollution from maritime cargo terminal and industrial-related operations. MCAS goals and measures are designed to be implemented if feasible and

through future binding actions, by the District, but not necessarily on a project-by-project basis. In addition, although the District's participation in the CERP and its implementation is important, most of the CERP's goals and actions, as enumerated, are not applicable to or under the control of the District to implement. For instance, a substantial component of the CERP is premised on future regulatory or policy action by the SDAPCD and/or CARB, and expanding and evolving the enforcement program to increase compliance rates, increase outreach efforts, and maximize compliance (see Chapters 5 and 6 of the CERP). Nevertheless, to provide full public disclosure and informed participation, this section includes an analysis of whether the proposed project would conflict with or obstruct implementation of the MCAS and CERP.

Tables 4.3-4 and 4.3-5 discuss whether the proposed project conflicts with or obstructs implementation of the goals and objectives of the District's MCAS and CERP to inform the public and Board regarding the proposed project's likely near-term and long-term impacts, if any. Merely being inconsistent with a MCAS or CERP goal or objective would not necessarily be considered a significant impact under CEQA in itself; rather, the inconsistency must result in a substantial adverse effect on the environment. As documented in Tables 4.3-4 and 4.3-5, no inconsistencies have been identified that would result in a significant impact on the environment.

Table 4.3-4 Maritime Clean Air Strategy Consistency Analysis

Goals and Objectives	Proposed Project Applicability and Consistency
Long-Term Goals	
Long-term Goal for Trucks: In advance of the State's goals identified in Executive Order No. N-79-20, attain 100% ZE truck trips by 2030 for all trucks that call to the Ports two marine cargo terminals.	**Not Applicable.** The proposed project is not located at one of the Port's marine terminals. The proposed project is not inconsistent with and does not obstruct the Port from attaining 100% ZE truck trips.
Long-term Goal for Cargo Handling Equipment: In advance of the State's goals identified in Executive Order No. N-79-20, the transition of diesel cargo handling equipment to 100% ZE by 2030.	**Not Applicable.** The proposed project does not involve the use of cargo handling equipment. The proposed project is not inconsistent with and does not obstruct the Port from transitioning diesel cargo handling equipment to 100% ZE.
Long-term Goal for Harbor Craft: Tugboat-related Diesel Particulate Matter (DPM) emissions identified in the Port's Emissions Inventory (2019) will be reduced by half by transitioning to ZE/near zero emission (NZE) technologies and/or other lower-emitting engines or alternative fuels.	**Consistent.** The proposed project would result in the reduction of tugboat-related DPM emissions during operations. Specifically, the new floating dry dock position at Lot 20 would reduce the distance of tugboat trips because the floating dry dock would no longer need to be repositioned farther away from the home position within the NASSCO leasehold during vessel launches. Furthermore, the proposed project would not obstruct transition of tugboats to technologies that reduce emissions (as tugs are owned by other operators and this transition is not related to operations of the shipyards).
Long-term Goal for Port Fleet: Transition Port-owned fleet of vehicles and equipment to ZE/NZE emission technologies in manner that meets operational needs and reduces emissions, as outlined below: ▶ Transition light-, medium-, and heavy-duty vehicles beginning in 2022 to ZE. ▶ Transition emergency vehicles to alternative fuels including hybrid, electric, and/or low carbon fuels. ▶ Convert equipment, such as forklifts and lawn maintenance equipment, to ZE. ▶ Seek opportunities to advance lower emitting solutions for marine vessels	**Not Applicable.** The NASSCO shipyard is a privately owned and operated shipyard facility. As such, the proposed project is not inconsistent with and does not obstruct the Port's ability to transition Port-owned fleet vehicles and equipment to ZE/NZE emission technologies.
Long-term Goal for Ocean-going Vessels: Equip marine terminals with shore power and/or an alternative technology to reduce ocean-going vessel emissions for ships that call to the Port.	**Not Applicable.** The proposed project is not located at one of the Port's marine terminals. The proposed project is not inconsistent with and does not obstruct the District from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions. Vessels within the dry dock are connected to shorepower when the dock is not in transit.

Goals and Objectives	Proposed Project Applicability and Consistency
Near-Term Goals and Objectives (2021 to June 30, 2026)	
Health	
Health Goal I. Protect and improve community health by reducing emissions and lessening Portside Community residents' exposure to poor air quality.	**Consistent.** The proposed project would result in the reduction of emissions during operations. Specifically, the new Lot 20 position would reduce the distance of tugboat trips because the floating dry dock would no longer need to be repositioned farther away from the home position within the NASSCO leasehold during vessel launches. As such, the proposed project's operational characteristics would result in reduced fuel use that would improve air quality and reduce TACs, when compared to existing conditions. In addition, the proposed project would include installation of replacement diesel generators that would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. In addition, the new floating dry dock would be outfitted with an extensive electrical distribution system in an effort to reduce the quantity of temporary diesel air compressors utilized for production operations, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps. These improvements would reduce diesel emissions when compared to existing conditions. Furthermore, the use of off-road equipment with Tier 4 engines during project construction would be required as project conditions of approval to reduce construction-related emissions.
Health Objective 1: By October 2021, identify existing health risk levels generated from the Port's Tenth Avenue Marine Terminal and the National City Marine Terminal for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant emissions. a. Reduce DPM Emissions: The Health Risk Assessment (HRA) may be used to inform an emission reduction goal. b. Reduce Health Risk: The HRA may be used to inform a cancer risk reduction goal.	**Not Applicable.** The proposed project is not located at one of the Port's marine terminals. The proposed project is not inconsistent with and would not obstruct the Port's ability to identify existing health risk levels generated at the Tenth Avenue Marine Terminal and National City Marine Terminal, nor would it affect the Port's ability to inform an emission reduction goal or cancer risk reduction goal at the marine terminals.
Health Objective 2: Assist the San Diego Air Pollution Control District and the California Air Resources Board with preparing a cumulative or community health risk analysis for the AB 617 Portside Community by providing them with the Port's Health Risk Assessment (October 2021) and other operational related information.	**Not Applicable.** This objective is not applicable as it pertains to sharing of information between the SDAPCD and the District.
Health Objective 3: Work collaboratively with the San Diego Air Pollution Control District (SDAPCD) on the SDAPCD's Portside Air Quality Improvement and Relief (also known as PAIR) program, including pursuing a Memorandum of Agreement with the SDAPCD to contribute Port Maritime Industrial Impact Fund for the SDAPCD's purchase and installation of new portable air filtration devices at participating Portside Community residences.	**Not Applicable.** The Port Maritime Industrial Impact Fund is administered by the District, not NASSCO; therefore, the proposed project is not inconsistent with and would not obstruct the District's ability to pursue an MOA with the SDAPCD to purchase and install residential air filtration devices in participating Portside community residences.
Health Objective 4: Collaborate with the San Diego Air Pollution Control District (SDAPCD) as they evaluate and consider developing a new rule to control emissions from indirect sources, in accordance with the timelines and dates established by the SDAPCD.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct the District's ability to collaborate with the SDAPCD to develop new rules to control emissions.
Community	
Community Goal 1: Enrich the AB 617 Portside Community through Education, Engagement, and Urban Greening.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to enrich the AB 617 Portside Community through community education, engagement, and urban greening.

Goals and Objectives	Proposed Project Applicability and Consistency
Community Objective 1: Rely on established processes for stakeholders and the public to provide input in the selection, deployment, and on-going monitoring of emission reduction projects.	**Not Applicable**. Community Objective 1 promotes active stakeholder and public involvement regarding District initiatives and other measures to facilitate emissions reductions. The proposed project is a waterfront improvement project that would result in lower operational emissions once the proposed project elements are constructed. As such, it is not inconsistent with and does not obstruct the District's ability to engage with and received input from stakeholders and the public on the issue of emission reductions.
Community Objective 2: Port staff will provide the Board of Port Commissioners, Barrio Logan Community Planning Group, the National City Council, and the AB 617 Portside Community Steering Committee with periodic updates on the status of its emission reduction projects and initiatives and associated emission reduction levels.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to provide status updates and/or to inform various governing and/or advisory bodies of the District's emission reduction projects.
Community Objective 3: Port staff will convene a group of stakeholders to explore increasing tree canopy in the Portside Community and continue to work with groups like Urban Corps of San Diego County to advance this objective.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to engage stakeholders on issues of community concern.
Community Objective 4: Support the expansion of the Port's existing outdoor educational programs to increase participation of youth that live in the AB 617 Portside Community.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to support the expansion of existing outdoor educational programs to youth that live in the AB 617 Portside Community.
Community Objective 5: Work with Portside Community residents and stakeholders to complete a comprehensive update in 2025 to the MCAS, including goals and objectives for 2026 to 2030 that are Specific, Measurable, Attainable, Relevant, Timebound, Inclusive, and Equitable that reflects updated technology, regulations, and market conditions.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to engage with residents and stakeholders to complete a comprehensive update of the District's MCAS in 2025, which would include setting goals and objectives for the 2026 to 2030 time period.
Cargo Handling Equipment	
Cargo Handling Equipment Goal 1: Attain substantial reductions for cargo handling equipment related emissions by facilitating upgrades to zero emission/near zero emission equipment alternatives.	**Not Applicable**. NASSCO specializes in the design and construction of auxiliary and support ships for the U.S. Navy and commercial markets. Consequently, NASSCO's operations do not involve the use of cargo handling equipment as the shipyard does not receive, store, or transport cargo.
Cargo Handling Equipment Objective 1: Reduce emissions from cargo handling equipment by approximately 90% for nitrogen oxides (NOX), 80% for diesel particulate matter (DPM), and 50% for carbon dioxide equivalent (CO_2e) below 2019 levels by January 1, 2025.	**Not Applicable**. NASSCO's operations do not involve the use of cargo handling equipment or movement of cargo. Therefore, the proposed project is not inconsistent with and does not obstruct the District's ability to reduce NOx, DPM, and CO_2e emissions, associated with cargo handling equipment, which operate at the Port's marine cargo terminals.
Harbor Craft	
Harbor Craft Goal 1: Reduce emissions from Harbor Craft by advancing emerging zero emission and advanced technologies.	**Not Applicable**. The proposed project would not be inconsistent with or obstruct a future transition to advanced Harbor Craft technologies that would reduce emissions. The proposed project would reduce Harbor Craft emissions (specifically from assist tugs) compared to existing conditions due to the reduced distance to move the dry dock to its temporary moorage at Lot 20.
Harbor Craft Objective 1: Facilitate implementation of the first all-electric tugboat in the United States by June 30, 2026.	**Not Applicable**. NASSCO's shipyard operations require the periodic use of tugboats to assist the movement of vessels in and out of mooring. However, NASSCO does not control tugboats, nor would implementation of its proposed project obstruct pursuit of an all-electric tugboat in San Diego Bay. These harbor craft are owned by third parties, not NASSCO, and the implementation of all-electric tugboats is not within the control of NASSCO.

Goals and Objectives	Proposed Project Applicability and Consistency
Harbor Craft Objective 2: Identify suitable projects to assist with advancing the State's goals for commercial harbor craft by supporting: • Existing fuel docks with the transition to renewable diesel by January 1, 2023; • Installation and maintenance of landside shore power for all facilities that receive more than 50 visits per year by 2024; • All new excursion vessels transition to zero emission capable hybrid technologies starting on January 1, 2025; and • Short run ferry-operators transition to zero emission technologies for all new and in use short-run (under 3 nautical miles) trips starting on January 1, 2026.	**Not Applicable**. The proposed project does not involve the use of fueling docks. No excursion or short run ferry operations are associated with shipyard operations.
Truck	
Truck Goal 1: Improve the air quality in the Portside Community by accelerating the implementation of zero emission/near zero emission trucks.	**Not Applicable**. The proposed project is a waterfront improvement project for a privately owned and operated shipyard facility, and it does not involve the use of heavy duty trucks that transport cargo to/from the Port's two marine cargo terminals. As such, the proposed project is not inconsistent with and does not obstruct the District's ability to accelerate the implementation of zero/near-zero emission trucks.
Truck Objective 1A: Prepare a heavy-duty truck transition plan by June 30, 2022 with ZE heavy-duty truck transition benchmarks of 40% of the Port's annual truck trips by June 30, 2026 and 100% by December 31, 2030 that includes the following: i. A compilation of all foreseeable tasks and their timelines including: charging infrastructure development; planning and implementation of a short-haul truck program; and creation of a truck registry. ii. Development of key policy concepts such as additional revenue source mechanisms and guidelines to utilize them; and new lease provisions for ZE truck requirements. This section should include the process required for consideration and adoption by the Board as well as their projected hearing dates. iii. Compilation and analysis of truck data (e.g. truck ownership, delivery distances within San Diego region and beyond) needed to prepare the transition plan.	**Not Applicable**. Pursuant to Objective 1A, the District is preparing a heavy duty truck transition plan, the details of which will include provisions that will aid and further facilitate the transition to ZE truck technologies, consistent with the objective. The proposed project will not be inconsistent with or obstruct the District's ability to prepare a truck transition plan that includes the three components that the Board directed staff to include in the heavy-duty truck transition plan.
Truck Objective 1B: By the end of 2022, Port staff will develop and present a short-haul, on-road, Zero Emission Truck Program for the Board's consideration that includes at least one collaborating trucking company and that targets having the necessary charging infrastructure in place by 2024, in order to displace approximately 65,000 diesel vehicle miles traveled.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to develop a Zero Emission Truck Program by the end of 2022.
Truck Objective 1C: Coordinate with the California Air Resources Board as they continue to develop the Advanced Clean Fleet Regulation regarding the transition to zero emission trucks to better understand associated State forecasts and forthcoming rulemaking.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to coordinate with CARB as they continue to develop the Advanced Clean Fleet Regulation.
Truck Objective 1D: In collaboration with the California Air Resources Board, the Port will utilize a truck registry or other system to summarize annual truck trips to the Port's marine cargo terminals and measure progress to achieve Port goals.	**Not Applicable**. The proposed project is not located at one of the marine terminals. Therefore, it is not inconsistent with and does not obstruct the District's ability to create and/or utilize a truck registry system to gain additional information relating to trucks the Port's marine terminals.
Truck Objective 1E: Provide status report to the Board of Port Commissioners with recommendations on zero emission truck technologies, as well as an evaluation of potential impacts to small fleets and/or independent truck drivers, as part of a biennial emissions reporting to better understand the transition zero emission truck technology.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct District staff from reporting to the Board of Port Commissioners.

Goals and Objectives	Proposed Project Applicability and Consistency
Truck Goal 2: Facilitate the deployment of infrastructure to support the transition to zero emission truck trips to the Port's marine cargo terminals.	**Not Applicable**. The NASSCO shipyard is not located at one of the Port's marine cargo terminals.
Truck Objective 2A: Within the fourth quarter of calendar year 2022, present a concept plan to the Board for its consideration that identifies four potential public-facing medium-duty/heavy-duty charging locations within the San Diego Region to support deployment of zero emission trucks, which may include locations in close proximity to or on the Tenth Avenue Marine Terminal and/or the National City Marine Terminal.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct District staff from identifying potential locations for infrastructure to support deployment of zero emission trucks.
Truck Objective 2B: Collaborate and coordinate with community residents, stakeholders, and agencies to ensure that the medium-duty/heavy-duty zero emission truck charging facilities identified in Objective 2A are aligned with and connect to the region's larger zero emission vehicle charging infrastructure system.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct District staff from ensuring any marine terminal truck charging infrastructure is consistent with other regional efforts to deploy and install truck charging infrastructure.
Truck Goal 3: Support the designated truck route to avoid truck impacts on the local community.	**Consistent**. Trucks over five (5) tons are required to follow the designated Truck Route along Harbor Drive to access north or southbound Interstate 5 or northbound Interstate 15, as adopted 10/31/2018 by the City of San Diego Resolution R-2019-249. In addition, the proposed project requires the issuance of a Coastal Development Permit which has been conditioned, as all projects located along the working waterfront, to require the use of the City of San Diego's designated Truck Route to further emphasize and improve compliance with the designated trucking route.
Truck Objective 3A: Work with partners to continue advancement of the connected and flexible freight and transit haul route concept to provide more efficient freeway access and encourage truck drivers to avoid residential neighborhoods by leveraging technology to support dedicated lanes and signal prioritization.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct District staff from advancing the flexible freight and transit route concept.
Fleet	
Fleet Goal 1: Update Port purchasing and/or procurement policies to acquire zero emission vehicles and best available alternative fuels or technologies.	**Not Applicable**. NASSCO is not involved in the update to the District's procurement policies.
Fleet Objective 1A: Update the Port's vehicle purchasing and/or procurement policy in Fiscal Year 2022 to identify a hierarchy of procurement considerations that prioritize zero emission vehicles, followed by the utilization of best available alternative fuels, to ensure Port fleet upgrades and replacements obtain the lowest emitting option available.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct District staff from updating procurement policies.
Fleet Objective 1B: Create a zero emission vehicle transition plan in Fiscal Year 2022 for the Port's fleet of vehicles and equipment that identifies a long-term acquisition schedule for when current vehicles and equipment will be phased out and when new electric vehicles and equipment are anticipated to be procured.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct District staff from developing a plan to transition the District fleet to zero emission vehicles.
Fleet Goal 2: Procure zero emission vehicles and necessary electric vehicle charging equipment and infrastructure beginning in Fiscal Year 2022.	**Not Applicable**. NASSCO is not involved in the District's procurement of zero emission vehicles and associated infrastructure.
Fleet Objective 2A: Procure at least two battery electric medium- to heavy-duty vehicles in Fiscal Year 2022. where feasible, provided. Developments providing public recreational opportunities are preferred.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District from procurement of two battery electric vehicles.
Fleet Objective 2B: Identify power needs and electric vehicle charging options at the General Services facility and apply to SDG&E's Power Your Drive for Fleets Program in calendar year 2021.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct District staff from identifying power needs and apply for program funding.

Goals and Objectives	Proposed Project Applicability and Consistency
Shipyard	
Shipyard Goal 1: Collaborate with the San Diego Air Pollution Control District as they review and propose modifications to applicable rules, regulations, and/or programs.	**Not Applicable**. NASSCO shipyard is subject to numerous laws and regulations implemented by the SDAPCD and would be a willing collaborative participant during modification or update to existing regulations. The project would not obstruct the ability of the District to collaborate with the SDAPCD on new and/or modified rules (regulations) that may be adopted by the SDAPCD. As applicable, the proposed project may be subject to the following SDAPCD rules, and others, during construction: ▶ Regulation 2, Rule 20.2—New Source Review Non-Major Stationary Sources: establishes Air Quality Impact Analysis (AQIA) Trigger Levels, which set emission limits for non-major new or modified stationary sources. ▶ Regulation 2, Rule 20.3—New Source Review Major Stationary Sources and Prevention of Significant Deterioration Stationary Sources: establishes AQIA Trigger Levels, which set emission limits for major new or modified stationary sources or Prevention of Significant Deterioration stationary sources. Major sources are defined in Regulation 8 as sources that emit 100 tons per year of PM_{10}, SO_X, CO, and lead; and 50 tons per year of NO_X and volatile organic compounds (VOC) in federal O_3 nonattainment areas. ▶ Rule 50—Visible Emissions: establishes limits for the opacity of emissions within the SDAPCD. The proposed project is subject to Rule 50(d)(1) and (6) and should not exceed the visible emission limitation. ▶ Rule 51—Nuisance: prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or cause injury or damage to business or property. ▶ Rule 52—Particulate Matter: establishes limits for the discharge of any particulate matter from nonstationary sources. ▶ Rule 54—Dust and Fumes: establishes limits for the amount of dust or fume discharged into the atmosphere in any 1 hour. ▶ Rule 55—Fugitive Dust Control: sets restrictions on visible fugitive dust from construction and demolition projects. ▶ Rule 67—Architectural Coatings: establishes limits to the VOC content for coatings applied within the SDAPCD. ▶ Rule 67.7—Cutback and Emulsified Asphalts: establishes general provisions and limits to the VOC content for asphalt materials applied within the SDAPCD. ▶ Rule 69.2—Industrial and Commercial Boilers, Process Heaters and Steam Generators: establishes emissions testing and standards for boilers with a heat input rating of 5 million British thermal units (BTU) per hour or more. ▶ Regulation 8, Rules 1200–1210: establishes rules and procedures governing new, relocated, or modified emission units that may increase emissions of one or more TAC. While the project is not necessarily subject to the requirements of this regulation, the risk assessment guidelines and procedures published as part of this regulation are used in the health risk assessment herein.

Goals and Objectives	Proposed Project Applicability and Consistency
Shipyard Objective 1: Collaborate with the San Diego Air Pollution Control District as they evaluate and consider potentially lowering the health risk in Rule 1210, including the threshold for stationary sources that reduce their estimated cancer risk.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct implementation of this objective, which was completed in November 2021. More specifically, with input from the District, the SDAPCD updated Rule 1210 to lower the health risk threshold from 100 per one million to 10 per million on November 4, 2021.
Shipyard Objective 2: Continue to work with the shipyard facilities to identify and implement emission reduction projects and, subject to further Board approval, require such implementation, and support the shipyard-related actions that are identified in the Portside Community's AB 617 Community Emissions Reduction Program.	**Consistent**. The District and all shipyard facility operators, including NASSCO, will continue to work together to identify additional projects, programs, and initiatives intended to reduce emissions and increase efficiency at the shipyards and be consistent with the CERP. Implementation of the proposed project would not be inconsistent with or obstruct future coordination and implementation of such actions.
Ocean-Going Vessels	
Ocean-going Vessels In-Transit Goal 1: Reduce annual ocean-going vessel in-transit emissions.	**Not Applicable**. Ocean-going vessels are used to transport goods and people to and from domestic and international seaports. Ocean-going vessels visit the Port's two marine cargo terminals and the two cruise ship terminals. The proposed project does not involve the movement of goods or people to and from seaports, nor is the shipyard located at one of the Port's marine terminals or cruise ship terminals.
Ocean-going Vessels In-Transit Objective 1A: Pursue implementing an expanded Vessel Speed Reduction Program that achieves upwards of 90% participation, subject to further Board of Port Commissioners' approval.	**Not Applicable**. Vessels serviced at the proposed project site arrive from US Navy Base San Diego, within San Diego Bay where the VSR program does not apply. The Vessel Speed Reduction Program is a voluntary program asking cargo vessel operators entering or leaving San Diego Bay to observe a 12-knot speed limit. NASSCO operations involve the design and construction of auxiliary and support ships. Shipyard operations within the NASSCO leasehold would not involve activities that would be inconsistent with the Vessel Speed Reduction Program.
Ocean-going Vessels At-Berth Goal 2: Reduce ocean-going vessels' at-berth emissions by expanding existing and/or developing new shore power systems and/or equivalent technologies at the Port's marine terminals.	**Consistent**. The proposed project is not located at one of the Port's marine terminals. When vessels berth or dock for repairs, upgrades, and maintenance, their engines are turned off. The proposed project is not inconsistent with and does not obstruct the District from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions while at berth.
Ocean-going Vessels At-Berth Objective 2A: For cruise ships, add one additional plug to the existing shore power system by 2023.	**Not Applicable**. The proposed project does not involve the operation of cruise ships.
Ocean-going Vessels At-Berth Objective 2B: At the National City Marine Terminal, add a new shore power system with at least two plugs and/or an alternative technology that reduces ocean-going vessel emissions at berth by 2025.	**Not Applicable**. The proposed project is not located at the National City Marine Terminal.
Rail	
Rail Goal 1: Upgrade rail capabilities at the Tenth Avenue Marine Terminal to allow for more efficient and cleaner operations.	**Not Applicable**. The proposed project does not involve operations at the Tenth Avenue Marine Terminal.
Rail Objective 1: Outline options to further develop rail upgrades, including rail reconfiguration within the Tenth Avenue Marine Terminal by June 30, 2026.	**Not Applicable**. The proposed project does not involve the use of rail services; the proposed project is not located at the Tenth Avenue marine Terminal.
Rail Goal 2: Promote the use of a Single Engine Tier 4 Switcher if applicable to operations at the Tenth Avenue Marine Terminal and National City Marine Terminal.	**Not Applicable**. The proposed project does not involve the use of switchers and it is not located that the Tenth Avenue Marine Terminal or the National City Marine Terminal.

Goals and Objectives	Proposed Project Applicability and Consistency
Rail Objective 2: Encourage tenants that rely on rail operations that move cargo to use cleaner switchers.	**Not Applicable**. The proposed project does not rely on rail operations.
Enabling Goals	
Enabling Goal 1: Establish partnerships with stakeholders, tenants, and agencies to help increase the likelihood of implementation and project success.	**Not Applicable**. This goal focuses on partnerships established and maintained by the District to advance emission reduction projects within and around Tidelands to achieve the goals and objectives of the MCAS. The proposed project is not inconsistent with and does not obstruct the District's ability to establish partnerships to increase the likelihood of implementation of zero emission initiatives and/or projects.
Enabling Objective 1A: Pursue a potential Memorandum of Understanding with the San Diego Air Pollution Control District to administer California Air Resources Board Funding to help fund zero emission/ near zero emission trucks and/or cargo handling equipment.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District from pursuing an MOU with SDAPCD and/or CARB.
Enabling Objective 1B: Work with the California Department of Transportation and other west coast ports to implement domestic shipping services to reduce emissions by facilitating the movement of goods by waterborne routes that are currently served by trucks or rail.	**Not Applicable**. The proposed project does not involve domestic shipping services and is not inconsistent with and does not obstruct the District's ability to work with the California Department of Transportation to facilitate the movement of goods by waterborne routes.
Enabling Goal 2: Conduct the necessary research and analysis to inform additional options that could be used to help attain emission reductions and other MCAS-related goals.	**Not Applicable**. This goal focuses research and analysis for the District to advance emission reduction projects within and around Tidelands to achieve the goals and objectives of the MCAS. The proposed project is not inconsistent with and does not obstruct the District's ability to conduct additional research and analysis to inform additional options that could be used to attain emission reductions and other MCAS-related goals.
Enabling Objective 2A: Create a clearinghouse process to track progress towards achieving MCAS and relevant AB 617 CERP goals and objectives, including technology and emission improvements associated with development, within 30-days of final approval of both documents.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District from creating a clearinghouse to track and monitor MCAS-related goals and objectives.
Enabling Objective 2B: Establish an Emissions Reduction Incentive Program.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District from developing an emissions reduction incentive program.
Enabling Objective 2C: Prepare a market study/feasibility analysis for the Board of Port Commissioners that explores a range of potential fees that can support zero emission/near zero emission reduction projects, as well as identify any implications the fee may have on the Port's revenue and maritime business opportunities.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to prepare a market/feasibility study for the Board of Port Commissioners, that considers a range of fees that can support zero emission/near zero emission projects.
Enabling Objective 2D: Explore potential credentials for installation and maintenance of emerging zero emission technologies and report recommendations to the Board of Port Commissioners by end of calendar year 2021.	**Not Applicable**. The proposed project is not inconsistent with and does not obstruct the District's ability to provide a report and recommendations to the Board of Port Commissioners that explores potential credentials for the installation and maintenance of emerging zero emission technologies.
Enabling Objective 2E: Promote adoption of zero emission technologies by Port tenants, truckers, and other users of equipment.	**Consistent.** The proposed project would result in the reduction of emissions from harbor craft and diesel sources during operations. In addition, the use of off-road equipment with Tier 4 engines during project construction would be required as project mitigation to reduce construction-related emissions. The proposed project would not obstruct or limit the ability of the District, in conjunction with its tenants, to promote, adopt, and implement zero emissions technologies across the District, including at the shipyards.

Source: San Diego Unified Port District 2021a

Table 4.3-5 Community Emissions Reduction Program Consistency Analysis

Goals and Strategies	Proposed Project Consistency
Goal 1. By 2031, reduce Diesel PM from 2018 levels by 80% in ambient air at all Portside Community locations.	**Consistent.** Goal 1's aspirational objectives are long-term and may be pursued through a variety of measures, including future regulatory or policy action by the SDAPCD (and other public agencies, organizations, and businesses). The proposed project would result in the annual reduction of DPM from operation activities help assist in meeting the 80% reduction goal by 2031. Furthermore, the use of off-road equipment with Tier 4 engines during project construction would be required as a project mitigation to reduce construction-related emissions.
Goal 2. Medium and Heavy Duty trucks servicing Portside Community to be 100% ZEV 5 years ahead of the California state requirements.	**Not Applicable.** The proposed project complies with all applicable laws, regulations, and policies pertaining to air quality emissions and does not propose construction activities that involve medium or heavy-duty trucks servicing the Portside Community. The proposed project is not inconsistent with and does not obstruct the SDAPCD or CARB from developing and implementing ZEV requirements for medium and heavy-duty trucks; until such requirements are established with a time certain implementation date, it cannot be determined if and when the proposed project can meet as yet defined requirements.
Goal 3. Establish ZEV HD/MD truck charging infrastructure in Portside, by specified dates in Action E1, with 4 sites operational by 2026.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD staff from establishing ZEV HD/MD truck charging infrastructure. The SDAPCD and/or other entities may pursue and establish charging infrastructure, in strategic locations, designed to facilitate the use of ZE trucks.
Goal 4. Reduce emissions from HD/MD trucks servicing indirect sources by 100% 5 years in advance of regulatory requirements.	**Not Applicable.** The proposed project is in compliance with all applicable laws, regulations, and policies pertaining to air quality emissions and does not propose construction activities that involve medium or heavy-duty trucks serving the Portside Community. The proposed project is not inconsistent with and does not obstruct CARB from developing and implementing emission reduction requirements for medium and heavy-duty trucks serving the Portside Community. Until such requirements are established with a time certain implementation date, it cannot be determined if and when the proposed project can meet as yet defined requirements.
Goal 5. By December 2021, APCD to present the cumulative cancer risk for Portside Communities from Health Risk Assessments and modeling of cumulative risk (including freeways, rail, vessels, stationary sources, etc.) to inform Goal #6. APCD can achieve this modeling goal with CARB assistance and input from the Portside Community Steering Committee including methodology and input data.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD staff from presenting the cumulative cancer risk for Portside Communities from Health Risk Assessments and modeling of cumulative risk.
Goal 6. By February 2022, establish an estimated cancer risk reduction goal based on the modeling that is done in Goal #2. Estimated cancer risk at all census tracts in Portside Community from locally generated emissions, including both stationary and mobile sources, to meet goals of ___/ million by 2026 and ___ /million by 2031.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD staff from establishing an estimated cancer risk reduction goal.
Goal 7. Conduct a Health Risk Assessment (HRA) at the Port's two marine cargo terminals to establish an updated baseline that relies on the most recent source characterization and activity from the Port's 2019 Emissions Inventory to inform aspirational goals in support of public health community priorities:	**Goal 7 Not Applicable.** The NASSCO shipyard is not located at the District's marine terminals **Priority 2) Not Applicable.** The NASSCO Shipyard is not located at the District's marine terminals.

Goals and Strategies	Proposed Project Consistency
2) By October 2021, identify existing health risk levels generated from the Port's Tenth Avenue Marine Terminal (TAMT) and the National City Marine Terminal (NCMT) for Diesel Particulate Matter (DPM) and other Toxic Air Contaminant (TAC) emissions. a. Reduce Health Risk: The HRA may be used to inform an aspirational goal of reducing cancer risk b. Reduce DPM Emissions: The HRA may be used to inform an aspirational emission reduction goal c. Assist the San Diego Air Pollution Control District (SDAPCD) and the California Air Resources Board (CARB) with preparing a cumulative cancer risk analysis for the AB 617 Portside Community by providing them with the Port's HRA (October 2021) and the other operational related information.	**Priority 2) a. Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD staff from developing an aspirational goal to reduce cancer risk. **Priority 2) b. Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD staff from developing an aspirational goal to reduce emissions. **Priority 2) c. Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD staff from establishing an estimated cancer risk reduction goal. **Priority 2) c. Not Applicable.** The proposed project is not inconsistent with and does not obstruct Port staff from assisting SDAPCD and CARB in preparing a cumulative cancer risk analysis.
GOAL 8. By 2026 reduce cancer risk below 10/million for each permitted stationary source, including portable equipment, in the Portside Environmental Justice Community.	**Consistent.** The proposed project would generate emissions from construction activities. The Health Risk Assessment prepared for the proposed project concluded that the cancer risk to receptors at the nearest school in the vicinity of the project site, Logan Memorial Educational Center, due to construction emissions would be 1.2 chances per million. The chronic non-cancer health hazard index at the nearest school would be 0.00036; both indices are below 10 cases per million. The project will not be inconsistent with or obstruct the District from reducing cancer risk in the Portside Community, for emissions associated with activities on Tidelands.
Goal 9. By 2031 complete Harbor Drive 2.0 truck freight improvements, including enforcement and signage of truck route for National City.	**Not Applicable.** The project site is not located in National City; therefore, the proposed project is not inconsistent with and does not obstruct completion of Harbor Drive 2.0 improvements.
Goal 10. By 2031 increase tree canopy in the Portside Community to 35%.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct the SDAPCD, City of San Diego, National City and stakeholders from increasing the tree canopy of Portside Communities. The proposed project is not anticipated to remove any mature trees.
Goal 11. Develop a new vision for park/green space for the Portside Community to increase park space by 30% by December 2022.	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct the SDAPCD, City of San Diego, National City and stakeholders from increasing park space for Portside Communities.
Heavy Duty Truck Strategies	
Action E1: Advance the deployment of heavy-duty on-road electric trucks to demonstrate operational feasibility and reduce emissions within the Portside Community and other disadvantaged communities.	**Not Applicable.** The proposed project would not be inconsistent with or obstruct any actions to advance the deployment of on-road electric trucks to demonstrate feasibility.
Action E3: Support dedicated truck route and avoid truck impacts to local community	**Consistent.** Trucks over five (5) tons are required to follow the designated Truck Route along Harbor Drive to access north or southbound Interstate 5 or northbound Interstate 15, as adopted 10/31/2018 by the City of San Diego Resolution R-2019-249. In addition, the proposed project requires the issuance of a Coastal Development Permit which has been conditioned, as all projects located along the working waterfront, to require the use of the City of San Diego's designated Truck Route to further emphasize and improve compliance with the designated trucking route.
Action E4: Increase number of truck parking and staging facilities with electric charging capabilities to address regional parking needs and alleviate the truck parking burdens within the Portside Community.	**Not Applicable.** The proposed project would not result in any changes in available parking and would not increase operational truck trips.

Goals and Strategies	Proposed Project Consistency
Land Use Strategies	
Action F3: Urban Greening	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct City of National City, City of San Diego, SANDAG, U.S. Navy, Port of San Diego, Caltrans or the Barrio Logan Community Planning Group from promoting programs, projects, and funding opportunities to increase urban greening efforts.
Action F5: Support Harbor Drive Multimodal Corridor Study (HDMCS) Land Use Proposals	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct the City of San Diego, Port of San Diego or the City of National City from supporting the Harbor Drive Multimodal Corridor Study Land Use Proposals.
Action F7: Improve Transportation Efficiencies	**Not Applicable.** The proposed project is not inconsistent with and does not obstruct SDAPCD, SANDAG, Naval Base San Diego, Port of San Diego, City of San Diego, City of National City, and Caltrans from working with regional and local transportation agencies to improve transportation efficiencies.
Working Waterfront Activities (Port, Navy, and Shipyards)	
Action G2: Reduce Emissions from Ships at Berth	**Consistent.** When vessels berth or dock at NASSCO for repairs, upgrades and maintenance, their engines are turned off. Furthermore, the proposed project would include installation of new diesel generators on the new dry dock that would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. The new floating dry dock would be outfitted with an extensive electrical distribution system in an effort to reduce the quantity of temporary diesel air compressors utilized for production operations, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps. The proposed project is not inconsistent with and does not obstruct the Port from advancing implementation of shore power infrastructure and/or alternative technology to reduce ocean-going vessel emissions.
Action G3: Reduce emissions from harbor craft	**Consistent.** The proposed project would result in the reduction of emissions from harbor craft during operations, compared to existing conditions. Specifically, the new Lot 20 position would reduce the distance of tugboat trips because the floating dry dock would no longer need to be repositioned farther away from the home position within the NASSCO leasehold during vessel launches.
Action G4: Reduce DPM and NOx emissions from portable air compressors and other diesel sources at shipyards.	**Consistent.** The proposed project would result in the reduction of emissions from diesel sources during operations, compared to existing conditions. Specifically, the proposed project would include installation of new diesel generators that would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system, which would replace the Tier 0 generators used on the existing floating dry dock. The new floating dry dock would be outfitted with an extensive electrical distribution system in an effort to reduce the quantity of temporary diesel air compressors utilized for production operations, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps. Furthermore, the use of off-road equipment with Tier 4 engines during project construction would be required as project conditions of approval to reduce construction-related emissions.

Goals and Strategies	Proposed Project Consistency
Action G5: Promote best practices for reducing diesel, VOC and other emissions from ship repair activities.	**Consistent.** See the consistency analysis for Action G2 and G4 above. The proposed project would result in the reduction of emissions from harbor craft and diesel sources during ship repair activities, compared to existing conditions.
Action G6: Reduce emissions from shipyard employee transportation	**Consistent.** As discussed in Section 4.17, "Transportation," no new vehicle trips would be generated during operation of the project. Additionally, NASSCO provides subsidized vanpool, discounted trolley passes, and employee bike lockers. On-premises transportation is also aided by over 150 electrics carts and more than 200 electric bikes. Therefore, the proposed project would not affect emissions from shipyard employee transportation.
Action G7: Promote adoption of ZE technologies by Port tenants, truckers, and other users of equipment	**Consistent.** As discussed above, the proposed project would result in the reduction of emissions from harbor craft and diesel sources during ship repair activities, compared to existing conditions. Furthermore, the use of off-road equipment with Tier 4 engines during project construction would be required as project mitigation to reduce construction-related emissions. The proposed project would not be inconsistent with the ability of the Port to promote the adoption of ZE technologies when these technologies become feasible and available.
Advocacy Measures	
Action H1: Support Emission Reduction Opportunities Some measures require a commitment by an agency that cannot be made until after a public process and/or after May 2021 when the CERP will be finalized. The only action the APCD and/or Steering Committee can take is to support an outcome that will improve air quality in Portside, all disadvantaged communities, or the region.	**Consistent.** As discussed above, the proposed project would result in the reduction of emissions from harbor craft and diesel sources during ship repair activities, compared to existing conditions. Furthermore, the use of off-road equipment with Tier 4 engines during project construction would be required as mitigation to reduce construction-related emissions. The proposed project would not be inconsistent with or obstruct the District's ability to support emission reduction opportunities intended to improve air quality.

Source: SDAPCD 2021b

In summary, the floating dry dock would no longer need to be relocated to another berth farther from the home dock during vessel launches from the inclined building ways or building dock. Rather, the floating dry dock would be repositioned to the "Lot 20" temporary location, which is closer to the home position. As such, the proposed project would result in reduced fuel use associated with tug trips during operations that would improve air quality and reduce TACs, when compared to existing conditions. In addition, the new diesel generators would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. The new floating dry dock would be outfitted with an extensive electrical distribution system in an effort to reduce the quantity of temporary diesel air compressors utilized for production operations, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps. Therefore, the proposed project would reduce emissions from stationary sources during operations, when compared to existing conditions. Furthermore, the use of off-road equipment with Tier 4 engines during project construction would be required as project mitigation to reduce construction-related emissions (see Issue III.c. below). For these reasons, the proposed project would not conflict with the applicable goals, objectives, and strategies of the MCAS and CERP. As a result, there would be a less than significant impact, and no mitigation would be required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less-than-significant impact. The SDAB is designated as a nonattainment area with respect to the NAAQS and CAAQS for ozone, and the CAAQS for $PM_{2.5}$ and PM_{10}. The trigger levels developed by SDAPCD used as mass emission thresholds for this analysis are tied to attaining and maintaining these health-based standards. Projects that exceed these thresholds would result in a cumulative, regional contribution (i.e., significant) to the nonattainment status of the SDAB and may also contribute to adverse health impacts affecting nearby receptors.

Short-Term Construction-Related Emissions of Criteria Air Pollutants and Precursors

Implementation of the proposed project would include construction necessary to replace NASSCO's floating dry dock and perform other structural repair and replacement activities as part of waterfront infrastructure improvements. Based on information provided by the project applicant, construction is anticipated to begin in January 2023, with expected completion of most phases by December 2027. Intermittent construction would consist of as-needed structural repair and replacement of existing structural piles throughout the leasehold, including those that support Berths 2, 3, 4, 5, 6, and Pier 12, the floating dry dock approach pier, and the Berth 1 Platform. The existing steel-jacketed concrete piles, concrete-filled steel pipe piles, and H-piles show signs of deterioration, cracking, corrosion, and wear. These structural repairs would continue from January 2023 through January 2034.

The proposed project's construction-related emissions were modeled based on project specifications and default settings and parameters contained in California Emissions Estimator Model (CalEEMod) Version 2020.4.0, modified using vehicle emission factors from CARB's latest Emission Factor Model (EMFAC 2021) (CAPCOA 2021, CARB 2021). Emissions associated with the derrick and spud barges (e.g., exhaust emissions from tugboats utilized to mobilize the barges during construction, emissions from on-board generator sets) were estimated using the Sacramento Metropolitan Air Quality Management District (SMAQMD) Harborcraft Emissions Calculator (SMAQMD 2017), which is the most up-to-date calculator for marine vessel emissions. Specific input parameters and modeling output results are included in Appendix A. Construction activities related to the proposed project would result in the intermittent, temporary generation of emissions of criteria air pollutants and precursors from heavy-duty off-road construction equipment, vehicle use during worker commute trips and construction materials transport, and the emissions of marine watercraft (i.e., tugboats used to mobilize barges). Existing operational efficiency would be improved by this project in that the new floating dry dock would be repositioned from the home position to Lot 20 which is a shorter distance from the home position during vessel launches under existing conditions, thus reducing fuel consumption and emissions associated with power necessary to move the dry dock, especially during extreme weather events. Operational emissions after project completion would therefore not increase and would actually be reduced due to increased fuel efficiency of operations of repositioning the dry dock to the closer temporary position of Lot 20.

Construction-related emissions were assessed for each phase of project construction, with daily emissions from overlapping phases summed, to calculate conservative maximum daily emissions. Each phase of construction was modeled separately, including:

- Floating dry dock replacement and waterfront infrastructure improvements (January 2023-September 2024)
- Repair and improvements to the Repair Complex Wharf (September 2024-July 2025)
- Repair of failed revetment along Quay Wall, Berths 2-5 (January 2024-February 2024)
- Derrick and spud barge transport (January 2023-July 2025)
- Additional repairs to 1,500 linear feet of shoreline segments, including shoreline segments Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base Quay Wall (January 2025-December 2027)
- As-needed structural repair/placement of select piles (100 piles/year) at Berths 2, 3, 4, 5, 6, and Pier 12 and the floating dry dock approach pier, and at the Berth 1 Platform (January 2024-January 2034)

Estimated maximum daily emissions during each construction phase are presented in Table 4.3-6.

Table 4.3-6 Maximum Daily Construction Emissions

Phase	Dates	Pollutant Emissions (pounds per day)					
		VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase 1	Jan 2023-Sept 2024	0.8	3.9	25.5	0.1	0.2	0.1
Phase 2	Sept 2024-July 2025	1.5	10.3	29.8	0.1	0.5	0.4
Phase 3	Jan 2024-Feb 2024	1.1	7.5	36.8	0.1	0.3	0.2
Phase 4	Jan 2025-Dec 2027	1.1	7.4	36.8	0.1	0.3	0.2
Phase 5	Jan 2024-Jan 2034	0.9	4.8	27.1	0.1	0.3	0.2
Derrick Barge (1 main engine, 2 generator sets)[1]	Jan 2023-July 2025	2.4	70	15	0.1	1.9	1.7
Spud Barge (1 portside and 1 starboard engines)	Jan 2023-July 2025	0.8	21	4.1	< 0.1	0.5	0.5
Tugboat (1 main engine)	Jan 2023-July 2025	0.8	9	2.7	< 0.1	0.5	0.5
	Combined Daily Emissions[2]	7.5	121.7	115.6	0.3	4.0	3.4
	SDAPCD Daily Threshold	**75**	**250**	**550**	**250**	**100**	**55**
	Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compounds; NO_X = Oxides of Nitrogen; CO = Carbon Monoxide; SO_X = Oxides of Sulfur; PM_{10} = Particulate Matter with a diameter < 10 micrometers; $PM_{2.5}$ = Particulate Matter with a diameter < 2.5 micrometers

[1] Barge emissions refer to emissions associated with both the main propulsion engine and on-board generators used to provide electricity on the barge.

[2] Combined maximum overlap of daily emissions occurs Jan-June 2025 (Phases 2, 4, 5, barges and tugboats). All estimates are with Toxic Best Available Control Technology (i.e., Tier 4 engines). Tier 4 engines will be required as project conditions of approval.

Source: Modeling by Ascent Environmental 2021

Emissions of NO_X would be primarily associated with off-road construction equipment exhaust; secondary sources would include on-road trucks for the hauling of materials and equipment, as well as worker vehicles for commuting. Worker commute trips using gasoline-fueled vehicles would be the primary source of VOC, with additional VOC coming from off- and on-road construction equipment. Emissions of fugitive PM_{10} and $PM_{2.5}$ dust are associated primarily with ground-disturbance activities, and may vary as a function of such soil parameters such as silt content, soil moisture, wind speed, and the area of disturbance. Exhaust emissions from diesel equipment, worker commute trips, on-board generators on barges, barge engines, and tugboats used to mobilize barges also contribute to short-term increases in PM_{10} and $PM_{2.5}$.

The levels of criteria air pollutants and precursors generated during project construction would not exceed the applicable mass emission thresholds based on SDAPCD trigger levels. Therefore, project-related emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is in nonattainment with the CAAQS and NAAQS. In addition, the project would not exacerbate or interfere with the region's ability to attain any health-based standards and would not cause adverse health impacts related to criteria air pollutant emissions. Therefore, this impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant with mitigation incorporated. Sensitive receptors include land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and the potential for increased and prolonged exposure of individuals to pollutants. The project is located in a waterfront industrial area. The nearest sensitive receptors include residents in the Barrio Logan community of San Diego, which lies approximately 1,100 feet north of the project site, across Harbor Drive and the BNSF rail line.

Barrio Logan is a residential area composed of single- and multi-family homes, along with various schools, neighborhood restaurants, and retail stores interspersed throughout. The closest residence is located on the north side of Main Street just west of South 27th Street, approximately 1,180 feet north of the nearest project site boundary, and the nearest school, the Logan Memorial Educational Campus, bordered on the south by Logan Avenue between South 28th and South 29th Streets, is located approximately 3,010 feet north of the project site.

Because the operational emissions at the NASSCO facility would not be increased from implementation of the proposed project, only emissions associated with construction are evaluated. Construction-related activities would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment. Construction activities would occur no closer than 1,180 feet away from the nearest sensitive receptor over a period of 12 years, from 2023 to 2034. According to CARB, more than 90 percent of diesel PM is less than 1 micrometer in diameter and is, thus, a subset of $PM_{2.5}$ (CARB 2022). As such, $PM_{2.5}$ exhaust from diesel equipment is used as a surrogate for diesel PM. Based on emissions modeling, the total exhaust $PM_{2.5}$ emissions over the entire construction period within one mile of the project site would be 0.5 tons, or an average of 83.4 pounds per year over 12 years. To evaluate the potential health effects of construction-related diesel PM emissions on receptors near the project site, an HRA was performed based on these emissions estimates and the MICR and chronic HHI were calculated at the nearest residential receptor.

Air Dispersion Modeling and Health Risk Assessment

The potential cancer risk from inhaling diesel PM emissions associated with project construction outweighs the potential for all other diesel PM-related health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. With regards to exposure of diesel PM, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance, and is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period.

An HRA was prepared for this project to provide an estimate of potential cancer risk to nearby receptors due to construction emissions. This HRA was done in accordance with OEHHA's Air Toxic Hot Spot Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015) and SDAPCD's Supplemental Guidelines for Submission of Rule 1200 Health Risk Assessments (SDAPCD 2019b). Construction emissions of $PM_{2.5}$ (exhaust) were estimated using CalEEMod based on the anticipated construction schedule and the proposed land uses, as well as defaults in CalEEMod (CAPCOA 2021). $PM_{2.5}$ emissions associated with the derrick and spud barges (i.e., exhaust emissions from tugboats utilized to mobilize the barges during construction) were calculated using SMAQMD's Harborcraft Emissions Calculator (SMAQMD 2017). The resulting $PM_{2.5}$ (exhaust) emissions, used as a surrogate for diesel PM emissions, were averaged over the duration of the entire construction period to determine the annual average diesel PM emission rate. Because the project does not contain earth movement/excavation that generates dust, diesel PM is the TAC of primary concern. In addition, cancer-potency factors for diesel PM account for the combined health effects of the many chemicals that make up diesel PM. The modeling considered the length of exposure time, local meteorological data, and proximity of receptors, including sensitive receptors, to the project site.

Dispersion modeling was conducted with the CARB-approved American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee modeling system (AERMOD), Version 21112 (EPA 2021), with a unit emission rate of 1.0 gram per second (g/s) for all modeled sources. The modeling included PM_{10} exhaust emissions, as a surrogate for diesel PM emissions, from diesel-fueled equipment, tugboats, and haul trucks that would be operated during construction. Dispersion modeling was conducted in AERMOD to estimate ground-level exhaust $PM_{2.5}$ concentrations at each receptor location. This approach enabled the output files to be assigned appropriate emission rates and to estimate diesel PM concentrations, as well as resulting cancer and non-cancer risk levels, at each receptor location. The health risks to residents were estimated in the Hotspots Analysis and Reporting Program Version 2 (HARP2) (CARB 2019). The cancer risk was estimated using the OEHHA-derived calculation method for residential receptors and the exposure duration was adjusted in accordance with the anticipated construction schedule (12 years). See Appendix A for all risk assessment assumptions/calculations and model output files.

The modeling included all standard regulatory default options, including the use of urban dispersion parameters and local terrain. Terrain in the project vicinity is generally flat. The following specific parameters were used to perform airborne dispersion modeling and the assessment of health risks related to diesel PM emissions resulting from project construction, including general AERMOD configuration, meteorological data inputs, selection of emission sources and receptors, and cancer risk determination.

AERMOD Model Configuration

The following input parameters were used in all model runs:

- Projected Coordinate System: Universal Transverse Mercator zone 11;
- Geographic Datum: World Geodetic System of 1984;
- Unit emission rate of 1 g/s for all sources; and
- U.S. Geological Survey (USGS) National Elevation Dataset (NED) 1/3 terrain data.

Meteorological Data

Pre-processed meteorological data collected at San Diego International Airport (Lindbergh Field) was obtained from CARB (CARB 2015b) for the complete 5-year period of 2009 through 2013. San Diego International Airport is the nearest and most representative meteorological station to the proposed project site. A wind rose displaying the wind speed and wind direction is shown in Appendix A. The wind primarily blows from the west towards the northeast during most of the year. Using these data, dispersion modeling applied a time-averaged, simplified representation of turbulent, atmospheric transport to approximate how pollutants are carried, mixed, dispersed, and diluted by the local winds.

Emission Sources and Receptor Grid

A receptor grid with 50-meter spacing was placed in the areas surrounding the proposed project site per SDAPCD HRA guidelines, extending out to approximately 1,500 meters (1 mile) beyond the project site boundary. The receptor grid was placed to estimate the level of cancer risk and to determine whether residents would be exposed to excessive concentrations of diesel PM. Adjacent volume sources placed within the proposed project site to represent off-road equipment and tugboats/barges used during construction, each with a 10-meter diameter, an internal lateral dimension of 4.7 meters, and an internal vertical dimension of 1.2 meters, were used for dispersion modeling and to determine ground-level concentrations at receptors. Line volume sources spaced at 10-meter intervals, with a 4.2-meter plume height, 8.0-meter plume width, and a 2.6-meter release height were used to represent haul routes to the I-5 freeway. These dimensions assumed that trucks traveling on these routes would have an average height of 3 meters and width of 2.4 meters. The elevations of volume sources and receptors were based on terrain-feature data obtained from CARB's Digital Elevation Model Files (CARB 2022).

Cancer and Non-Cancer Risks at Sensitive Receptors

Cancer risk to the nearest residential receptor proximal to the project site (i.e., at northwest corner of Main St. and South 27th St.) due to construction emissions would be 11.7 chances per million (Appendix B). The chronic non-cancer health hazard index at this residential receptor would be 0.0034. The cancer risk to receptors at the nearest school in the vicinity of the project site, Logan Memorial Educational Center (i.e., at 3,010 feet from the project site boundary), due to construction emissions would be 10.4 chances per million. The chronic non-cancer health hazard index at the nearest school would be 0.0031. Therefore, prior to mitigation, the cancer risk posed to nearby sensitive receptors who would be exposed to TAC emissions from project construction that would exceed SDAPCD's MICR threshold of 10 chances in one million (**Impact-AQ-1**). However, the chronic non-cancer risks would not exceed the HHI threshold of 1.0.

Mitigation would be required to reduce cancer and non-cancer health risk to below a level of significance. To reduce construction emissions below the MICR threshold of 10 chances in one million, the project applicant and its contractor would be required to use off-road construction equipment that meets Tier 4 (final) California Emissions Standards for off-road diesel engines (**MM-AQ-1**). This mitigation measure would require that at least 75 percent of the off-road construction fleet that has engines sizes that are greater than 50 horsepower meet Tier 4 California Emission standards.

With the incorporation of **MM-AQ-1**, cancer risk to the nearest residential receptor proximal to the project site (i.e., at northwest corner of Main St. and South 27th St.) due to construction emissions would be 8.9 chances per million (Appendix B). The chronic non-cancer health hazard index at this residential receptor would be 0.0026. The cancer risk to receptors at the nearest school in the vicinity of the project site, Logan Memorial Educational Center (i.e., at 3,010 feet from the project site boundary), due to construction emissions would be 1.2 chances per million. The chronic non-cancer health hazard index at the nearest school would be 0.00036. Therefore, with mitigation, the cancer risk posed to nearby sensitive receptors who would be exposed to TAC emissions from project construction would not exceed SDAPCD's MICR threshold of 10 chances in one million nor the HHI threshold of 1.0. **Impact-AQ-1** would be less than significant with mitigation incorporated.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less-than-significant impact. Project operations would not include activities that typically generate odors, such as those associated with wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, or food processing facilities. Implementation of the project would therefore not result in exposure of a substantial number of people to objectionable odors. Minor odors from the use of heavy-duty diesel equipment during project construction activities would be intermittent and temporary, and would dissipate rapidly from the source with an increase in distance. Therefore, project construction is not anticipated to result in an odor-related impact. Thus, this impact would be less than significant, and no mitigation is required.

Required Mitigation Measures

With implementation of the following mitigation measure, the impact on air quality would be less than significant:

Mitigation Measure AQ-1: Construction Fleet Emissions Requirements

Prior to issuance of a construction-related permit, the applicant shall submit evidence to the District that the proposed off-road construction fleet will consist of at least 75 percent of off-road diesel construction equipment (greater than 50 horsepower) that meet Tier 4 (final) California Emissions Standards for off-road diesel engines. The equipment shall be properly maintained and tuned in accordance with manufacturer specification. This shall be verified by submitting an equipment inventory to the District for off-road equipment greater than 50 horsepower that includes the engine model year, horsepower rating, projected hours of use, and the CARB equipment identification number for each piece of equipment. The submittal shall include a statement indicating compliance with MM-AQ-1 and signed verification by the Applicant and Contractor.

If 75 percent of off-road construction fleet cannot meet the Tier 4 construction equipment requirement of this measure due to lack of availability in the region, the applicant shall demonstrate the details of the attempt to obtain Tier 4 equipment and shall also provide to the District an off-road equipment inventory with air quality emissions estimates calculated by a qualified air quality specialist, prior to commencement of any construction activities, indicating that the construction fleet to be used achieves an average fleetwide emission rate (g/hp/hr for NOx and PM) that does not exceed the applicable health-based threshold of 10 chances in a million for cancer risk at the nearest sensitive receptor. The qualified air quality specialist is defined as having at least 3 years of experience conducting health risk assessments using a CARB-recognized model. The submitted air quality emission calculations shall include a signed statement from the Applicant and Contractor indicating compliance with MM-AQ-1.

4.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

The environmental setting and project impact analysis for marine biological resources provided below is based on two project-specific technical reports. The *Marine Habitat Assessment for the General Dynamics-NASSCO Floating Dry Dock Replacement and Waterfront Improvement Project*, prepared by Marine Taxonomic Services (February 2022), is included as Appendix B. In addition, *The Port of San Diego NASSCO Floating Drydock and Waterfront Improvement Project Underwater Assessment,* prepared by Illingworth and Rodkin (February 2022) is included as Appendix C.

4.4.1 Environmental Setting

TERRESTRIAL HABITAT

The terrestrial portion of the project site is completely developed and contains no natural habitat, natural vegetation, or landscape vegetation. The project site is situated in a highly industrialized area on and adjacent to the San Diego Bay.

MARINE HABITAT

Marine habitats on the project site were surveyed and characterized in May of 2021 using side-scan sonar surveys and SCUBA-based transect surveys (Appendix B). The natural and human-made habitats observed and surveyed within the project site included intertidal and subtidal hard bottom, intertidal and subtidal piles, subtidal unvegetated soft bottom, subtidal vegetated soft bottom, and open water habitats. These marine habitats are discussed below.

Hard Bottom Habitat

Hard bottom habitats observed throughout the project site were generally present along the shallow water edges of survey sites and consisted of items used for the purpose of armoring the shoreline. Hard bottom substrate was generally composed of varying and on occasion multiple types of hard material including riprap rock, stacked concrete blocks, and concrete poured over stacked concrete block. Organisms observed over and within hard bottom habitats included marine invertebrates, marine fishes, and several species of marine algae. Hard bottom habitat is present along the shoreline, in shallow subtidal areas, and in some areas below -12 feet mean lower low water (MLLW) (Appendix B).

Piles

Piles are present throughout the project site that support overwater structures of the NASSCO facility. The upper reaches of the piles (i.e., 2 to -2 feet MLLW) were generally colonized by a fouling community dominated by Pacific oysters (*Crassostrea gigas*), barnacles (*Chthamalus* spp.), and foliose species of red algae (*Gelidium* sp., *Gracilaria* sp.) (Appendix B). Fish were not observed around the piles, however, marine fish species observed elsewhere in the project site may utilize these structures on occasion.

Unvegetated Soft Bottom Habitat

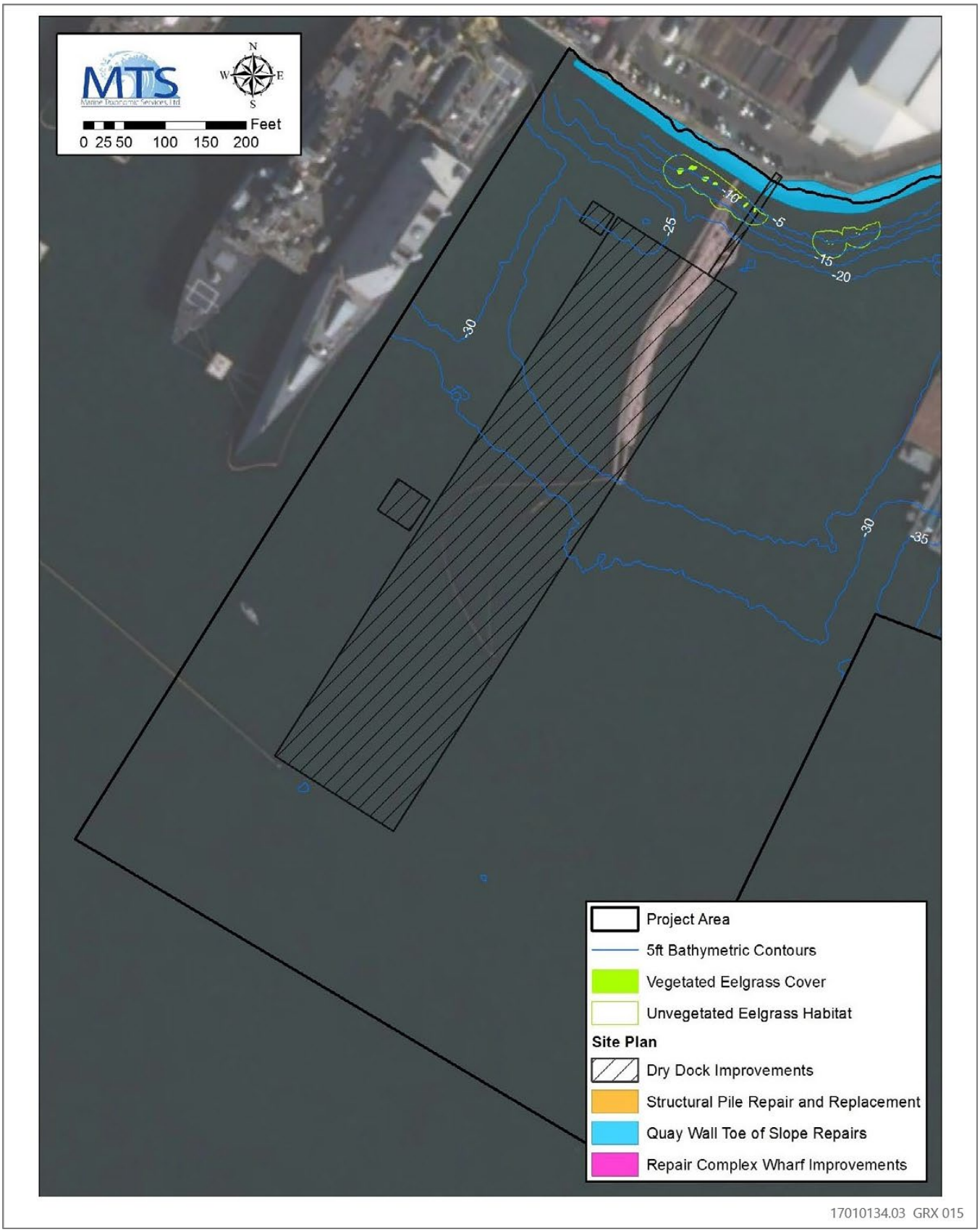
Most of the marine habitat within the project site was unvegetated soft bottom habitat. Unvegetated soft bottom habitat was generally characterized by sediment grain size of mud to fine sand and shell hash. Bioturbation (i.e., the disturbance of sedimentary deposits by living organisms) was generally low throughout all soft bottom habitats. In portions of deep subtidal unvegetated habitat moderate bioturbation was observed due to reduced coarseness of sediment and reduced presence of shell hash and shells. Organisms observed within unvegetated soft bottom habitats included marine invertebrates, marine fishes, stingrays, and sparse marine algae (Appendix B).

Vegetated Soft Bottom Habitat

Vegetated soft bottom (i.e., eelgrass [*Zostera marina*]) occurs within portions of the project site. Eelgrass covers approximately 5,150 square feet and unvegetated eelgrass habitat (i.e., areas within approximately 16 feet of established eelgrass habitat where the beneficial aspects of eelgrass presence extend and influence benthic communities) covers approximately 0.7 acre within the project site (Appendix B). Eelgrass is typically present in shallow subtidal habitats in the project site but is occasionally present in intertidal and moderately deep subtidal habitat (Appendix B).

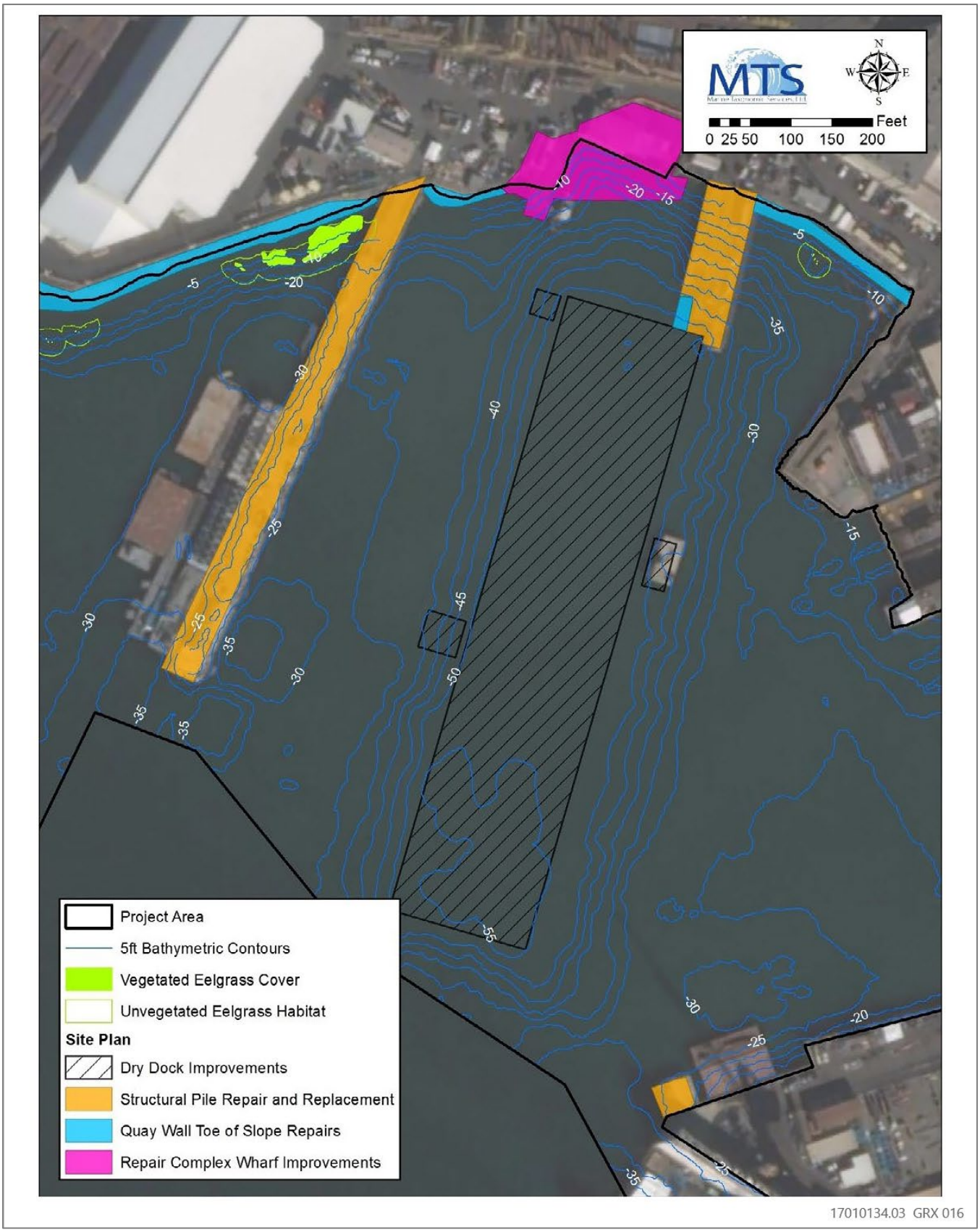
Open Water Habitat

Topsmelt (*Atherinops affinis*) were observed swimming in open water, and it is likely that schooling baitfish frequent the open waters of project site, which are important prey items for seabirds (Appendix B).



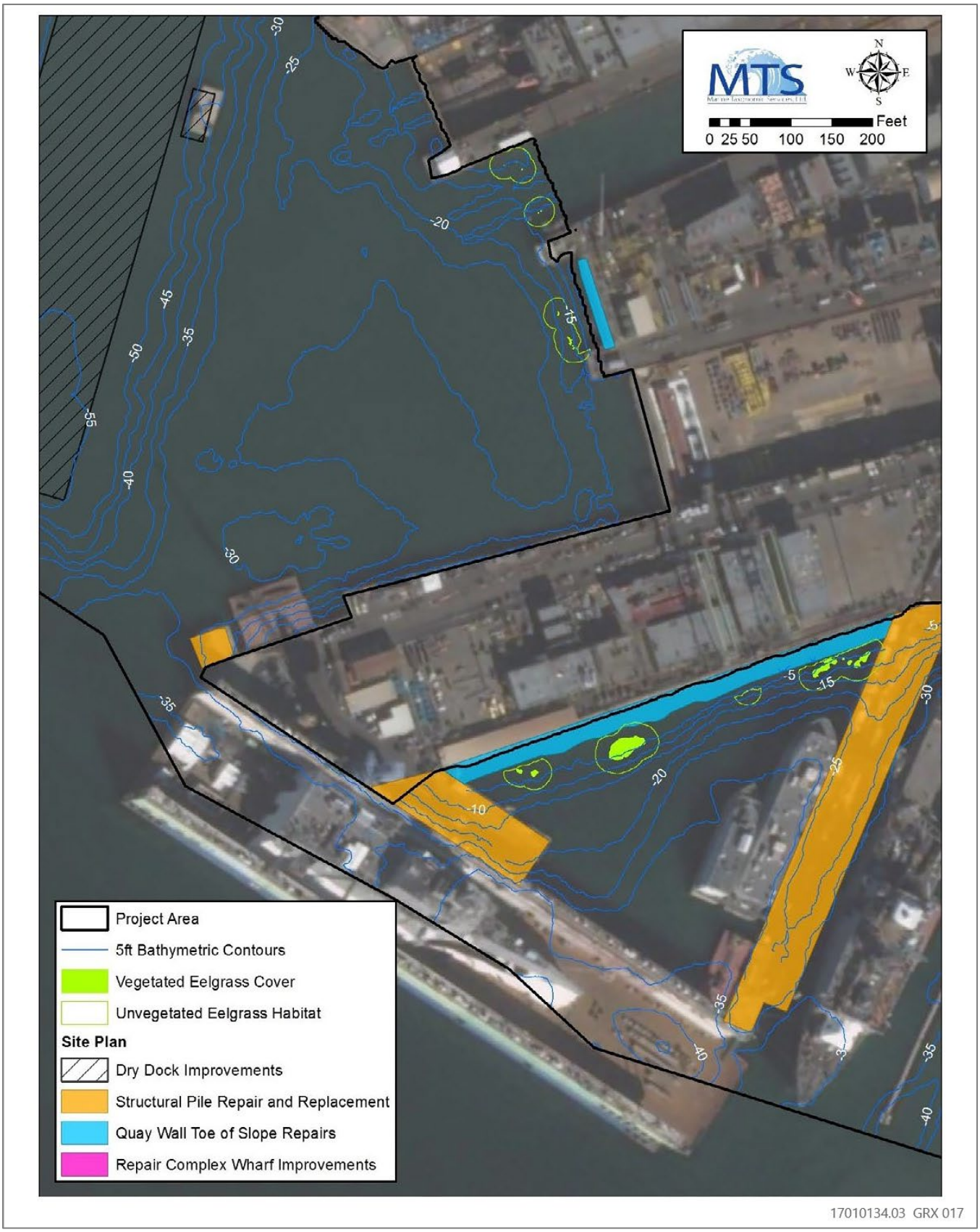
Source: Image provided by Marine Taxonomic Services, LTD in 2021

Figure 4.4-1 Mapped Eelgrass (Sheet 1 of 4)



Source: Image provided by Marine Taxonomic Services, LTD in 2021

Figure 4.4-1 Mapped Eelgrass (Sheet 2 of 4)



Source: Image provided by Marine Taxonomic Services, LTD in 2021

Figure 4.4-1 Mapped Eelgrass (Sheet 3 of 4)

Source: Image provided by Marine Taxonomic Services, LTD in 2021

Figure 4.4-1 Mapped Eelgrass (Sheet 4 of 4)

SPECIAL-STATUS SPECIES

A query of the California Natural Diversity Database and a California Native Plant Society Inventory of Rare and Endangered Plants search of the La Jolla, La Mesa, Point Loma, National City, and Imperial Beach USGS 7.5-minute quadrangles were conducted to identify sensitive biological resources within the vicinity of the project site. A review of the query and search results, documented species ranges, and habitat within the project site identified no special-status plant species that may occur on the project site due to lack of suitable natural habitat (Appendix D; CNDDB 2021; CNPS 2021). A total of 14 special-status wildlife species were indicated as possibly occurring on the project site: green sea turtle (*Chelonia mydas*), American peregrine falcon (*Falco peregrinus anatum*), black skimmer (*Rynchops niger*), brant (*Branta bernicla*), California brown pelican (*Pelecanus occidentalis californicus*), California least tern (*Sternula antillarum browni*), common loon (*Gavia immer*), gull-billed tern (*Gelochelidon nilotica*), bottlenose dolphin (*Tursiops truncatus*), California sea lion (*Zalophus californianus*), gray whale (*Eschrichtius robustus*), harbor seal (*Phoca vitulina*), long-beaked common dolphin (*Delphinus capensis*), and short-beaked common dolphin (*Delphinus delphis*) (Appendix B; CNDDB 2021). Specific details of birds, turtles, and marine mammals with the potential to occur onsite or in the vicinity are described below.

Birds

As discussed in Appendix B, available space for nesting California least terns does not occur within the project site; however, due to the proximality of the facility relative to known nesting colonies there is moderate potential for least terns to utilize areas of open water within the project site to actively forage for fish. Similarly, although California brown pelican do not nest in San Diego Bay, they do forage within the bay and there is moderate potential for this species to utilize areas of open water within the Project site to forage for fish.

Like the California least tern, available space for California snowy plovers nesting does not occur within the project site. The species forages on sandy shorelines and mudflats at low tide. Given that there is minimal suitable foraging habitat exposed at any given tide, there is low potential for this species to utilize space within the facility for foraging.

Turtles

The population requirements of green sea turtles in San Diego Bay mean that the animals spend most of their time in the south bay. The potential to observe animals in more northern portions of San Diego Bay and in offshore environments increases in summer months when warmer surface water is present. The decommissioning of the South Bay Power Plant has also been attributed to an increased number of more northern observations. Animals will also leave foraging opportunities in San Diego Bay when they migrate to nesting sites. There is moderate potential for green sea turtle presence at the project site due to the facility's central location within San Diego Bay. Other sea turtle species have not been observed in San Diego Bay thus it is unlikely for them to be observed within the Project site.

Cetaceans

Common dolphin's and bottlenose dolphins have widespread distributions and are commonly observed in southern California nearshore environments. They are also often observed in the north San Diego Bay area from the San Diego Bay entrance to approximately Harbor Island (Appendix B). These animals are often observed either swimming alongshore or bowriding vessels entering and leaving the bay. However, due to the location of the project site, further south and away from the San Diego Bay entrance, the potential for the occurrence of these species is low.

All the remaining cetaceans except for the gray whale, have very low potential for observation along the San Diego coast and are unlikely to occur within the project site. The gray whale performs annual migrations from cooler northern Pacific feeding areas to embayments in Baja California, Mexico for mating and caving. Gray whales migrate south through San Diego coastal waters in fall and early winter and can be observed on their northbound migration in later winter and early spring. Animals have been occasionally observed entering San Diego Bay (Appendix B); these events are likely accidental and are rare. Should animals enter San Diego Bay there is very low potential for them to travel as far south as the project site.

Pinnipeds

Pinnipeds are documented to occupy natural settings: sandy beaches, rocky beaches, boulder beaches, rocks and pinnacles, mud flats, reefs, fallen trees, and rock shelves. California sea lion (*Zalophus californianus*) and occasionally Pacific harbor seal (*Phoca vitulina*) occupy man-made structures (e.g., docks, buoys, landings, breakwaters, boats, barges, and fish ladders). Potential disturbance occurs when these "haul-out" locations overlap with urbanized areas.

In San Diego Bay, both California sea lion and Pacific harbor seal haul out on natural (e.g., beaches) and man-made structures, forage, raft, and mill throughout the entirety of the bay. California sea lion and harbor seal are not typically found in the same haul out locations due, in part, to their physiology. The California sea lion is able to haul out on steep, rocky habitat because it can rotate its pelvis to use all four limbs to walk. Harbor seal cannot rotate the pelvis and must move on land by undulating the body (Appendix B). Within San Diego Bay, California sea lion is the dominant and most numerous pinniped observed, whereas harbor seal is more elusive and found in lower numbers. California sea lion haul out in large numbers at the two bait barges that are located near the entrance to San Diego Bay in Point Loma. They also haul out individually or in small groups on buoys, docks, and boats throughout San Diego Bay but are most prevalent in northern portions of San Diego Bay. In addition to the animals that haul out on the buoys, docks, and boats, California sea lion rests in moderate numbers on the rock riprap that forms Zuniga Jetty at the entrance to San Diego Bay (Appendix B). On the exposed ocean side of the Point Loma Peninsula, harbor seals have established one of two mainland hauling and rookery sites in San Diego County. As a result, Pacific harbor seals and their pups have been documented in San Diego Bay, mostly at the northern end of the Bay nearest Ballast Point. The harbor seals use a portion of the docks in a restricted area adjacent to the Naval Base Point Loma Submarine docking station to haul out. In addition, harbor seals have been observed to haul out along the shore south of Ballast Point (Appendix B).

Other pinnipeds seen in the bay include northern elephant seal (*Mirounga angustrirostris*) and Steller sea lion (*Eumetopias jubatus*). These are rare sightings and**,** in the case of the elephant seals, they are typically undernourished juveniles that strand on the shore within the bay. Steller sea lions have been recorded hauled out on the bait barge and navy docks, and swimming in the north bay (Appendix B).

While the project site is located further from the San Diego Bay entrance and the established natural haul out sites there is potential for these species to travel further into the bay in search of anthropogenic haul out areas and foraging for food. There is potential for California sea lions and harbor seals to transit within the open waters of the project site and utilize structures within the NASSCO leasehold as haul out sites. Given the overall rarity of sightings of other pinniped species in north San Diego Bay, all other pinniped species are considered to be unlikely to occur within the project site and its immediate surroundings.

ESSENTIAL FISH HABITAT

To adequately address Essential Fish Habitat (EFH) within the study area, fish species managed by the Pacific Fishery Management Council (PFMC) that are known to either occur within the study area, have historically occurred within the study area, or depend upon those marine habitats that are known to occur within study area, were identified. In all, 28 species managed by the PFMC were identified, including species managed under the Coastal Pelagic Species Fishery Management Plan (FMP), the Highly Migratory Species FMP, and the Pacific Groundfish FMP (See Table 3 of Appendix B).

In addition, Habitat Areas of Particular Concern (HAPC) were observed within the Project site. HAPCs are a discreet subset of EFH, that are distinguished by characteristics including their high ecological value and vulnerability to anthropogenic stressors. As indicated in Appendix B, a review of mapping NMFS mapping data for pacific Coast HAPCs, and confirmation obtained from side-scan sonar and visual SCUBA survey observation, 478 square meters of eelgrass (*Zostera marina*), seagrass habitat, were identified within the project site and is classified as a HAPC (See Figure 4.1-1).

4.4.2 Regulatory Setting

FEDERAL

Coastal Zone Management Act of 1972

The U.S. Congress recognized the importance of meeting the challenge of continued growth in the coastal zone by passing the Coastal Zone Management Act in 1972. The act, administered by NOAA's Office of Ocean and Coastal Resource Management, provides for management of the nation's coastal resources and balances economic development with environmental conservation.

The Coastal Zone Management Act outlines two national programs. The National Coastal Zone Management Program includes 34 coastal programs that aim to balance competing water and land issues in the coastal zone. The National Estuarine Research Reserve System creates field laboratories that provide a greater understanding of estuaries and how humans affect them. The overall program objectives of the act are to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone."

The Coastal Zone Management Act ensures that development projects in coastal areas are designed and sited in a manner that is consistent with coastal zone land uses, maximizes public health and safety, and ensures that biological resources (e.g., wetlands, estuaries, beaches, and fish and wildlife and their habitat) within the coastal zone are protected. The California Coastal Commission enforces the Coastal Zone Management Act by certifying that any proposed project is consistent with the California Coastal Act of 1976 (as amended). The enforceable policies of the Coastal Zone Management Act are found in Chapter 3 of the California Coastal Act.

Rivers and Harbors Act (Section 10)

Pursuant to Section 10 of the Rivers and Harbors Act, the U.S. Army Corps of Engineers (USACE) is authorized to regulate any activity within or over any navigable water of the United States. Rivers and Harbors Act Section 10 jurisdiction is defined as "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use, to transport interstate or foreign commerce" (33 Code of Federal Regulations 322). The San Diego Bay is considered traditional navigable water regulated under Section 10 of the Rivers and Harbors Act; therefore, any future work activities proposed within or over any navigable waters would require Section 10 compliance and coordination with USACE.

Federal Endangered Species Act

Species listed as endangered and/or threatened by the USFWS are protected under Section 9 of the Federal ESA, which forbids any person to "take" an endangered or threatened species. Take is defined in Section 3 of the act as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The U.S. Supreme Court ruled in 1995 that the term "harm" includes destruction or modification of habitat. Sections 7 and 10 of the Act may authorize "incidental take" for an otherwise lawful activity (a development project, for example) if it is determined that the activity would not jeopardize survival or recovery of the species. Section 7 applies to projects where a Federally listed species is present and there is a Federal nexus, such as a Federal CWA Section 404 permit (e.g., impacts on waters of the United States [WoUS]) that is required. Section 10, requiring an incidental take permit, applies when a Federally listed species is present, but there is no Federal nexus.

Magnuson-Stevens Fishery Management and Conservation Act

Federal agencies must consult with NOAA Fisheries on actions that may adversely affect essential fish habitat (EFH). EFH is defined as those "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." NOAA Fisheries encourages streamlining the consultation process using review procedures under the National Environmental Policy Act, Fish and Wildlife Coordination Act, the CWA, and/or the Federal ESA provided that documents meet requirements for EFH assessments under Section 600.920(g). EFH assessments must include (1) a description of the proposed action, (2) an analysis of effects, including cumulative effects, (3) the Federal agency's views regarding the effects of the action on EFH, and (4) proposed mitigation, if applicable.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1972 prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. Congress passed the MMPA based on the following findings and policies: (1) some marine mammal species or stocks may be in danger of extinction or depletion as a result of human activities, (2) these species of stocks must not be permitted to fall below their optimum sustainable population level (depleted), (3) measures should be taken to replenish these species or stocks, (4) there is inadequate knowledge of the ecology and population dynamics, and (5) marine mammals have proven to be resources of great international significance.

The MMPA was amended substantially in 1994 to provide for: (1) certain exceptions to the take prohibitions, such as for Alaska Native subsistence, and for permits and authorizations for scientific research; (2) a program to authorize and control the taking of marine mammals incidental to commercial fishing operations; (3) preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction; and (4) studies of pinniped-fishery interactions. Additionally, under the 1994 amendments to the MMPA, harassment is statutorily defined as any act of pursuit, torment, or annoyance that:

- Has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or
- Has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavior patterns, including, but not limited to migration, breathing, nursing, breading, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild (Level B harassment).

NOAA Fisheries and USFWS administer the MMPA. Project activities that may result in Level A or B harassment, injury, or mortality would require consultation with NOAA Fisheries and USFWS under the MMPA.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it is unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. Under the MBTA, "take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." A take does not include habitat destruction or alteration, if there is not a direct taking of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA can be found in 50 CFR 10.13. The list includes nearly all birds that are native to the United States.

Clean Water Act

The Federal Water Pollution Control Act Amendments of 1972, commonly known as the Clean Water Act (33 United States Code [USC] 1251–1376), as amended by the Water Quality Act of 1987, is the major Federal legislation governing water quality. The purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Discharges into WoUS are regulated under CWA Section 404. WoUS include: (1) all navigable waters (including all waters subject to the ebb and flow of the tide); (2) all interstate waters and wetlands; (3) all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, or natural ponds; (4) all impoundments of waters mentioned above; (5) all tributaries to waters mentioned above; (6) the territorial seas; and (7) all wetlands adjacent to waters mentioned above. Important applicable sections of the CWA are discussed below.

- Section 401 requires an applicant for any Federal permit that proposes an activity that may result in a discharge into WoUS (as defined by the navigable water protection rule) to obtain certification from the State that the discharge will comply with other provisions of the CWA. Certification is provided by the respective Regional Water Quality Control Board (RWQCB). A Section 401 certification from the San Diego RWQCB would be required for future projects if a Section 404 permit and/or Rivers and Harbor Act (Section 10) permit are required.
- Section 404 provides for USACE issuance of permits for discharge of dredged or fill material into WoUS by Permits typically include conditions to minimize impacts on water quality. Common conditions include: (1) USACE

review and approval of sediment quality analysis before dredging; (2) a detailed pre- and post-construction monitoring plan that includes disposal site monitoring; and (3) requiring compensation for loss of WoUS.

California Eelgrass Mitigation Policy

The National Marine Fisheries Service (NMFS) is an office of the NOAA and is responsible for the stewardship of the nation's ocean resources and their habitat. NMFS developed the California Eelgrass Mitigation Policy (CEMP) in order to establish and support a goal of protecting eelgrass and its habitat functions (NMFS 2014). The CEMP includes guidance on defining eelgrass habitat, surveying, mapping, assessing impacts, avoiding and minimizing impacts on eelgrass, and mitigation options. Avoidance and minimization measures included within the CEMP relate to turbidity, shading, circulation, and nutrient and sediment loading impacts. Mitigation options include comprehensive management plans, in-kind mitigation, mitigation banks and in-lieu-fee programs, and out-of-kind mitigation.

NMFS has provided this policy to other State and Federal agencies, including the California Department of Fish and Wildlife (CDFW), as guidance for handling project-related impacts on eelgrass habitat.

STATE

California Endangered Species Act; Fully Protected Species

The CESA establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that affect both a State- and Federally listed species, compliance with the Federal ESA will satisfy the CESA if the CDFW determines that the Federal incidental take authorization is consistent with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in a take of a State-only listed species, the project proponent must apply for a take permit under Section 2081(b).

Also, California Fish and Game Code Sections 3511, 4700, 5050, and 5515 prohibit take or possession of fully protected species. Incidental take of fully protected species may be authorized only under an approved Natural Communities Conservation Plan (NCCP).

California Fish and Game Code

Other sections of the California Fish and Game Code establish the Fish and Game Commission, as authorized by Article IV, Section 20, of the Constitution of the State of California. The Fish and Game Commission is responsible, under the provisions of Sections 200–221, for regulating the take of fish and game, not including the taking, processing, or use of fish, mollusks, crustaceans, kelp, or other aquatic plants for commercial purposes. However, the Fish and Game Commission does regulate aspects of commercial fishing, including fish reduction; shellfish cultivation; take of herring, lobster, sea urchins, and abalone; kelp leases; leases of State water bottoms for oyster allotments; aquaculture operations; and other activities. These resource protection responsibilities involve the setting of recreational and commercial fishing seasons, bag and size limits, and methods and areas of take, as well as prescribe the terms and conditions under which permits or licenses may be issued or revoked by CDFW. The Fish and Game Commission also oversees the establishment of wildlife areas and ecological reserves and regulates their use and sets policy for CDFW.

Sections 3503, 3503.5, 3505, 3800, and 3801.6 of the Fish and Game Code protect all native birds, birds of prey, and all nongame birds, including their eggs and nests, that are not already listed as fully protected and that are naturally present within the state. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, falcons), including their nests or eggs.

CDFW is the lead State agency that manages native fish, wildlife, plant species, and natural communities for their ecological value and their benefits to people. CDFW oversees the management of marine species through several programs, some in coordination with NMFS and other agencies.

The CEMP is administered by NMFS and CDFW. The effects of a project on any surrounding eelgrass beds and any compensatory mitigation would be addressed under the CEMP.

California Coastal Act

The California Coastal Act of 1976 recognizes California ports, harbors, and coastline beaches as primary economic and coastal resources and as essential elements of the national maritime industry. Decisions to undertake specific development projects, where feasible, are to be based on consideration of alternative locations and designs in order to minimize any adverse environmental impacts. The California Coastal Act is implemented by the California Coastal Commission (CCC). The District's currently adopted Port Master Plan was certified by CCC on January 21, 1981, and subsequently amended.

LOCAL

San Diego Port District Port Master Plan

Through implementation of the Port Master Plan (PMP), the District maintains authority over tidelands and submerged lands conveyed in trust to the District by the California legislature. Any amendments to the PMP are first reviewed and adopted by the Board of Port Commissioners and then certified by the California Coastal Commission, thereby allowing the District to issue coastal development permits for projects within its jurisdiction. The PMP provides for protection of biological resources and states that the District will remain sensitive to the needs of, and will cooperate with, other communities and other agencies in Bay and tideland development.

San Diego Bay Integrated Natural Resources Management Plan

The San Diego Bay INRMP is a long-term strategy sponsored by two of the major managers of San Diego Bay: the U.S. Navy and the District. Its intent is to provide direction for the good stewardship that natural resources require while also supporting the ability of the Navy and District to meet their missions and continue functioning within the Bay. The core strategies of the plan are to (1) manage and restore habitats, populations, and ecosystem processes; (2) plan and coordinate projects and activities so that they are compatible with natural resources; (3) improve information sharing, coordination, and dissemination; (4) conduct research and long-term monitoring that supports decision-making; and (5) put in place a Stakeholder's Committee and Focus Subcommittees for collaborative, ecosystem-based problem-solving in pursuit of the goal and objectives.

Port of San Diego Environmental Mitigation Property (BPC Policy No. 735)

Board of Port Commissioners (BPC) Policy 735 establishes a policy for the allocation of environmental mitigation property within District Tidelands. Environmental mitigation property refers to land, water area, natural or constructed habitats, credit for the removal of shading over open water, or other assets, held in trust by the District and that could be used to offset the environmental impacts of projects. The District recognizes the demand for mitigation property within Tidelands for capital development projects and major maintenance pursuant to the District's land-use obligation (as defined in Section 4 of the San Diego Unified Port District Act). The District also recognizes that the demand for environmental mitigation property for non-District funded projects is increasing. It is the policy of the District that property suitable for mitigation, which is held in trust by the District, will be retained for District-funded capital development and major maintenance projects. Due to the limited area of mitigation property available to the District, each project requiring mitigation shall be evaluated through an administrative procedure as described in BPC Policy No. 735 to ensure that environmental mitigation property is only used for the most appropriate project. Further, unused mitigation land and new mitigation opportunities on District Tidelands that are not encumbered by a project will be under the control of the District and will be added to the District's accounting of available mitigation property. New mitigation land or credits will be managed in accordance with the District's administrative policy for use of District Environmental Mitigation Property.

4.4.3 Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less than significant with mitigation incorporated. Project construction activities would potentially cause substantial noise, increases in turbidity, release of construction-related pollutants into U.S. and State waters, and have an anticipated increase in overwater coverage that would have the potential to significantly impact a special-status species. Each is described in more detail below.

The landside portion of the project site is fully developed and does not contain natural habitat suitable for special-status plant species. Therefore, there would be no impact on special-status plant species.

Impacts from Construction Noise

The use of large machinery for construction and demolition as well as pile driving could result in construction-induced noise impacts that could alter the behavior of protected species. These impacts could occur from construction activities such as hammering, drilling, operation of heavy construction equipment, or transport of construction materials. Additionally, the installation of new in-water and overwater structures would also have the potential to result in similar impacts on protected species from in-water construction activities such as pile driving. Construction-induced noise impacts from pile driving could disrupt the foraging behavior of the California least tern if construction occurs during the California least tern nesting season. Other sensitive fish-foraging avian species such as brown pelican can similarly be impacted. This would be considered a significant impact (**Impact-BIO-1**).

Mitigation measures for reducing noise related impacts on foraging California least tern and other sensitive fish feeding avian predators during nesting season (**Impact-BIO-1**) include construction monitoring during the nesting season (**MM-BIO-1**). The monitor would have the ability to reduce or temporarily stop noise producing activities if those activities were believed to impact or otherwise alter foraging behavior of sensitive avian species during the nesting season. For instances involving impact hammer or vibratory pile driving, the driving of piles would be limited to the non-breeding season (i.e., September 16 to March 31) for California least terns. The use of impact hammering or vibratory pile driving during the nesting season would require the qualified biologist to establish, to the satisfaction of regulatory agencies, that equivalent or greater protection can be provided by an alternate approach, such as the installation of sound barriers. Implementation of **MM-BIO-1** would reduce **Impact-BIO-1** to less than significant.

Construction noise can also impact species protected under the Migratory Bird Treaty Act and California Fish and Game Code. For instance, marine dependent avian species such as the black-crowned night heron nest in trees near shore where there nesting activities could be disturbed by construction noise. Disturbance can cause nesting birds to abandon nest sites or alter nesting behavior in ways that lower nesting success. This would be considered a significant impact (**Impact-BIO-2**).

While disturbance of nesting marine dependent avian species (**Impact-BIO-2**) is not anticipated due to the lack of nesting habitat within the Project site, disturbance can be minimized by ensuring that nesting bird behavior is not modified during construction activities that generate loud noises. **MM-BIO-2** would require the project applicant to retain a qualified biologist to perform a nesting bird survey of the noise generating activity one week prior to the start of construction utilizing heavy equipment, and if nests are found, survey once per week during construction until use of heavy equipment ceases. If noise levels are anticipated to be 10dBA or greater above ambient background noise levels within the vicinity of an active nest, sound barriers with a minimum sound transmission class (STC) rating of 28 would be placed between the noise generating activity and the nest. Distance from the nest would be determined by the qualified biologist based on the species nesting and the noise acceptability exhibited by the bird. If noise effects cannot be minimized, construction shall be altered, to the extent necessary to ensure that impacts to the nesting species are negligible in a manner determined by regulatory agencies and based on the opinion of the qualified biologist. Implementation of **MM-BIO-2** would reduce **Impact-BIO-2** to less than significant.

Several marine species may occur in marine environments on the project site, including green sea turtle, and marine mammals such as bottlenose dolphin, long-beaked common dolphin, short-beaked common dolphin, California sea lion, and harbor seal (Appendix B). California sea lions and harbor seals may haul out on human-made structures in the NASSCO facility. Some project activities (i.e., impact and vibratory pile driving) would generate loud noise and vibration. NMFS defines noise thresholds for marine mammal harassment relative to "Level A" and "Level B" harassment. Level B harassment refers to disruption of marine mammal behavior (e.g., foraging, traveling, resting) due to impulsive noise (i.e., impact pile driving) or continuous noise (i.e., vibratory pile driving). (Appendix B). Pile driving activities may also disrupt the behavior of green sea turtles if present in the project site. In addition, pile installation activities are predicted to have potential Level A marine mammal impacts are those impacts that can cause injury. Level A impacts may extend out to 474 meters each day, depending on the type of activity and animal species (Table 4.4-1). The range of Level B impacts would be greater, extending out to approximately 1.8 kilometers (1.1 miles) during vibratory pile driving under the unattenuated condition (Table 4.4-1). For activities involving impact driving only, Level B zones would be less than 160 meters under the unattenuated condition (Table 4.4-1). The prediction that sounds would extend out to these distances would be associated with waters that have clear line of sight to the construction activity.

Table 4.4-1 Distance to the Adopted Marine Mammal Thresholds for Pile Driving Activities

Driving Method	Pile Type	Pile Size	Piles per Day	Number of Strikes per Pile	Condition[1]	Level A Injury Zone (meters)[2]					Level B Harassment Zone (meters)[5]
						Cetaceans[3]			Pinnipeds[4]		
						LF	MF	HF	PW	OW	
Impact	Concrete	12–18 inches. Round or Square	10	1,000	Unattenuated	136	5	162	73	5	63
					Attenuated	63	2	75	34	3	29
Impact	Concrete	20–24 inches. Round or Square	10	1,000	Unattenuated	398	14	474	213	16	100
					Attenuated	185	7	220	99	7	46
Impact	Steel H	12–14 inches	10	1,000	Unattenuated	341	12	406	183	13	158
					Attenuated	158	6	189	85	6	74
Vibratory	Steel Pipe	13 inches	2	NA	Unattenuated	6	1	9	4	<1	1,131
					Attenuated	3	<1	4	2	<1	525
Vibratory	Steel Sheet	—	2	NA	Unattenuated	9	<1	14	6	<1	1,792
					Attenuated	4	<1	6	3	<1	832

1 Attenuated condition assumes 5- decibels lower sounds owing to different attenuation mechanisms like bubble curtains, isolation casing, or other methods that may be used during the pile driving activities.

2 Using SEL_{cum} threshold.

3 Cetaceans include whales and dolphins.

4 Pinnipeds include seals and sea lions.

5 Green sea turtle monitoring follows the marine mammal Level B Harassment Zone parameters.

Notes: NA = Not Applicable. LF = Low Frequency cetaceans (gray whales). MF = Mid-Frequency cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales). HF = High Frequency cetaceans (true porpoises). PW = Phocids [i.e., true seals including harbor seal]. OW = Otariids [i.e., sea lions including California sea lion].

Source: Data provided by Illingworth & Rodkin in 2022 (Appendix C).

In addition to marine mammals and green sea turtles, several species of fish have been observed within and surrounding the project site, including on hard bottom habitat, unvegetated soft bottom, and vegetated soft bottom. As described in the project underwater assessment (Attachment B), pile driving activities would generate loud noise and vibration up to 150 dB root-mean-square pressure (RMS) that would travel out to distances in the unattenuated condition of between 46 meters and 736 meters, assuming no intervening structures or land mass and depending on the type of pile being driven, the number of piles driven per day, and the number of strikes per pile.

Table 4.4-2 Distance to the Various Adopted Fish Thresholds for Pile Driving Activities

Driving Method	Pile Type	Pile Size	Piles Installed per Day	Number of Strikes per Pile	Condition[1]	Distance to Various Adopted Fish Thresholds (meters)			
						Peak 206 dB[2]	RMS 150 dB[2]	Cumulative SEL	
								187 db[3]	183 db[3]
Impact	Concrete	12–18 inches. Round or Square	10	1,000	Unattenuated	<1	293	46	46
					Attenuated	<1	136	22	22
Impact	Concrete	20–24 inches. Round or Square	10	1,000	Unattenuated	<1	464	136	136
					Attenuated	<1	215	63	63
Impact	Steel H	12–14 inches	10	1,000	Unattenuated	4	736	117	117
					Attenuated	2	341	54	54
Vibratory	Steel Pipe	13 inches	2	NA	Unattenuated	<1	46	N/A	N/A
					Attenuated	<1	22	N/A	N/A
Vibratory	Steel Sheet	—	2	NA	Unattenuated	<1	74	N/A	N/A
					Attenuated	<1	34	N/A	N/A

[1] Attenuated condition assumes 5- decibels lower sounds owing to different attenuation mechanisms like bubble curtains, isolation casing, or other methods that may be used during the pile driving activities.

[2] dB : re 1 µpa

[3] dB : re 1 µpa2sec

Therefore, in-water construction associated with proposed construction could generate enough underwater noise to physically injure marine mammals, sea turtles, and fishes from impact hammer or vibratory pile driving occurring during construction. Any noise related impacts would be dependent on the type of activity being performed, the proximity to marine waters, and the biology of the considered species. In-water impact hammer or vibratory pile driving activity could potentially generate enough underwater noise to injure (Level A Harassment) or alter behavior (Level B Harassment) for marine mammals, green sea turtles, and fishes. Impacts are therefore considered significant (Impact-BIO-3).

Potential noise-related impacts on marine mammals, green sea turtles, and fishes (Impact-BIO-3) can be minimized by implementing the various measures required under mitigation measure MM-BIO-3. This mitigation measure would require development of a marine mammal monitoring plan and subsequent monitoring of hauled out marine mammals whenever noise generating activities are in excess of 90 dB root mean square (RMS) for harbor seals and 100 dB RMS for non-harbor seals (sea lions) at the haul out locations or if the haul out is within 500 feet of the noise source. These criteria are established by NOAA NMFS as noise levels for a Level B harassment (behavior alteration) of marine mammals when those mammals are hauled out. Protecting marine mammals against Level B harassment when hauled out also ensures protection against Level A harassment (injury). If marine mammals are hauled out within the zone where sound thresholds are exceeded, then the biological monitor will notify the contractor to halt or alter the noise generating activity such that construction noise is at or below 90 dB RMS or 100 dB RMS for harbor seals and non-harbor seals, respectively. The zones of influence to thresholds for harassment of hauled out marine mammals is provided in Appendix C. For portions of the proposed project that generate in water noise such as impact and vibratory pile driving, the biological monitor will monitor for marine mammals when in the water within isopleth distances calculated (Appendix C) to be within the range of sound thresholds established by NOAA NMFS for Level A and Level B harassment of marine mammals (Appendix B). Like monitoring for hauled out animals, the biological monitor will have the authority to halt or modify work based on animal observations relative to monitoring isopleths. Green sea turtles will be monitored using the maximum calculated isopleth for Level B harassment of marine mammals; there is no specific guidance for sea turtles, but they are often monitored alongside marine mammals to ensure their protection. In addition, construction activities where impact hammer and vibratory pile driving occurs shall utilize a soft start for pile driving. This generally means performance of three pile strikes at reduced (approximately 50%) force, then waiting 30 seconds. This is repeated three times before starting pile driving

at full force. This measure provides time for marine mammals, green sea turtles, and fishes to disperse from the sound source area in the event the sound is a source of stress for the animal. Implementation of MM-BIO-3 would reduce Impact-BIO-3 to less than significant.

Impacts from Increased Turbidity

Construction activities associated with structural pile repair and replacement, quay wall revetment repairs, and the Repair Complex Wharf improvements could increase levels of turbidity in waters within the Bay in the absence of mitigation. This could occur either during activities such as pile driving, incidentally during vessel contact with bottom substrate, and by propeller wash in shallower water. Increases in turbidity in water may occur as a result of displaced sediment from construction activities. In general, increased turbidity could limit the ability of California least terns and other sensitive fish-foraging avian species to locate prey. Construction activities could potentially result in impacts on protected species by the inadvertent introduction of pollutants such as fuel, oil, and/or other industrial and mechanical fluids into waters of the U.S., either from construction equipment, landside construction vehicles, construction vessels, and from partially completed overwater structures. Additionally, disruption to eelgrass can occur due to increased turbidity. Prolonged increases in turbidity can reduce primary productivity associated with eelgrass because turbid water prevents sunlight from reaching this primary producer and sensitive species. These impacts would be considered a significant impact (Impact-BIO-4).

Turbidity generated by in water construction activities (Impact-BIO-4) can be reduced by implementing MM-BIO-4. This mitigation measure requires that vessel operators shall be instructed regarding the impacts of propeller wash with regards to erosion of sediment and suspension of fine particulates; allowing vessel operators to adjust operations that lessen the impact. All vessels would be required to use depth sounders which are routinely checked to ensure vessels are positioned to avoid shallow water areas to the extent practical. Finally, when construction involves necessary bottom disturbance such as dredging or pile driving, silt curtains would be in place around the activity to limit the spread of any turbidity generated during the bottom disturbing activity. As such, MM-BIO-4 would reduce Impact-BIO-4 to less than significant.

Impacts from Shading on Foraging Habitat

Total overwater coverage would increase from 157,297 square feet to 167,507 square feet. Additionally, a total of 300 square feet of overwater coverage would be temporarily present during project construction. The installation and use of overwater structures would result in temporary and permanent reduction of potential open water foraging habitat for California least tern and other sensitive fish-foraging species. The overwater coverage also leads to lower eelgrass productivity due to shading if the overwater structure is above eelgrass. Similarly, structures on shore that increase shading of water area will lower eelgrass productivity where eelgrass is shaded. The effect will increase as the structure gets closer to the water and as the height of the structure increases. Additionally, solar aspect will influence the level of impact. Structures that face the sun to the south with water to the north will result in a greater temporal impact from shading. The lost eelgrass productivity impacts all higher trophic levels due to the lost production of organic carbon. The impacts to California least tern foraging habitat resulting from overwater coverage are considered a significant impact (Impact-BIO-5).

Overwater cover from permanent structures can be mitigated in-kind if feasible, or out-of-kind if in-kind options are not available. Mitigation measure MM-BIO-5 includes options for mitigating impacts associated with Impact-BIO-5. These options can be implemented either individually or in combination, as may be required through consultation with applicable resource agencies during permitting processes, including but not limited to, NMFS, CDFW, USFWS, RWQCB, and/or USACE, to offset impacts from permanent overwater coverage. The in-kind option includes removal of existing overwater coverage at a 1:1 mitigation ratio at other locations within the Project site. Out-of-kind mitigation measures include creation or restoration of wetlands or eelgrass habitat at a 1:1 mitigation ratio to improve fisheries and associated wildlife beneficial uses in consultation with regulatory agencies identified above, and/or contribution to an approved mitigation bank. Implementation of MM-BIO-5 would reduce Impact-BIO-5 to less than significant. The potential impacts and mitigation measures relative to eelgrass are discussed under Issue IV.b below.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

Less than significant with mitigation incorporated. Terrestrial habitat within the project site is entirely developed and does not contain any natural habitat. Therefore, no terrestrial sensitive natural communities or riparian habitat would be adversely affected as a result of project implementation. Eelgrass habitat, which comprises approximately 478 square meters (5,145 square feet) of the marine habitat in the project site, is considered a sensitive habitat, and is managed by NMFS as EFH. The eelgrass habitat on the project site is also classified as a Habitat Area of Particular Concern (HAPC) as defined by the Magnuson-Stevens Fishery Management and Conservation Act.

Proposed construction activities have the potential to have a substantial adverse effect on eelgrass. These activities include temporary new placement of the dry dock structure, structural pile repair and replacement, quay wall revetment repairs, and the Repair Complex Wharf improvements. Construction related impacts that could result from these proposed activities could result from increased turbidity from support vessels, equipment, installation of structures and piles, and shading from support vessels, barges, and relocation of the dry dock structure. The operation of vessels over shallow water during construction can decrease light to the seafloor by increasing turbidity from propeller wash or direct contact with the seafloor. Suspended particles reduce water clarity and can reduce the light reaching plant and algae cells. When suspended particles settle on primary producers such as periphyton, macroalgae, and eelgrass, they can further continue to prevent light from reaching the plant cells. Additionally, any contact with the seafloor where eelgrass occurs could directly dislodge and remove eelgrass and other vegetation. Although **MM-BIO-4** provides for measures to reduce and restrict turbidity, in some cases eelgrass may occur within the footprint where construction vessels and turbidity curtains are placed during construction. In such cases, the contained turbidity may still impact eelgrass that is within the limits of the silt curtains and construction activity. In some locations where quay wall revetment repair is proposed, eelgrass is immediately adjacent to repair activities and may be impacted by placement and/or removal of material at those select locations. Additionally, extended temporary placement of the dry dock, construction support vessels, and barges could impede eelgrass growth depending on the location, height of structure, and sun angle during the presence of each structure. These construction-related impacts would be significant (**Impact-BIO-6**).

The mitigation measures to reduce construction turbidity impacts to eelgrass beds are the same as those proposed under **MM-BIO-4**. Impacts associated with reduced growth and cover of eelgrass or direct removal of eelgrass during construction would be mitigated by mitigation measures identified under **MM-BIO-6**. This mitigation measure would follow guidelines set by the CEMP (NMFS 2014). Pre- and post-construction eelgrass surveys would be required at the construction site and a suitable reference area. The final calculation of mitigation requirements should occur after the post-construction monitoring. Should losses to eelgrass occur, mitigation should be carried out in accordance with the CEMP at or before the time of impact in a manner that conservatively mitigates for all potential impacts to eelgrass. Mitigation by replanting or restoring eelgrass should follow the CEMP's eelgrass restoration ratio. Any implemented eelgrass mitigation site shall be monitored for 5 years to ensure successful eelgrass establishment in accordance with the CEMP. **MM-BIO-4** and **MM-BIO-6** would reduce **Impact-BIO-4** and **Impact-BIO-6**, respectively, to less than significant.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less-than-significant impact. The terrestrial portion of the project site is completely developed and does not contain any natural habitat, including state or federally protected wetlands. The project site contains a portion of San Diego Bay, which would be considered a water of the United States.

Aside from gains in efficiency, such as reducing the distance required to move the dry dock when not in use and replacement of older dry dock ancillary engines with Tier 4 ancillary engines, project implementation would not result in changes in operational activities; thus, protect operation would not result in increased adverse effects on waters of the United States relative to existing conditions.

Construction of the in-water project elements could result in short-term water quality impacts from the disturbance of sediments within the project site. San Diego Bay is also a navigable water and regulated by USACE under Section 10 of the Rivers and Harbors Act.

To address the potential for impacts on waters of the United States and navigable waters, NASSCO would be required to obtain authorization from USACE pursuant to the Section 10 process and potentially Section 404 for fill associated with additional pilings, each also requiring a CWA Section 401 water quality certification. No other modifications to state of federally protected wetlands would occur. As such, the proposed project would not result in any significant and adverse impacts on state or federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less-than-significant impact. The project site is fully developed, does not contain natural terrestrial habitat that could function as a native wildlife nursery site, and is characterized by many existing barriers to wildlife movement, including human-made structures and vessel traffic. The terrestrial portion of the project site is surrounded completely by intensive development, and likely does not function as a wildlife movement corridor. Aquatic wildlife, including fish, birds, and marine mammals, likely transit periodically through the marine environment in the project site to access foraging and resting habitat elsewhere in San Diego Bay or at sea. Project construction activities, such as pile driving and operation of construction vessels may temporarily interfere with the movement of aquatic wildlife species during project construction, however; there would be no substantial change in conditions on the project site following construction. This impact would be less than significant, and no mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than significant with mitigation incorporated. Applicable local policies and ordinances of the District that relate to biological resources are the PMP, San Diego Unified Port District Code, and the District's INRMP. As discussed in Section 4.11, "Land Use and Planning," the project is consistent with the PMP and the San Diego Unified Port District Code. The INRMP includes objectives and policy recommendations to guide planning, management, conservation, restoration, and enhancement of natural resources in San Diego Bay. Implementation of MM-BIO-1 through MM-BIO-6 would avoid and reduce significant impacts on special-status wildlife and eelgrass habitat and biological monitoring from construction activities. Therefore, project implementation would not result in a conflict with any INRMP policies, and impacts would be reduced to less than significant with mitigation incorporated.

Required Mitigation Measures

With implementation of the following mitigation measures, impacts on biological resources would be less than significant:

MM-BIO-1: Implement Construction Measures to Avoid or Reduce Noise-Related Foraging Impacts on California Least Tern and Other Sensitive Fish Foraging Avian Species. If pile driving activities occur between April 1st and September 15th, the project applicant shall retain a qualified biologist approved by the District to monitor during pile driving activities. The project applicant shall take specific actions, as approved by the District, to reduce or temporarily stop noise-producing activities if the qualified biologist identifies that the activities are impacting the foraging behavior of sensitive avian species. These actions shall include, but not be limited to, the following:

- For all pile driving activities performed during the California least tern nesting season (April 1st to September 15th), a qualified biologist shall be on site observing for foraging California least terns. If any California least terns are observed, the qualified biologist shall have the authority to halt or modify pile driving activity to ensure foraging behavior is not altered by construction. Work modifications that may limit pile driving noise impacts may include:

- Reducing the intensity of pile driving.
- Placing sound dampening panels on pile driving equipment.
- Restricting pile driving to periods when sensitive avian species are not present.

For all pile driving projects that may impact sensitive nesting avian species refer to MM-BIO-2

MM-BIO-2: Implement Construction Noise Measures to Avoid or Reduce Noise Impacts on Sensitive Nesting Marine-Dependent Avian Species. To avoid impacts on nesting marine-dependent birds, during the breeding season (i.e., April 1st- September 15th), the project proponent shall implement the following measures during construction:

- The project proponent shall retain a qualified biologist, approved by the District, to perform a marine dependent nesting bird survey within 500 feet of the noise-generating activity 1 week prior to the start of construction utilizing heavy equipment, and, if nests are found, the qualified biologist shall perform a survey once per week during construction until use of noise-generating heavy equipment ceases.
- The project proponent shall submit the survey to the District for review and approval of the survey and the buffer area, defined below, if any, prior to the commencement of these activities at the project site.
- The nesting surveys shall consist of a thorough inspection of the project area by a qualified biologist(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, the qualified biologist(s) shall prepare and submit to the District a letter report documenting the results of the survey. If there is a delay of more than 7 days between when the nesting bird survey is performed and construction activities begin, the qualified biologist shall resurvey to confirm that no new nests have been established.
- If the survey confirms nesting within 500 feet of the disturbance footprint, the project proponent shall establish a no-disturbance buffer around each nest site to avoid disturbance or destruction of the nest until after the nesting season or a qualified biologist determines that the nest is no longer active. The size and constraints of the no-disturbance buffer shall be determined by the qualified biologist, at the time of discovery. In addition, if the qualified biologist(s) prepares any subsequent reports, the reports shall be submitted to the District.
- The qualified biologist shall establish a baseline ambient sound level by measuring ambient sound levels during the time of day that work is expected to occur. The monitoring distance from the nest shall be chosen to not disturb the species.
- If noise-generating activities are within 500 feet and the species behavior is modified due to noise, the qualified biologist shall monitor noise levels daily, during construction activities, at a distance that would prevent the disturbance of the relevant species. Sound levels at nest sites shall not exceed 10 dBA above ambient levels. This monitoring shall occur until the nest is no longer active.
- If sensitive avian species begin nesting within 500 feet of noise-generating construction and the species behavior is modified, the qualified biologist shall establish a baseline ambient sound level by measuring sound levels at a distance without disturbing the species during a representative construction day. The qualified biologist shall monitor those nests daily during construction activities, until after the nesting season or a qualified biologist determines that the nest is no longer active. If the monitoring shows sound levels more than 10 dBA above the baseline ambient levels (representative construction noise included), and the species behavior is modified, the qualified biologist shall have the authority to halt or modify construction activity to ensure the behavior of sensitive nesting avian species is not altered by construction noise.
- If the above noted sound thresholds are exceeded, the project proponent shall implement actions recommended by the qualified biologist and approved by the District to reduce sound levels to within thresholds.

If the qualified biologist determines that noise cannot be attenuated, noise-generating activities must cease until such time that adequate noise attenuation is achieved, or nesting is complete.

MM-BIO-3: Implement Noise Reducing Measures During Pile Installation Activities to Avoid Impacts on Marine Mammals, Green Sea Turtles, and Fish. Prior to and during construction activities involving in-water impact hammer pile installation or vibratory pile installation or removal, the project proponent shall implement marine mammal, green sea turtle and fishes noise reducing measures, which 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, shall monitor an impact radius around the active pile installation areas to ensure that special-status species do not modify behavior. The qualified biologist must meet the minimum requirements as defined by the NOAA's Guidance for Developing a Marine Mammal Monitoring Plan (2017). The impact radius shall be established by determining the largest zone of influence associated with in-water construction activities occurring that workday (Zone of Influence is the area that extends out to Level B harassment area indicated in Table 4.4-1 of the IS/MND).
- The project proponent shall not start work if the qualified biologist observes any special-status species prior to starting pile installation until the special-status species has left the area to be affected.
- Pile driving activities shall only be conducted during daylight hours when biological monitors can visually observe marine mammals.
- Pile driving shall not exceed 10 piles per day and 1,000 strikes per pile or a combination that does not exceed a total of 10,000 strikes in 1 day.
- In-water pile driving shall begin with soft starts in accordance with Section 4.5 of the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019), gradually increasing the force of the pile driving.
- Installation of an acoustical bubble curtain, isolation casing, or another attenuation method approved by NMFS or CDFW shall be installed if monitoring to the attenuated distance identified in Table 10 (Fishes), Table 11 (Marine Mammals, and Table 12 (Green Sea Turtle) of Appendix C (i.e., *The Port of San Diego NASSCO Floating Drydock and Waterfront Improvement Project Underwater Assessment*, prepared by Illingworth and Rodkin [February 2022]) to the IS/MND. Otherwise, monitoring shall be required to the distances identified under the unattenuated condition of these same tables.
- The biological monitor shall note observations of the presence of sensitive marine species, including California least tern, green sea turtles, and marine mammals, within the zone of influence (see Tables 10, 11, and 12 of Appendix C of the IS/MND). Observations shall include hauled out harbor seals and California sea lions. The biological monitor shall observe the site for 15 minutes prior to all pile driving activities and during all pile driving activities. If sensitive marine species are observed within the zone of influence, during or 15 minutes before pile driving, the biological monitor shall immediately notify the on-site supervisor or inspector and require that pile driving either not be initiated or temporarily cease until the animals have moved outside of the zone of influence on their own. The biological monitor shall have the authority to stop work at any time due to observed animal behavior or uncertainty regarding potential to harm an animal due to pile driving activities or noise generated from the activity.
- "Shutdown zones" have been established for sensitive marine species. If a sensitive marine species enters the shutdown zone during active pile driving, the biological monitor shall stop pile driving. These shutdown zones are provided in Table 4.4-1 of the IS/MND.
- If weather or sea conditions restrict the biological monitor's ability to observe marine mammals or sea turtles within the zone of influence, then pile driving activities shall cease until conditions improve.

The biological monitor shall maintain records of the species, date, and time of any marine mammal or sea turtle sightings, as well as species behavior, and communications with the contractor during pile driving.

MM-BIO-4: Implement Construction Measures to Eliminate Water Quality Impairment Impacts on California Least Tern, Other Sensitive Fish Foraging Avian Species, and Eelgrass. During all in-water construction activities that would disturb sediment, the project applicant shall implement the following construction measures in accordance with applicable Federal, State, and local regulations, including but not limited to CWA Sections 401 and 404, Rivers and Harbors Act Section 10, and applicable NPDES permit conditions, and Stormwater Management and Discharge Control Ordinance:

- The project applicant shall implement contractor education for vessel operations. Vessel operators shall be trained that any contact with the bottom from the vessel, barges, anchors, or spuds can suspend sediment that results in water quality and turbidity impacts that limit the ability of fish foraging avian species to locate prey and disrupt eelgrass productivity. Additionally, vessel operators shall be instructed to minimize activities that direct propeller wash toward shallow areas with substrates that can be suspended and result in increased turbidity.
- The project applicant shall deploy a turbidity curtain around the pile driving or other sediment-disturbing activity areas to restrict the visible surface turbidity plume to the area of construction. The turbidity curtain shall consist of a hanging ballast-weighted curtain with a surface float line and shall extend from the surface into the water column without disturbing the bottom based on the lowest tidal elevation and swing of the curtain within the water column. The turbidity curtain shall meet the specifications for design, installation, use, performance, and/or modification outlined in the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019). The goal of this measure is to minimize the area in which visibility of prey by California least terns and other sensitive fish foraging avian species (e.g., California brown pelican) is obstructed.
- If impacts on eelgrass due to water quality cannot be mitigated through contractor education and deployment of silt curtains, the project applicant shall implement mitigation measures for losses to eelgrass in accordance the California Eelgrass Mitigation Policy and with MM-BIO-6.

The project applicant shall implement MM-WQ-1, Monitoring Turbidity and Constituents of Concern During Construction-Related Sediment Disturbance and MM-WQ-2, Implement Best Management Practices During Construction-Related Sediment Disturbance.

MM-BIO-5: Implement Overwater Coverage Mitigation in Coordination with the Appropriate Resource Agencies and the District to Compensate for Loss of Open Water Habitat. Prior to construction activities that may result in overwater coverage, the project applicant shall comply the following:

1. The project applicant shall consult with the appropriate resource agencies, including but not limited to, NMFS, USFWS, RWQCB, and/or USACE, regarding mitigation of impacts associated with loss of beneficial uses from overwater coverage, loss of open water habitat function, and shading. The project applicant shall secure all applicable permits for the mitigation of overwater coverage prior to commencement of waterside construction. One or more of the appropriate resource agencies may require additional or greater mitigation than specified in this mitigation measure.
2. The project applicant shall implement one of the following mitigation options, or a combination thereof. These options provide the minimum mitigation for overwater coverage impacts and/or shading impacts. One or more of the appropriate resource agencies may require additional or greater mitigation than specified in this mitigation measure.
    A. Remove an amount of existing overwater coverage within San Diego Bay that is equivalent to the proposed project's net increase in overwater coverage. This would replace the area affected by the project at a 1:1 mitigation ratio, subject to the District's review and approval.
    B. Restore or create an amount of eelgrass habitat within San Diego Bay equivalent to the proposed project's net increase in overwater coverage at a suitable location within San Diego Bay, at a 1:1 ratio for eelgrass consistent with the CEMP, which would offset the net increase in overwater coverage by improving the habitat structure and primary productivity at the restoration site. (Note, the 1:1 ratio is suitable mitigation for

open water impacts. The 1.2:1 ratio is appropriate for impacts on eel grass as identified in MM-BIO-6. These should not be confused.) The restoration or creation of eelgrass habitat shall require the project applicant to prepare a mitigation plan for the District's review and approval. The mitigation plan at a minimum shall include a description of the restoration site, mitigation requirements, planting plan (e.g., transplant sites, donor sites, reference site), restoration methods (e.g., plant collection or purchase, transplant units), timing of the restoration work, and a monitoring program to include a mitigation success criteria. The mitigation project shall secure all applicable permits and all applicable District Real Estate agreements for the mitigation site prior to commencement of construction. Additionally, all fill materials proposed for discharge into San Diego Bay for the development of the mitigation site shall meet the requirements of the USACE's Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (Inland Testing Manual).

C. If a suitable mitigation bank within the Coastal Zone that is not yet available becomes available in the future, prior to construction of the proposed project, the project applicant shall purchase overwater coverage credits to offset the net increase in overwater coverage.

D. Subject to the Board of Port Commissioners' approval and findings, the project applicant may purchase an amount of credits from the District's shading credit program established pursuant to BPC Policy 735 equivalent to that of the project's final shading total (i.e., to the satisfaction of the appropriate resource agencies).

F. As specified in MM-BIO-6, for overwater coverage, a qualified biologist shall conduct eelgrass surveys per the CEMP to determine potential impacts on eelgrass from construction. If pre- versus post-construction eelgrass surveys determine that overwater structures will shade and impact eelgrass, then mitigation for the loss of eelgrass will be conducted pursuant to the CEMP at a 1.2:1 mitigation ratio based on the amount of eelgrass impacted.

MM-BIO-6: Implement Eelgrass Mitigation and Monitoring in Compliance with the California Eelgrass Mitigation Policy. The project applicant shall comply with all requirements of the California Eelgrass Mitigation Policy (CEMP) (NMFS 2014). If impacts on eelgrass occur based on a comparison of pre- and post-construction eelgrass surveys as specified in this mitigation measure, NASSCO shall retain a qualified marine biologist to develop an eelgrass mitigation and monitoring plan in compliance with the CEMP (NMFS 2014). The mitigation and monitoring plan shall be submitted to the District and NMFS for approval and shall be implemented to compensate for any loss of eelgrass. Specific requirements of this mitigation include the following:

- Prior to the commencement of any in-water construction activities, a qualified marine biologist retained by NASSCO and approved by the District shall conduct a preconstruction eelgrass survey. Surveys for eelgrass will be conducted during 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 next growing season. The project applicant shall provide the preconstruction eelgrass survey to the District and the NMFS as well as regulatory points of contact for agencies that will be required to provide project permits such as the CCC, USACE, and San Diego RWQCB.
- Within 30 days of completion of in-water construction activities, a qualified marine biologist retained by NASSCO and approved by the District shall conduct a post construction eelgrass survey during the active eelgrass growing season (March 1st – October 31st). If construction ends during the non-growing season (November 1 to February 28), the monitoring shall be delayed until the resumption of the growing season. The postconstruction survey shall evaluate potential eelgrass impacts associated with construction. Upon completion of the postconstruction survey, the qualified marine biologist shall submit the survey report to the District and resource agencies within 30 days.
- If impacts on eelgrass are detected, NASSCO shall implement the following:
  - A qualified marine biologist retained by NASSCO and approved by the District shall develop an eelgrass mitigation plan for in-kind mitigation. The qualified marine biologist shall submit the mitigation plan to the District and NMFS within 60 days following the postconstruction survey.

- Mitigation for eelgrass impacts shall be at a ratio of no less than 1.2:1, as required by the CEMP.
- 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 CEMP.
- The qualified biologist shall submit the monitoring reports and spatial data to the District and NMFS within 30 days after the completion of each monitoring period. The monitoring reports shall include all specific requirements identified in the CEMP.

► At least two years of annual post-construction eelgrass surveys shall be conducted during the active eelgrass growing season. The additional annual surveys shall evaluate the potential for structural shading on eelgrass.

If impacts on eelgrass are detected during the 2-year post-construction period, the project proponent shall provide additional mitigation for eelgrass impacts by transplanting eelgrass at a suitable restoration site at a ratio of 1.2:1. Conservative mitigation planning can avoid this additional mitigation through planning for long-term impacts and providing eelgrass transplantation prior to monitoring and evaluation of all impacts.

4.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Disturb human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The historical resources evaluation provided below is based on the *Cultural Resources Assessment Floating Dry Dock and Waterfront Improvement Project,* by Anchor QEA (June 2021; Appendix E).

4.5.1 Environmental Setting

RECORDS SEARCH

A cultural resources records search was obtained from the South Coastal Information Center (SCIC), which is located at San Diego State University and is part of the California Historical Resources Information System. The records search provides for identification of previously documented resources within and near the project site. The SCIC reported the results of the record search on April 5, 2021. No historical resources have been previously identified within the project site. The records search revealed that a total of 20 cultural resources studies have been conducted within a quarter-mile radius of the project site. Of these, only 2 have covered at least some portion of the project site. The record search also revealed the presence of 22 previously recorded cultural resources within a quarter-mile radius of the project site. Sixteen of the resources are historic-aged built environment resources (primarily military buildings), five historic-era archaeological sites (four of which contain remains related to railroads and one is the foundation of a building), and one prehistoric archaeological site consisting of shell midden and habitation debris. An additional built environment resource, Building 19 of the NASSCO shipbuilding facility, was revealed through review of received SCIC cultural resources studies. This building is located within the project site; however, the building itself has not been catalogued by the SCIC, therefore it did not appear in the record search results as a previously recorded cultural resource. Building 19 was determined to be not eligible for listing in either the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP) in 2019. No other cultural resources were identified within the project site as a result of the SCIC records search.

HISTORICAL RESOURCES EVALUATION

Because the project site consists of harbor fill and is entirely developed with buildings and pavement, a site visit was not conducted to identify archaeological resources. A historical resources assessment was conducted for the built environment, to determine if any existing structures located within the project site were eligible for listing in the NRHP or the CRHR. To be eligible for inclusion in the NRHP or the CRHR, a property generally must be at least 50 years old, have significance, and retain integrity. Under NRHP Criteria Consideration G and CRHR criteria at CCR 15, Chapter 11.5, Section 4850(d), a property less than 50 years old can be eligible if it is of exceptional significance. A

property can have exceptional significance if it is notable in context of other similar properties, if it has been the object of scholarly study, if it is fragile or short-lived, or if there is widespread recognition of its historical value. The assessment concluded that there are no structures older than 50 years old within the project site and the piers, berths, and bulkheads are of common construction and are not significantly associated with local, state, or national historical context in order to be considered exceptional significance; therefore, none of the existing structures are considered historical resources under CEQA (see Appendix E; Anchor QEA, LLC 2021).

4.5.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No impact. As described above, the existing structures on the project site do not appear to meet the criteria for listing in the CRHR or the NRHP. Because they are less than 50 years old, they do not meet the definition of a historical resource pursuant to CEQA. Therefore, there would be no impact to historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No impact. The shoreline and majority of the project site above ground is underlain by artificial fill; including compacted engineered and non-compacted, nonengineered fill. Although the records search described archaeological resources have previously been recorded within a quarter-mile radius of the project site, the prehistoric archaeological resource is not located within artificial fill. The historic-era archaeological resources consist of railroad remnants and a building foundation; the project site has been redeveloped numerous times and has no potential to contain historic-era archaeological resources of this nature. Activities related to the repair and replacement of the quay wall will occur in the artificial fill. Therefore, no original ground would be disturbed and no impacts to archaeological resources are expected as a result of the repair and replacement of the quay wall. The pile replacement process would involve ground-disturbing activities within the Bay, primarily in locations that have been previously disturbed by the installation of the existing piles. Additionally, the project site portion of the Bay has been previously dredged and disturbed during installation of the existing piles and other past activities at the project site. As such, it is not anticipated that significant (i.e., intact) archaeological resources are present where the project would involve ground-disturbing activities. Therefore, the project would not cause an adverse change in the significance of an archaeological resource; no impact would occur.

c) Substantially disturb human remains, including those interred outside of formal cemeteries?

Less-than-significant impact. There are no known cemeteries or burials on the project site or immediate area. However, because ground disturbing activities associated with project construction would occur, there is potential to encounter buried human remains or unknown cemeteries in areas with little or no previous disturbance.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated Most Likely Descendant and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in Public Resources Code Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be less than significant.

Required Mitigation Measures

The project would not result in significant impacts on cultural resources. Mitigation measures are not required.

4.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

4.6.1 Environmental Setting

GENERAL SETTING

California relies on a regional power system composed of a diverse mix of natural gas, petroleum, renewable, hydroelectric, and nuclear generation resources.

Petroleum: Petroleum products (gasoline, diesel, jet fuel) are consumed almost exclusively by the transportation sector, and account for almost 99 percent of the energy used in California by the transportation sector, with the rest provided by ethanol, natural gas, and electricity (Bureau of Transportation Statistics 2015). Between January 2011 and August 2020, approximately 171.5 billion gallons of gasoline and diesel fuel were purchased in California (California State Board of Equalization 2020). Gasoline and diesel fuel sold in California for motor vehicles is refined in California to meet specific formulations required by CARB (EIA 2018).

Natural Gas: Almost two-thirds of California households use natural gas for home heating, and about half of California's utility-scale net electricity generation is fueled by natural gas (EIA 2018).

Electricity and Renewables: The California Energy Commission (CEC) estimates that 34 percent of California's retail electricity sales in 2018 will be provided by Renewables Portfolio Standard (RPS)-eligible renewable resources such as solar and wind (CEC 2019a). Additionally, the CEC's Energy Efficiency Action Plan (CEC 2019b) focuses on energy efficiency savings in new and existing buildings and reducing greenhouse gas (GHG) emissions and provides strategy recommendations for realizing these goals. The 2019 Energy Efficiency Action Plan is separated into three goals that drive energy efficiency: doubling energy efficiency savings by 2030, removing and reducing barriers to energy efficiency in low-income and disadvantaged communities, and reducing GHG emissions from the buildings sector.

Alternative Fuels: Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many alternative transportation fuels (e.g., biodiesel, hydrogen, electricity, and others). Use of alternative fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, AB 32 Scoping Plan).

ENERGY PROVIDER

Electric and natural gas services in San Diego county is provided by the San Diego Gas and Electric Company (SDG&E), a subsidiary of Sempra Energy. SDG&E operates electricity and natural gas infrastructure in the county, including power lines, power plants, pipelines, and substations. As of 2018, SDG&E procured 44 percent of its electricity from renewable sources (CEC 2019c). This project site is currently served by SDG&E.

4.6.2 Regulatory Setting

FEDERAL REGULATIONS

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Under this act, the National Highway Traffic and Safety Administration (NHTSA), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards. The Corporate Average Fuel Economy program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Three Energy Policy Acts have been passed, in 1992, 2005, and 2007, to reduce dependence on foreign petroleum, provide tax incentives for alternative fuels, and support energy conservation.

STATE REGULATIONS

Warren-Alquist Act

The 1974 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The creation of the act occurred as a response to the State legislature's review of studies projecting an increase in statewide energy demand, which would potentially encourage the development of power plants in environmentally sensitive areas. The act introduced State policy for siting power plants to reduce potential environmental impacts, and additionally sought to reduce demand for these facilities by directing CEC to develop statewide energy conservation measures to reduce wasteful, inefficient, and unnecessary uses of energy. Conservation measures recommended establishing design standards for energy conservation in buildings that ultimately resulted in the creation of the Title 24 Building Energy Efficiency Standards (California Energy Code), which have been updated regularly and remain in effect today. The act additionally directed CEC to cooperate with the Office of Planning and Research, the California Natural Resources Agency, and other interested parties in ensuring that a discussion of wasteful, inefficient, and unnecessary consumption of energy is included in all environmental impact reports required on local projects.

State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 2003 California Energy Action Plan (2008 update). The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

Transportation-Related Regulations

U.S. EPA and NHTSA have issued rules to reduce GHG emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond (77 Federal Register [FR] 62624). NHSTA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. The purpose of this program is to increase fuel economy and limit vehicle emissions, including carbon dioxide (CO_2) emissions, of cars and light-duty trucks (77 FR 62630).

Various regulatory and planning efforts are aimed at reducing dependency on fossil fuels, increasing the use of alternative fuels, and improving California's vehicle fleet. Senate Bill (SB) 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. CARB, in consultation with the metropolitan planning organizations, provides each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035.

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), CEC and CARB prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003).

AB 1007 (Chapter 371, Statues of 2005) required CEC to prepare the State Alternative Fuels Plan to increase the use of alternative fuels in California.

Renewable Energy Regulations

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (Senate Bill X1-2 of 2011); 52 percent by 2027 (SB 100 of 2018); 60 percent by 2030 (also SB 100 of 2018); and 100 percent by 2045 (also SB 100 of 2018).

LOCAL REGULATIONS

Port of San Diego Climate Action Plan

The Port of San Diego Climate Action Plan (CAP) was adopted in December 2013 and includes an inventory of existing (2006) and projected emissions in 2020, 2035, and 2050, as well as strategies to meet the District's goal of reducing annual GHG emissions to 25 percent below 2006 levels by 2035 (San Diego Unified Port District 2013). To achieve the Port's goals, the CAP details various GHG reduction measures related to transportation and land use, alternative energy generation, energy conservation, waste reduction, water conservation, and recycling. These GHG reduction strategies and measures included in the CAP support meeting the statewide goals set forth in AB 32.

The Port's CAP meets the criteria listed in Section 15183.5 of the State CEQA Guidelines by providing reduction targets that align with statewide goals. However, the CAP does not cover construction activities. A critical aspect of having a CAP that fits the criteria within State CEQA Guidelines Section 15183.5 is having reduction targets that align with statewide goals. Because the Port's reduction targets outlined in the CAP parallel the State's commitment in AB 32, and align with statewide goals to reduce GHG emissions, the CAP is consistent with AB 32. While the Port's CAP includes a long-term 2035 goal, it does not include post-2020 reduction quantification. Therefore, the CAP cannot be used as a qualified plan for reduction of GHG emissions pursuant to Section 15183.5 of the CEQA Guidelines for projects with a post-2020 buildout date. Because project construction is not expected to commence until 2023, the CAP is not used to assess the significance of the project's GHG emissions.

San Diego Association of Governments Regional Energy Strategy

The San Diego Association of Governments (SANDAG) Regional Energy Strategy (RES) serves as an energy policy blueprint for the region through 2050. It established long term goals in eleven topic areas including energy efficiency, renewable energy, distributed generation, transportation fuels, land use and transportation planning, border energy issues, and the green economy. Using the strategies as guiding principles, and taking into consideration the myriad of policy measures recommended across the energy topics, six early actions were identified to focus on in the near term. These include building retrofit programs, financing programs, energy savings at government buildings and in communities, land use and transportation strategies that reduce energy use and GHG emissions, electric vehicle and alternative fueling infrastructure, and use of reclaimed water. In 2014, a technical update of the RES was completed to inform development of San Diego Forward: The Regional Plan. This technical update demonstrates progress toward attaining the RES goals, updates existing conditions and future projections data, and recommends priorities for moving forward. The RES is not an adopted plan or policy document; rather it is a strategy framework that was accepted by the SANDAG Board of Directors. As such, it does not represent a state or local plan for renewable energy or energy efficiency. However, it is included here for completeness as it is a local resource focused on energy.

4.6.3 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less-than-significant impact. Thresholds that define when energy consumption is considered wasteful, inefficient, or unnecessary have not been established in federal or state law or in the State CEQA Guidelines. Compliance with the California Energy Code would result in energy-efficient buildings. However, compliance with building codes alone does not adequately address all potential energy impacts during construction. For example, energy would be required to transport people and goods to and from the project site. Energy use is discussed further below.

Construction

Energy would be required to operate and maintain construction equipment and for the transport of construction materials by barge and haul truck. The one-time energy expenditure required to repair and replace the existing physical facilities and infrastructure associated with the proposed project would be nonrecoverable. Most energy consumption would result from operation of off-road construction equipment and on-road vehicle trips associated with construction, worker commute trips, vendor haul truck trips, and barge mobilization.

The energy consumption associated with proposed project construction by year was estimated using CalEEMod Version 2020.4.0 (CAPCOA 2021). Fuel usage of tugboats utilized to mobilize the spud and derrick barges, barge propulsion engines, and barge generator sets during construction was estimated using the SMAQMD Harborcraft Emissions Calculator (SMAQMD 2017) and CO_2 diesel emissions factor (10.21 kilograms-CO_2 per gallon). Refer to Appendix A for specific input parameters and modeling output results. Most of the construction-related energy consumption would be associated with off-road equipment, worker vehicle trips, and the transport of equipment and waste using barges and on-road haul trucks during construction. Average annual energy consumption is presented in Table 4.6-1.

Table 4.6-1 Annual Construction Energy Consumption

Energy Type	Annual Energy Consumption	Units
Construction		
Gasoline[1]	9,233	gal/year
Diesel[2]	155,140	gal/year

Notes: gal/year = gallons per year

[1] Consumption by worker commute vehicle trips

[2] Average usage per year over 12 years (2023-2034)

Source: Calculations performed by Ascent Environmental in 2022

Once operational, the project site would continue to be served by SDG&E. No new or expanded service is proposed. Rather, operational energy use is anticipated to be reduced when compared to existing conditions. Specifically, the floating dry dock would no longer need to be relocated to another berth outside of the leasehold during vessel launches from the inclined building ways or building dock. The floating dry dock would instead be repositioned to the "Lot 20" temporary location, which is closer to the home position. As such, the proposed project would result in reduced energy consumption associated with tug trips during operations when compared to existing conditions. In addition, the diesel generators on the new floating dry dock would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. These new engines would improve energy efficiency when compared with existing Tier 0 diesel engines. Moreover, the new floating dry dock would be outfitted with an extensive electrical distribution system, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps, which would further improve energy efficiency. Lastly, the new Repair Complex Wharf would create a centralized laydown area to support ship repair operations in the vicinity of the floating dry dock. This centralized laydown area is anticipated to reduce the distance of forklift trips, and associated energy consumption, throughout the shipyard when compared with existing conditions. Thus, operational emissions would not result in wasteful, inefficient, and unnecessary consumption of energy resources. This impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Less-than-significant impact. State and local renewable energy and energy efficiency plans that are applicable to the proposed project include California Title 24 energy efficiency standards, the State of California Energy Action Plan, which contain required standards related to energy efficiency for buildings and renewable energy development (CEC 2019b), the District's CAP, which includes strategies to reduce GHG emissions, and SANDAG's Regional Energy Strategy, which establishes long-term energy goals in the region through 2050, including energy efficiency, renewable energy, distributed generation, transportation fuels, land use and transportation planning, border energy issues, and the green economy. The proposed project is required to comply with these regulations, to the extent applicable, all of which are aimed at increasing energy efficiency and renewable energy development. Because the project is expected to result an increase in fuel efficiency with no other changes in operations, the project would not conflict with state or local long-term renewable energy or energy efficiency plans.

Energy to meet the project's construction electricity demand would be provided by the San Diego Gas and Electric Company (SDG&E), which is subject to meeting California's RPS. SDG&E plans to increase procurement from eligible renewable energy resources to 44 percent of retail sales by December 31, 2024; 52 percent of retail sales by December 31, 2027; and 60 percent of retail sales by December 31, 2030 (SDG&E 2018). For these reasons, the project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency. Therefore, this impact would be less than significant.

Required Mitigation Measures

The project would not result in significant impacts on energy. Mitigation measures are not required.

4.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

4.7.1 Environmental Setting

The information in this section is based in part on the *Geotechnical Investigation* prepared for the project (TerraCosta Consulting Group 2020), which is included as Appendix F. The *Geotechnical Investigation* evaluated the following project components: the sheet-pile bulkhead supported by precast concrete batter piles; the triangular-shaped wharf supported by octagonal vertical precast concrete piles and associated fender system; the dry dock approach fenders; the dry dock mooring dolphins; the catwalk support to access the floating dry dock while moored in its temporary position; and the shoreline repairs between Berths 2 and 6. Although the *Geotechnical Investigation* focused on shoreline repairs between Berths 2 and 6, similar conditions are anticipated along the quay walls throughout the

entire NASSCO leasehold. The *Geotechnical Investigation* presents recommendations pertaining to the various geotechnical aspects of the proposed improvements based on the results of field investigation, laboratory testing, and engineering analyses of the subsurface conditions at the project site.

According to the California Geologic Survey (CGS) California Earthquake Hazards Zone Application map, the project site is not within an earthquake fault zone. The nearest active Alquist-Priolo fault zone is the Point Loma Fault Zone, located approximately 0.6 mile northwest of the project site (CGS 2019; TerraCosta Consulting Group 2020). The project site is within a seismically active region and is located approximately 1,800 feet south-southeast of the Silver Strand Fault, which has demonstrated fault activity during the last 10,000 years.

According to the City of San Diego Seismic Safety Study, the project site is in an area with high potential for liquefaction due to shallow groundwater, major drainages, and hydraulic fills (City of San Diego 2008a: Grid Tile 13). Based on the *Geotechnical Investigation*, the project site is underlain with artificial fill and Holocene-age sediments, which overlie bay deposits, Quaternary-aged terrace deposits, and the San Diego Formation. Some of the soil within the bay deposits are comprised of soils that are potentially liquefiable. However, the soils comprising the Quaternary-aged terrace deposits are not considered liquefiable (TerraCosta Consulting Group 2020).

The *Geotechnical Investigation* concluded that lateral spreading is likely to occur in the bay deposits and fill soils that surround the bay. In addition, slopes comprised of bay deposits and some fill soils comprised of loose sands and soft clays may be subject to seismic-induced slope instability. The *Geotechnical Investigation* did not identify any features indicative of ancient natural landslides on or adjacent to the project site (TerraCosta Consulting Group 2020).

4.7.2 Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No impact. As discussed in Section 4.7.1 above, the project site is not within an earthquake fault zone (CGS 2019). The nearest active Alquist-Priolo fault zone is the Point Loma Fault Zone, located approximately 0.6 mile northwest of the project site. The Geotechnical Investigation concludes that the risk associated with ground rupture at the project site is considered low (TerraCosta Consulting Group 2020). Because there are no active faults within the project site, the project would have no potential to cause or exacerbate the risk of a fault rupture. No impact would occur.

ii) Strong seismic ground shaking?

Less-than-significant impact. Although the project site is not within an active fault zone, the project site is in a seismically active region of southern California and would be susceptible to seismic ground shaking produced by nearby faults during earthquakes. The *Geotechnical Investigation* concluded that the risk associated with ground shaking is considered very high (TerraCosta Consulting Group 2020). However, the project components, including the proposed pile driving, would have no potential to exacerbate the existing risk of strong seismic ground shaking. In addition, the project would be designed and constructed in accordance with the recommendations in the *Geotechnical Investigation* that address risks related to seismic ground shaking. The *Geotechnical Investigation* provides recommendations for pile installation methods; slope inclination; pile capacity, including lateral load capacities for vertical piles; and sheet-pile bulkhead lateral pressures, which would provide structure stability and security and would not worsen the existing conditions (refer to Attachment D for additional information). Because the project would be engineered to specifications based on site-specific geotechnical conditions, project construction and operations would not cause potential substantial adverse effects from strong seismic ground shaking and a less than significant impact would occur.

iii) Seismic-related ground failure, including liquefaction?

Less than significant with mitigation incorporated. According to the City of San Diego Seismic Safety Study, the project site is in an area with high potential for liquefaction due to shallow groundwater, major drainages, and hydraulic fills (City of San Diego 2008a: Grid Tile 13). In addition, the *Geotechnical Investigation* notes that some of the soil within the bay deposits are comprised of soils that are potentially liquefiable (TerraCosta Consulting Group 2020).

No project components would require grading on the landside portion of the project site and, therefore, there would be no impact associated with the potential of seismic-related ground failure on the landside portion of the project site. Moreover, the in-water project components would not have the potential to exacerbate the existing risk of seismic-related ground failure, including liquefaction, because the in-water structures would be engineered to the existing sediment and soil conditions. As discussed in Section 4.7.2(a)(ii), the project would be designed and constructed in accordance with the recommendations in the *Geotechnical Investigation* (TerraCosta Consulting Group 2020) that address risks related to seismic-related ground failure. The *Geotechnical Investigation* provides recommendations for pile installation methods; slope inclination; pile capacity, including lateral load capacities for vertical piles; and sheet-pile bulkhead lateral pressures, which would provide structure stability and security and would not worsen the existing conditions (refer to Attachment D for additional information).

As discussed in Section 4.7.1, the *Geotechnical Investigation* (TerraCosta Consulting Group 2020) evaluated 950 linear feet of shoreline repairs between Berths 2 and 6. Geologic conditions for the as-needed 1,500 linear feet of shoreline repairs (from Lot 20 to Pier 12, the floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base quay wall) were not specifically evaluated. However, as noted above, the *Geotechnical Investigation* evaluated shoreline repairs between Berths 2 and 6 and similar conditions are anticipated along the quay walls throughout the entire NASSCO leasehold. Without proper geotechnical engineering, the proposed structures may not be designed and installed to withstand and avoid causing or exacerbating geologic hazards (**Impact-GEO-1**). With implementation of **MM-GEO-1**, NASSCO would be required to prepare a geotechnical investigation prior to commencing any as-needed shoreline repairs. In addition, NASSCO would be required to implement the recommendations in the supplemental geotechnical investigation to ensure that all structures are engineered to specifications based on site-specific geotechnical conditions. Implementation of **MM-GEO-1** would ensure that the project would not result in hazards from seismic-related ground failure.

The project would be designed and constructed in accordance with recommendations from the *Geotechnical Investigation* (TerraCosta Consulting Group 2020) and any supplemental geotechnical investigations as required by **MM-GEO-1**; therefore, project construction and operations would not cause substantial adverse effects from seismic-related ground failure and impacts would be less than significant.

iv) Landslides?

No impact. According to the City of San Diego Seismic Safety Study, the project site is not within a landslide hazard area (City of San Diego 2008a: Grid Tile 13). In addition, the *Geotechnical Investigation* did not identify any features indicative of ancient natural landslides on or adjacent to the project site (TerraCosta Consulting Group 2020). The landside portions of the NASSCO shipyard are completely developed and generally flat. There are no steep slopes within or adjacent to the project site. Project construction would occur over or within water and there are no project components that would have the potential to exacerbate existing the risk of landslides. Therefore, project construction and operations would not cause potential substantial adverse effects from landslides and no impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

No impact. The landside portion of the NASSCO facility is entirely paved with no areas of exposed soil. Construction activities would occur over water and would not involve grading or excavation activities that have potential to disturb soils. In addition, NASSCO operates under an individual National Pollutant Discharge Elimination System (NPDES) Permit (Order R9-2016-0116) and maintains a facility Best Management Practices (BMP) Plan Manual, which include operational erosion control and site stabilization measures. NASSCO would be required to maintain all existing

operational and maintenance BMPs. Therefore, project construction and operations would not result in substantial erosion or the loss of topsoil and no impact would occur.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than significant with mitigation incorporated. Refer to Sections 4.7.2(a)(iii) and (iv) for discussions related to liquefaction and landslides. According to the *Geotechnical Investigation* (TerraCosta Consulting Group 2020), lateral spreading and seismic-induced slope instability could occur in the bay deposits and fill soils within the project site. As discussed above, the project components would not occur on the landside portion of the project site. In addition, the project would be designed and constructed in accordance with the recommendations in the *Geotechnical Investigation* (TerraCosta Consulting Group 2020) that address soil instability. The *Geotechnical Investigation* provides recommendations for pile installation methods; slope inclination; pile capacity, including lateral load capacities for vertical piles; and sheet-pile bulkhead lateral pressures, which would provide structure stability and security and would not worsen the existing conditions (refer to Attachment D for additional information).

As discussed in Section 4.7.2(a)(iii), the geologic conditions for the as-needed quay wall revetment repairs and improvements were not specifically evaluated, but the Geotechnical Investigation did evaluate specific areas and conditions are assumed to be the same within the project site. Nevertheless, with implementation of **MM-GEO-1**, NASSCO would be required to prepare a geotechnical investigation prior to commencing any as-needed shoreline repairs. In addition, NASSCO would be required to implement the recommendations in the supplemental geotechnical investigation to ensure that all structures are engineered to specifications based on site-specific geotechnical conditions. Implementation of **MM-GEO-1** would ensure that the project would not result in hazards from geologic unit or soil instability.

The project would be designed and constructed in accordance with recommendations from the *Geotechnical Investigation* (TerraCosta Consulting Group 2020) and any supplemental geotechnical investigations as required by **MM-GEO-1**; therefore, project construction and operations would not cause substantial adverse effects from geologic unit or soil instability and impacts would be less than significant with mitigation.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less-than-significant impact. Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content as well as a significant decrease in volume with a decrease in water content. Changes in the water content of highly expansive soils can result in severe distress for structures constructed on or against the soils.

Underlying soils found in the BAE Systems leasehold adjacent to the project site include Huerhuero-Urban land complex (2 to 9 percent slope) and Tidal flats, which have high shrink-swell behavior, as well as Urban land, which has variable shrink-swell behavior (San Diego Unified Port District 2020b; USDA 1973). The underlying soils in the BAE Systems leasehold are partially composed of clays and, as such, could be subject to expansion. Because of the developed nature of the project site, it is likely that any expansive soils have been removed during previous development of the site. No construction activities are proposed on the landside of the project site. In addition, the project design would include all necessary stabilizing components for in-water structures, as described in Section 4.7.2(a) above, including the installation of piles and reconstruction of the revetment walls. Because the project would be engineered to specifications based on site-specific geotechnical conditions, project construction and operations would not result in substantial risks to life or property from constructing on expansive soils. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No impact. The project does not propose septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No impact. The project site is situated on artificial engineered fill, which overlies Holocene marine deposits. This underlying formation has a low paleontological sensitivity. Given that construction activities would be in-water and would not require disturbance of native soils and all in-water work would consist of pile replacement/installation and reconstruction of revetments, it is unlikely that paleontological resources would be encountered. Following construction, the project site would be returned to a similar condition as the existing setting. The project would not introduce new activities during operation that would have potential to disturb native soils. Therefore, the project would not destroy a unique paleontological resource or site or unique geologic feature. No impact would occur.

Required Mitigation Measures

With implementation of the following mitigation measure, impacts related to geology and soils would be less than significant:

MM-GEO-1: Supplemental Geotechnical Investigation. The project applicant shall complete a supplemental geotechnical investigation prior to the completion of any as-needed shoreline repairs from Lot 20 to Pier 12, the floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base quay wall. The applicant shall incorporate all recommendations from the supplemental geotechnical investigation into the project design to ensure that all structures are engineered to specifications based on site-specific geotechnical conditions. Should the Engineer of Record (licensed Professional Engineer) determine there is sufficient available information to properly design the as-needed shoreline repairs, such determination will be clearly documented and provided to the District for review and approval. Should the District concur with the determination not to prepare a Supplemental Geotechnical Investigation, this measure will not be required.

4.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

4.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing, electricity generation by utilities and consumption by end users, residential and commercial onsite fuel usage, and agriculture and forestry. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing together (IPCC 2014:5).

Climate change is a global problem. GHGs are global pollutants because even local GHG emissions contribute to global impacts. GHGs have long atmospheric lifetimes (one to several thousand years) and persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any particular GHG molecule is dependent on multiple variables and cannot be determined with any certainty, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration (IPCC 2013:467).The three primary GHGs discussed when quantifying GHG emissions in the context of climate change include CO_2, CH_4, and N_2O. Emissions of these gases are converted to a comparable unit by multiplying each non-CO_2 gas by their global warming potential (GWP), reporting emissions in terms of carbon dioxide equivalent (CO_2e). These equivalencies are typically represented as million metric tons of CO_2e ($MMTCO_2e$) and metric tons of CO_2e ($MTCO_2e$). CH_4, for example, with a GWP of 25, can trap 25 times as much heat in the atmosphere as the same quantity of CO_2, thus the heat trapped in the atmosphere by one metric ton (MT) of CH_4 is equivalent to that trapped by 25 metric tons of CO_2 or 25 $MTCO_2e$. This conversion to CO_2e allows consideration of all gases in comparable terms and makes it easier to communicate how various sources and types of GHG emissions contribute to global climate change.

GHG inventories provide a detailed accounting of the sources and quantities of GHG emissions generated from activities. For example, at the State level, CARB prepares regular GHG inventory updates for a defined set of gases that contribute to climate change. In 2014, the statewide total quantity of GHGs emitted was 443 $MMTCO_2e$/year (CARB 2020a). At the local level, total GHG emissions in San Diego county during 2014 was 3.2 $MMTCO_2e$/year (County of San Diego 2014). Additionally, the District's 2016 Maritime Emissions Inventory reports that the maritime activity at the port, including harbor craft and on-road vehicles, emitted 67,431 $MTCO_2e$ in 2016 (San Diego Unified Port District 2016).

4.8.2 Regulatory Setting

STATE

Statewide GHG Emission Targets and the Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the State government for approximately two decades (CARB 2020b). GHG emission targets established by the State legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (Senate Bill [SB] 32 of 2016). Executive Order (EO) S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. EO B-55-18 calls for California to achieve carbon neutrality no later than 2045 and achieve and maintain net negative GHG emissions thereafter. These targets align with the scientifically established levels needed globally to limit the rise in global temperature to no more than 2 degrees Celsius (°C), the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected. These targets also align with efforts to limit the temperature increase even further to 1.5°C (UN 2015:3).

The 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by CARB, outlines the main strategies California shall implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB 2017:1, 3, 5, 20, 25–26). It identifies the reductions needed by each GHG emission sector including transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste. The State has also passed more detailed legislation addressing GHG emissions associated with industrial sources, transportation, electricity generation, and energy consumption.

LOCAL

Port of San Diego Climate Action Plan

The Port of San Diego CAP was adopted in December 2013 and includes an inventory of existing (2006) and projected emissions in 2020, 2035, and 2050, as well as strategies to meet the District's goal of reducing annual GHG emissions to 25 percent below 2006 levels by 2035 (San Diego Unified Port District 2013). To achieve the Port's goals, the CAP details various GHG reduction measures related to transportation and land use, alternative energy generation, energy conservation, waste reduction, water conservation, and recycling. These GHG reduction strategies and measures included in the CAP support meeting the statewide goals set forth in AB 32.

The Port's CAP meets the criteria listed in Section 15183.5 of the State CEQA Guidelines by providing reduction targets that align with statewide goals. However, the CAP does not cover construction activities. A critical aspect of having a CAP that fits the criteria within State CEQA Guidelines Section 15183.5 is having reduction targets that align with statewide goals. Because the Port's reduction targets outlined in the CAP parallel the State's commitment in AB 32, and align with statewide goals to reduce GHG emissions, the CAP is consistent with AB 32. While the Port's CAP includes a long-term 2035 goal, it does not include post-2020 reduction quantification. Therefore, the CAP cannot be used as a qualified plan for reduction of GHG emissions pursuant to Section 15183.5 of the CEQA Guidelines for projects with a post-2020 buildout date. Because project construction is not expected to commence until 2023, the CAP is not used to assess the significance of the project's GHG emissions.

4.8.3 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less-than-significant impact. The issue of global warming and climate change is inherently a cumulative issue because the GHG emissions associated with an individual project cannot be shown to have a material effect on global climate. Thus, the quantity of GHG emissions associated with construction of the project is addressed as a cumulative impact.

The District has not established quantitative significance thresholds for evaluating GHG emissions. The California Air Pollution Control Officers Association (CAPCOA) presented a 900 $MTCO_2e$ per year threshold in a white paper titled *CEQA and Climate Change* (CAPCOA 2008). This threshold was developed based on various land use densities and discretionary project types that were analyzed to determine the size of projects that would likely have a less than cumulatively considerable contribution to climate change. Projects that meet or fall below the CAPCOA 900 $MTCO_2e$ threshold are expected to result in GHG emissions that would not result in a cumulatively considerable impact.

When compared to similar mass emissions thresholds adopted by other regional air districts in California, the CAPCOA 900 $MTCO_2e$ per year threshold is relatively conservative and can be used to support cumulative impact determinations beyond 2020. Additionally, in June 2020, SMAQMD published updated CEQA significance thresholds and determined that construction activities that estimated to generate less than 1,100 $MTCO_2e$ per year would not result in a significant cumulative impact. This *de minimis* screening threshold was developed to demonstrate compliance with the statewide 2030 GHG reduction target, and was determined by SMAQMD to capture 98 percent of total GHG emissions associated with representative projects analyzed in determining this threshold (SMAQMD 2014; 2020). However, the CAPCOA threshold of 900 $MTCO_2e$ per year represents a more conservative threshold than has been approved by other air districts in compliance with 2030 statewide reduction targets, and will thus be used in this analysis.

The proposed project's construction-related GHG emissions were modeled based on project specifications and default settings and parameters contained in CalEEMod Version 2020.40 (CAPCOA 2021), modified using vehicle emission factors from EMFAC 2021. GHG emissions from tugboats utilized to mobilize the spud and derrick barges during construction and the on-board spud and barge engines were estimated using the SMAQMD Harborcraft Emissions Calculator (SMAQMD 2017). Project-specific information, including specified equipment and CalEEMod defaults, were used to model emissions. When assessing construction-related GHG emissions over the lifetime of the project, an amortization period of 30 years is recommended as an estimate of equivalent annual emissions (SCAQMD 2008). Refer to Appendix A for specific input parameters and modeling output results. Construction activities related to the proposed project that would result in the generation of GHG emissions include the use of heavy-duty off-road construction equipment, vehicle use during worker commute trips and construction materials transport, emissions of tugboats used to move barges, and emissions from on-board propulsion engines and generator sets.

Construction-related GHG emissions were assessed over the total duration of project construction, a period of 12 years, to calculate average annual emissions. Each phase of construction was modeled separately, including:

- Floating dry dock replacement and waterfront infrastructure improvements (January 2023-September 2024)
- Repair and improvements to the repair complex wharf (September 2024-July 2025)
- Repair of failed revetment along Quay Wall, Berths 2-5 (January 2024-February 2024)
- Additional repairs to 1500 linear feet of shoreline segments, including shoreline segments Lot 20 to Pier 12, floating dry dock approach pier to Berth 8, Ways to Building Dock, and Berth 6 to Navy Base Quay Wall (January 2025-December 2027)
- As-needed structural repair/placement of select piles (100 piles/year) at Berths 2, 3, 4, 5, 6, and Pier 12 and the floating dry dock approach pier, and at the Berth 1 Platform (January 2024-January 2034)

CalEEMod results indicated that construction-related activity over the course of the construction period would result in the estimated annual emissions listed in Table 4.8-1.

Table 4.8-1 Annual Construction GHG Emissions

Year	Annual GHG Emissions (MT per year)			
	CO_2	CH_4	N_2O	Total CO_2e
2023	1,223	0.2	0.01	1,231
2024	2,491	0.5	0.01	2,506
2025	2,994	0.6	0.01	3,012
2026	2,292	0.5	0.01	2,306
2027	2,290	0.5	0.01	2,304
2028	1,016	0.2	< 0.01	1,023
2029	1,013	0.2	< 0.01	1,019
2030	1,133	< 0.1	< 0.01	1,135
2031	1,133	< 0.1	< 0.01	1,135
2032	1,136	< 0.1	< 0.01	1,137
2033	1,132	< 0.1	< 0.01	1,134
2034	96	< 0.01	< 0.01	96
Total	17,948	2.8	0.06	18,037
Amortized Emissions (30 years)	598	0.095	< 0.01	601
Threshold	–	–	–	900
Exceeds Threshold?	N/A	N/A	N/A	No

Notes: MT = Metric Tons; CO_2 = Carbon Dioxide; CH_4 = Methane; N_2O = Nitrous Oxide; CO_2e = Carbon Dioxide Equivalents

Source: Modeling by Ascent Environmental 2021

Project construction emissions, when amortized over 30 years, would be 601 $MTCO_2e$ per year, which is below the 900 $MTCO_2e$ per year significance threshold. Thus, this impact would be less than significant, and no mitigation is required.

Operational energy use is anticipated to be reduced when compared to existing conditions, thereby reducing operation-related GHG emissions. Specifically, the floating dry dock would no longer need to be relocated to another berth outside of the leasehold during vessel launches from the inclined building ways or building dock. The floating dry dock would instead be repositioned to the "Lot 20" temporary location, which is closer to the home position. As such, the proposed project would result in reduced energy consumption associated with tug trips during operations when compared to existing conditions. In addition, the diesel generators on the new floating dry dock would be U.S. EPA Tier 4-rated and would be outfitted with a closed-loop cooling water system. These new engines would improve energy efficiency when compared with existing Tier 0 diesel engines. Moreover, the new floating dry dock would be outfitted with an extensive electrical distribution system, as well as a modern electric salt water pumping system to minimize the need for portable diesel salt water pumps, which would further improve energy efficiency. Lastly, the new Repair Complex Wharf would create a centralized laydown area to support ship repair operations in the vicinity of the floating dry dock. This centralized laydown area is anticipated to reduce the distance of forklift trips, and associated energy consumption, throughout the shipyard when compared with existing conditions. Thus, operational emissions under the proposed project would be decreased compared to existing conditions and operational GHG emissions associated with the proposed project would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-than-significant impact. Reducing GHG emissions in California has been the focus of the State government for approximately two decades (CARB 2020b). GHG emission targets established by the State legislature include reducing

statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (SB 32 of 2016). EO S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. EO B-55-18 calls for California to achieve carbon neutrality no later than 2045 and achieve and maintain net negative GHG emissions thereafter. These targets align with the scientifically established levels needed globally to limit the rise in global temperature to no more than 2°C, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected. These targets also align with efforts to limit the temperature increase even further to 1.5°C (UN 2015:3).

The 2017 Scoping Plan, prepared by CARB, outlines the main strategies California shall implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB 2017:1, 3, 5, 20, 25–26). The plan identifies the reductions needed by each GHG emission sector including transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste. The State has also passed more detailed legislation addressing GHG emissions associated with industrial sources, transportation, electricity generation, and energy consumption. CARB and other agencies are charged with implementing regulations that achieve the reduction goals on a statewide basis, including through increased building efficiency (through California Building Code updates) and vehicle efficiency (through truck and car rulemaking), among other things. Those statewide regulations apply to ensure local construction and operation increase efficiencies toward achievement of statewide GHG emissions reduction goals.

At the local level, the District adopted their CAP in December 2013 and identified the District's reduction goals and measures to be implemented to achieve the reduction goals set forth in AB 32 and long-term goals beyond 2020. The CAP includes an inventory of existing (2006) and projected emissions in 2020, 2035, and 2050, as well as strategies to meet the District's goal of reducing annual GHG emissions to 25 percent below 2006 levels by 2035 (San Diego Unified Port District 2013). To achieve the Port's goals, the CAP details various GHG reduction measures related to transportation and land use, alternative energy generation, energy conservation, waste reduction and recycling, water conservation, and recycling. Therefore, AB 32, SB 32, and the District's CAP represent the most applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

The Port's CAP meets the criteria within State CEQA Guidelines Section 15183.5 of the CEQA Guidelines by providing reduction targets that align with statewide goals. A critical aspect of having a CAP that fits the criteria within State CEQA Guidelines Section 15183.5 is having reduction targets that align with statewide goals. Because the Port's reduction targets outlined in the CAP parallel the State's commitment in AB 32, and aligns with statewide goals to reduce GHG emissions, the CAP is consistent with AB 32. While the Port's CAP includes a long-term 2035 goal, it does not include post-2020 reduction quantification. Therefore, the CAP cannot be used as a qualified plan for reduction of GHG emissions pursuant to Section 15183.5 of the CEQA Guidelines for projects with a post-2020 buildout date.

Plans, policies, and regulations adopted for the purpose of reducing GHG emissions were developed with the intent of reducing cumulative emissions related, primarily, to long-term operational emissions. As described previously, the project would not result in a considerable increase in GHG emissions as a result of construction activities, which would temporarily generate GHG emissions below the 900 $MTCO_2e$ threshold. The proposed project would not increase operational shipbuilding/repair capacity at the project site and would, therefore, not result in a long-term increase in GHG emissions. In fact, the repair and replacement of the dry dock and other infrastructure would increase efficiency by reducing transit distances and fuel consumption, thus lowering operational GHG emissions at the project site. Other CAP GHG reduction measures, such as reducing building energy use, relying more on alternative energy generation, as well as reductions in water use and waste generation, are not applicable to the currently proposed project. The current project would therefore be consistent with GHG reduction goals and efficiency requirements of the District's CAP, as well as statewide planning efforts, and would not result in a permanent increase in GHG emissions. Thus, the project would not conflict with any applicable plan, policy, or regulation adopting for the purpose of reducing emissions of GHGs. This impact would be less than significant, and no mitigation is required.

Required Mitigation Measures

The project would not result in significant impacts related to greenhouse gas emissions. Mitigation measures are not required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

4.9.1 Environmental Setting

HISTORICAL ACTIVITIES

The project site is within the NASSCO leasehold, which consists of a full-service ship construction, modification, repair, and maintenance facility that spans 126 acres of tidelands property on the San Diego Bay waterfront. NASSCO has conducted shipyard operations at this site since 1960. NASSCO's shipyard facilities have included concrete platens used for steel fabrication, a graving dock, shipbuilding ways, and berths on piers or land to accommodate the berthing of ships.

SURROUNDING LAND USES AND ACTIVITIES

BAE Systems operates a shipyard facility located immediately northwest of the project site, which is used to modernize, repair, and overhaul marine vessels. The BAE Systems shipyard facility includes administrative offices, production shops, training areas, parking and staging areas, floating drydocks, concrete platforms, piers, marine railways, and related utilities and infrastructure. Hazardous materials are stored and used within the BAE Systems leasehold as part of their operations. The BAE Systems facilities also generate hazardous waste classified as ignitable waste, methyl ethyl ketone, and spent nonhalogenated solvents.

Industrial land uses north of the project site across Harbor Drive and the railroad ROW include a metal fabrication shop; gas station; recycling services centers; meat wholesaler; paint stores; and automobile service, repair, and storage facilities. Naval Base San Diego, which conducts waterfront operations and fleet support of the U.S. Navy, is located immediately east and southeast of the project site.

EXISTING ONSITE STORAGE, USE, AND DISPOSAL OF HAZARDOUS MATERIALS

As established by RCRA, the U.S. EPA administers a program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. Existing operations with the NASSCO shipyard involve the routine use and storage of hazardous materials and generation of hazardous waste. Waste generated at the facility includes spent abrasive, paint, rust, petroleum products, marine growth, sanitary waste, and general refuse. According to the Department of Toxic Substances Control (DTSC) Hazardous Waste Tracking System, NASSCO generated approximately 106.5 tons of waste subject to RCRA regulations in 2020, including ignitable waste, corrosives, benzene, and methyl ethyl ketone (DTSC 2021a).

HAZARDOUS MATERIALS DATABASE RESULTS

The State Water Resources Control Board (SWRCB) GeoTracker database contains records for sites that require cleanup, including leaking underground storage tank (LUST) sites, cleanup program sites, military cleanup sites, and other sites with potential for soil and groundwater contamination. The GeoTracker database identifies six cleanup program sites associated with the NASSCO leasehold. The cleanup for five of these sites has been completed and the cases for these five sites have been closed with dates ranging from 1986 to 2018 (SWRCB 2021). The active cleanup program site, a shipyard sediment site, is undergoing verification monitoring as of July 9, 2018. Year 5 remedial performance monitoring sampling was completed at the site in July 2021 and a Year 5 Post-Remedial Report was prepared in February 2022. The cleanup program site encompasses the entire 56 water acres of the NASSCO and BAE Systems leaseholds and is a result of discharges of metals and other pollutant wastes that caused the accumulation of pollutants in bay bottom marine sediments. Additional information about the cleanup program site is provided in the Historical Contamination section below.

DTSC EnviroStor database tracks cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further. The EnviroStor database identifies one hazardous waste site associated with the NASSCO shipyard. In 1999, NASSCO signed a Consent Agreement for Corrective Action with DTSC for hazardous waste identified in the vicinity of the NASSCO Building 6 Sump. As of 2016, approximately 20 tons of mixed asphalt and concrete and 66.8 tons of soil contaminated with metals, volatile organic compounds, semivolatile organic compounds, and petroleum hydrocarbons were removed from the site. DTSC concurred that the site cleanup goals were met and the site is undergoing monitoring (DTSC 2021b).

Within a 0.5-mile radius of the project site, there are several LUST cleanup sites, cleanup program sites, and DTSC cleanup sites associated with nearby industrial properties. The open sites and sites needing evaluation are listed in Table 4.9-1 below.

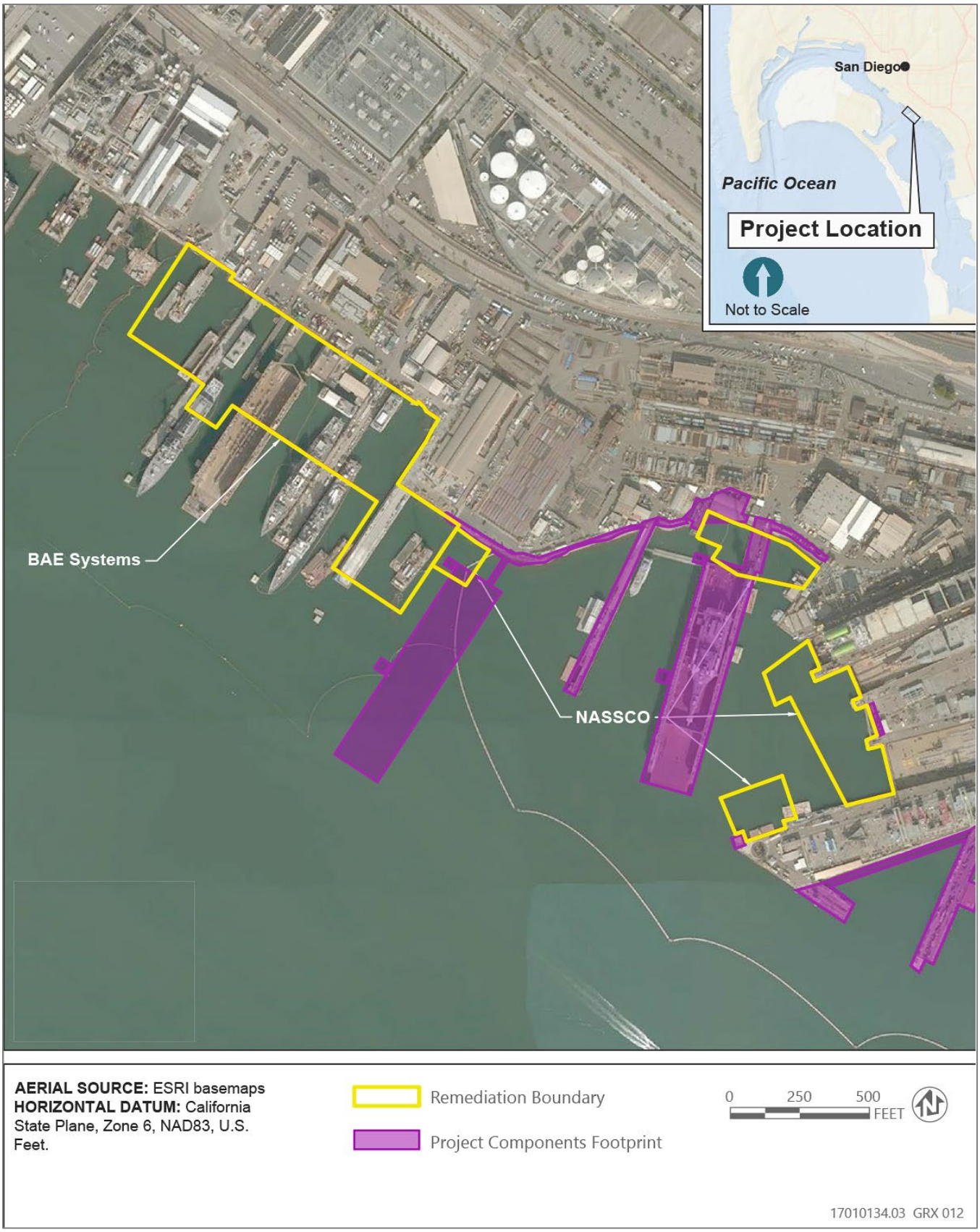
HISTORICAL CONTAMINATION

In 2012, the San Diego RWQCB issued Cleanup and Abatement Order (CAO) R9-2012-0024 for sediment contamination within the NASSCO and BAE Systems leaseholds. The contamination boundary of the CAO is collectively referred to as the shipyard sediment site and is depicted on Figure 4.9-1. The shipyard sediment site was divided into the North Shipyard (the property leased by BAE Systems) and the South Shipyard (the property leased by NASSCO). The CAO established cleanup levels for primary contaminants of concern (COC) of metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc), butyl tin species, polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCT), polynuclear aromatic hydrocarbons (PAH), and total petroleum hydrocarbons (TPH).

Table 4.9-1 Hazardous Waste Sites within a 0.5-Mile Radius of the Project Site (Open or Needing Evaluation)

Site Name	Address	Site Type	Status	Potential Contaminants of Concern	Potential Media of Concern
Carlson & Beauloye	2141 Newton Ave, San Diego, CA 92113	Cleanup Program Site	Open – Site Assessment as of 8/1/2018	None Specified	None Specified
Chevron Harbor Terminal – Lower Tank Farm	2295 Belt St, San Diego, CA 92113	DTSC Cleanup Site - Evaluation	Refer: 1248 Local Agency as of 9/13/2001	None Specified	None Specified
Chevron USA Inc.	2351 Harbor Dr, San Diego, CA 92113	Cleanup Program Site	Open – Site Assessment as of 6/16/1993	Gasoline	Other Groundwater (uses other than drinking water)
Chevron USA Inc.	2351 Harbor Dr, San Diego, CA 92113	LUST Cleanup Site	Open – Verification Monitoring as of 1/1/2011	Diesel, Gasoline	Other Groundwater (uses other than drinking water)
CP Kelco	2025 E. Harbor Dr, San Diego, CA 92113	DTSC Cleanup Site - Evaluation	Refer: 1248 Local Agency as of 4/12/2021	None Specified	None Specified
Kelco	2145 E. Belt St, San Diego, CA 92113	DTSC Cleanup Site - Evaluation	Refer: 1248 Local Agency as of 1/23/2001	None Specified	None Specified
NutraSweet Kelco Co.	2145 E. Belt St, San Diego, CA 92113	DTSC Cleanup Site – Tiered Permit	Inactive – Needs Evaluation	None Specified	None Specified
OFL 2292 LLC	2292 National Ave, San Diego, CA 92113	Cleanup Program Site	Open – Site Assessment as of 4/26/2019	None Specified	None Specified
Pacific Treatment Corp.	2146 Main St, San Diego, CA 92113	DTSC Cleanup Site - Corrective Action	Inactive – Needs Evaluation	None Specified	None Specified
Sampson Street Site	Sampson Street	Cleanup Program Site	Open – Inactive as of 1/14/2019	Tetrachloroethylene (PCE), Trichloroethylene (TCE)	Indoor Air, Soil Vapor
SDG&E and BAE Systems Northern Sediment Delineation Investigation	2145 East Belt St, San Diego, CA 92113	Cleanup Program Site	Open – Site Assessment	Other Metal, Polychlorinated Biphenyls (PCB)	Sediments, Soil, Surface Water, Under Investigation
SDG&E Environmental Department	1348 Sampson St, San Diego, CA 92113	Cleanup Program Site	Open – Site Assessment as of 11/30/2006	None Specified	None Specified
SDG&E Silvergate Substation	1348 Sampson St, San Diego, CA 92113	LUST Cleanup Site	Open – Assessment & Interim Remedial Action as of 11/5/2018	Gasoline, Other Solvent or Non-Petroleum Hydrocarbon	Soil, Surface Water
Arc Castle Engineering	3106 Main St, San Diego, CA 92113	DTSC Cleanup Site - Evaluation	Refer: 1248 Local Agency as of 4/22/2004	None Specified	None Specified

Source: SWRCB 2021; DTSC 2021b



Source: Anchor QEA, LLC 2014

Figure 4.9-1 Shipyard Sediment Site Remediation

The project site lies within the South Shipyard boundary. Remedial activities under the CAO for the South Shipyard were initiated in September 2013 and completed in March 2014. The Final Cleanup and Abatement Completion Report San Diego Shipyard Sediment Site – South Shipyard (Anchor QEA, LLC 2014) indicated that approximately 28,660 cubic yards (cy) of contaminated sediments were dredged from the South Shipyard sediment site. Impacted sediment that could not be removed due to risk of undermining slopes or existing pier structures was covered with a sand or gravelly sand cover. Approximately 19,760 tons of sand material were placed as cover. The South Shipyard site was moved into post-remedial monitoring to evaluate the effectiveness of the remedial action. In compliance with the CAO, remedial actions were completed at the site in early 2016. The CAO did not address sediments with concentrations in excess of the cleanup levels in areas that were located under existing in-water infrastructure. Although the RWQCB concurred that the cleanup was performed to their satisfaction, it allowed for sediments with concentrations in excess of the cleanup levels to be left in-place and covered.

The CAO R9-2012-0024 stipulated post-remedial monitoring would be conducted 2 years (2018) and 5 years (2021) after the completion of the remediation to confirm remedial goals continue to be achieved. With respect to the remedial actions required by the CAO, the Work Plan for the San Diego Shipyards Post-Remedial Monitoring (PRMP) required remedial performance monitoring (composite chemistry, discrete sample chemistry analysis for benthic exposure, sediment toxicity testing, and bioaccumulation testing) in Years 2 and 5 (and possibly Year 10, if deemed warranted), and benthic community recovery monitoring in Years 3 and 4 (Exponent 2012). The PRMP is intended to verify that the remedial actions are effective in reducing and maintaining chemical concentrations in sediments to an acceptable level, as determined by the RWQCB. NASSCO provided notice of its proposed field work related to Year 5 post-remedial monitoring to the RWQCB on June 15, 2021. The RWQCB will review the Year 5 post-remedial monitoring report prepared by NASSCO for consistency with the PRMP, the CAO, and implementation and continued effectiveness of the remedial actions.

Schools and Airports

The closest school is the Logan Memorial Educational Campus at 2875 Oceanview Avenue, approximately 0.4 mile north of the project site. The closest public airport is the San Diego International Airport, approximately 3.3 miles northwest of the project site. In addition, the North Island Naval Air Station is a naval air station approximately 2.8 miles northwest of the project site.

Wildland Fire Hazard

The project site is over water, lacks vegetation, and is within a developed, urban area that is not susceptible to wildland fire. As discussed further in Section 4.20, the project site is designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a non-Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2009).

4.9.2 Regulatory Setting

FEDERAL

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act Amendments

The federal Toxic Substances Control Act (1976) and the RCRA of 1976 established a program, which is administered by the U.S. EPA, to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. The RCRA program also establishes standards for hazardous waste treatment, storage, and disposal units, which are intended to have hazardous wastes managed in a manner that minimizes present and future threats to the environment and human health. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed of at a facility, any treatment, storage, or disposal unit must be permitted under the RCRA. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous materials.

Department of Transportation Hazardous Materials Regulations (49 CFR 100-185)

U.S. Department of Transportation (DOT) Hazardous Materials Regulations (49 CFR 100–185) cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging Requirements), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance) would all apply to goods movement to and from the project site.

Enforcement of these DOT regulations is shared by each of the following administrations under delegations from the Secretary of the DOT:

- Research and Special Programs Administration is responsible for container manufacturers, reconditioners, and retesters and shares authority over shippers of hazardous materials.
- Federal Highway Administration (FHWA) enforces all regulations pertaining to motor carriers.
- Federal Railroad Administration enforces all regulations pertaining to rail carriers.
- Federal Aviation Administration (FAA) enforces all regulations pertaining to air carriers.
- U.S. Coast Guard (USCG) enforces all regulations pertaining to shipments by water.

Spill Prevention Control and Countermeasure Plans (40 CFR 112.7)

Spill Prevention Control and Countermeasure (SPCC) plans are required for facilities in which construction and removal operations involve oil in the vicinity of navigable waters or shorelines. SPCC plans ensure that facilities implement containment and other countermeasures that would prevent oil spills from reaching navigable waters. SPCC plans are regulations administered by the U.S. EPA. Preparation of an SPCC Plan is required for projects that meet three criteria: (1) the facility must be non-transportation-related, or, for construction, the construction operations involve storing, using, transferring, or otherwise handling oil; (2) the project must have an aggregate aboveground storage capacity greater than 1,320 gallons or completely buried storage capacity greater than 42,000 gallons; and (3) there must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines. For construction projects, for criterion (1), 40 CFR 112 describes the requirements for implementing SPCC plans. The following three areas should clearly be addressed in a SPCC plan:

- Operating procedures that prevent oil spills;
- Control measures installed to prevent a spill from reaching navigable waters; and
- Countermeasures to contain, clean up, and mitigate the effects of an oil spill that reaches navigable waters.

U.S. Coast Guard 33 CFR and 46 CFR

USCG, through Title 33 (Navigation and Navigable Waters) and Title 46 (Shipping) of the CFR, is the federal agency responsible for vessel inspection, marine terminal operations safety, coordination of federal responses to marine emergencies, enforcement of marine pollution statutes, marine safety (such as navigation aids), and operation of the National Response Center for spill response, and is the lead agency for offshore spill response. USCG implemented a revised vessel-boarding program in 1994 designed to identify and eliminate substandard ships from U.S. waters. The program pursues this goal by systematically targeting the relative risk of vessels and increasing the boarding frequency on high risk (potentially substandard) vessels. The relative risk of each vessel is determined through the use of a matrix that factors the flag of the vessel, owner, operator, classification society, vessel particulars, and violation history. Vessels are assigned a boarding priority from I to IV, with priority I vessels being the potentially highest risk and priority IV having relatively low risk.

Emergency Planning and Community Right-To-Know Act (42 U.S.C. 11001 et seq.)

The Emergency Planning and Community Right-to-Know Act was enacted by Congress as the national legislation on community safety in 1986, as Title III of the Superfund Amendments and Reauthorization Act. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement this act, Congress required each state to appoint a State Emergency Response Commission. The State Emergency

Response Commissions are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. The act provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act (OSHA) establishes the framework for safe and healthful working conditions for working men and women by authorizing enforcement of the standards developed under the act. The act also provides for training, outreach, education, and assistance related to establishing a safe working environment. Regulations defining safe standards have been developed for general industry, construction, maritime, recordkeeping, and agriculture. A major component of the act is the requirement that employers implement the OSHA Hazard Communication Standard to provide information to employees about the existence and potential risks of exposures to hazardous substances in the workplace. As part of the Hazard Communication Standard, employers must:

- Obtain material safety data sheets from chemical manufacturers that identify the types and handling requirements of hazardous materials used in given areas;
- Make the material safety data sheets available to their employees;
- Label chemical containers in the workplace;
- Develop and maintain a written hazard communication program; and
- Develop and implement programs to train employees about hazardous materials.
- OSHA standards specific to hazardous materials are listed in 29 CFR 1910 Subpart H. Safety and health regulations pertaining to construction are listed in 29 CFR 1926 Subpart H.

STATE

California Health and Safety Code (Hazardous Waste Control Act)

DTSC, a department of the California Environmental Protection Agency (Cal/EPA), is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5, also known as the Hazardous Waste Control Act). Division 20, Chapter 6.5, of the California Health and Safety Code identifies hazardous waste control regulations pertaining to transportation, treatment, recycling, disposal, enforcement, and the permitting of hazardous waste. Division 20, Chapter 6.10, identifies regulations applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5, contains environmental health standards for the management of hazardous waste, as well as standards for the identification of hazardous waste (Chapter 11), and standards that are applicable to transporters of hazardous waste (Chapter 13).

Environmental Health Standards for the Management of Hazardous Waste (California Code of Regulations Title 22, Division 4.5, Section 66001 et seq.)

The Environmental Health Standards for the Management of Hazardous Waste (22 CCR 66001 et seq.) establish requirements for the management and disposal of hazardous waste in accordance with the provisions of the state Hazardous Waste Control Act and federal RCRA.

California Code of Regulations, Title 8 – Industrial Relations

Title 8 of the California Code of Regulations, Section 1532.1 is a rule developed by the federal OSHA in 1993 and adopted by the state of California. Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The federal OSHA and the California Division of Occupational Safety and Health (Cal/OSHA) are responsible for ensuring worker safety in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards would be applicable to both construction and operation of the proposed project. Title 8 includes

regulations pertaining to hazard control (including administrative and engineering controls), hazardous chemical labeling and training requirements, hazardous exposure prevention, hazardous material management, and hazardous waste operations.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (California Health and Safety Code, Chapter 6.11, Sections 25404-25404.9)

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA). The CUPA for San Diego County is the San Diego County Department of Environmental Health's Hazardous Materials Division (HMD), which has the responsibility and authority for implementing and enforcing the requirements listed in Chapter 6.5 (commencing with Section 25100), Chapter 6.67 (commencing with Section 25270), Chapter 6.7 (commencing with Section 25280), Chapter 6.95 (commencing with Section 25500), and Sections 25404.1 and 25404.2, including the following:

- Aboveground Petroleum Storage Act Requirements for SPCC Plans. Facilities with a single tank or cumulative aboveground storage capacities of 1,320 gallons or greater of petroleum-based liquid product (e.g., gasoline, diesel, lubricants) must develop an SPCC plan. An SPCC plan must be prepared in accordance with the oil pollution prevention guidelines in 40 CFR 112. This plan must describe the procedures, methods, and equipment needed at the facility to prevent discharges of petroleum from reaching navigable waters. A registered professional engineer must certify the SPCC plan, and a complete copy of the plan must be maintained on site.
- California Accidental Release Prevention Program. This program requires any business that handles more than threshold quantities of an extremely hazardous substance to develop a Risk Management Plan. The Risk Management Plan is implemented by the business to prevent or mitigate releases of regulated substances that could have offsite consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls.
- Hazardous Materials Business Plan/Hazardous Materials Inventory Statements. Hazardous Materials Business Plans contain basic information regarding the location, type, quantity, and health risks of hazardous materials and/or waste. Each business must prepare a Hazardous Material Business Plan if that business uses, handles, or stores a hazardous material and/or waste or an extremely hazardous material in quantities greater than or equal to the following:
  - 55 gallons for a liquid;
  - 500 pounds for a solid;
  - 200 cubic feet for any compressed gas; or
  - Threshold planning quantities of an extremely hazardous substance.
- Hazardous Waste Generator Program.
  - This program regulates businesses that generate any amount of a hazardous waste. Proper handling, recycling, treating, storing, and disposing of hazardous waste are key elements to this program.
- Tiered Permitting Program.
  - This program regulates the onsite treatment of hazardous waste.
- Underground Storage Tank Program.
  - This program regulates the construction, operation, repair, and removal of underground storage tanks that store hazardous materials and/or waste.

California Labor Code (Division 5, Parts 1 and 7)

California Labor Code regulations ensure appropriate training regarding the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who handle hazardous materials are appropriately trained and informed about the materials. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (embodied in the California Water Code) of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the state must adopt water quality policies, plans, and objectives that protect its waters for the use and enjoyment of the people. Under the California Water Code, the State of California is divided into nine regions governed by RWQCBs that, under the guidance and review of the SWRCB, implement and enforce provisions of the California Water Code and the CWA. The project site is in Region 9, the San Diego Region, and governed by the San Diego RWQCB (see also Section 4.10, Hydrology and Water Quality).

Chapter 5, Enforcement and Implementation, Section 13304 Cleanup and Abatement, of the California Water Code outlines the RWQCB or SWRCB's authority to order cleanup and abatement efforts to an entity that has discharged waste or has allowed the discharge of waste to waters of the state, or threatens to create a condition of pollution (California Water Code, Chapter 5, Section 13304).

A cleanup and abatement order issued by the SWRCB or RWQCB may require the cleanup of waste or abatement of the effects of waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. California Water Code Section 13267, Investigations, inspections, outlines the RWQCB's authority to issue an investigative order. The RWQCB, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action related to a plan or discharge requirements, may investigate the quality of waters within the region. The RWQCB can require that responsible parties investigate the discharge or threatened discharge of toxic pollutants.

State Water Resources Control Board Resolution Number 92-49 and 68-16

SWRCB Resolution Number 92-49 – Policies and Procedures for the Investigation and Cleanup and Abatement of Discharges Under Section 13304 was adopted by the SWRCB in 1992. The resolution contains policies and procedures for the RWQCBs to follow for the oversight and regulation of investigations and cleanup and abatement activities for all types of discharges as described in Section 13304 of the California Water Code (described above). Resolution No. 92-49 also provides the requirements of establishing and maintaining a site's containment zone.

Water Quality Control Plans

The preparation and adoption of water quality control plans (basin plans) is required by the California Water Code (Section 13240) as prescribed by the CWA. Section 303 of the CWA requires states to adopt water quality standards that "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." According to Section 13050 of the California Water Code, basin plans consist of a designation or establishment of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives for the waters within a specified area. Because beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, basin plans are regulatory references for meeting the state and federal requirements for water quality control.

The Water Quality Control Plan for the San Diego Basin (Basin Plan), which was adopted by the San Diego RWQCB in 1994 and updated in 2016, designates the Beneficial Uses and Water Quality Objectives for water bodies under its jurisdiction (San Diego RWQCB 1994).

LOCAL

RWQCB Municipal Stormwater Permit (Order No. R9-2013-0001)

The Municipal Stormwater Permit (Order No. R9-2013-0001 as amended by Order Nos. R9-2015-001 and R9-2015-0100) is a National Pollutant Discharge Elimination System (NPDES) Permit issued that requires the owners and operators of Municipal Separate Storm Sewer Systems (MS4s) within the San Diego region to implement management programs to limit discharges of pollutants and non-stormwater discharges to and from their MS4 from all phases of development. The Municipal Stormwater Permit requires the District and other "copermittees" to develop watershed-based Water Quality Improvement Plans. The Municipal Stormwater Permit emphasizes watershed program planning and program outcomes. The intent of the permit is to enable each jurisdiction to focus its resources and efforts to:

- Reduce pollutants in stormwater discharges from its MS4,
- Effectively prohibit non-stormwater discharges to its MS4, and
- Achieve the interim and final Water Quality Improvement Plan numeric goals.

San Diego County Code, Title 6, Division 8

San Diego County Code of Regulatory Ordinances under Title 6, Division 8, Chapters 8 through 11 establish the HMD as the local CUPA. The HMD is responsible for the protection of public health, safety, and the environment and inspects businesses or facilities that handle or store hazardous materials, generate hazardous waste, generate medical waste, and own or operate underground storage tanks. HMD also administers the California Accidental Release Prevention Program and the Aboveground Petroleum Storage Act Program, and provides specialized instruction to small businesses through its Pollution Prevention Specialist. HMD has the authority under state law to inspect facilities with hazardous materials or hazardous waste and, in cases where a facility is in non-compliance with the applicable state law or regulations, take enforcement action.

Projects are required to notify HMD regarding the use, handling, release (spills), storage, and/or disposal of hazardous materials and hazardous waste in accordance with existing state law and County ordinance. The notification is the initial step in the HMD permitting process, which requires businesses that handle or store hazardous materials, are part of the California Accidental Release Prevention Program, generate or treat hazardous wastes, generate or treat medical waste, store at least 1,320 gallons of aboveground petroleum, or own and/or operate underground storage tanks to obtain and maintain a Unified Program Facility Permit. The online notification must be done using the State of California Environmental Reporting System by the applicant/permittee requesting a permit and submitted within 30 days.

San Diego Unified Port District, Article 10

The District's Article 10, the Port Stormwater Management and Discharge Control Ordinance, prohibits the deposit or discharge of any chemicals or waste to the tidelands or San Diego Bay and makes it unlawful to discharge pollutants directly into non-stormwater or indirectly into the stormwater conveyance system.

4.9.3 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less-than-significant impact. Construction of the project would involve the use of hazardous materials such as fuels, lubricants, and solvents for construction equipment operation and maintenance. These materials would be properly stored, handled, used, and disposed of in accordance with applicable regulations and laws described in Section 4.9.2, which include RCRA; U.S. DOT Hazardous Materials Regulations; California Health and Safety Code; and San Diego County Code, Title 6, Division 8. In addition, OSHA provides specific standards for maintaining safe and healthy working conditions pertaining to hazardous materials; listed in 29 CFR 1910 Subpart H. Project construction would

also require the disposal of creosote-treated wood waste, which is regulated by Division 20, Chapter 6.5, and Title 22, Division 4.5 of the California Health and Safety Code (refer to Section 4.9.3[b] for additional information). A licensed contractor would be responsible for the removal, transportation, and disposal of the removed piles in accordance with these regulations. Any accidental release of hazardous materials due to spills or leaks would be cleaned up in the normal course of business, consistent with the above-mentioned regulations. Compliance with the above-listed regulations would ensure the safe transport, use, and disposal of hazardous materials, such that construction-related hazardous materials impacts would be less than significant.

Following completion of construction, the project would not increase the project site's operational capacity and would, therefore, not increase the use of hazardous materials on the site. The transport, use, and disposal of any hazardous materials would continue to occur in compliance with the above-mentioned regulations. As such, operational impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than significant with mitigation incorporated. As described above, project construction would involve the temporary use and disposal of hazardous materials and wastes, including fuels, lubricants, and solvents. These materials would be properly stored, handled, used, and disposed of in accordance with applicable regulations and laws. Although the project would comply with applicable regulations and laws, hazardous materials could be accidentally released into the San Diego Bay, which could result in a potentially significant impact to the public and wildlife (**Impact-HAZ-1**). Mitigation measures **MM-HAZ-1 through MM-HAZ-9** would be implemented, which include procedures for prevention and containment of accidental leaks and spills, routine inspection and instrumentation of equipment, worker training, and visual hazardous materials monitoring. Compliance with regulations and implementation of measures **MM-HAZ-1 through MM-HAZ-9** would ensure that project construction would not create a hazard to the public or environment and **Impact-HAZ-1** would be reduced to less than significant.

Removal of the existing Repair Complex Wharf is anticipated to generate approximately 100 creosote-treated timber piles. Creosote is a tar-based substance that was used to preserve wood against rot but was found to be carcinogenic to humans and toxic to marine life through bioaccumulation. As such, the removal and disposal of the existing piles would have a temporary potential to create a hazard to construction workers and environment during construction, which would be a potentially significant impact. The handling, transportation, and disposal of creosote-treated wood is regulated by Division 20, Chapter 6.5, and Title 22, Division 4.5 of the California Health and Safety Code. In addition, OSHA provides specific standards for maintaining safe and healthy working conditions pertaining to hazardous materials; listed in 29 CFR 1910 Subpart H. A licensed contractor would be responsible for the removal, transportation, and disposal of the removed piles in accordance with these regulations. The contractor would first remove the piles from their existing positions in the San Diego Bay floor via crane. The removed materials would then be temporarily placed in a container located on the barge. The timber piles would be managed and manifested as hazardous waste and transported for disposal at a landfill that accepts hazardous waste. Compliance with these regulations would ensure the safe management and proper disposal of creosote-treated wood and that any related hazardous materials impacts would be less than significant. Following the removal and disposal of the existing piles, new concrete or steel fender piles that would not contain a creosote coating would be installed in place of the existing wood piles. Therefore, in the long-term, the project would be beneficial because it would reduce the risk of exposure by humans and marine life to the toxic creosote coating.

In addition, as discussed in Section 4.9.1, the San Diego RWQCB issued CAO No. R9-2012-0024 for the cleanup of marine sediments within the NASSCO leasehold. As described in the CAO, the COCs include metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc), butyl tin species, PCBs, PCTs, PAHs, and TPH. Remedial actions were completed in early 2016, including the removal of sediment and placement of clean cover material. The site is currently undergoing remedial monitoring to ensure that the goals in the CAO are being met (SWRCB 2021). As discussed above, the PRMP required remedial performance monitoring in Years 2 and 5 (and

possibly Year 10, if deemed warranted), and benthic community recovery monitoring in Years 3 and 4. This monitoring is intended to verify that the remedial action required pursuant to the CAO is effective. It should be noted that, while remedial actions were implemented, remedial actions were not implemented across the entire NASSCO leasehold, which is encompassed by the CAO. Because the project site is within an area of identified, known contamination, as evidenced by the CAO and associated investigations, in-water construction activities could involve the disturbance of cover material resulting in the exposure of underlying contaminated sediment to the environment which would be a significant impact (Impact-HAZ-2). The CAO and associated remedial documents identified contaminants of concern (COCs) and specified COC levels that were required to be achieved through remedial action. To address the potential for releasing contaminated sediment to the environment, MM-HAZ-10 and MM-HAZ-11 would be implemented, which would require implementation of a sediment management program and post-waterside construction remediation. In addition, MM-WQ-1 and MM-WQ-2 would require implementation of silt curtains to contain spread of sediment and nest practices for construction activities that would disturb the bay floor. With implementation of mitigation measures MM-WQ-1 and MM-WQ-2 described in Section 4.10 and MM-HAZ-10 and MM-HAZ-11, the project would not create a significant hazard to the public or environment from upset or accident conditions involving the release of impaired sediments into the environment, and Impact-HAZ-2 would be reduced to less than significant.

The project would not result in an expansion of the existing use of the site, an increase in shipbuilding and repair operations, or additional employees, other than those needed during construction. During operations, NASSCO would continue to comply with applicable regulations and laws that govern the use of hazardous materials and generation of hazardous waste, as described in Section 4.9.2. Therefore, project operations would not create a significant hazard to the public or environment from upset or accident conditions involving the release of impaired sediments into the environment, and impacts associated with operations would be less than significant.

As discussed in Section 4.9.1, there are several hazardous waste sites associated with nearby industrial properties within a 0.5-mile radius of the project site that are open or need further evaluation. However, the project would not require the disturbance of landside soils because no landside construction is proposed; therefore, the project would have no potential of exposing and releasing contaminated soils into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No impact. There are no existing or proposed schools within one-quarter mile of the project site. The closest school is the Logan Memorial Educational Campus at 2875 Oceanview Avenue, approximately 0.4 mile north of the project site. As such, the 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. Therefore, no impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than significant with mitigation incorporated. The California Environmental Protection Agency lists the following data resources that provide information regarding facilities or sites identified in California Government Code 65962.5 (commonly referred to as the "Cortese List"):

- List of Hazardous Waste and Substances sites from the DTSC EnviroStor database,
- List of LUST sites from the SWRCB GeoTracker database,
- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit,
- List of "active" Cease and Desist Actions (CDO) and CAO from the SWRCB, and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

As listed in Table 4.9-1, there are several landside hazardous materials sites that are open or needing evaluation associated with nearby industrial properties within a 0.5-mile radius of the project site. However, the project would not require the disturbance of landside soils because no landside construction is proposed; therefore, the project is not anticipated to create a significant hazard to the public or environment from disturbing potentially contaminated soils on landside sites.

As discussed in Section 4.9.3(b), the project site is identified on the list of "active" CDO and CAO from the RWQCB as CAO R9-2012-0024. Remedial actions were completed at the project site; however, in-water construction activities could involve the disturbance of cover material which may lead to encountering and releasing contaminants associated with a hazardous materials site that is listed on a database complied pursuant to Government Code Section 65962.5 (**Impact-HAZ-3**). To address this potentially significant impact, **MM-HAZ-10** and **MM-HAZ-11** would be implemented. **MM-HAZ-10** would require implementation of a sediment management program and **MM-HAZ-11** would require post-waterside construction remediation. In addition, **MM-WQ-1 and MM-WQ-2** would require implementation of silt curtains to contain spread of sediment and best management practices for construction activities that would disturb the bay floor. With implementation of mitigation measures **MM-WQ-1 and MM-WQ-2** described in Section 4.10 and **MM-HAZ-10** and **MM-HAZ-11**, the project would not create a significant hazard to the public or environment regarding the impaired sediments, and **Impact-HAZ-3** would be less than significant with mitigation incorporated.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact. No public airports or private airstrips are within 2 miles of the project site. The closest public airport is the San Diego International Airport, approximately 3.3 miles northwest of the project site. In addition, the North Island Naval Air Station is approximately 2.8 miles northwest of the project site. According to the San Diego County Regional Airport Authority airport land use compatibility plans (ALUCP), the project site is not within the 60- or 65-decibel (dB) community noise equivalent level (CNEL) noise contours or within the boundaries of established safety zones for these airports (SDCRAA 2014: Exhibit 2-1, SDCRAA 2020: Exhibit 4). Therefore, the project would not result in a safety hazard or excessive noise for people working in the project area. No impact would occur. Refer to Section 4.11.2(b) for additional information regarding airport land use compatibility.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The San Diego County Office of Emergency Services adopted its Emergency Operations Plan (EOP) in September 2018. Highways in proximity to the project site include I-5, I-15, and SR 75, which are identified in the EOP as primary evacuation routes in San Diego County (County of San Diego 2018). Construction activities would be contained within the NASSCO leasehold and would occur over water. Therefore, emergency access to and from the project site along Harbor Drive and on designated evacuation routes would be maintained during project construction. Because project implementation would not expand the existing use of the site or expand existing shipyard operations, the project would not result in permanent changes to emergency access following construction. Thus, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impacts would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No impact. The project site is in a developed urban area on and adjacent to the San Diego Bay. The project site is over water, lacks vegetation, and is not in an area susceptible to wildland fire. As discussed further in Section 4.20, the project site is designated by CAL FIRE as a non-VHFHSZ (CAL FIRE 2009). Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fire. No impact would occur.

Required Mitigation Measures

With implementation of the following mitigation measures, impacts related to hazards and hazardous materials would be less than significant:

MM-HAZ-1: Secondary Containment Structures. The project applicant shall require its contractor to ensure that oils and fuels are contained in secondary containment structures during any demolition or construction activities so that spills and leaks are contained and prevented from entering the San Diego Bay. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-2: Hazards-related Worker Training. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to provide training to construction workers on specific task areas, including potential hazards resulting from accidental oil and/or fuel spills, and proper equipment operation. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-3: Equipment Inspection. Prior to commencing any demolition or construction activities, the contactor and equipment operators shall conduct equipment inspections prior to use to identify and address wear, faulty parts, and leaks. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-4: Proper Equipment Instrumentation. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to identify required instrumentation for each piece of equipment to avoid spillage of material from the barge. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-5: Hazardous Materials Monitoring. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to assign construction personnel to visually monitor for oil and fuel spills during construction. If oil spilled oil or fuel is detected, all equipment shall be shut down and the source of the spill shall be identified, contained, and reported. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-6: Oil/Spills Kits. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to inform construction workers as to where oil/fuel spill kits are located, how to deploy the oil-absorbent pads, and proper disposal guidelines. The barge shall have a full complement of oil/fuel kits on-board to allow for quick and timely implementation of spill containment. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-7: Barge Loading Procedures. Prior to commencing any demolition or construction activities, the project applicant shall require its contractor to identify barge load limits and loading procedures and shall mark the appropriate draft level on the materials barge hull. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-8: Removed Pile Placement. When placing pulled and removed piles and debris in the barge, the project applicant shall require its contractor to employ a flattop barge with containment walls and "skip tubs" to prevent any sediment, wood, or metal debris from falling into the water. The contractor shall locate the barge as close to shore as possible when transferring materials and/or debris on and off of the work barge. If necessary, traps shall be utilized to prevent debris from falling into the water. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-9: Removed Material Clean-up. The project applicant shall require its contractor to clean up marine growth from removed material before disposal. The project applicant shall also require its contractor to clean up debris generated from construction activities. The contractor shall restore any piers utilized for materials staging to pre-construction conditions. This measure shall be denoted on the construction plans and/or construction contract and proof of such denotation shall be submitted to the District's Director of Development Services Department.

MM-HAZ-10: Implement a (Waterside) Sediment Management Program. The project applicant 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 oversee the implementation of a Sediment Management Program. The Sediment Management Program will be implemented prior to and throughout the duration of waterside construction activities for the proposed project. The Sediment Management Program shall include the following elements, each of which have specific timing mechanisms as identified in the description of each element below:

A. *Sampling Analysis Plan* (SAP): Prior to in-water demolition or construction that may potentially disturb sediment, a licensed Professional Engineer shall (1) delineate the area of potential disturbance (Disturbance Area); (2) develop an SAP; and (3) perform sediment sampling. The SAP shall set forth the methodology to be used, the locations where sampling would occur, analysis of the contaminants of concern (COC), and proper decontamination and disposal procedures. The sediment samples shall be tested for the presence of the COCs identified in the CAO R9-2012-0024.

   The sampling area and sampling methodology shall identify sample locations determined to be appropriate, at the discretion of the District and [Regional Water Quality Control Board] RWQCB (or other applicable agencies), to adequately characterize any Disturbance Area associated with project elements. All sediment sampling and analysis must occur prior to sediment-disturbing construction activity and shall be performed in accordance with the requirements of the SAP. The SAP must be submitted to the RWQCB for review and approval, and to the District for concurrence.

   The results of all sediment sampling shall be documented in a report and submitted to the RWQCB for their review and approval prior to any marine-side sediment-disturbing activities.

B. *Marine Sediment Contamination Characterization Report (Sediment Characterization Report)*: Prior to in-water construction, the licensed Professional Engineer shall prepare a Sediment Characterization Report delineating the vertical and lateral extent and concentration of the project site's potential COCs in areas where pile driving or removal and other sediment-disturbing activities are proposed as part of this project. The Sediment Characterization Report shall be developed taking into account the site assessment reports, final cleanup reports, and post-remediation monitoring reports associated with the San Diego Shipyard Sediment Cleanup – South Shipyard, and sediment sampling performed per the SAP. The project applicant shall submit the Sediment Characterization Report to the RWQCB (and any other appropriate regulatory agencies) for approval as representative of sediment conditions in Disturbance Areas.

C. *Contaminated Sediment Management Plan (Sediment Management Plan)*: If contaminated sediment is identified in the Sediment Characterization Report in any of the proposed project Disturbance Area, the project applicant shall prepare a Sediment Management Plan for the District's and RWQCB's approval. Once approved, the Sediment Management Plan shall be implemented by the project applicant and be subject to oversight by the appropriate overseeing regulatory agencies, including the District. The Sediment Management Plan shall describe in detail the methods to be employed to prevent waterside construction activity from adversely affecting or exposing the gravelly-sand or sand-covered contaminated sediment, or disturbing contaminated sediment, as identified in the Sediment Characterization Report, and the monitoring that will occur postconstruction.

D. *In-Water Activity Specific Procedures (Pile Installation or Removal)*: Pile installation or removal shall be conducted in a manner that implements applicable permit requirements, including the [Clean Water Act] CWA Section 404 permit and CWA Section 401 Water Quality Certification. Impact hammer pile driving, internal jetting, or spudding may be required based on the type of pile installation, or removal, that occurs.

Pile installation or removal shall be conducted in a manner that implements applicable permit requirements, including the [Clean Water Act] CWA Section 404 permit and CWA Section 401 Water Quality Certification. Impact hammer pile driving, internal jetting, or spudding may be required based on the type of pile installation, or removal, that occurs.

Internal jetting shall not be allowed unless the project applicant can demonstrate, to the District's satisfaction, there are no feasible alternatives to the use of internal jetting.

Spudding shall not be allowed unless the project applicant can demonstrate, to the District's satisfaction, there are no feasible alternatives to the use of spudding. If no alternatives to spudding are feasible, when spuds are lifted during in-water construction, they shall be lifted slowly—at least a quarter of the speed that spuds are lifted during normal operation. Before the spud reaches the subsurface of the Bay floor during removal, the operator shall conduct spud extraction in 2-minute intervals (repeated 2-minute extraction followed by 2-minute pause) to reduce the disturbance of Bay sediment.

E. *Post-Construction Sampling and Analysis*: At the conclusion of construction activities within a Disturbance Area, the project applicant shall conduct post-construction sediment sampling that adequately characterizes potential contamination resulting from construction activities (and dredging activities if the in-water construction occurred within a dredging area) to determine if in-water construction or disturbance activities resulted in COCs in excess of the levels above the levels set forth in CAO R9-2012-0024. The project applicant shall prepare, for submittal to and approval by the District and RWQCB, a Post-Construction Sampling Plan that shall outline the methodology to be used, the locations where sampling would occur, and the COCs to be analyzed consistent with CAO R9-2012-0024.

MM-HAZ-11: Implement Post-Waterside Construction Remediation. If, after the completion of any in-water construction work, consistent with the requirements of mitigation measure MM-HAZ-10, site sampling shows that concentrations of COCs exceed those set forth in CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), the project applicant shall propose remediation consistent with CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), subject to approval by the RWQCB, and any other agencies with jurisdiction over the site contamination, and concurrence by the District. The project applicant's remediation approaches may include, but are not limited to, dredging, placement of sand cover, or Enhanced Monitored Natural Recovery sand containing active carbon. 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 applicant shall monitor the remediation for its effectiveness, consistent with the standards set forth by CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), for a period consistent with guidance from the regulatory agency with jurisdiction. 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 the relevant agency overseeing the remediation activities.

If, after the completion of any in-water construction work within a Disturbance Area, consistent with the requirements of mitigation measure MM-HAZ-10, concentrations of COCs in the area of potential contamination do not exceed those levels set forth in CAO R9-2012-0024 (or other levels as prescribed by the RWQCB), no further mitigation is required.

4.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial on- or offsite erosion or siltation;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

4.10.1 Environmental Setting

REGIONAL AND SURROUNDING AREA CONDITIONS

Surface Water Hydrology

The project site is within the jurisdiction of the San Diego RWQCB. The San Diego Region is divided into 11 hydrologic units (HUs) for administrative purposes. Each of the HUs flow from elevated regions in the east to lagoons, estuaries, or bays in the west and exhibit similar water quality characteristics and issues. The project site is within the San Diego Bay Watershed, which is within the Pueblo San Diego HU. The Pueblo San Diego HU is the smallest HU in San Diego County and covers approximately 60 square miles of predominantly urban landscape in the cities of San Diego, La

Mesa, Lemon Grove, and National City. Approximately 75 percent of the watershed is developed. Major water features in the Pueblo San Diego HU include Chollas Creek, Paleta Creek, and San Diego Bay (Project Clean Water 2021). The Pueblo San Diego HU has no central stream system and instead consists primarily of a group of relatively small local creeks and pipe conveyances, many of which are concrete-lined and drain directly into San Diego Bay. The Pueblo San Diego HU contains three hydrologic areas: Point Loma (908.1), San Diego Mesa (908.2), and National City (908.3). The project site is in the San Diego Mesa hydrologic area, as are the San Diego Bay and Chollas Creek. The project site is adjacent to and within the San Diego Bay and northwest of Chollas Creek.

Surface Water Quality

San Diego Bay is the receiving water body for the project site, which occurs indirectly through the City's municipal storm drain system. Water quality in the San Diego Bay is influenced by processes and activities that take place within the Pueblo San Diego HU. The creeks in the watershed are highly affected by urban runoff, such as contaminants from roadways, industry, and other urban sources. Contaminants found in San Diego Bay include chlorinated hydrocarbons, toxic components of petroleum hydrocarbons, PAHs, PCBs, heavy metals, and organotins (i.e., organic compounds with one or more tin atoms) such as tributyltin. 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 2021).

Tidal exchange in San Diego Bay controls the flushing of contaminants, salt and heat balance, and residence time of water. The ebb and flow of tides mix ocean and San Diego Bay waters. Tides produce currents, which induce changes in salinity, and alternately expose and wet portions of the shoreline. Tidal flushing and mixing are important for dispersing pollutants, maintaining water quality, and moderating water temperature that has been affected by exchange with the atmosphere or heating. Tidal flushing and currents affect water quality in north-central San Diego Bay. Water quality also is influenced locally by freshwater inflows.

Beneficial Uses

The San Diego RWQCB is responsible for designating beneficial uses for water bodies in the San Diego region; establishing water quality objectives; and developing implementation plans to protect designated beneficial uses through the Water Quality Control Plan for the San Diego Basin (San Diego RWQCB 1994). Beneficial uses for the nearest inland surface water, Chollas Creek, include contact (potential use) and non-contact water recreation, warm freshwater habitat, and wildlife habitat. Beneficial uses for the nearest coastal water, the San Diego Bay, include industrial uses, navigation, contact and non-contact recreation, commercial and sport fishing, preservation of biological habitats of special significance, estuarine habitat, wildlife habitat, preservation of rare and endangered species, marine habitat, fish migration, fish spawning, and shellfish harvesting (San Diego RWQCB 1994).

Total Maximum Daily Loads

CWA Section 303(d) requires the identification of water bodies that do not meet, or are not expected to meet, water quality standards (i.e., impaired water bodies). The affected water body, and associated pollutant or stressor, is then prioritized in the 303(d) List. California's current 303(d) List is the 2014-2016 List of Impaired Waters, which was approved by the U.S. EPA on April 6, 2018. The CWA further requires the development of a total maximum daily load (TMDL) for each listing. A TMDL is the maximum daily amount of a pollutant that a water body can receive and still safely meet water quality standards.

As shown in Table 4.10-1, water bodies with 303(d)-listed impairments with potential to be affected by the proposed project include Chollas Creek, San Diego Bay Shoreline near Chollas Creek, San Diego Bay (encompasses the project site), San Diego Bay shoreline between Sampson Street and 28th Street (encompasses the project site), and the San Diego Bay shoreline near Coronado Bridge (SWRCB 2017).

Table 4.10-1 303(d)-Listed Impairments for Water Bodies and Adjacent Shorelines within the Project Vicinity

Reach	303(d)-Listed Impairments	Source	Estimated TMDL Completion
Chollas Creek	Bifenthrin	Unknown	2005
	Chlorpyrifos	Unknown	2005
	Cypermethrin	Unknown	2005
	Malathion	Unknown	2005
	Nitrogen	Unknown	2005
	Phosphorus	Unknown	2005
	Trash	Unknown	2005
	Copper	Unknown	2008
	Diazinon	Unknown	2003
	Indicator Bacteria	Unknown	2011
	Lead	Unknown	2008
	Zinc	Unknown	2008
San Diego Bay Shoreline, near Chollas Creek	Benthic Community Effects	Unknown	2010
	Sediment Toxicity	Unknown	2010
San Diego Bay	PCBs	Contaminated sediments, dredging, historic land management activities, illegal dumping, spills, urban runoff/storm sewers	2019
	PAHs	Unknown	2025
	Mercury	Atmospheric deposition, contaminated sediments, historic land management activities, urban runoff	2027
San Diego Bay Shoreline, near Coronado Bridge	Benthic Community Effects	Unknown	2019
	Sediment Toxicity	Unknown	2019
San Diego Bay Shoreline, between Sampson and 28th Streets	Copper	Unknown	2015
	Mercury	Major Industrial Point Source	2013
	PAHs	Unknown	2013
	PCBs	Major industrial point source, urban runoff/storm sewers, unknown point and nonpoint sources	2013
	Zinc	Unknown	2013

TMDL = total maximum daily load; PCBs = polychlorinated biphenyls; PAHs= Polycyclic aromatic hydrocarbons

Source: SWRCB 2017

EXISTING SITE CONDITIONS

Site Hydrology and Water Quality

The landside portions of the NASSCO facility are highly impervious, consisting of paved roadways, facilities, office buildings, and equipment staging and storing areas. NASSCO operates under an individual NPDES Permit (Order R9-2016-0116) and maintains a facility BMP Plan Manual. As described in Order R9-2016-0116, NASSCO operates and maintains a fully-contained Storm Water Diversion System (SWDS) that is designed to capture stormwater runoff from industrial areas and prevent the discharge of industrial stormwater to the San Diego Bay. The SWDS has a capacity to retain an excess of 33,858,000 gallons, which is enough capacity to capture a 100-year storm event. Stormwater runoff from industrial high risk areas (i.e., areas where wastes or pollutants of significant quantities are

produced from ship construction, modification, repair, and maintenance activities) are treated in an ion exchange treatment system designed to remove pollutants. Once treated, all stormwater captured within the facility is discharged to the San Diego Metropolitan Sewer System.

Sediment Contamination

As discussed in Section 4.9, Hazards and Hazardous Materials, the San Diego RWQCB issued CAO R9-2012-0024 for sediment contamination within the General Dynamics NASSCO and BAE Systems leaseholds, which was collectively referred to as the shipyard sediment site. The shipyard sediment site was divided into the North Shipyard (the property leased by BAE Systems) and the South Shipyard (the property leased by NASSCO). As such, the project site is within the South Shipyard cleanup boundary. The CAO established cleanup levels for primary COCs of metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc), butyl tin species, PCBs, PCTs, PAHs, and TPHs.

In 2013, the San Diego RWQCB issued Order R9-2013-0093 for the waterside portions of the shipyard sediment site related to sediment remediation requirements of CAO R9-2012-0024. Order R9-2013-0093 imposed requirements that regulate discharges of waste associated with dredging activities required by CAO R9-2012-0024. Contaminated marine bay sediments adjacent to the BAE Systems and NASSCO shipyards in San Diego Bay were removed under Order R9-2013-0093 using environmental dredging techniques performed specifically for the removal of contaminated sediment while minimizing the spread of contaminants to the surrounding environment during dredging operations. The dredged sediment was off-loaded from haul barges to a landside staging area (sediment staging area or sediment management area), dewatered and solidified (onshore or on a barge), sampled for waste characterization, and transported by trucks to the appropriate landfill disposal facility. As discussed in Section 4.9, Hazards and Hazardous Material, approximately 28,660 cy of contaminated sediments were dredged from the South Shipyard sediment site and approximately 19,760 tons of sand material was placed as a cover (Anchor QEA, LLC 2014). Remedial activities for the South Shipyard site were completed in March 2014 and the site is currently under post-remediation monitoring to evaluate the effectiveness of the cleanup.

Hazardous Material Structures in Water

The wooden components in the existing Repair Complex Wharf have been treated with creosote. Creosote is a common tar-based wood preservative that was found to be carcinogenic to humans and toxic to marine life through bioaccumulation. The primary chemicals of concern in creosote include PAHs, phenols, and creosols.

Groundwater

Groundwater at the project site is directly tied to the San Diego Bay and has a high salt content making it unsuitable for consumption.

Inundation

As shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) No. 06073C1884H and 06073C1892H, the project site is within a Special Flood Hazard Area labeled Flood Zone AE. Flood Zone AE is an area subject to flooding during the 100-year storm event (1 percent annual chance of flooding where base flood elevations and flood hazard factors are determined) (FEMA 2019).

The project site is within a tsunami hazard area, as delineated on the Tsunami Inundation Map for Emergency Planning for the National City Quadrangle published by CGS, the University of Southern California (USC), and the California Emergency Management Agency (CalEMA), which is now known as the California Governor's Office of Emergency Services (2009). Because the project site is situated on and adjacent to the San Diego Bay, it could also be susceptible to seiche.

4.10.2 Regulatory Setting

FEDERAL

Clean Water Act (33 U.S.C. 1251–1387)

The primary goals of the CWA are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The U.S. EPA is the lead federal agency responsible for water quality management. The CWA of 1972 (33 U.S.C. 1251–1387) is the primary federal law that governs and authorizes water quality control activities by the U.S. EPA as well as the states. The federal CWA of 1977 (33 U.S.C. 1251 et seq.), which amended the federal Water Pollution Control Act of 1972, established the basic structure for regulating discharges of pollutants into the waters of the United States (not including groundwater). Under the CWA, it is unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a National Pollutant Discharge Elimination System (NPDES) permit is obtained and implemented within compliance. In addition, the CWA requires the states to adopt water quality standards for receiving water bodies and to have those standards approved by EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. The proposed project would be required to comply with the CWA, as discussed in the subsections below.

Section 401: Water Quality Certification

Under Section 401 of the CWA, an applicant for a Section 404 permit to discharge dredged or fill material into waters of the United States must first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant water quality certification or waive the requirement is delegated by the SWRCB to the nine RWQCBs. In addition, an applicant under Section 10 of the Rivers and Harbor Act must also obtain a Section 401 Water Quality Certification. The proposed project would require a Section 401 Water Quality Certification from the SWRCB for project activities permitted under the CWA Section 404 Permit and Rivers and Harbor Act Section 10 Permit.

Section 402: National Pollutant Discharge Elimination System Permits

Section 402(p) of the CWA was amended in 1987 to require the U.S. EPA to establish regulations for permitting of municipal and industrial (including active construction sites) stormwater discharges under the NPDES permit program. U.S. EPA published final regulations for industrial and municipal stormwater discharges on November 16, 1990. The NPDES program requires all industrial facilities and municipalities of a certain size that discharge pollutants into waters of the United States to obtain a permit. Stormwater discharges in California are commonly regulated through general and individual NPDES permits, which are adopted by the SWRCB or RWQCBs and are administered by the RWQCBs. U.S. EPA requires NPDES permits to be revised to incorporate waste-load allocations for TMDLs when the TMDLs are approved (40 CFR 122).

NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, or other activities.

The proposed project would be required to comply with the Waste Discharge Requirements for General Dynamics National Steel and Shipbuilding Company Discharge to San Diego Bay (Order R9-2016-0116), which serves as the NPDES permit for the NASSCO facility, as described in the Local Regulations section below.

Section 404: Permits for Dredged or Fill Material

Under Section 404, the USACE and U.S. EPA regulate the discharge of dredged and fill materials into the waters of the United States. These waters are primarily defined as navigable waterways or water features (including wetlands) that have a significant nexus to navigable waters. Project sponsors must obtain authorization from USACE for all discharges of dredged or fill materials into waters of the United States before proceeding with a proposed activity.

Individual Section 404 permits may only be issued for a least environmentally damaging practicable alternative. Compliance with CWA Section 404 requires compliance with several other environmental laws and regulations. USACE cannot issue an individual permit or verify the use of a general permit until the requirements of the National Environmental Policy Act of 1969, Endangered Species Act, Coastal Zone Management Act, and National Historic Preservation Act have been met. Additionally, no permit can be issued or verified until a water quality certification, or waiver of certification, has been issued pursuant to CWA Section 401. The proposed project would be required to obtain and comply with a Section 404 Permit from USACE for in-water project activities that would result in dredge/fill in the San Diego Bay.

Section 10, Rivers and Harbors Act of 1899

The Rivers and Harbors Act is a primary federal law regulating activities that may affect navigation on the nation's waterways. Section 10 of the Rivers and Harbors Act grants USACE control over obstructions to navigable waters of the United States and gives USACE exclusive authority to approve construction of smaller structures, such as wharves, booms, and bulkheads, as well as to approve dredging and filling operations. The proposed project would require a Section 10 Permit from USACE for project elements that involve the addition of new and/or replacement structures in the water.

STATE

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (embodied in the California Water Code) of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect its waters for the use and enjoyment of the people. Under the California Water Code, the State of California is divided into nine regions governed by RWQCBs that, under the guidance and review of the SWRCB, implement and enforce provisions of the California Water Code and the CWA. The project site is in Region 9, the San Diego Region, and governed by the San Diego RWQCB.

The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of their activities through the filing of Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

Section 13050 of the California Water Code defines what is considered pollution, contamination, or nuisance. Briefly defined, pollution means an alteration of water quality such that it unreasonably affects the beneficial uses of water. Contamination means an impairment of water quality to the degree that it creates a hazard to public health. Nuisance is defined as anything that is injurious to health, is offensive to the senses, or is an obstruction to property use, and which affects a considerable number of people.

Section 13304 outlines the RWQCB's or SWRCB's authority to order cleanup and abatement efforts to an entity that has discharged waste or has allowed the discharge of waste to waters of the state, or threatens to create a condition of pollution (Water Code Chapter 5, Section 13304). A cleanup and abatement order issued by the SWRCB or RWQCB may require the cleanup of waste or abatement of the effects of waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. Water Code Section 13267 outlines the RWQCB's authority to issue an investigative order. The RWQCB, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action related to a plan or discharge requirements, may investigate the quality of waters within the region. The RWQCB can require that responsible parties investigate the discharge or threatened discharge of toxic pollutants.

The proposed project would be required to comply with the Porter-Cologne Water Quality Control Act through compliance with the San Diego Region Basin Plan and Waste Discharge Requirements for General Dynamics National Steel and Shipbuilding Company Discharge to San Diego Bay (Order R9-2016-0116).

LOCAL

Water Quality Control Plan (Basin Plan)

The preparation and adoption of water quality control plans (Basin Plans) is required by the California Water Code (Section 13240) as prescribed by the CWA. Section 303 of the CWA requires states to adopt water quality standards that "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." According to Section 13050 of the California Water Code, Basin Plans consist of a designation or establishment of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives for the waters within a specified area. Because beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, the Basin Plans are regulatory references for meeting the state and federal requirements for water quality control. The project site is within the San Diego RWQCB's jurisdiction and would be required to comply with the Basin Plan.

Municipal Stormwater Permit (Order R9-2013-001 as amended by Orders R9-2015-001 and R9-2015-0100)

The Municipal Stormwater Permit (Order R9-2013-0001 as amended by Orders R9-2015-0001 and R9-2015-0100) is a NPDES permit that requires the owners and operators of MS4s within the San Diego Region to implement management programs to limit discharges of pollutants and non-stormwater discharges to and from their MS4 during all phases of development. The Municipal Stormwater Permit requires the District and other "copermittees" to develop watershed based Water Quality Improvement Plans (WQIP). The intent of the Municipal Stormwater Permit is to enable each jurisdiction to focus its resources and efforts to:

- Reduce pollutants in stormwater discharges from its MS4,
- Effectively prohibit non-stormwater discharges to its MS4, and
- Achieve the interim and final WQIP numeric goals.

The proposed project would be required to comply with the Municipal Stormwater Permit requirements as well as any specific WQIP requirements and BMPs identified by the District to be implemented in compliance with the Municipal Stormwater Permit.

Jurisdictional Runoff Management Program

Under the Municipal Stormwater Permit (Order No R9-2013-0001), each jurisdiction is required to prepare a Jurisdictional Runoff Management Program (JRMP). Each JRMP includes a component that addresses issues related to construction activities and a component that addresses issues related to existing development. Additionally, each copermittee is required to prepare and submit an annual report that describes the implementation of programs and strategies to reduce the discharge of pollutants of concern to the MS4 and receiving waters to the maximum extent practicable.

The District's JRMP is an informational document that provides an overall account of the program to be conducted by the District during the 5-year life of the Municipal Stormwater Permit (San Diego Unified Port District 2021b). The District's JRMP has been developed to meet the conditions of the Municipal Stormwater Permit and to assist the District in achieving the goals identified in the WQIP. Port-specific WQIP-based strategies have been incorporated into the JRMP. The JRMP's focus is on controlling stormwater discharges to the MS4, with the overall goal of achieving improvements in receiving water quality. The District has developed a list of BMPs that are applicable to all persons, activities, and operations taking place on District tidelands. The JRMP utilizes District-specific jurisdictional activities as well as watershed-based strategies. Enforcement of the JRMP helps to prevent stormwater pollutants from entering into the local storm drains and, ultimately, San Diego Bay.

As part of the District's JRMP, a BMP Design Manual was developed to provide guidelines for incorporating post-construction BMPs into new and priority redevelopment projects. The BMP Design Manual identifies the required source-control and site-design BMPs to eliminate or reduce pollutants in stormwater runoff. For priority development

projects (PDP), the BMP Design Manual also describes pollutant-control BMPs that must be incorporated into the site design and, where applicable, addresses potential hydromodification impacts from changes in flow and sediment supply. The BMP Design Manual is applicable for both tenant- and District-sponsored major maintenance or capital improvement projects, as required by the Municipal Stormwater Permit.

The District has developed a list of pollution prevention BMPs outlined in the JRMP that are applicable to industrial and commercial facilities on District tidelands as required by the Municipal Stormwater Permit. Because pollution prevention BMPs eliminate pollutants at their source, they are a preferred means of preventing discharge of priority pollutants into the receiving waters. The list of pollution prevention BMPs includes the following:

- Keep waste containers covered or lids closed (trash).
- Minimize outdoor storage (trash, metals).
- Capture, contain, and/or treat wash water (bacteria, metals).
- Conduct employee training (bacteria, trash, metals).

In addition, Table 7-4 of the JRMP provides an extensive list of minimum BMPs for commercial and industrial facilities (San Diego Unified Port District 2021b). Categories of BMPs include general operations and housekeeping, non-stormwater management, waste handling and recycling, outdoor material storage, outdoor drainage from indoor activity, outdoor parking, vehicles and equipment, education and training, overwater activity, and outdoor activity and operation. The project would be required to follow all specific actions or BMPs set forth in the JRMP.

Waste Discharge Requirements for General Dynamics National Steel and Shipbuilding Company Discharge to San Diego Bay (Order R9-2016-0116)

Order R9-2016-0116 serves as waste discharge requirements (WDR) pursuant to Division 7 of the California Water Code and Section 402 of the CWA and implementing regulations adopted by the U.S. EPA. The order serves as a NPDES permit authorizing NASSCO to discharge into waters of the United States at specified discharge locations subject to the WDRs. The order outlines discharge prohibitions, effluent limitations and discharge specifications, receiving water limitations, and provisions (e.g., Federal and San Diego RWQCB standards, monitoring and reporting program requirements, and BMPs). As part of Order R9-2016-0116, the project site is subject to an operational SWPPP designed to reduce or prevent the discharge of pollutants from industrial activities.

4.10.3 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than significant with mitigation incorporated. NASSCO operates under an individual NPDES Permit (Order R9-2016-0116), maintains a facility BMP Plan Manual, and has a fully contained stormwater diversion system where discharging to the receiving water does not occur. As described in Order R9-2016-0116, the NASSCO facility includes areas where pollutants of significant quantities from ship construction, modification, repair, and maintenance activities are generated (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleansers, hazardous substances, toxic pollutants, nonconventional pollutants, materials of petroleum origin, or other substances of water quality significance). As part of Order R9-2016-0116, the project site is subject to an operational SWPPP designed to reduce or prevent the discharge of pollutants from industrial activities.

The project proposes components that would involve in-water construction and disturbance to the bay floor. Disturbance of the bay floor would cause sediment to temporarily be resuspended, thereby increasing turbidity and potentially lowering levels of dissolved oxygen, increasing salinity, increasing concentrations of suspended solids, and possibly releasing chemicals present in the sediment into the water column (**Impact-WQ-1**). The degree of turbidity resulting from the suspended sediments would vary substantially with the quantity and duration of the construction activity and would also depend on the methods used, the quality of equipment, and the care of the operator. Higher turbidity is expected to be confined to the specific area of pile installation. Substantially depressed oxygen levels

resulting from high turbidity (i.e., below 5 milligrams per liter [mg/L]) can cause respiratory stress to aquatic life, and levels below 3 mg/L can cause mortality.

Most project components (i.e., floating dry dock replacement and modification, Repair Complex Wharf improvements, and quay wall revetment repairs [berths 2-5]) would be constructed between January 2023 to July 2025; however as-needed quay wall repairs may extend to December 2027 and structural pile repair and replacement may extend to January 2034. Therefore, site-specific turbidity levels may be above ambient levels within a portion of the project site for an extended period, which may result in a potentially significant impact (**Impact-WQ-1**). Construction methods with potential to result in turbidity include pile driving or internal jetting. As specified in **MM-HAZ-10**, internal jetting would not be allowed unless the project proponent can demonstrate, to the District's satisfaction, that there are no feasible alternatives to the use of internal jetting.

As discussed in Section 4.10, Hydrology and Water Quality, mitigation measure **MM-WQ-1** would require the deployment of silt curtains around pile removal and pile driving areas to minimize turbidity. Silt curtains would limit the spread of the turbidity plume outside the specific work area. With implementation of **MM-WQ-1**, increased turbidity levels would be generally confined to within the area of silt curtain containment. After initial high turbidity levels within the specific work area, sediments would disperse, and background levels would be restored within hours of disturbance. In addition, tidal currents would slowly dissipate the oxygen-poor water and replenish ambient oxygen levels within one to several tidal exchanges. Therefore, suspended solids and depressed oxygen levels in the water column of the specific work area would only be expected to result in temporary and limited effects on water quality.

Furthermore, NASSCO would be required to develop and implement a turbidity monitoring plan to the satisfaction of the District and the San Diego RWQCB (**MM-WQ-1**) and implement best management practices during sediment disturbances (**MM-WQ-2**). During pile removal and pile driving activities, NASSCO would be required to conduct turbidity monitoring up- and down-current of the silt curtain to ensure that turbidity does not exceed the water quality objectives established in the turbidity monitoring plan in consultation with the RWCQB. If turbidity levels down current of the silt current exceed the performance standard, construction activities would be modified, reduced, or halted until the performance standard is achieved. Therefore, with the incorporation of **MM-BIO-4, MM-WQ-1**, and **MM-WQ-2**, **Impact-WQ-1** would be reduced to a level below significance.

As discussed in Section 4.9, Hazards and Hazardous Materials, construction activities have the potential to result in the release of hazardous wastes and materials into the San Diego Bay, which would also potentially result in a water quality-related impact (**Impact-WQ-2**). Project construction would involve the use and disposal of hazardous waste, including fuels, lubricants, solvents, and creosote-treated wood. These materials would be properly stored, handled, used, and disposed of in accordance with applicable regulations and laws listed in Section 4.9.3(a) and by **MM-HAZ-1 through MM-HAZ-9** and would require specific measures to avoid potentially adverse impacts on water quality, including secondary containment of hazardous materials (e.g., oils and fuels), equipment inspection to avoid leaks, spill kits to prevent spills from entering the bay, barge loading procedures to avoid overloading barges, and use of a flattop barge with containment walls to prevent debris from entering the water. In addition, best management practices for work that would potentially disturb the bay floor would be required (**MM-WQ-2**). With implementation of these mitigation measures, **Impact-WQ-2** would be reduced to less than significant.

As also discussed in Section 4.9, the San Diego RWQCB issued CAO R9-2012-0024 for sediment contamination within the NASSCO and BAE Systems leaseholds. The COCs for the cleanup site sediments include copper, mercury, HPAHs, PCBs, tributyltin, arsenic, cadmium, lead, and zinc. Contaminated marine bay sediments were removed from the contamination site under Order R9-2013-0093 using environmental dredging techniques. However, sand or gravelly sand covers were placed in areas within the NASSCO leasehold where dredging activities would have threatened the stability of the slopes or in-water structures (refer to Section 4.9 for additional information). As such, the contamination present in those sediments was not removed, but was covered to prevent mixing of contaminants with the water column or clean sediment.

The proposed pile removal and replacement has potential to disturb contaminated sea-floor sediments associated with CAO R9-2012-0024, which may result in a potentially significant impact water quality impact (**Impact-WQ-3**). As described in Section 4.9.3(b), mitigation measures **MM-HAZ-10** and **MM-HAZ-11** would include implementation of a

sediment management program and post-waterside construction remediation. With implementation of mitigation measures MM-HAZ-10 and MM-HAZ-11, Impact-WQ-3 would be reduced to less than significant.

Project implementation would not result in a change in the type or quantity of pollutants that would be generated during operations. Stormwater runoff from the NASSCO facility, including the new overwater structures, would be captured and contained in the existing SWDS system for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System. NASSCO would be required to maintain all existing operational and maintenance BMPs and comply with Order R9-2016-0116, which regulates polluted runoff, for the new overwater structures.

In summary, the project would not substantially degrade surface or groundwater quality or violate water quality standards or waste discharge requirements through compliance with permit conditions and through the implementation of mitigation measures MM-HAZ-1 through MM-HAZ-11, MM-BIO-4, MM-WQ-1, and MM-WQ-2. Therefore, impacts would be reduced to less than significant with mitigation incorporated.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less-than-significant impact. Construction activities would occur within the NASSCO leasehold located on and adjacent to the San Diego Bay. The project would not result in a net increase in impervious surfaces, such that the surface area for percolation of stormwater would be reduced. All stormwater runoff from the NASSCO facility is designed to be captured and contained for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System. Therefore, groundwater recharge from stormwater should not occur at the project site. Furthermore, groundwater at the project site is saline from saltwater intrusion and is not used as a groundwater supply source.

The project would not require landside excavation and would not have the potential to encounter groundwater such that dewatering would be required. Furthermore, as discussed in more detail in Section 4.19, Utilities and Service Systems, construction-related water use would represent a small demand on local and regional water supplies that could be accommodated by the existing water service provider. The project would not generate a permanent increase in water demand compared to existing conditions. Consequently, the project would not substantially decrease groundwater supplies or interfere with groundwater recharge. Impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or offsite erosion or siltation;

Less-than-significant impact. The NASSCO facility is entirely paved with no areas of exposed soil. Construction activities would occur over water and would not involve grading or excavation activities that have potential to disturb landside soils. Stormwater runoff from the NASSCO facility would continue to be captured and contained for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System. NASSCO would be required to maintain all existing operational and maintenance BMPs for stormwater runoff. Therefore, the project is not anticipated to result in on- or off-site erosion or siltation. Impacts would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less-than-significant impact. The project would result in a net increase in overwater coverage of 10,210 square feet for permanent structures (i.e., floating dry dock, mooring dolphins, approach pier fender system, and Repair Complex Wharf) and 300 square feet for temporary structures (i.e., catwalk and removable brow). Stormwater runoff from the NASSCO facility, including the new overwater structures, would be captured and contained in the existing SWDS for subsequent, controlled discharge to the San Diego Metropolitan Sanitary Sewer System. NASSCO would be required to maintain all existing operational and maintenance BMPs for stormwater runoff for the new overwater structures.

Project implementation would not affect the amount of surface runoff at the project site. Therefore, the project is not anticipated to result in on- or off-site flooding. Impacts would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less-than-significant impact. NASSCO operates under an individual NPDES Permit (Order R9-2016-0116), maintains a facility BMP Plan Manual, and has a fully contained stormwater diversion system where discharging to the San Diego Bay does not occur. As described in Order R9-2016-0116, the NASSCO facility includes areas where pollutants from ship construction, modification, repair, and maintenance activities are generated (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleansers, hazardous substances, toxic pollutants, nonconventional pollutants, materials of petroleum origin, or other substances of water quality significance). As part of Order R9-2016-0116, the project site is subject to an operational SWPPP designed to reduce or prevent the discharge of pollutants from industrial activities.

The project would result in a net increase in overwater coverage of 10,210 square feet for permanent structures (i.e., floating dry dock, mooring dolphins, approach pier fender system, and Repair Complex Wharf) and 300 square feet for temporary structures (i.e., catwalk and removable brow). NASSCO would be required to maintain all existing operational and maintenance BMPs and comply with the RWQCB's Order R9-2016-0116, which regulates polluted runoff, for the new overwater structures. NASSCO's existing NPDES permit would be updated to reflect the increase in overwater coverage. As discussed above, NASSCO operates and maintains a fully-contained SWDS that is designed to capture stormwater runoff from industrial areas and prevent the discharge of industrial stormwater to the San Diego Bay. The SWDS has a capacity to retain an excess of 33,858,000 gallons, which is enough capacity to capture a 100-year storm event, including when accounting for the additional surface areas proposed by the project. Stormwater runoff from industrial high risk areas (i.e., areas where wastes or pollutants of significant quantities from ship construction, modification, repair, and maintenance activities) are treated in an ion exchange treatment system designed to remove pollutants. Once treated, all stormwater captured from the NASSCO facility, including the new overwater structures, would be discharged from the existing SWDS system to the San Diego Metropolitan Sewer System.

Project implementation would not result in a change in the type or quantity of pollutants that would be generated and would not result in a substantial increase in stormwater runoff during operations. Stormwater runoff from the NASSCO facility would continue to be captured and contained for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System. The sanitary sewer system would have adequate capacity for any negligible increases in stormwater from the proposed increase in overwater coverage.

Based on the above discussion, the project would contribute only minimal additional runoff water and would not contribute additional sources of polluted runoff. Therefore, impacts would be less than significant.

iv) Impede or redirect flood flows?

Less-than-significant impact. As shown on FEMA FIRM No. 06073C1884H and 06073C1892H, the project site is within Flood Zone AE, which is an area subject to flooding during the 100-year storm event (1 percent annual chance of flooding where base flood elevations and flood hazard factors are determined). FEMA defines base flood elevation as the elevation that floodwaters are expected to rise during a flood event with a one percent chance of occurring in any given year. The base flood elevation within the project site is 11 feet (FEMA 2019).

During project construction, all proposed construction elements would be over water and would not have potential to impede or redirect flood flows. The temporary presence of the construction-related equipment would not represent a permanent change to the floodplain and would not impede or redirect flood flows.

The project would include the repair and replacement of in-water structures. All permanent structures proposed within Flood Zone AE must be designed to ensure that the floor elevation is raised at least one foot above the floodplain elevation and meets the structural requirements of the FEMA National Flood Insurance Program to avoid any damage to persons or structures from a 100-year flood. Review of all permanent structure design plans designed

by a professional engineer by the District's Engineering Department is a standard requirement as part of the project review process. As this process is mandatory, no mitigation is needed.

The District's Sea Level Rise Vulnerability Assessment and Coastal Resiliency Report (2019) includes a sea level rise (SLR) vulnerability assessment for Planning District 4 (Tenth Avenue Marine Terminal Planning District). Based on the assessment, this planning district is projected to withstand potential SLR inundation and temporary flooding from SLR during a 100-year storm event at 1.6 feet of projected SLR (anticipated in the year 2050). The higher elevation and existing shoreline armoring are expected to protect many of the land uses in the planning district from substantial projected SLR impacts. Several project components, including areas where quay wall revetment and pile repairs or replacement would occur, may be affected by mean SLR during the useful design life (i.e., 30 years) of the various project elements. However, these project elements are intended to protect the shoreline and improve SLR resiliency through addressing existing revetment failures and structural pile deficiencies. In addition, these project elements would not substantially increase in-water fill volumes and, therefore, would not have potential to impede or redirect flood flows. Furthermore, this type of inundation would occur with or without the proposed project. Consequently, the project is not anticipated to exacerbate existing or projected damage to the environment due to SLR.

Based on the above discussion, the project would not exacerbate the flooding potential of the project site or the effects of flooding on the existing environment. Therefore, impacts would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less-than-significant impact. As discussed in Section 4.10.3(c)(iv), the project site is within Flood Zone AE and is subject to flooding during the 100-year storm event (FEMA 2019). In addition, the project site is within a tsunami hazard area, as delineated on the Tsunami Inundation Map for Emergency Planning for the National City Quadrangle published by CalEMA, CGS, and USC (2009). Because the project site is situated on and adjacent to the San Diego Bay, it could also be susceptible to seiche.

The project would include the repair and replacement of in-water structures. All project elements would be over or within water and BMPs would be in place to divert runoff from the project site toward proper drainage locations. In addition, the project is subject to RWQCB's Order R9-2016-0116 and NASSCO's own BMP manual, which includes BMPs and requirements to ensure hazardous materials are contained. Therefore, the project would not have potential to risk release of pollutants during a flood hazard event such as a tsunami or seiche. Impacts would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant with mitigation incorporated. As discussed in Section 4.10.3(a) above, NASSCO, and any of its contractors, would be required to comply with permit conditions imposed by USACE, the San Diego RWQCB, and other regulatory agencies during construction. Applicable permits include the CWA Section 401 Water Quality Certification and Section 404 permit, as well as NASSCO's individual NPDES permit (Order R9-2016-0116). Mitigation Measures **MM-HAZ-1 through MM-HAZ-11**, **MM-BIO-4**, **MM-WQ-1,** and **MM-WQ-2** would be implemented to reduce potential impacts on water quality from temporary increases in turbidity (**Impact-WQ-1**), the accidental release of potentially hazardous materials and wastes (**Impact-WQ-2**), disturbance of contaminated sediments associated with known contaminated sites (**Impact-WQ-3**). During project operation, stormwater runoff from the NASSCO facility would continue to be captured, treated, and contained for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System. NASSCO would be required to maintain all existing operational and maintenance BMPs and comply with Order R9-2016-0116, which regulates polluted runoff. Furthermore, as discussed in Section 4.10.3(b), the project would not have potential to decrease groundwater supplies, impair groundwater quality, or affect groundwater recharge. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant with mitigation incorporated.

Required Mitigation Measures

With implementation of MM-WQ-1 and MM-WQ-2 described below; MM-BIO-4 described in Section 4.4, Biological Resources; and MM-HAZ-1 through MM-HAZ-11 described in Section 4.9, Hazards and Hazardous Materials, impacts related to hydrology and water quality would be less than significant.

MM-WQ-1: Monitor Turbidity and Constituents of Concern During Construction-Related Sediment Disturbance. Prior construction activities in water that would disturb the bay floor, the project proponent shall retain a water quality monitor, approved by the District, who shall prepare a water quality monitoring plan and shall conduct water quality monitoring to demonstrate to the satisfaction of the District and the RWQCB that construction activities do not violate the Basin Plan or applicable water quality objectives. Approval of the plan by the District and appropriate regulatory agencies is required before field activities can be initiated. The plan shall incorporate: (1) all permit-specific regulatory monitoring and reporting requirements and (2) a detailed description of the proposed water quality monitoring program. The plan will clearly identify the project boundaries, and chemical constituents of concern and water quality thresholds; and provide a detailed description of the water quality monitoring to be conducted prior to, during, and after construction activities to ensure compliance with this mitigation measure. The monitoring plan will be robust enough to ensure that any exceedances of water quality objectives are identified. Depending upon the scope of the project and the potential for the release of project-derived contaminants, the water quality monitoring shall include visual inspections of turbidity and debris as well as water-column monitoring using appropriate and calibrated water quality monitoring field equipment to measure, at a minimum: turbidity, dissolved oxygen, pH, temperature, and salinity. If water column monitoring indicates exceedances of water quality thresholds (e.g., turbidity or dissolved oxygen), then water column samples shall be collected and analyzed for project-specific chemicals of concern. The project proponent shall use a State of California Environmental Laboratory Accreditation Program (ELAP)–certified laboratory for all analytical testing except in those instances where measurements such as water temperature and pH can be determined immediately in the field and not jeopardize the samples by exceeding transportation time to the lab for analysis.

The designated water quality monitor shall stop work to ensure that turbidity does not extend outside of the immediate construction area. If turbidity is 20 percent higher outside the work area versus inside the work area, the water quality monitor may direct the temporary halt of construction activities. Depending upon the requirements in the permit, the project proponent may be required to alert the regulatory agencies if a water quality violation is observed. In addition, the project proponent shall coordinate water quality monitoring efforts and shall provide copies of all monthly water quality monitoring data to the RWQCB and District throughout the duration of project construction, as outlined in the reporting schedule of the agency-approved monitoring plan or project-specific permits.

MM-WQ-2: Implement Best Management Practices During Construction-Related Sediment Disturbance. During construction activities, BMPs shall be implemented by the project proponent and shall include the following:

The project proponent shall not stockpile material on the bottom of the San Diego Bay floor and shall not sweep or level the bottom surface with the bucket.

- The project proponent shall use and maintain silt curtains for sediment disturbing construction activities that encircle the area of construction activities and shall minimize the times in which these curtains are temporarily opened (allowing only necessary openings for operation of the curtain), to contain suspended sediments. The floating silt curtain shall consist of connected lengths of fabric. A continuous length of floating silt curtain shall be arranged to fully surround the construction equipment. The silt curtain shall be supported by a floating boom in open water areas (such as along the bayward side of the dredging areas). Along pier edges, the project proponent shall have the option of connecting the silt curtain directly to the structure. The project proponent shall continuously monitor the silt curtain for damage, dislocation, or gaps and immediately fix any locations where it is no longer continuous or where it has loosened from its supports. The bottom of the silt curtain shall be weighted with ballast weights or rods affixed to the base of the fabric that do not touch the Bay floor at the lowest tide even with curtain float/swing. Where the District determines it is feasible and applicable, the floating silt curtains shall be anchored and deployed from the surface of the water to just above the substrate allowing

for tidal action. If deemed necessary by the District once project construction details and plans are available, silt curtains with tidal flaps shall be installed to facilitate curtain deployment in areas of higher flow. Based on a determination by the District and the Federal and/or State permitting agencies (as applicable), air curtains may be used in conjunction with silt curtains to contain resuspended sediment and allow barges containing dredge material or empty barges to transit into and out of the work area, without the need to open and close silt curtains.

- Based on a determination of the District and applicable Federal and/or State permitting agency (as applicable), air curtains in conjunction with silt curtains may be used to contain resuspended sediment, and allow barges containing dredge material or empty barges to transit into and out of the work area without the need to open and close silt curtain gates.
- In-Water Activity–Specific Procedures (Pile Installation or Removal). The project proponent shall conduct pile installation or removal in a manner that implements applicable permit requirements, including the CWA Section 404 permit and CWA Section 401 Water Quality Certification. The following additional measures shall be required based on the type of pile installation, or removal, that occurs.
  - Impact Hammer Pile Driving or Jetting

    Turbidity curtains shall be installed by the proponent consistent with the District's Best Management Practices and Environmental Standards for Overwater Structural Repair and Maintenance Activities for Existing Port Facilities Conducted by the San Diego Unified Port District (District 2019).
  - Spudding

    Spuds lifted during in-water construction shall be lifted slowly—at least a quarter of the speed that spuds are lifted during normal operation. Before the spud reaches the subsurface of the Bay floor during removal, the operator shall conduct spud extraction in 2-minute intervals (repeated 2-minute extraction followed by 2-minute pause) to reduce the disturbance of Bay sediment.

4.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

4.11.1 Environmental Setting

The project site is located at the NASSCO shipyard on and adjacent to the San Diego Bay. The NASSCO shipyard is situated in a highly developed urban area surrounded by heavy industrial land uses to the northwest; military land uses to the east and southeast; the San Diego Bay to the south and west; and military, light industrial, and commercial and office land uses separated by a transportation corridor to the north.

4.11.2 Regulatory Setting

STATE

Coastal Zone Management Act and California Coastal Act

The Coastal Zone Management Act of 1972 ensures that development projects in coastal areas are designed and sited in a manner that is consistent with coastal zone land uses, maximizes public health and safety, and ensures that biological resources within the coastal zone are protected. The California Coastal Act of 1976 governs land use planning for the entire coastal zone of California. The California Coastal Act includes policies for public access to the coast, recreation, marine environment, land resources, development, and SLR. The CCC enforces the Coastal Zone Management Act by certifying that a proposed project is consistent with the California Coastal Act. Pursuant to the California Coastal Act and the CCC Sea Level Rise Policy Guidance document (2018), projects in the California Coastal Zone must address SLR and resiliency of the project and coastal resources. The project site is within the California Coastal Zone and is subject to the Coastal Zone Management Act and California Coastal Act.

Sections of the California Coastal Act that area applicable to the project include the following:

- Section 30230. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significant. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.
- Section 30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

- Section 30232. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.
- Section 30233. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (1) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

  (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

  (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California," shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

  (d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.
- Section 30235. Revetments breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.
- Section 30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.
- Section 30250. (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.
- Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation

and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

- Section 30253. New development shall do all of the following:

  (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

  (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

  (c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.

  (d) Minimize energy consumption and vehicle miles traveled.

- Section 30255. Coastal-developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

- Section 30706. In addition to the other provisions of this chapter, the policies contained in this section shall govern filling seaward of the mean high tide line within the jurisdiction of ports:

  (a) The water area to be filled shall be the minimum necessary to achieve the purpose of the fill.

  (b) The nature, location, and extent of any fill, including the disposal of dredge spoils within an area designated for fill, shall minimize harmful effects to coastal resources, such as water quality, fish or wildlife resources, recreational resources, or sand transport systems, and shall minimize reductions of the volume, surface area, or circulation of water.

  (c) The fill is constructed in accordance with sound safety standards which will afford reasonable protection to persons and property against the hazards of unstable geologic or soil conditions or of flood or storm waters.

  (d) The fill is consistent with navigational safety.

- Section 30708. All port-related developments shall be located, designed, and constructed so as to:

  (a) Minimize substantial adverse environmental impacts.

  (b) Minimize potential traffic conflicts between vessels.

  (c) Give the highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities.

  (d) Provide for other beneficial uses consistent with the public trust, including, but not limited to, recreation and wildlife habitat uses, to the extent feasible.

Public Trust Doctrine

Through the Public Trust Doctrine, the SLC oversees all tide and submerged lands, navigable rivers, sloughs, and other public lands or waters. The doctrine restricts the type of land uses allowed on these lands, which include waterborne commerce, navigation, fisheries, open space, water-oriented recreation, ecological habitat protection, or other recognized Public Trust purposes. The project site includes land subject to the Public Trust Doctrine.

LOCAL

San Diego Unified Port District Port Master Plan

The San Diego Unified Port District Act (Port Act), adopted in 1962, gives the District authority for the development, operation, maintenance, control, regulation, and management of the tidelands and lands underlying the inland

navigable waters of San Diego Bay. The District PMP is the guiding land use policy document for all areas under the District's jurisdiction. The PMP was developed consistent with the Public Trust Doctrine and in accordance with the provisions of the California Coastal Act. Under the PMP, the District has permitting authority and the ability to issue coastal development permits.

- The project site is within Planning District 4 (Tenth Avenue Marine Terminal) of the PMP, which consists of the following water and land uses: industrial and deep-water berthing, institutional/ roadway, marine terminal, maritime services and industrial, and recreation open space. Planning District 4 is the only area in the entire San Diego region with an established waterfront industrial shipping operation. The project site is in the Harbor Drive Industrial Subdistrict of Planning District 4, which is dedicated for shipbuilding and ship repair for the defense and maritime industries. PMP land and water use designations within the project site include Marine Related Industrial and Specialized Berthing, which are described in more detail as follows (San Diego Unified Port District 2020a):
- Marine Related Industrial: Landside designation for sites within close proximity to water bodies due to functional dependencies on the industrial activity for direct access or for linkages to waterborne products, processes, raw materials, or large volumes of water. The primary users of marine-related industrial areas are dependent upon large ships, deep water, and specialized loading and unloading facilities, typically associated with shipbuilding and repair, processing plants, and marine terminal operations.
- Specialized Berthing: Waterside designation devoted to marine commercial and industrial uses including ship building and repair, water taxi, excursion and ferry craft, commercial fishing boat berthing as a priority use, cruise ship berthing, maritime museum exhibits and historic craft replicas, water intake and discharge, industrial and commercial launching, vessel loading and unloading, marine contractors, rigged vessels, barges, tugs/tow boats, breakwater, launch ramps and lifts, seawall margin wharves, and any other facility supporting the marine craft engaged in commercial and industrial uses.

Goals in the Port Master Plan that are applicable to the project include the following:

- Goal I: Provide for the present use and enjoyment of the bay and tidelands in such a way as to maintain options and opportunities for future use and enjoyment.
- 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.
- Goal III: The Port District will assume leadership and initiative in determining and regulating the use of the bay and tidelands.
  - Encourage industry and employment generating activities which will enhance the diversity and stability of the economic base.
  - Encourage private enterprise to operate those necessary activities with both high and low margins of economic return.
- Goal IV: The Port District, in recognition of the possibility that its actions may inadvertently tend to subsidize or enhance certain other activities, will emphasize the general welfare of statewide considerations over more local ones and public benefits over private ones.
  - Develop the multiple purpose use of the tidelands for the benefit of all the people while giving due consideration to the facts and circumstances related to the development of tideland and port facilities.
  - Foster and encourage the development of commerce, navigation, fisheries, and recreation by the expenditure of public monies for the preservation of lands in their natural state, the reclamation of tidelands, the construction of facilities, and the promotion of its use.
  - Encourage non-exclusory uses on tidelands.
- 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 long-term leases will be taken only when substantial public benefit is derived.

- Goal VII: The Port District will remain sensitive to needs, and cooperate with adjacent communities and other appropriate governmental agencies in Bay and Tideland development.
  - The Port District will attempt to avoid disproportionate impact on adjacent jurisdictions both in benefits and any possible liabilities, which might accrue through bay and tideland activities.
- Goal VIII: The Port District will enhance and maintain the bay and tidelands as an attractive physical and biological entity.
  - Each activity, development and construction should be designed to best facilitate its particular function, which function should be integrated with and related to the site and surroundings of that activity.
  - Views should be enhanced through view corridors, the preservation of panoramas, accentuation of vistas, and shielding of the incongruous and inconsistent.
  - Establish guidelines and standards facilitating the retention and development of an aesthetically pleasing tideland environment free of noxious odors, excessive noise, and hazards to the health and welfare of the people of California.
- Goal X: The quality of water in San Diego Bay will be maintained at such a level as will permit human water contact activities.
  - Insure through lease agreements that Port District tenants do not contribute to water pollution.
  - Cooperate with the Regional Water Quality Control Board, the County Health Department, and other public agencies in a continual program of monitoring water quality and identifying the source of any pollutant.
  - Adopt ordinances, and take other legal and remedial action to eliminate sources of pollution.
- Goal XI: The Port will protect, preserve, and enhance natural resources, including natural plant and animal life in the Bay as a desirable amenity, an ecological necessity, and a valuable and usable resource.
  - Identify existing and potential assets.
  - Keep appraised of the growing body of knowledge on ecological balance and interrelationships.
  - Administer the natural resources so that impacts upon natural resource values remain compatible with the preservation requirements of the public trust.

The Port Master Plan specifies that industrial activities on tidelands should meet the following objectives and criteria, which are applicable to the project:

- Be located in convenient proximity to other industrial areas and to living areas from which there are interconnecting transit and thoroughfare routes.
- Provide sites that are economical to develop and adequate for main buildings, accessory storage, off-street loading, off-street parking, and buffer strips.
- Be designed to meet performance standards adequate to avoid nuisances, thereby insuring compatibility with surrounding uses.
- Be limited to industrial uses which have a definite need for the availability of utilities, direct access to railroads and major thoroughfares, and the proximity of either airport or water frontage.
- Provide substantial benefits to both local economic needs and to the regional hinterland.

Values and standards in the Port Master Plan Update that are applicable to the project include the following:

- B. Promote clean air, healthy communities, and environmental justice. Seek to achieve environmental justice which shall be defined as: working to reduce the cumulative health burdens on neighboring communities and

ensure fair treatment of people of all races, cultures, and incomes in developing, adopting, implementing, and enforcing environmental laws, regulations, and policies.

- C. Ensure job creation, prudent economic policies, and financial sustainability. Balance economics, available resources and the public good. As the shepherd of public lands and water within the Tidelands, the Port shall require a strategy that outlines investment and costs that consider economic feasibility, long-term financial sustainability and viability for the Port District, broader State and community needs and impacts, while promoting public access, use, and enjoyment of the Bay. Utilize balanced and equitable investments in the tidelands and public realm in infrastructure improvements to create a value proposition for existing and future economic development, business attraction, growth, and public enjoyment of the Bay. Continue to increase revenues and support existing and future entrepreneurial opportunities in concert with Port operations such as, Cruise, Cargo, and Real Estate opportunities considering a progressive economic and business growth strategy.
- D. Preserve the working Port as a dynamic and thriving element of the region's economy and cultural history. The Port's working waterfront serves an essential role in the region as an economic engine and a job generator. The Bay's history as a commercial center and cultural exchange, facilitated by commerce, are historically important and are reflected in the modern industrial facilities located on the Bay's working waterfront. Protecting the Bay as a shared waterway to promote commerce, navigation, fisheries, national defense, and recreation were foundational to the creation of the Port and will continue to underscore future investment in water-dependent industrial facilities.
- E. Incorporate state of the art sustainability practices. Consider the long-term impacts of sea level rise and climate change to both land and water resources. Implement principles of resiliency and seek to become a national leader in thought and implementation of these practices. Implement energy conservation and sustainability practices and reduce dependency on carbon-based energy. Promote the health and sustainability of natural resources, and the growth and proliferation of natural ecosystems. Create a sustainable fiscal budget and update it regularly.

Planning principles in the Port Master Plan Update that are applicable to the project include the following:

- 1. Honor the water. Future decisions shall consider the health of the entire Bay eco-system as a single, multi-faceted entity. Create a water use plan comparable to a land use plan recognizing the value of land assets as a function of their adjacency to different types of water. Use this plan to maximize deep water and dredged resources, recreational opportunities, and natural resource protection. Encourage a variety of activities and entrepreneurial opportunities. Optimize infrastructure for water-dependent uses, organize water transportation routes, guide future decisions regarding infrastructure needs and upland uses adjacent to the Working Port, and integrate natural resources, climate change and water quality policies.
- 3. Celebrate nature and ecology. Establish an Environmental Stewardship Strategy. Celebrate the whole Bay as an inter-related marine, estuarine, and bay ecosystem that is valued, managed, protected, and enhanced for its overall impact on biology, economic prosperity, public use, and enjoyment. Promote the careful integration of water, natural resources, open space, and buildings.

San Diego International Airport Land Use Compatibility Plan

The San Diego International Airport ALUCP is a guiding document for development of the airport and surrounding areas in a manner that protects public health, safety, and welfare. As designated in the ALUCP, the project site is within the airport influence area for the San Diego International Airport (SDCRAA 2014: Exhibit 1-1). The project site is in Review Area 2, which is the boundary for which airspace protection and overflight policies and standards apply. The project site is also within the FAA airspace protection boundary pursuant to Federal Aviation Regulations, Part 77 (SDCRAA 2014: Exhibit 4-1).

San Diego Bay Integrated Natural Resources Management Plan

The San Diego Bay Integrated Natural Resources Management Plan (INRMP) is a long-term strategy, sponsored by the U.S. Navy and the District, that is intended to provide direction for the good stewardship of natural resources, while also supporting the ability of the U.S. Navy and District to meet their missions and continue functioning within the San Diego Bay (U.S. Department of the Navy et al. 2013). The stated goal of the INRMP is "to ensure the long-

term health, restoration, and protection of San Diego Bay's ecosystem in concert with the bay's economic, Naval, navigational, recreational, and fisheries needs." Table 1-5 of the INRMP summarizes the INRMP objectives. The INRMP objectives that are applicable to the project include the following:

- Objective 4.3.7: Artificial Shoreline Structures. Through engineering solutions, minimize the use of shoreline stabilization structures that impact or replace natural intertidal habitats, and maximize the value and function that necessary artificial structures contribute to the bay ecosystem.
- Objective 5.1.2: Sustainable Resource Use and Development. Sustain natural resources and Port and Navy institutional missions into the future without decline to natural resource assets or compromising the ability to grow those assets, by enabling innovation in planning, design, project management, and implementation.
- Objective 5.2.1: Dredge and Fill Projects. Conduct necessary dredging and dredge disposal in an environmentally and economically sound manner.
- Objective 5.2.2: Ship and Boat Maintenance. Manage the maintenance of boats and ships in San Diego Bay in a manner that achieves significantly improved water and sediment quality, healthier marine organisms, and economic good sense.
- Objective 5.2.3: Shoreline Construction. Seek improved habitat value of developed shorelines and marine structures and their functional contribution to the ecosystem.
- Objective 5.2.4: Water Surface Use and Shoreline Disturbance. Properly balance the various surface uses of the bay as a navigable waterway and associated shorelines with conservation priorities for waterbirds and shorebirds.
- Objective 5.3.2.1: Industrial. Reduce and minimize stormwater pollutants harmful to the bay's ecosystem from entering the bay from watershed users.
- Objective 5.4.1: Remediation of Contaminated Sediments. Ensure that San Diego Bay finfish and shellfish are safe to eat, that the food web is not adversely altered and that risks are minimized to recreational and commercial water contact users from the effects of contaminated sediment.
- Objective 5.4.2: Oil Spill Prevention and Clean Up. Prevent spills of oil and other hazardous substances, and ensure the effectiveness of prevention and response planning.
- Objective 5.5: Cumulative Effects. Minimize adverse cumulative effects on habitats and species of the bay ecosystem.

4.11.3 Discussion

a) Physically divide an established community?

No impact. The project involves the repair and replacement of a floating dry dock and associated infrastructure to support ongoing operations within the NASSCO shipyard. All construction activities would be contained within the NASSCO leasehold. Project construction would not expand the physical landside boundaries of the shipyard or expand into any adjacent communities. The project would not result in the construction of any physical barriers or require any road closures that would disrupt access within the surrounding community. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less-than-significant impact. The project's consistency with applicable land use plans, policies, and regulations is discussed in the following sections.

Coastal Zone Management Act, California Coastal Act, Public Trust Doctrine, and San Diego Unified Port District Port Master Plan

The project involves the repair and replacement of a floating dry dock and associated infrastructure to support ongoing operations within the NASSCO leasehold. The project would not require any change to existing Marine Related Industrial and Specialized Berthing designations for the project site. Rather, the project would improve the safety and structural integrity of existing dry dock facilities and associated infrastructure to support the existing water-dependent maritime industrial operations at the project site. These improvements would ensure the continued use of the project site for its designated uses. All project improvements would be contained within the NASSCO leasehold and would not involve acquisition of adjacent parcels; however, the installation of the west offshore mooring dolphin would occur within CCC jurisdiction and would require approval from the CCC.

The project would ensure continued public and economic benefits through maintaining NASSCO employment opportunities and revenue, as well as national defense services (i.e., ship building and repair services for the U.S. Navy). The project site includes water-dependent maritime industrial operations and is not accessible to the public. The project would not affect coastal access because it would not decrease the availability of existing parking or alter existing public views, public waterfront access, or water-oriented recreational activities. Furthermore, the project would include measures to reduce impacts on biological resources and water quality (see Section 4.4, Biological Resources, and Section 4.10, Hydrology and Water Quality, for more information). Therefore, the project would be consistent with the goals, policies, and objectives outlined in the PMP, which were developed in accordance with the requirements of the Coastal Zone Management Act, California Coastal Act, and Public Trust Doctrine.

Table 4.11-1 includes a discussion of the project's consistency with CCC Sea Level Rise Policy Guidance (2018).

Table 4.11-1 California Coastal Commission Sea Level Rise Policy Guidance (2018)

Steps for Addressing Sea Level Rise	Project Discussion
1. Establish the projected sea level rise (SLR) range for the proposed project	The expected project life is anticipated to be 30 years. Construction of the various project components would be completed in 2023 to 2034. Therefore, the range of SLR projections applicable to the project would be 2050 to 2070. Because the project components include in-water structures to support maritime infrastructure, the extreme risk aversion scenario was used. Under this scenario, the projected SLR at the project site is anticipated to be 2.7 to 5.2 feet.
2. Determine how SLR impacts may constrain the project site	Impacts associated with SLR generally include erosion, inundation, flooding, wave impacts, and saltwater intrusion. The project site would be susceptible to inundation and storm surge under the scenarios described in Step 1 above. However, the various project components that would be constructed or repaired include in-water structures that are already exposed to these hazards. The project would not exacerbate projected damage due to SLR; rather, the project includes improvements to reinforce the existing shoreline through (1) installation of a sheet-piled bulkhead at the proposed Repair Complex Wharf; (2) repairs to revetment showing signs of wear, fracture, and collapse; and (3) repairs to existing structural piles or in-kind replacement of structural piles showing deterioration, cracking, corrosion, and wear. These project components are intended to improve resiliency to SLR within the project site.
3. Determine how the project may impact coastal resources over time, considering SLR	The project site is developed with marine-related, water-dependent industrial uses. The project site lacks many coastal resources, including public access and recreation, agricultural resources, natural landforms, scenic resources, and archaeological and paleontological resources. However, the project site includes water quality and natural resources. As discussed in Sections 3.4, Biological Resources, and Section 4.10, Hydrology and Water Quality, the project would include measures to reduce impacts on these resources. The project would not exacerbate the potential for impacts on water quality and natural resources from projected SLR. The project includes improvements to existing infrastructure and any potential impacts from SLR would occur even if the project was not implemented.
4. Identify project alternatives to both avoid resource impacts and minimize risks to the project	Implementation of the project would not exacerbate existing or projected damage to the environment, including damage to existing structures and sensitive resources, due to projected SLR. Mitigation is not required.
5. Finalize project design and submit permit application	As a standard practice, this step will be completed after the CEQA process is complete.

SLR = Sea Level Rise

Source: California Coastal Commission 2018

As discussed in Section 4.10, Hydrology and Water Quality, a SLR vulnerability assessment was completed for the Tenth Avenue Marine Terminal Planning District (San Diego Unified Port District 2019). Based on the assessment, this planning district is projected to withstand potential SLR inundation and temporary flooding from SLR during a 100-year storm event at 1.6 feet of projected SLR (anticipated in the year 2050). The higher elevation and existing shoreline armoring are expected to protect many of the land uses in the panning district from substantial projected SLR impacts. However, the coastal dependent uses in the planning district are sensitive to potential inundation. Several project components, including areas where quay wall revetment and pile repairs or replacement would occur, may be affected by mean SLR during the useful design life (i.e., 30 years) of the various project elements. However, these project elements are intended to protect the shoreline and improve SLR resiliency through addressing existing revetment failures and structural pile deficiencies. In addition, these project elements would not substantially increase in-water fill volumes and, therefore, would not have potential to impede or redirect flood flows. Furthermore, this type of inundation would occur with or without the proposed project. Consequently, the project is not anticipated to exacerbate existing or projected damage to the environment due to SLR. Therefore, the project would be consistent with CCC Sea Level Rise Policy Guidance (2018).

San Diego International Airport Land Use Compatibility Plan

In accordance with Federal Aviation Regulations, Part 77, the FAA would be notified at least 45 days prior to construction because project construction would introduce temporary objects (e.g., construction equipment, drilling rigs, and lights) in proximity to the airport. The proposed project is required to obtain all necessary FAA determinations prior to construction, and comply with any conditions provided in the determination, if any. Furthermore, the project would not result in any changes in existing land uses and does not propose increases in height limits for any existing structures. Therefore, the project would be consistent with the ALUCP and would not pose an obstruction or hazard to air navigation.

Natural Resources Management Plans

There are no habitat conservation plans or natural community conservation plans that apply to the project site. As discussed in Section 4.4, Biological Resources, the project would include mitigation measures to reduce impacts on marine habitats and species during construction activities. In addition, as discussed in Section 4.10, Hydrology and Water Quality, the project would include BMPs to protect water quality during construction activities, in compliance with NASSCO's individual NPDES permit requirements. Furthermore, NASSCO would be required to maintain all existing operational and maintenance BMPs, including a fully contained stormwater diversion system where discharging to the receiving water does not occur. Because the project includes measures to reduce impacts on the San Diego Bay's natural resources and would enable NASSCO to safely continue shipbuilding and repair operations, the project would be consistent with the goal and objectives of the San Diego Bay INRMP, as summarized in Section 4.11.2. Therefore, the project would not conflict with natural resources management plans.

Summary

As discussed above, the project would not result in any changes in existing land uses. Rather, the project would result in on-site improvements that would ensure the continued use of the project site for its designated uses. NASSCO would be required to obtain all necessary approvals from agencies governing land use of the project site, including the SLC, CCC, District, and FAA. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Required Mitigation Measures

The project would not result in significant impacts associated with land use and planning. Mitigation measures are not required.

4.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

4.12.1 Environmental Setting

The Surface Mining and Reclamation Act directs the State Geologist to identify and map the non-fuel mineral resources of the State to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data. Areas known as Mineral Resource Zones (MRZs) are classified based on geologic factors, without regard to existing land use and land ownership. The areas are categorized into four general classifications (MRZ-1 through MRZ-4). Of the four MRZ classifications, the MRZ-2 classification is recognized in land use planning because the likelihood for occurrence of significant mineral deposits is high, and the classification may be a factor in the discovery and development of mineral deposits that would potentially be economically beneficial to the local, state, and/or national economy.

The project site is classified as MRZ-1, which indicates no significant mineral deposits are located at the project site (City of San Diego 2008b: Figure CE-6). The project site is not designated as a locally important mineral resource recovery site in the City of San Diego General Plan Conservation Element (City of San Diego 2008b: Figure CE-6).

4.12.2 Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. According to City of San Diego's General Plan Conservation Element, the project site is in an area designated as MRZ-1, indicating that no significant mineral deposits are present (City of San Diego 2008b: Figure CE-6). Furthermore, the project site is in a highly developed and urbanized area with marine-related industrial land uses that are incompatible with and preclude mineral extraction. Therefore, the project would not result in the loss of availability of locally important mineral resources and no impact would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The project site is not designated as a locally important mineral resource recovery site in the City of San Diego General Plan Conservation Element (City of San Diego 2008b: Figure CE-6). Thus, the project would not result in a loss of availability of locally important mineral resources. No impact would occur.

Required Mitigation Measures

The project would not result in significant impacts associated with mineral resources. Mitigation measures are not required.

4.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

4.13.1 Environmental Setting

NOISE FUNDAMENTALS

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. Sound is the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound. As sound travels through the atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on a variety of factors, including geometric spreading (i.e., spherical or cylindrical spreading), ground absorption (i.e., hard versus soft sites), atmospheric conditions (e.g., wind direction and speed, air temperature, humidity, turbulence), and shielding by natural or human-made features. Geometric spreading is the way in which sound intensity decreases further away from the source, and it occurs because the area that the sound energy covers becomes larger with increasing distance.

The amplitude of pressure waves generated by a sound source determines the loudness of that source, also called the sound pressure level (SPL). SPL is most commonly described by using decibels (dB) because this logarithmic unit best corresponds to the way the human ear interprets sound pressures. However, the decibel scale does not adequately characterize how humans perceive noise because the human ear is not equally sensitive to loudness at all frequencies (i.e., pitch) in the audible spectrum. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels or dBA) can be computed based on this information. All sound levels discussed in this section are expressed in A-weighted decibels.

Because decibels are logarithmic units, SPLs expressed in dB cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally

perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013a:2-10).

Various noise descriptors have been developed to describe time-varying noise levels. The noise descriptors used in this chapter include:

- Equivalent Continuous Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013a:2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period.
- Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013a:2-48; FTA 2018:207–208).
- CNEL: the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m. (Caltrans 2013a:2-48).

GROUND VIBRATION

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Groundborne vibration is vibration of and through the ground. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions). Regardless of land use, building damage could occur from continuous vibration. Land uses that are considered sensitive from human annoyance to vibration include residential uses, hospitals, nursing facilities, intermediate care facilities, child educational facilities, libraries, museums, and childcare facilities.

Groundborne vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocities are normally described in inches per second (in/sec) but can also be expressed in decibel notation (VdB), which is used mainly in evaluating human response to vibration.

EXISTING NOISE ENVIRONMENT

The predominant noise sources influencing noise levels in the vicinity of the project site include vehicle traffic on Harbor Drive, I-5, I-15, and SR-75; train activity on the BNSF rail line and San Diego Metropolitan Transit System (MTS) Blue Line; aircraft activity associated with San Diego International Airport and Naval Air Station North Island; marine traffic in San Diego Bay; and industrial land use activities. Harbor Drive, which is a major north-south transportation corridor in the area, borders the NASSCO shipyard to the north. The BNSF rail line is located immediately north of Harbor Drive, approximately 750 feet from the nearest project site boundary. The San Diego MTS Blue Line is directly north of the BNSF rail line. Railway noise includes that generated by daily passenger (Amtrak) and commuter (Coaster) trains, as well as BNSF freight trains and MTS Blue Line trolleys.

The project site is located in a highly industrialized area along the San Diego Bay, with heavy industry land uses to the northwest; military land uses to the east and southeast; and military, light industry, and commercial and office land uses to the north. Noise sources associated with industrial land uses typically include heavy machinery and equipment (e.g., air compressors, generators), as well as various types of vehicles (e.g., delivery trucks, passenger vehicles).

Regarding other transportation noise sources, I-5 is located north of the BNSF rail line, approximately 2,030 feet from the nearest project site boundary, and intersects I-15 northeast of the project site. I-15 is located approximately 2,450 feet from the nearest project site boundary, and SR-75, which crosses the bay onto Coronado Island west of the project site, is approximately 2,300 feet from the nearest project site boundary. The runways of the San Diego

International Airport and Naval Air Station North Island are both located approximately 3.3 miles from the project site. Because these noise sources are all distant from the project site (over 1,000 feet away), they contribute less to existing on-site noise levels compared to other sources. However, these noise sources are important to provide context for understanding the noise environment in the areas surrounding project site.

In January 2019, ambient noise measurements were collected in the vicinity of the project site for the adjacent BAE Systems Waterfront Improvement Project. Existing noise levels in areas located north of Harbor Drive range from 61 to 69 dB CNEL, and the existing noise level across the bay on Coronado Island, north of SR-75, ranges from 63 to 66 dB CNEL (San Diego Unified Port District 2020b).

NOISE-SENSITIVE RECEPTORS

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Noise-sensitive receptors are also considered vibration-sensitive receptors. Commercial and industrial buildings where vibration could interfere with operations within the building, including levels that may be well below those associated with human annoyance, are also considered vibration-sensitive receptors.

The nearest sensitive receptors within the City of San Diego include residences in the Barrio Logan neighborhood on the north side of Harbor Drive and the BNSF rail line. The closest residence is located approximately 1,180 feet north of the nearest project site boundary. The nearest residences within the City of Coronado are located across the San Diego Bay approximately 1.4 miles from the project site and are not discussed further due to their distance from the project site.

4.13.2 Regulatory Setting

STATE

California Department of Transportation Noise and Vibration Standards

In 2013, the California Department of Transportation (Caltrans) published the Transportation and Construction Vibration Manual (Caltrans 2013b). The manual provides general guidance on vibration issues associated with construction and operation of projects in relation to human perception and structural damage. Table 4.13-1 presents recommendations for levels of vibration that could result in damage to structures exposed to groundborne vibration.

Table 4.13-1 Caltrans Recommendations Regarding Levels of Vibration Exposure

Maximum PPV (in/sec)		Type of Building and Condition
Transient Sources	Continuous/Frequent Intermittent Sources	
0.12	0.08	Extremely fragile historic buildings, ruins, ancient monuments
0.2	0.1	Fragile buildings
0.5	0.25	Historic and some old buildings
0.5	0.3	Older residential structures
1.0	0.5	New residential structures
2.0	0.5	Modern industrial/commercial buildings

Notes: PPV= peak particle velocity; in/sec = inches per second.

Source: Caltrans 2013b:38

For evaluating impacts to occupied buildings (i.e., human annoyance) from pile driving, FTA has established criteria based on the frequency of vibration activities (FTA 2018). Considering the number of daily pile strikes (i.e., up to 10,000), the following criteria, are applicable to pile driving activities

- 65 VdB at buildings where vibration could interfere with interior operations
- 72 VdB at buildings where people normally sleep
- 75 VdB at institutional land uses with primarily daytime uses.

LOCAL

Because of the distance from the project site to the nearest sensitive receptors in the City of Coronado (1.4 miles away), regulations applicable to the City of Coronado are not discussed below. The local regulatory setting focuses on applicable regulations and standards for the City of San Diego. The project would only result in temporary noise from project construction; thus, the City of San Diego's construction standards stated in the municipal code are the only applicable standards.

City of San Diego Municipal Code – Noise Abatement and Control Ordinance

Section 59.5.0401 of the City's Noise Abatement and Control Ordinance (Sound Level Limits) states that:

> It shall be unlawful for any person to cause noise by any means to the extent that the one-hour average sound level exceeds the applicable limit given in the following table [shown as Table 4.13-2], at any location in the City of San Diego on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person.

Table 4.13-2 City of San Diego Noise Abatement and Control Ordinance Limits

Land Use	Time of Day	Sound Level dB L_{eq}[1]
Single Family Residential	7 a.m. to 7 p.m.	50
	7 p.m. to 10 p.m.	45
	10 p.m. to 7 a.m.	40
Multi-Family Residential	7 a.m. to 7 p.m.	55
	7 p.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
All other Residential	7 a.m. to 7 p.m.	60
	7 p.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
Commercial	7 a.m. to 7 p.m.	65
	7 p.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	60
Industrial or Agricultural	Anytime	75

Notes: dB = decibel; L_{eq} = equivalent continuous sound level

[1]The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts.

Source: City of San Diego 2019

Section 59.5.0404 of the City's Noise Abatement and Control Ordinance (Construction Noise) states that:

> (a) It shall be unlawful for any person, between the hours of 7 p.m. of any day and 7 a.m. of the following day, or on legal holidays as specified in Section 21.0104 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.
>
> (b) Except as provided in subsection C. hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7 a.m. to 7 p.m.
>
> (c) The provisions of subsection b of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

4.13.3 Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less-than-significant impact. Noise levels associated with project construction and operation are discussed separately, below. This section focuses on potential noise impacts on surrounding people and properties; potential effects of noise on wildlife are addressed in Section 4.4, Biological Resources.

TEMPORARY CONSTRUCTION NOISE

Construction activities associated with the project would result in a temporary increase in noise. Project construction would include five main components: floating dry dock replacement and modification (January 2023 to September 2024), Repair Complex Wharf improvements (September 2024 to July 2025), quay wall revetment repairs (January 2024 to February 2024), additional as-needed quay wall revetment repairs (January 2025 to December 2027), and structural pile repair and replacement (January 2024 to January 2034). Construction noise would fluctuate throughout the duration of project construction depending on the type of construction activities occurring and equipment used on any given day; the distances from construction activity to noise-sensitive receptors; any noise-attenuating features, such as topography, vegetation, and existing structures; and existing ambient noise levels. Although specific equipment used would vary for the different components of construction, project construction would generally involve the use of heavy construction equipment such as cranes, excavators, jackhammers, impact and vibratory pile drivers, dump trucks, shears, air compressors, concrete trucks and pumps, welding units, generators, and haul trucks. These pieces of equipment generate noise levels that range from 73 to 95 dB at 50 feet (FHWA 2006:3). No blasting would occur as part of the project.

Construction activities would occur 24 hours per day and seven days per week. However, construction work during evening and nighttime hours (between 7:00 p.m. and 7:00 a.m.) would be limited to project deliveries, formwork, welding, and other activities that would generate lower noise levels. No pile driving would be conducted during the evening or nighttime hours (7:00 p.m. to 7:00 a.m.). The applicable City noise standard for daytime (7:00 a.m. to 7:00 p.m.) construction noise is a 12-hour L_{eq} of 75 dB, which is the L_{eq} over a 12-hour period. Noise modeling used a worst-case hour, which is a conservative approach because the resulting noise levels are higher than construction averaged over 12 hours.

Noise standards for evening and nighttime hours established in Section 59.5.0401 of the City of San Diego Municipal Code vary depending on the type of land use and time of day. The nearest sensitive receptors to the project site are single-family residences located in Subdistrict B of the Barrio Logan Planning District, a residential zone that also allows for heavy industrial land uses (i.e., those permitted in IH-2-1 zones). This residential zone is adjacent to industrially zoned areas. Therefore, in accordance with San Diego Code Section 59.5.0401(b), the applicable City noise standard for these receptors is the arithmetic mean of the specified standards for industrial and single-family residential land uses. The applicable noise standards are the following:

- Daytime hours (7:00 a.m. to 7:00 p.m.): 75 dB L_{eq}, 12-hour
- Evening hours (7:00 p.m. to 10:00 p.m.): 60 dB L_{eq}
- Nighttime hours (10:00 p.m. to 7:00 a.m.): 57.5 dB L_{eq}

For construction that would only occur during daytime hours, noise modeling conservatively assumed simultaneous operation of four pieces of heavy equipment (a crane, excavator, pile driver, and flatbed truck) in close proximity to each other. For construction that would occur during evening and nighttime hours, noise modeling assumed simultaneous operation of a flatbed truck, a pump, and a welder in close proximity to each other. Based on the modeling conducted using FTA guidance (FTA 2018), the nearest residence to the project site boundary would be exposed to construction noise levels of 62 dB L_{eq} during daytime hours and 54 dB L_{eq} during evening and nighttime hours. Therefore, daytime construction would not exceed the applicable daytime noise standard of 75 dB L_{eq}, and evening and nighttime construction would not exceed the applicable evening and nighttime noise standards of 60 and 57.5 dB L_{eq}, respectively. Detailed calculations are provided in Appendix G.

The noise level at more distant receptors would be lower because noise attenuates with distance. Therefore, none of the applicable City standards during daytime, evening, or nighttime hours would be exceeded at any sensitive receptors due to the operation of noise-generating construction equipment. In addition, these construction noise estimates are conservatively high because they do not account for any additional attenuation that would be provided by existing buildings, structures, or vegetation that exist along the sound path between construction sites and receptors.

LONG-TERM, OPERATIONAL NOISE

Implementation of the project would not expand the existing use of the project site or expand existing shipyard operations, including any increase in capacity to service or build more ships. The same operations and maintenance activities would be undertaken in the same general locations and using the same types of equipment as are currently used. Shipyard operations would not introduce any new long-term sources of noise. In addition, the project would not appreciably increase the number of employees or visitors to the project site and, thus, there would be no measurable increase in traffic noise levels. For these reasons, long-term operational noise levels are not anticipated to change from current conditions. Additionally, no sensitive receptors are located in the vicinity of the project site.

SUMMARY

While project construction would result in temporary increases in noise levels, both daytime and nighttime construction associated with the project would not result in noise levels that exceed City standards at any sensitive receptors. Additionally, shipyard operations would not result in any long-term noise impacts from facility operations and maintenance. Therefore, this impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less-than-significant impact. Shipyard operations would not introduce any new long-term sources of vibration. Therefore, this analysis focuses on vibration generated by construction activities. Vibration assessments are generally separated into two distinct analyses, one that is concerned about the receiving land uses perception and associated level of annoyance to vibration-inducting activities, and the second which is concerned with the possibility of vibration-inducing activities to cause structural damage to nearby structures. Vibration-decibels, or VdB, is the unit of measurement most applicable to assessing annoyance and peak-particle velocity, or in/sec PPV, is the unit of measurement most applicable to assessing the potential for structural damage. Both assessments are conducted below.

Project construction would involve the use of ground vibration–intensive activities, such as impact and vibratory pile driving (i.e., although not representative of a typical day, the analysis conservatively assumes up to 10,000 pile strikes could occur on the most intensive construction day). Activities involving pile driving typically generate the highest vibration levels compared to other construction methods and are, therefore, of greatest concern when evaluating construction-related vibration impacts. Impact pile driving generates a vibration level of 1.52 in/sec PPV and 112 VdB at 25 feet when the equipment is being used at its upper range. Vibratory (i.e., sonic) pile driving generates a vibration level of 0.73 in/sec PPV and 105 VdB at 25 feet when the equipment is being used at its upper range (FTA 2018:184).

Regarding disturbance to vibration-sensitive uses, the buildings closest to the construction site are modern industrial buildings, none of which contain institutional uses or sensitive operations (e.g., medical laboratories). Residential uses are located over 1,000 feet from potential pile driving activities. Considering the reference levels for pile driving and the applicable threshold of 72 VdB (level for frequent events at places where people sleep), disturbance could be considered substantial within 540 feet from pile driving activities. No vibration-sensitive uses exist within this distance from potential pile driving locations.

Regarding structural damage, t applicable threshold for the prevention of structural damage at modern industrial/commercial buildings is 0.5 in/sec PPV (Caltrans 2013b). Assuming normal propagation conditions, vibration generated by impact and vibratory pile driving could exceed the threshold for structural damage within 53 and 32 feet of pile driving activity, respectively. No buildings or structures would be located within 53 feet of impact pile driving or 32 feet of vibratory pile driving. Refer to Appendix G for detailed vibration modeling calculations, which are based on FTA guidance (FTA 2018). Therefore, project construction would not result in disturbance to vibration-sensitive uses or structural damage to nearby structures from vibration-generating construction activities. This impact would be less than significant, and no mitigation is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. The San Diego International Airport and Naval Air Station North Island are the closest public and private airports, and their runways are both located approximately 3.3 miles from the project site. Although the project is located within the airport influence area for the San Diego International Airport, the project site is over 1.5 miles from the airport's 60 dB CNEL noise contour (San Diego International Airport 2014). An Airport Land Use Compatibility Plan (ALUCP) is currently being prepared for the Naval Air Station North Island and the noise contours prepared for the ALUCP EIR indicate that the project site is over 1.5 miles from the airport's 65 dB CNEL noise contour (County of San Diego 2019). The project is not located within two miles of a public private airstrip. The project would not include any new land use development where people would reside. Operation of the project would not expose existing employees to increased aircraft noise or require an increased number of employees. Therefore, the project would have no impact regarding the exposure of people residing or working in the project area to excessive aircraft-related noise levels, and no mitigation is required.

4.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

4.14.1 Environmental Setting

The project site is within Planning District 4 (Tenth Avenue Marine Terminal) of the PMP. According to the PMP, there are approximately 50,000 jobs within this planning district (San Diego Unified Port District 2020a). There are no residential land uses within the District's jurisdiction, including the project site. The nearest residences to the project site are within the adjacent Barrio Logan community plan area. The nearest residence is approximately 1,180 feet northeast of the project site and is separated from the project site by Harbor Drive, railroad ROW, and a recycling center.

4.14.2 Discussion

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less-than-significant impact. The growth inducing potential of a project would typically be considered significant if it fosters growth or a concentration of population in excess of what is assumed in applicable land use plans. Significant growth impacts could also occur if a project provides infrastructure or service capacity to accommodate levels of growth beyond levels currently permitted by local or regional plans or policies.

The project involves the repair and replacement of a floating dry dock and associated infrastructure to support ongoing operations within the NASSCO leasehold. The project does not propose new homes or businesses that would directly induce population growth. In addition, the project does not include the expansion of existing infrastructure, including changes to existing shipyard operations, that would indirectly induce population growth. Approximately 10 workers would be present on the project site each day during the construction period. Construction workers are anticipated to commute from within the surrounding area and would likely not require temporary local housing. Therefore, there would be a negligible temporary increase in local and regional population during construction. Thus, the project would not induce substantial unplanned population growth and impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. The land use designation for the project site is Marine Related Industrial (Land) and Specialized Berthing (Water). Residential housing is not an allowable use within Harbor Drive Industrial Subdistrict and no housing currently exists on the project site. Therefore, the project would not displace people or housing and would not require the construction of replacement housing. No impact would occur.

Required Mitigation Measures

The project would not result in significant impacts associated with population and housing. Mitigation measures are not required.

4.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for 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 any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

4.15.1 Environmental Setting

The City of San Diego's Fire-Rescue Department (SDFRD) provides fire, emergency medical, lifeguard and emergency management services, including 9-1-1 services, fire inspections, permits, and community education. In addition, the San Diego Harbor Police Department provides marine crime and firefighting services. The closest fire station is SDFRD Fire Station 7 at 944 Cesar E. Chavez Parkway, approximately 0.7 mile northwest of the project site. The Port of San Diego Harbor Police Department (HPD) and the City of San Diego Police Department (SDPD) provide law enforcement services to the project site. The closest police station is the SDPD Central Division Station at 2501 Imperial Avenue, approximately 1.0 mile north of the project site.

The project site is located within the San Diego Unified School District (SDUSD). The closest SDUSD school is the Logan Memorial Educational Campus at 2875 Oceanview Avenue, approximately 0.4 mile north of the project site. As identified in Section 4.16, Recreation, the closest parks to the project site include Chicano Park, Memorial Community Park, and Dorothy Petway Neighborhood Park. Other nearby public facilities include the San Diego Public Library at 567 S 28th Street, approximately 0.6 mile north of the project site.

4.15.2 Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for 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 any of the public services:

Fire protection?

Less-than-significant impact. The project involves the repair and replacement of a floating dry dock and associated infrastructure to support ongoing operations within the NASSCO leasehold. As discussed in Section 4.14 above, approximately 10 workers would be present on the project site each day during the construction period. Project construction would result in a negligible temporary increase in local population and would not contribute to permanent population growth. Therefore, project construction would not affect performance objectives for SDFRD or the HPD.

Project construction would be contained within the NASSCO leasehold and would not require any road closures. In addition, project construction would result in a negligible temporary increase in vehicle trips on surrounding roadways associated with worker commutes and haul trips (refer to Section 4.17, "Transportation," for more information). Therefore, project construction would not contribute to substantial congestion on surrounding roadways that would affect response times for SDFRD or the HPD.

The project would not result in an expansion of the existing use of the site, an increase in shipbuilding and repair operations, or additional employees, other than those needed during construction. Therefore, project operations would not affect response times for SDFRD or the HPD. Based on the above discussion, the project would not require the provision of new or physically altered fire protection facilities. Therefore, impacts would be less than significant.

Police protection?

Less-than-significant impact. Refer to the discussion for fire protection above. Project construction would not result in permanent population growth that would affect service ratios for SDPD or the HPD. In addition, project construction would not contribute to substantial congestion on surrounding roadways or otherwise hinder police response such that response times for the HPD or SDPD would be affected. The project would not result in an expansion of the existing use of the site, an increase in shipbuilding and repair operations, or additional employees, other than those needed during construction. Therefore, project operations would not affect response times for SDPD or the HPD. Based on the above discussion, the project would not require the provision of new or physically altered police protection facilities. Impacts would be less than significant.

Schools?

No impact. As discussed in Section 4.14, Population and Housing, the project would not result in permanent population growth. The project would not result in an expansion of the existing use of the site, an increase in shipbuilding and repair operations, or additional employees, other than those needed during construction. Jobs generated during construction would be drawn from the local workforce that is already served by existing school facilities. Therefore, the project would not increase the demand for school facilities or increase existing student to teacher ratios. Furthermore, project activities would be contained within the NASSCO leasehold and would not encroach onto any school property. Therefore, the project would not require the provision of new or physically altered schools. No impact would occur.

Parks?

No impact. Refer to Section 4.16, Recreation, for additional information. The project would not result in permanent population growth that would generate additional demand for parks. In addition, project activities would be contained within the NASSCO leasehold and would not encroach onto any park property. Therefore, the project would not require the provision of new or physically altered parks and recreation facilities. No impact would occur.

Other public facilities?

No impact. As discussed in Section 4.14, Population and Housing, the project would not result in permanent population growth. Therefore, the project would not increase the demand for existing public facilities. Furthermore, project activities would be contained within the NASSCO leasehold and would not encroach onto any public facility property. Therefore, the project would not require the provision of new or physically altered public facilities. No impact would occur.

Required Mitigation Measures

The project would not result in significant impacts associated with public services. Mitigation measures are not required.

4.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation.				
Would the project:				
a) 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?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

4.16.1 Environmental Setting

- The project site is within the NASSCO shipyard in a developed industrial area. The nearest public parks and recreational facilities to the project site include the following:
- Chicano Park is located at 1982 National Avenue, approximately 0.6 mile northwest of the project site. The 0.5-acre park is operated by the City of San Diego Parks and Recreation Department and includes a playground, tot lot, restrooms, and basketball courts.
- Cesar Chavez Park is located at 1449 Cesar E. Chavez Parkway, approximately 0.6 mile northwest of the project site. The 4-acre park is operated by the District and includes a recreational pier, picnic and playground areas, a soccer field, and green open space.
- Memorial Community Park is located at 2947 Ocean View Boulevard, approximately 0.7 mile northeast of the project site. The 18-acre park is operated by the City of San Diego Parks and Recreation Department and includes a playground, tot lot, concession stand, baseball/softball fields, and restrooms.
- Dorothy Petway Neighborhood Park is located at 1367 Rigel Street, approximately 1.3 miles east of the project site. The 2.7-acre park is operated by the City of San Diego Parks and Recreation Department and includes a playground, tot lot, and restrooms.

4.16.2 Discussion

a) 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?

Less-than-significant impact. An increase in the use of existing parks and recreational facilities typically results from an increase in the number of housing units or residences in the surrounding area. The project would not involve the construction of housing units or residences. As discussed in Section 4.14, Population and Housing, approximately 10 workers would be present on the project site each day during the construction period, which would contribute to a negligible temporary increase in population. The demand for short-term construction jobs would be met by the local work force, and it is anticipated that no outside labor would be needed. The project would not result in an expansion of the existing use of the site, an increase in shipbuilding and repair operations, or additional employees, other than those needed during construction. Consequently, the project would not contribute to a permanent increase in

population that would increase the use of existing parks or recreational facilities. Furthermore, project activities would be contained within the NASSCO leasehold and would not require closure of any parks or recreational facilities. Therefore, impacts would be less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No impact. The project involves the repair and replacement of a floating dry dock and associated infrastructure to support ongoing operations within the NASSCO leasehold. The project would not involve the construction or expansion of recreational facilities, such that adverse physical effect on the environment would occur. Therefore, impacts would be less than significant.

Required Mitigation Measures

The project would not result in significant impacts associated with recreation. Mitigation measures are not required.

4.17 TRANSPORTATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐
e) Result in an insufficient parking supply that would lead to a decrease in public coastal access?	☐	☐	☒	☐

4.17.1 Environmental Setting

The transportation impact analysis presented in this section is based primarily on the *NASSCO Floating Dry Dock and Waterfront Improvement Project Transportation Impact Study* (TIS) prepared by Intersecting Metrics (2021, Appendix H). The TIS, which is included as Appendix H, provides additional data and information related to the transportation analysis.

ROADWAY NETWORK

Access to the project site is provided via the surrounding roadway network which includes I-5, SR 75, I-15, East Harbor Drive at the intersection of 28th Street and via East Belt Street to the northwest, and Ward Road to the southeast.

State Highways

The following state highways are operated and maintained by Caltrans and provide regional access to the project site:

- **I-5** is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento, and the eastern portion of the San Francisco Bay Area. Near the project site, I-5 can be accessed by way of South 28th Street and South 29th Street via Boston Avenue to the north.
- **SR 75** begins as Palm Avenue at I-5 south of the project site, enters the city of Imperial Beach before becoming Silver Strand Boulevard and crossing into Coronado. SR 75 continues onto Coronado Island and across the San Diego-Coronado Bridge to the north of the project site where it reconnects with I-5.
- **I-15** is a north-south freeway that spans the United States from Southern California to the Canadian border crossing through the states of Nevada, Arizona, Utah, Idaho, and Montana. Within California, I-15 runs north-south between the City of San Diego and Riverside County and southwest-northeast through San Bernadino County. Near the project site, I-15 can be accessed via South 32nd Street.

Roadways

The following roadways provide access to the project site:

- East Harbor Drive is a bi-directional four-lane roadway east of the project site. The roadway runs parallel to two separate rail lines; the MTS light rail transit system and a heavy rail freight line. Near the project site, on-street parking is generally permitted on both sides of the roadway. Sidewalks are present on the west side of the roadway but absent from the eastern side. Bike lanes are present on both sides of the roadway within the vicinity of the project site.
- Belt Street is a bi-directional two-lane roadway which provides direct access to the project site via Sampson Street. East Belt Street is fronted by parking lots and heavy industrial businesses. Parking is not generally permitted on either side of the roadway. Discontinuous sidewalks are present along the roadway, and bicycle facilities are not present.
- Ward Road is a bi-directional two-lane roadway within Naval Base San Diego. Ward Road connects with Belt Street and East Harbor drive southeast of the project site. Although, Ward Road does not allow for public use, the roadway could potentially provide access for construction or emergency vehicles.

BICYCLE AND PEDESTRIAN FACILITIES

The bicycle and pedestrian transportation system in the City of San Diego is composed of local and regional bike lanes, bike paths, and bike routes. Bicycle facilities are classified as follows:

- Class I—off-street bike paths;
- Class II—on-street bike lanes marked by pavement striping;
- Class III—on-street bike routes that share the road with motorized vehicles;
- Bicycle Boulevard—local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate bicycle travel; and
- Cycle Track—bikeways located in roadway right-of-way but separated from vehicle lanes by physical barriers or buffers.

Pedestrian facilities (sidewalks) are present along all nearby streets in the vicinity of the project site, except for along the eastern side of East Harbor Drive where sidewalks are not present. Intermittent Class II bicycle facilities (i.e., on-street bike lanes) are present along East Harbor Drive.

TRANSIT SYSTEM

Two rail lines serving the MTS San Diego Trolley and freight are located northeast of the NASSCO shipyard. The Harborside Station located at East Harbor Drive and South 28th Street is approximately 800 feet northeast of the project site and is served by the Blue Line Trolley. The Blue Line Trolley runs from the Mexican border to Downtown San Diego and has seven to eight-minute headways during the weekday peak periods. The Mid-Coast Trolley Extension project is anticipated to open in late 2021 extending the Blue Line Trolley north from Downtown San Diego to the University Community area.

4.17.2 Regulatory Setting

STATE

Senate Bill 743

SB 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address transportation metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

In December of 2018, OPR published the most recent version of the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) which provides guidance for VMT analysis. The Office of Administrative Law approved the updated State CEQA Guidelines and lead agencies had an opt-in period until July 1, 2020 to implement the updated guidelines as they related to VMT. As of July 1, 2020, implementation of Section 15064.3 of the updated CEQA Guidelines apply statewide.

The District has not yet formally adopted any thresholds or guidance related to VMT analysis. Therefore, in the absence of adopted VMT guidelines and thresholds of significance, the VMT analysis here-in relies on the guidance provided in CEQA Guidelines Section 15064.3 and the OPR Technical Advisory (OPR 2018).

The OPR Technical Advisory states that lead agencies may screen out VMT using project size, maps, transit availability, and provision of affordable housing. Many agencies use these screening thresholds to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. These screening thresholds are identified below:

- *Small Project* – Projects that generate or attract fewer than 110 trips per day generally may be assumed to result in a less-than-significant transportation impact.
- *Map-Based Screening for Residential and Office Projects* – Residential and office projects located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.
- *Presumption of Less Than Significant Impact Near Transit Stations* – Lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT.
- *Presumption of Less Than Significant Impact for Affordable Residential Development* – Adding affordable housing to infill locations generally improves jobs-housing match in turn shortening commutes and reducing VMT. Further, low-wage workers in particular would be more likely to choose a residential location close to their workplace if one is available. In areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT.

Parking and Public Access

The California Coastal Act, specifically Section 30252, requires new development within the Coastal Zone to maintain and enhance public access to the coast by providing adequate parking facilities or providing substitute means of serving the development with public transportation. In accordance with the California Coastal Act, a significant parking and public access impact would occur if the proposed project would result in an insufficient parking supply

that, when considered with other modes of travel (e.g., bicycling, walking, transit use), would reduce the general public's access to the waterfront, as well as coastal commercial and recreational resources. To determine whether the proposed project would result in an insufficient parking supply, thereby inhibiting public coastal access, the analysis relies on the standards in the District's *Tidelands Parking Guidelines*.

4.17.3 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less-than-significant impact. Railroad right-of-way consisting of two rail lines, one serving the MTS San Diego Trolley and the other a freight heavy rail are located just northeast of the project site. Harborside Station which serves the Blue Line Trolley is located approximately 200 feet from the NASSCO shipyard and approximately 800 feet from the delineated project site. Additionally, MTS Bus service is available along Main Street located northeast of East Harbor Drive. The nearest bus stops are located along Main Street at 28th, 27th, and 26th Street.

The number of employees that access the NASSCO facilities during operational activities is not anticipated to change with implementation of the project. Therefore, the project would not result in an increase in demand for transit facilities.

Pedestrian facilities, including sidewalks and a pedestrian rail crossing at South 28th Street, are present in the vicinity of the project site and provide access to the Harborside Station. Additionally, intermittent Class II bicycle lanes are located along East Harbor Drive in the vicinity of the project stie.

As discussed in Section 2.3, "Project Site and Location," the project site is within the Harbor Drive Industrial Subarea of Planning District 4 of the certified PMP (San Diego Unified Port District 2020a). SANDAG is currently building the Bayshore Bikeway, 24 miles of continuous bicycle facilities around the San Diego Bay, which includes a Barrio Logan Segment in the vicinity of the project site. The Barrio Logan Segment will be located north of the project site along Harbor Drive from Park Boulevard to 32nd Street. Construction of the Barrio Logan Segment is anticipated to begin in 2022. Additionally, the PMP supports the build out of the Bayshore Bikeway project within the Harbor Drive Industrial area where the project is located (San Diego Unified Port District 2020a:79).

All proposed project improvements are located within the NASSCO shipyard; and thus, would not alter the surrounding roadway network. Therefore, the project would not conflict with future bicycle or pedestrian improvements. Additionally, the project would not alter daily operations; and thus, would not increase the demand for additional bicycle or pedestrian facilities.

For the reasons detailed above, the project would not result in an increase in demand for transit, bicycle, or pedestrian facilities, disrupt any such existing or planned service or facilities, or conflict with a program, plan, ordinance, or policy addressing these facilities. Therefore, the project would result in a less than significant impact and no mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

Less-than-significant impact. State CEQA Guidelines Section 15064.3 was added on December 28, 2018, to address the determination of significance for transportation impacts, which requires VMT as the basis of transportation analysis instead of congestion (such as LOS). The change in the focus of transportation analysis is intended to shift the focus from congestion to, among other things, reduction in greenhouse gas emissions, the development of multimodal transportation networks, and encouraging a diversity of land uses. State CEQA Guidelines Section 15064.3(b) identifies criteria for analyzing the transportation impacts of a project.

Section 15064.3(b)(1) addresses land use projects and describes that projects with specified proximity to "major" or "high quality" transit should be presumed to cause a less than significant transportation impact. As defined in PRC Section 21064.3, a "major transit stop" means a site containing an existing rail transit station, a ferry terminal served

by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. PRC Section 21155(b) defines a high-quality transit corridor as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. Additionally, Section 15064.3(b)(1) also describes that projects resulting in a decrease VMT in the project area as compared to existing conditions should also be presumed to have a less than significant effect.

Section 15064.3(b)(2) addresses transportation projects. The project would not include transportation improvements; and thus, would not be considered a transportation project. Therefore, this section does not apply.

Section 15064.3(b)(3) (Qualitative Analysis) explains that there may be conditions under which a qualitative rather than quantitative analysis of VMT is appropriate. This section states that if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may qualitatively analyze VMT generated by a project. Additionally, this section notes that for many projects, a qualitative analysis of construction traffic may be appropriate.

Section 15064.3(b)(4), Methodology, explains that the lead agency has discretion to choose the most appropriate methodology to evaluate VMT subject to other applicable standards such as CEQA Guidelines Section 15151 (standards of adequacy for EIR analyses).

The Technical Advisory, published by OPR in December 2018, provides advice and recommendations related to transportation analysis under SB 743, which agencies and other entities may use at their discretion. The Technical Advisory provides guidance related to screening thresholds for small projects to indicate when detailed analysis is needed or if a project can be presumed to result in a less than significant VMT impact. The Technical Advisory notes that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact, absent substantial evidence indicating otherwise (OPR 2018). Therefore, using OPR guidance, projects that would generate fewer than 110 trips per day would be presumed to result in a less-than-significant VMT impact.

The Technical Advisory notes that projects proposed within 0.5 mile of an existing major transit stop or an existing stop along a high-quality transit corridor generally may be assumed to cause a less-than-significant transportation impact unless project-specific or location-specific information indicates that the project would still generate significant levels of VMT. PRC Section 21064.3 defines a major transit stop as a site containing an existing rail transit station, a ferry terminal served by either bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. PRC Section 21155 defines a high-quality transit corridor as a fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Construction

As detailed in Section 2.5.3., "Construction Equipment and Workers," over the duration of construction, approximately 10 construction workers would access the construction site each day. Additionally, construction activities are anticipated to generate approximately two contractor vehicle truck trips per day to transport miscellaneous material and equipment. The majority of contractor equipment, materials, and personnel will be mobilized and demobilized from the project site via barge or water access.

Project construction activities would be temporary and intermittent in nature; and thus, would not result in long-term increases in vehicular trips. Additionally, the VMT of construction workers is not newly generated; instead, it is redistributed throughout the regional roadway network based on the different work sites in which workers travel to each day. Therefore, construction workers are not generating new VMT each day, only redistributing it. Therefore, construction activities are not expected to significantly increase VMT in the region.

Operations

The project includes replacement or repair to the floating dry dock, Repair Complex Wharf, quay wall revetment, and structural piles. The repairs and improvements will not expand or add any new facilities or infrastructure within the

project site. Therefore, the project is not anticipated to change the number of employees that access the NASSCO facilities on a daily basis, nor are they anticipated to increase the number of deliveries, vendors, or other services to the facility. Because no new vehicle trips will be generated during operation of the project, the project will generate fewer than 110 new daily trips; thus, meeting the screening criteria for small projects outlined in the Technical Advisory and being presumed to result in a less-than-significant VMT impact.

Additionally, the project would be located approximately 800 feet from the Harborside Station, a stop along the Blue Line Trolley. The Blue Line Trolley, which provides service between the Mexican border and Downtown San Diego, has headways of seven to eight-minute during the morning and afternoon peak commute periods. Therefore, the Harborside Station is considered a major transit stop as defined by PRC Section 21064.3. Thus, using guidance provided in the OPR Technical Advisory, because the project is located within 0.5 mile of an existing major transit stop it is presumed to result in a less-than-significant VMT impact.

Summary

For the reasons detailed above, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b); and thus, would result in a less than significant impact to VMT and no mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less-than-significant impact.

Construction

Existing designated areas at or near the construction site would be utilized for staging or laydown and contractors would park within the limits of the project site in designated equipment and material staging areas. If needed, the contractor would use high occupancy vehicles to transport the approximately 10 construction workers from the contractor's facility to the project site and back daily. Contractors would park within the limits of the project site in designated equipment and material staging areas. Vehicles would access the project site from East Harbor Drive.

Operations

All improvements and repairs associated with the project would occur to existing facilities within the NASSCO shipyard; and thus, would not alter the physical transportation network external to the project site. Therefore, the project would not require the construction, re-design, or alteration of any public roadways. Additionally, implementation of the project would not change operational activity or the types of vehicles accessing the project site. Thus, the operation of the project would not result in hazards because of design features or incompatible vehicular uses.

Summary

For the reasons detailed above, the project would not substantially increase transportation-related hazards; and thus, would result in a less than significant impact and no mitigation is required.

d) Result in inadequate emergency access?

Less-than-significant impact. The project would not require the construction, re-design, or alteration of any public roadways and construction activities would occur primarily within the NASSCO facility. Emergency access would be subject to review by the District and responsible emergency service agencies; thus, ensuring the project would be designed to meet all applicable emergency access and design standards. NASSCO BMP #102: Emergency Response requires anyone who works at the NASSCO facility to be aware of how to respond to emergencies, the location of the nearest fire extinguisher, and their evacuation or muster location (NASSCO 2016). Additionally, NASSCO has an onsite fire and emergency response team to respond to medical emergencies. Additionally, the southernmost site access point at the intersection of East Harbor Drive, Belt Street, and Ward Road provides as secondary ingress/egress point and access for emergency services if needed. Therefore, the project would not result in inadequate emergency access; and thus, would result in a less than significant impact and no mitigation is required.

e) Result in an insufficient parking supply that would lead to a decrease in public coastal access?

Less-than-significant impact.

Construction

During the entirety of project construction, approximately 10 construction workers would access the project site on a daily basis. Therefore, the parking demand associated with construction activity would be a maximum of 10 parking spaces. Contractors would be required to park within the limits of the project site in designated equipment and material staging areas and would not displace existing NASSCO or other public parking. Parking for construction workers would either use high occupancy vehicles to transport workers to and from the construction site from the contractor's office(s) on a daily basis, or would be provided parking in the immediate vicinity of the construction site within NASSCO's leasehold. Additionally, no parking lots would be used for construction staging or laydown.

Operations

As discussed above, the project would not result in any changes to operations. For this reason, the number of daily employees accessing the site is expected to remain the same; therefore, no additional parking demand is anticipated during operation of the project. Additionally, the nature of the area provides waterfront industrial land for marine-oriented businesses. As described in the PMP, the project site is located in the Harbor Drive Industrial Subarea which is encompassed entirely by NASSCO (San Diego Unified Port District 2020a:17). The NASSCO shipyard is located on private land that is not accessible to the public; therefore, public coastal access in relation to parking supply would not be affected.

Summary

The operational nature of the NASSCO shipyard would not change due to the project, and the number of employees is expected to remain the same. Additionally, the project site is not accessible to the public; therefore, public coastal access in relation to parking supply would not be affected during operation. During project constructions at most, 10 parking spaces would be required to accommodate construction workers. Additionally, parking lots would not be used for construction staging or laydown, and parking requirements related to contractor parking would not displace NASSCO or public parking. For these reasons, the project would not result in insufficient parking supply that would lead to a decrease in public coastal access; and thus, would result in a less than significant impact, and no mitigation is required.

Required Mitigation Measures

The project would not result in significant impacts associated with transportation; thus, mitigation measures are not required.

4.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	☐ Yes			☒ No
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☐	☒

4.18.1 Environmental Setting

AB 52, signed by the California Governor in September of 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in PRC Section 21074. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration. No California Native American tribes have requested notification for environmental review projects under CEQA within the District's jurisdiction.

A records search at SCIC was conducted for the project site and quarter-mile radius to determine if tribal cultural resources are present within the project site. No tribal cultural resources that are listed in or eligible for listing in the CRHR were identified during the records search. Additionally, a Sacred Lands File Search of the project site and vicinity was obtained from NAHC. No Sacred Lands were identified by the NAHC.

4.18.2 Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

No impact. The SCIC records search resulted in the identification of no tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, within the project site including the construction staging area. Therefore, no impact would occur.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

No impact. Under Public Resources Code Section 21080.3.1, a lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project if the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of projects in the geographic area that is traditionally and culturally affiliated with the tribe. No California Native American tribes have requested to be informed of projects by the District; therefore, there is no trigger to begin consultation under AB 52, resulting in no resources identified as tribal cultural resources under Public Resources Code Section 21074. Therefore, no impact would occur.

Required Mitigation Measures

The project would not result in significant impacts associated with tribal cultural resources. Mitigation measures are not required.

4.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

4.19.1 Environmental Setting

The utility providers that serve the project site are summarized in the following sections.

WATER

Water service is provided to the project site by the City of San Diego Public Utilities Department. Based on the City 2015 Urban Water Management Plan, the potable water demand forecast for the City's service area is 180,540 acre-feet per year (AFY) in 2020 and 246,801 AFY in 2040 (City of San Diego 2016: Table 4-3).

WASTEWATER

Wastewater treatment service is provided to the project site by the City of San Diego Public Utilities Department Wastewater Branch. Based on the City 2015 Urban Water Management Plan, the City collects, treats, and disposes of approximately 180 million gallons per day (mgd) of wastewater. Wastewater from the City is treated by the North City Water Reclamation Plant, South Bay Water Reclamation Plant, and Point Loma Wastewater Treatment Plant. The

Point Loma plant currently treats the wastewater generated by the project site and has a treatment capacity of 240 mgd and a peak wet weather capacity of 432 mgd (City of San Diego 2016).

STORMWATER DRAINAGE

Stormwater runoff from the project site is captured and contained for subsequent discharges to the San Diego Metropolitan Sanitary Sewer System.

ELECTRIC POWER AND NATURAL GAS

SDG&E provides electricity and natural gas services to the project site. SDG&E serves approximately 3.6 million people over an area that spans approximately 4,100 square miles in San Diego and southern Orange counties (SDG&E 2021).

SOLID WASTE

The City of San Diego Environmental Services Department is responsible for the collection and disposal of refuse, recyclables, household hazardous waste, and green waste in the City of San Diego. The department operates one full-service landfill and organic recycling facility, the Miramar Landfill, which is located at 5180 Convoy Street in the City of San Diego. The Miramar Landfill receives approximately 870,000 tons of trash per year and is anticipated to reach capacity by 2025 (City of San Diego 2021).

NASSCO has previously used landfills within the County of San Diego for solid waste disposal, including the Sycamore and Otay Landfills operated by Republic Services. According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System database, the Sycamore Landfill had a remaining capacity of 113,972,637 cubic yards as of December 2016 with an estimated closure date of December 2042. The Otay Landfill had a remaining capacity of 21,194,008 cubic yards as of May 2016 and estimated closure date of February 2030 (CalRecycle 2021).

4.19.2 Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less-than-significant impact. The project would require existing utility lines to be replaced and reconfigured to support the existing demands of dockside operations. The utilities consist of fresh water, salt water, compressed air, compressed gases, and electrical, which are routed from existing distribution systems throughout the project site. Project implementation would not result in a change in demand on municipal systems.

The project's effects on water, wastewater treatment or stormwater drainage, electric power, natural gas, and telecommunication facilities are described in the following sections.

Water

Construction activities would require the consumption of water for suppressing fugitive dust emissions, preparing and placing concrete, and other general uses. Construction-related water use would represent a small demand on local and regional water supplies that could be accommodated by the existing provider. The project would not generate a permanent increase in water demand compared to existing conditions. Moreover, the project does not propose or require any new or expanded water facilities or infrastructure, other than the replacement and reconfiguration of existing water lines that connect to the project components that are being replaced.

Wastewater

As discussed above under Section 4.14, Population and Housing, the project would not result in an increase in population. The temporary jobs generated during project construction would be drawn from the local workforce that is currently served by existing wastewater treatment facilities, and no permanent jobs would be created. Project-generated wastewater requiring treatment would be limited to onsite construction personnel and activities. These activities, primarily limited to a modest increase in restroom use, would not generate a significant amount of new wastewater. The minimal wastewater generated from project construction would not exceed the requirements of any wastewater treatment facilities. In addition, the project would not generate a permanent increase in demand for wastewater treatment compared to existing conditions. As such, no new or expanded wastewater facilities or infrastructure would be required and none are proposed.

Stormwater Drainage

As discussed in Section 4.10, Hydrology and Water Quality, the project would result in a net increase in overwater coverage of 10,210 square feet for permanent structures (i.e., floating dry dock, mooring dolphins, approach pier fender system, and Repair Complex Wharf) and 300 square feet for temporary structures (i.e., catwalk and removable brow). Stormwater runoff from the NASSCO facility, including the new overwater structures, would be captured and contained in the existing SWDS system for subsequent, controlled discharge to the San Diego Metropolitan Sanitary Sewer System. The SWDS has a capacity to retain an excess of 33,858,000 gallons, which is enough capacity to capture a 100-year storm event, including when accounting for the additional surface areas proposed by the project. NASSCO would be required to maintain all existing operational and maintenance BMPs and comply with the RWQCB's Order R9-2016-0116, which regulates polluted runoff, for the new overwater structures. NASSCO's existing NPDES permit would be updated to reflect the increase in overwater coverage. As such, no new or expanded stormwater drainage facilities would be required and none are proposed.

Electric Power and Natural Gas

As discussed in Section 4.6, Energy, construction activities would require the consumption of diesel fuel associated with the operation of heavy-duty construction equipment, material deliveries, and debris hauling; gasoline associated with worker commute trips; and minor amounts of electricity associated with operation of electric-powered construction equipment. Construction-related energy use would represent a small demand on local and regional fuel and electricity supplies that could be accommodated by existing facilities and infrastructure. No changes in operational energy use would occur. Therefore, the project would not result in any new or expanded energy facilities or infrastructure.

Telecommunication Facilities

The project would not increase the demand for telecommunications from existing conditions or require the construction of additional telecommunication facilities.

Summary

Based on the above discussion, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. Therefore, impacts from construction and operation would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less-than-significant impact. Refer to Section 4.19.2(a) above. Construction-related water use would represent a small demand on local and regional water supplies that could be accommodated by the existing provider. As there is no landside construction, including any grading activities, there would not be a need for regular watering to control onsite dust. Moreover, the project would not generate a permanent increase in water demand compared to existing conditions. Therefore, there would be sufficient water supplies available to serve project construction and operation and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

Less-than-significant impact. Refer to Section 4.19.2(a) above. The minimal wastewater generated from project construction would not exceed the requirements of any wastewater treatment facilities. In addition, the project would not generate a permanent increase in demand for wastewater treatment compared to existing conditions. Therefore, the wastewater treatment provider would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-than-significant impact. The project would require removal or demolition of existing structures and disposal of the subsequent debris. Although details are not known at this time, the existing floating dry dock would be sold or disposed of outside of California and the United States, with Mexico being the most likely recipient. Non-hazardous construction trash and debris would be sent to approved recycling facilities in accordance with the City's Recycling Ordinance and C&D Debris Deposit Ordinance, which requires recycling of a minimum of 65 percent of the construction waste. Remaining non-hazardous construction trash and debris would be handled through NASSCO's current trash hauler, Republic Services, and disposed at local landfills located outside the coastal zone. These landfills are anticipated to include Republic Services Sycamore and Otay Landfills in San Diego County, California.

Project construction is not anticipated to generate hazardous waste. However, if generated, RCRA and non-RCRA hazardous waste would be removed by NASSCO's current hazardous waste haulers, Univar Solutions or US Ecology. All hazardous waste would be transported under a waste manifest to an authorized hazardous waste Treatment, Storage, and Disposal Facility. These facilities may include US Ecology/Univar Solutions Clearfield Plant in Clearfield, Utah; Clean Harbors Buttonwillow LLC in Buttonwillow, California; or US Ecology Nevada in Beatty, Nevada.

Removal of the existing Repair Complex Wharf is anticipated to generate approximately 100 creosote-treated timber piles. In conformance with California Department of Toxic Substances Control standards, the timber piles would be managed and manifested as hazardous waste and transported to a Class I hazardous waste landfill for disposal. If other hazardous waste is generated, RCRA and non-RCRA hazardous waste would be removed by NASSCO's current hazardous waste haulers, Univar Solutions or US Ecology. All hazardous waste would be transported under a waste manifest to an authorized hazardous waste Treatment, Storage, and Disposal Facility.

No changes in operational generation of solid waste are anticipated. Operational solid waste generation would continue to comply with applicable statutes and regulations defined in Section 4.19.2(e) below, including AB 939 and AB 341 to support statewide goals of diverting solid waste from landfills. It is anticipated that local recycling facilities and landfills have adequate capacity to accommodate the solid waste that would be temporarily generated from construction activities. Therefore, impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less-than-significant impact. Refer to Section 4.19.2(d) above. The following statutes and regulations related to solid waste are applicable to local jurisdictions and solid waste collectors:

- AB 939 (1989) California Integrated Waste Management Act: Requires all California cities, counties, and approved regional solid waste management agencies to divert 25 percent of their solid waste by 1995 and 50 percent by 2000. AB 939 established the California Integrated Waste Management Board, which later became CalRecycle.
- AB 341 (2012) Mandatory Recycling: Increases California's waste diversion goal from 50 percent to 75 percent by 2020. AB 341 also includes mandatory commercial recycling to reduce greenhouse gas emissions. All commercial businesses that generate more than four cubic yards or more of solid waste per week are required to have a recycling program in place.

- AB 1594 (2014) Green Material Disposal: Effective January 1, 2020, jurisdictions can no longer count green material used as alternative daily cover (ADC) at landfills toward their recycling goals. Jurisdictions are required to develop plans to divert green material from landfills.
- Senate Bill (SB) 1383 (2016) Short-Lived Climate Pollutants – Organic Waste Methane Emissions Reductions: Requires a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. SB 1383 also requires at least 20 percent of currently disposed edible food be recovered for human consumption by 2025. Jurisdictions, haulers, and generators are required to implement programs to comply with the law by January 1, 2022.
- City of San Diego Recycling Ordinance: Provides recycling requirements for City-serviced multi-family residences, privately serviced businesses, commercial/institutional facilities, apartments, condominiums and permitted special events.
- City of San Diego C&D Debris Deposit Ordinance: Requires construction, demolition, and remodeling projects needing building, combination (i.e., permits for structural modifications to existing structures), and demolition permits pay a refundable deposit and divert at least 65 percent of their debris by recycling, reusing, or donating usable materials.
- City of San Diego Zero Waste Plan (City of San Diego 2015): Part of the City's approved Climate Action Plan, which sets goals of achieving 75 percent diversion of solid waste by 2020, 90 percent diversion of solid waste by 2035, and zero solid waste by 2040.

The project would not conflict or cause a local jurisdiction or service provider to conflict with any federal, state, or local solid waste regulations, including AB 939 (California Integrated Waste Management Act), AB 341 (Mandatory Recycling), AB 1594 (Green Material Disposal), or SB 1383 (Short-Lived Climate Pollutants: Organic). Moreover, waste generated from construction activities would be required to comply with the City Recycling Ordinance and the City's C&D Debris Deposit Ordinance. No changes in operational generation of solid waste are anticipated.

In addition, hazardous wastes would be separated, classified, and disposed of at an appropriate landfill that accepts hazardous waste. The disposal of hazardous wastes would be conducted in accordance with applicable regulations and laws, including the Federal Toxic Substances Control Act, RCRA and Hazardous Solid Waste Act Amendments, Environmental Health Standards for the Management of Hazardous Waste (CCR Title 22, Division 4.5, Section 66001 et seq.), California Labor Code (Division 5, Parts 1 and 7), and San Diego County Code (Title 6, Division 8) (see Section 4.9, Hazards and Hazardous Waste, for additional information). No changes in operational generation of hazardous wastes are anticipated.

Based on the discussion above, project construction and operation would comply with all federal, state, and local management regulations related to solid waste. Impacts would be less than significant.

Required Mitigation Measures

The project would not result in significant impacts associated with utilities and service systems. Mitigation measures are not required.

4.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire.				
Is the project located in or near state responsibility areas or lands classified as very high fire hazard severity zones?				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		☐ Yes		☒ No
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

4.20.1 Environmental Setting

The project site is within a local responsibility area and is designated by CAL FIRE as a non-VHFHSZ (CAL FIRE 2009). The nearest lands classified as a state responsibility area are approximately 7.8 miles southeast of the project site and the nearest lands classified as VHFHSZ are approximately 1.9 miles north of the project site (CAL FIRE 2007; CAL FIRE 2009). Therefore, the project site is not located in or near a state responsibility area or lands classified as VHFHSZ; no further discussion related to wildfire is required.

4.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No impact. As discussed in Section 4.20.1, the project site is not located in or near a state responsibility area or lands classified as VHFHSZ; therefore, no impact would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No impact. As discussed in Section 4.20.1, the project site is not located in or near a state responsibility area or lands classified as VHFHSZ; therefore, no impact would occur.

c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No impact. As discussed in Section 4.20.1, the project site is not located in or near a state responsibility area or lands classified as VHFHSZ; therefore, no impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. As discussed in Section 4.20.1, the project site is not located in or near a state responsibility area or lands classified as VHFHSZ; therefore, no impact would occur.

Required Mitigation Measures

The project would not result in significant impacts associated with risk of wildfire. Mitigation measures are not required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

4.21.1 Environmental Setting

State CEQA Guidelines Section 15064(h)(2) states that:

> A lead agency may determine in an initial study that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. When a project might contribute to a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through mitigation measures set forth in a mitigated negative declaration, the initial study shall briefly indicate and explain how the contribution has been rendered less than cumulatively considerable.

State CEQA Guidelines Section 15130(b) identifies the following three elements that are necessary for an adequate cumulative analysis:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency, or a summary of projections contained in an adopted general plan or related planning document that describes or evaluates conditions contributing to the cumulative effect.
- A summary of expected environmental effects to be produced by those projects. The summary shall include specific reference to additional information stating where the information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects and an examination of reasonable options for mitigating or avoiding any significant cumulative effects.

A list of past, present, and probable future projects is provided in Table 4.21-1. Past projects include all historic development that has combined to create the existing environmental condition; however recently completed projects (last 5 years) within District jurisdiction that are now operational are included for reference in Table 4-4. Present projects are defined as those that are under construction but not yet operational. Probable future projects are defined as those for which a development application has been submitted or credible information is available to demonstrate that project development is the probable outcome. Projects were identified based on publicly accessible information on the District website and communications with District staff members.

Projects were selected based on their location within the cumulative study area for the project and the potential to cause impacts related to the impacts of the project. The geographic scope of the cumulative impact analysis area varies based on the environmental topic. The study area for each environmental topic is described under the environmental topic headings below.

Table 4.21-1 Cumulative Projects List

Project Number	Name	Location	Description	Status
1	Dole Fresh Fruit Refrigerated Rack Project	850 Water Street, within the District's Tenth Avenue Marine Terminal	Involved the installation of five new refrigerated racks with an additional 94 electrical outlets, to increase outlets from 669 to 763. Improvements increased storage capacity within the existing footprint to accommodate up to three new larger ocean-going vessels.	Completed.
2	San Diego Continuing Education – Cesar Chavez Campus	Intersection of National Avenue and Cesar E. Chavez Parkway	New Cesar E. Chavez Campus is a 67,924-square-foot school facility with 22 classrooms to serve 720 students. The facility includes a multi-purpose room and administrative offices.	Completed.
3	BAE Systems-Pier 1 North Drydock, Associated Real Estate Agreements and Removal of Cooling Tunnels Project	2205 East Belt Street	Replacement of a wet berth with a new floating drydock and removal of subsurface cooling tunnels. Dredging activities were estimated to result in approximately 395,000 cubic yards of sediment.	Completed.
4	Shipyard Sediment Remediation Project	San Diego Bay between Sampson Street extension to the north and Schley Street to the south from the shoreline to the U.S. Pierhead Line to the west and a portion of British Aerospace Systems facility, San Diego, CA 92113	Consisted of the dredging of sediment adjacent to shipyards in the San Diego Bay, the dewatering and solidification of the dredged material on-shore, treatment of decanted water, and the transport of the removed material to an appropriate landfill for disposal.	Completed.
5	Naval Base Point Loma Fuel Pier (P151) Replacement and Dredging	Naval Station Point Loma and Alternative Bait Barge locations within state lands, San Diego, CA	Temporary Space and Naval Warfare Systems Center (SSC) marine mammal facilities at Naval Main and Anti-Submarine Warfare Command (NMAWC) and relocation of the program to NMAWC; demolished existing Naval Base Point Loma Fuel Pier in phases so as to leave pier operational throughout project; constructed 71,180-square-foot double-deck replacement pier and performed associated dredging; returned SSC marine mammal program to original location.	Completed.

Project Number	Name	Location	Description	Status
6	Pier 12 Replacement and Dredging at Naval Base San Diego	Pier 12 at Naval Base San Diego	Demolition of an inadequate existing pier (Pier 12); dredging in berthing and approach areas for a new pier; dredged material disposal at an approved ocean disposal site and permitted upland landfill; construction of a new pier and associated pier utilities, including upgrades to the electrical infrastructure at the adjacent Pier 13; and reuse of demolition concrete to create fish enhancement structures (artificial reefs). The purpose of the project was to address the current and impending shortfall at Naval Base San Diego of pier infrastructure necessary to support modern Navy ship classes with deep draft-power intensive or power intensive requirements.	Completed.
7	Shelter Island Boat Launch Facility Improvements Project	2210 Shelter Island Drive, San Diego, CA 92106	Repair, maintenance, and replacement of the boat launch ramp, jetties (including public walkways), gangways, and floating docks, as well as minor improvements to the kayak launching area, restrooms, and parking.	Completed.
8	Cold Ironing Phase 2 at B Street and Broadway Pier	B Street Pier and Broadway Pier, 1140 and 1000 North Harbor Drive	Infrastructure components to provide shore power to existing terminal operations at the B Street and Broadway Piers (three berths) to reduce air pollutant emissions and greenhouse gas emissions while cruise ships are berthed. Initially, shore power will be available to one ship at a time; in subsequent years, two ships will be able to use shore power at the same time.	Currently in design and slated for future construction.
9	San Diego Bay and Imperial Beach Oceanfront Fireworks Display Events	Throughout District tidelands	Addition of an Ordinance to the Port District Code that established a program to regulate fireworks. Specifically, the program governs the existing and proposed new fireworks display events requiring a discretionary action by the District or operated by the District's tenants that occur within the San Diego Bay and Imperial Beach Oceanfront. Four new fireworks display events were anticipated to require a future discretionary action by the District, including three displays along the Chula Vista Bayfront and one display along the National City Bayfront.	EIR was certified and Ordinance was adopted on May 25, 2017.
10	Pier 8 Replacement Naval Base San Diego	Pier 8 at Naval Base San Diego	Demolition of the inadequate existing Pier 8, construction of a replacement Pier 8, and provision of associated pier utilities. The purpose of the proposed action is to address the current and impending shortfall at Naval Base San Diego of pier infrastructure necessary to support modern Navy ship classes with deep-draft and power-intensive requirements.	Under construction.
11	Tenth Avenue Marine Terminal Redevelopment Plan and Demolition and Initial Rail Component Project	686 Switzer Street	Program- and project-level EIR analysis. The program component looks at Maximum Practical Capacity of three distinct cargo nodes (e.g., Refrigerated Container, Neo-bulk/Break Bulk, Dry Bulk) to the horizon year of 2035. Long-term infrastructure investments may include up to five gantry cranes, additional and consolidated dry bulk storage	Under construction.

Project Number	Name	Location	Description	Status
			capacity, enhancements to the existing conveyor system, demolition of molasses tanks and Warehouse C, additional open storage space, and on-dock intermodal rail facilities. Project-level improvements would be completed by June 30, 2020, and involve demolition of two transit sheds, installation of a small gear-shack with restrooms and outdoor storage space, and on terminal rail upgrades. Project improvements do not involve any in-water work; all program- and project-level improvements would be landside.	
12	Portside Pier Restaurant Redevelopment Project	1360 North Harbor Drive	Redevelopment of an existing waterfront restaurant with a new facility, including new pilings, piers, decking, and structure. Development involves demolition of an existing restaurant and supporting structure (including 66 piles) and redevelopment with a new, two-story restaurant and supporting structure (on 53 piles). The new facility would be approximately 33,577 square feet and include three distinct dining establishments, a coffee and gelato shop, an expanded dock-and-dine for short-term boat berthing, and a public viewing deck. The project would involve an approximately 8,722-square-foot increase in building floor area and a 4,480-square-foot net increase in water coverage. Restaurant seating would be increased by 464 seats. A new public viewing deck with approximately 108 seats is proposed and the replacement dock and dine boat dock would allow an increase in boat slips from 2 to 12; however, 4 would be constructed initially.	Completed July 2020.
13	B Street Pier Cruise Ship Terminal Maintenance Projects	B Street Pier, 1140 North Harbor Drive	Projects on B Street Pier required to address routine maintenance requirements to improve safety, security, integrity, aesthetics, and comfort of this facility. Roof replacement, roll-up and rolling gate doors installation, fire system upgrades, ceiling and hangers cleaning and painting, mobile gangway and platform painting, and installation of photovoltaic system.	Completed.
14	B Street Mooring Dolphin Project	B Street Pier, 1140 North Harbor Drive	Proposal to install moorings off the end of B Street Pier to allow for larger cruise ship docking.	Draft EIR was circulated February 2013. The Final EIR has not yet been certified. Project on hold.
15	Fifth Avenue Landing Redevelopment	Southerly paper end of Fifth Avenue, between the back of the Convention Center and South Embarcadero Park, San Diego, CA 92101	Proposed development would include: two hotel structures; one 44-story, approximately 498-foottall, 850-room hotel tower; and one 5-story, approximately 82-foot-tall, 565-bed, lower-cost, visitor-serving hotel; a 263-space parking structure; retail; meeting space; ancillary guest amenities; an optional bridge connecting the hotel to the Convention Center; approximately 85,490 square feet of public access areas, with approximately 3,190 square feet at ground level and 82,300 square feet	The Board rejected the project in December 2020.

Project Number	Name	Location	Description	Status
			on a podium level; and expansion of the marina by an additional 57,696 square feet of dock space. The project would maintain the existing 35-footwide bayfront promenade.	
16	Port Master Plan Update (PMPU)	Throughout District tidelands	Major update of the Port Master Plan that is anticipated to include new topical sections, or elements, to provide Baywide guidance related to Land and Water Use, Coastal Access and Recreation, Mobility, Natural Resources, Safety and Resiliency, and Economic Development.	The Draft Program EIR was released for public review in November 2021 and the Final Program EIR is currently in progress.
17	Metro Center Project	West side of National Avenue between Commercial and 16th Streets	Consists of 160,600 square feet of regional shopping center uses, 163,300 square feet of retail space, and a 152,000-square-foot lumber store.	Foreseeable project, not entitled.
18	Mitsubishi Cement Corporation	850 B. Water Street, within District's Tenth Avenue Marine Terminal	Involves improvements to Warehouse C at the Tenth Avenue Marine Terminal to import up to 500,000 metric tons of cement per year with an estimated 20,000 annual customer truck trips, for an average of less than 55 trucks per day during operations, with a maximum 192 trucks visiting the site per day.	Foreseeable project, not entitled. Final Subsequent EIR released November 2020. Consideration of the Final EIR continued.
19	Harbor Island West Marina Redevelopment	2040 Harbor Island Drive, San Diego, CA 92101	Involves demolition of 23,000 square feet of existing building and construction of 15,000 square feet of new office, deli, and retail, as well as reconfiguration of an existing marina. The project would construct a new 12-foot-wide public promenade and reduce the number of boat slips from 620 to 603.	Foreseeable project, not entitled. Draft Mitigated Negative Declaration (MND) released December 2019.
20	Lockheed Martin Harbor Island Facilities Demolition and Sediment Remediation Project	1160 Harbor Island Drive, San Diego, CA 92101	Involves demolition of 5,500 square feet of building and removal of a pier and trolley rail.	Final EIR certified December 2020. Under construction.
21	National City Bayfront Projects and Plan Amendments	Generally north of Sweetwater Channel, south of Civic Center Drive, east of National City Marine Terminal, and west of Paradise Marsh and Interstate 5, National City, CA 91950	Includes several landside and waterside improvements, including a recreational vehicle park, modular cabins, dry boat storage, hotels, an expanded marina, a rail connector track and storage track, road closures, Segment 5 of the Bayshore Bikeway, restaurants, and retail development. The project also includes corresponding amendments to the District's Port Master Plan and the City of National City's General Plan, Local Coastal Program, Harbor District Specific Area Plan, Land Use Code, and Bicycle Master Plan.	Foreseeable project, not entitled. Draft EIR released in September 2021.
22	Central Embarcadero Redevelopment	Generally south of the USS Midway Museum and Harbor Drive, west of the Manchester Grand Hyatt and Kettner Boulevard, and north and east of San Diego Bay, San Diego, CA 92101	Includes redevelopment of approximately 40 acres of land and 30 acres of water. Project design is conceptual at this time, but currently includes an observation tower, boat slips, an aquarium, public park space, hotels, retail, office space, an educational center, and parking.	Foreseeable project, not entitled. The project is in the planning stages.

Project Number	Name	Location	Description	Status
23	HII San Diego Shipyard Inc. Marginal Wharf Repair and As-Needed Pile Replacement Project	1995 Bay Front Street, San Diego, California	Involves two components consisting of demolition, reconstruction, and reconfiguration of piers and wharves. Component 1 is the replacement of three wharves that have severely deteriorated. Component 2 includes the demolition of one pier and the as-needed pile replacement of the remaining five piers.	MND adopted on April 9, 2019. Under construction. Additional project components currently being analyzed through an addendum to the 2019 MND.
24	Redevelopment of the Elbow Parcel on East Harbor Island	7-acre parcel of land north of the East Basin Industrial Subarea in the current PMP known as the Elbow Parcel	Involves an approximately 500-room hotel with other amenities including swimming pools, spas, gym, retail shops, open space event lawn, and a viewing deck.	Foreseeable project, not entitled. Environmental addendum in progress and construction anticipated in 2023.
25	Bayside Performance Park Enhancement Project	Embarcadero Marina Park South (EMPS)	Involves the replacement and enhancement of structures in EMPS and new facilities including the Bayside Performance Park, a new performance and event venue to hold up to 10,000 attendees and various other park improvements.	EIR certified on January 9, 2018. Construction completed.
26	3121 Boston Avenue Duplex – Project 409094	3121 Boston Avenue	Includes a 2,535-square-foot residential duplex on a 7,704 square-foot site that contains an existing 1,892-square-foot residential duplex.	Unknown. The CDP was issued in September 2015.
27	Workshop for Warriors CDP/SDP – Project 528711	2984, 2970, 2960, 2948, 2940 Main Street	Includes an 89,000-square-foot warehouse/ trade school/ roof deck and parking, within 1.28 acres.	Unknown.
28	Boston Commons – Project 176117	2893 Boston Avenue	Involves five affordable residential units for rent on a 0.24-acre site.	Unknown.
29	The Barrio Flats NDP/CDP – Project 541700	2257–2275 Logan Avenue	Involves the demolition of existing buildings and construction of a new 38,375-square-foot, four story, mixed-use building that would include: 24 residential units, 10 hotel rooms, and 5 retail spaces. The existing building on the 0.41-acre site would remain.	Final MND released July 2019. The SDP/CDP was issued in October 2019.
30	U-Stor-It – CDP – Project 586276	2209 National Avenue	Involves the demolition of an existing commercial building within the 0.807-acre site, for the development of a new three-story 68,878-square-foot self-storage building over two levels, and 90,297 square feet of underground basement.	Unknown. The CDP was issued in November 2018.
31	Family Counseling Center CDP – Project 490726	2130, 2134, and 2142 National Avenue	Involves the demolition of two single dwelling units and one commercial building located on three contiguous lots consisting of 0.34 acre. Includes the construction of a two-story family counseling center facility totaling 8,129 square feet.	Unknown. The CDP was issued in December 2016.
32	2142 Logan Avenue SDP/CDP – Project 585277	2142 Logan Avenue	Involves a mixed-use building to include 11 artist studios, retail sales, offices, and gallery spaces within the 0.10-acre site.	Final ND released December 2018. The SDP/CDP was issued in March 2019.
33	BAE Systems Waterfront Improvement Project	2205 E Belt Street	Involves the maintenance, repair, and replacement project for waterfront infrastructure associated with mooring and operational facilities on approximately 35.9 acres within the BAE Systems San Diego Ship Repair Yard	Final EIR certified February 2022.

4.21.2 Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than significant with mitigation incorporated. As discussed in Sections 4.1, 4.9, 4.10, and 4.13, project construction would result in a health risk exceeding an established threshold, potential releases of hazardous materials into the environment, and degradation of water quality, which would be a potentially significant impact. With implementation of BMPs and mitigation measures **MM-AQ-1, MM-BIO-4, MM-HAZ-1 through MM-HAZ-11**, and **MM-WQ-1** and **MM-WQ-2**, the project would not substantially degrade the quality of the environment.

As discussed in Section 4.4, Biological Resources, project construction has potential to result in direct and indirect effects on eelgrass habitat and aquatic wildlife if they were to be present in the project site, which would be a potentially significant impact. With implementation of **MM-BIO-1 through MM-BIO-6**, the project would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

As described in Section 4.5, Cultural Resources, and Section 4.18, Tribal Cultural Resources, no cultural resources were identified within the project site. In addition, it is not anticipated that intact cultural or paleontological resources are present where ground-disturbing activities would occur because ground disturbance would be limited to artificial fill. Therefore, the project would not eliminate important examples of the major periods of California history or prehistory.

Following construction, the project site would be returned to a similar condition as the existing setting. The project would not introduce new activities during operations that would have potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory.

Required Mitigation Measures

With implementation of **MM-BIO-1 through MM-BIO-6** described in Section 4.4, **MM-HAZ-1 through MM-HAZ-11** described in Section 4.9, and **MM-WQ-1** and **MM-WQ-2** described in Section 4.10, the project would not result in significant impacts.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than significant with mitigation incorporated. Because the project would have no impact on agriculture and forest resources, mineral resources, and tribal cultural resources, and wildfire, it would have no potential to contribute to significant cumulative impacts related to those resource areas. The project would have less than significant impacts on aesthetics, cultural resources, energy, greenhouse gas emissions, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems. With mitigation, the project would have a less than significant impact on air quality, biological resources, geology and soils, hazards and hazardous materials, and hydrology and water quality. The project would not result in any significant and unavoidable impacts. Analysis of the project's cumulative effects is provided below for each environmental topic

addressed in Sections 4.1 to 4.20 of the checklist that has potential to result in impacts that are less than significant or less than significant with mitigation.

Aesthetics

As described in Section 4.1, the project would have a less than significant impact related to scenic vistas, scenic resources within a state scenic highway, conflicts with zoning and other regulations governing scenic quality, and light and glare.

The cumulative study area for aesthetics includes the project site and surrounding areas with views to and from the project site. The cumulative study area is characterized as highly developed and industrial, with existing views dominated by shipbuilding facilities and associated infrastructure. Existing light sources include those typical of an urban industrial setting, including exterior security lighting, street and vehicle lighting, and spillover lighting from buildings.

Based on the analysis in Section 4.1, aesthetics impacts would not be cumulatively considerable because (1) the temporary presence of construction equipment would not produce a noticeable change to the existing visual character of the project site and surrounding area, which is predominately industrial; (2) project elements would not dominate the existing viewshed and would not have potential to block views from scenic vistas or damage resources within a state scenic highway; (3) project improvements would not require changes to existing PMP designations for the project site and would not conflict with other regulations governing scenic quality; and (4) light sources required for temporary construction activities would be directed on-site and would be of similar intensity as existing light sources. Furthermore, the project would not expand existing operations within the NASSCO leasehold. As such, views to and from the project site would remain similar to existing conditions for the duration of project construction and operation. Therefore, the project would not contribute to a cumulative effect on aesthetics and no further analysis is required.

Air Quality

As described in Section 4.3, the project would have less than significant impacts related to conflicts with the applicable air quality plan, increases in criteria pollutants, exposure of sensitive receptors to substantial pollutant concentrations, and emissions of odors.

The cumulative study area for air quality is the SDAB, which is designated as a nonattainment area with respect to the NAAQS and CAAQS for ozone, and the CAAQS for $PM_{2.5}$ and PM_{10}. Air pollutant emissions associated with project construction are addressed as a cumulative impact in Section 4.3. Based on the analysis in Section 4.3, air quality impacts would not be cumulatively considerable because the short-term construction of the project would not generate emissions of criteria air pollutants or precursors that would exceed SDAPCD's established trigger levels, which were developed as a metric to indicate whether a project's emissions would cumulatively contribute to the nonattainment designations in the SDAB. In addition, because the use of off-road construction equipment with Tier 4 engines would be required pursuant to **MM-AQ-1**, the project would not expose sensitive receptors to quantities of pollutants greater than significance thresholds, nor would a significant risk of adverse health impacts result from exposure. As such, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would not be cumulatively considerable. Furthermore, impacts related to odors would not be cumulatively considerable because odors would dissipate rapidly from the source with an increase in distance. Therefore, the project would not contribute to a cumulative effect on air quality and no further analysis is required.

Biological Resources

As described in Section 4.4, the project would have no impact related to conflicts with habitat conservation plans; therefore, no cumulative analysis is required for this topic area. The project would have a less than significant impact related to the movement of wildlife species. With mitigation, the project would have less than significant impacts related to adverse effects on special-status species, sensitive habitats, and state or federally protected wetlands, as well as conflicts with local policies or ordinances protecting biological resources.

The cumulative study area for biological resources includes all areas within the project site where in-water construction activities would occur. A total of 14 special-status wildlife species associated with marine environments may be present in the project site based on geographic range and suitable habitat. Approximately 5,150 square feet of eelgrass habitat, which is considered a sensitive habitat, is present in the cumulative study area. The project site contains a portion of San Diego Bay, which is considered a water of the United States.

As discussed in Section 4.4, project construction would involve in-water activities that would generate loud noise and vibration and increase turbidity. In addition, new overwater structures would increase shading. The project has potential to result in direct and indirect effects on eelgrass habitat and aquatic wildlife if they were to be present in the project site. BMPs would be implemented to comply with regulations and permit conditions imposed by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and other regulatory agencies. However, the project could still result in the harassment or behavioral disruption of aquatic species, loss of eelgrass habitat, and disturbance of sediments and increased turbidity in the San Diego Bay. Therefore, the project has potential to result in cumulatively considerable impacts related to biological resources. Mitigation measures MM-BIO-1 through MM-BIO-6, as described in Section 4.4, would be implemented to ensure that potential impacts associated with biological resources would be less than significant.

Past projects have contributed to the lack of suitable natural habitat and limited biological resources within the cumulative study area, as identified in the environmental setting in Section 4.4.1. Several of the present and reasonably foreseeable projects listed in Table 4.21-1 would require in-water work in the San Diego Bay. These projects would also have the potential to result in the harassment or behavioral disruption of aquatic species, loss of eelgrass habitat, and disturbance of sediments and increased turbidity in the San Diego Bay. Because some of the projects listed in Table 4.21-1 would require extensive in-water work, such as those requiring pier replacement, these projects could contribute to the exacerbation of impacts on biological resources within the San Diego Bay. However, all present and reasonably foreseeable cumulative projects would be required to obtain and comply with all applicable permits and regulations governing the protection of biological resources. Where applicable, mitigation measures would be implemented to reduce significant effects.

Based on the above discussion, the project, in combination with past, present, and probable future projects, could contribute to cumulative effects related to biological resources. However, these effects would be reduced through compliance with applicable regulations and permit conditions, as well as implementation of mitigation measures, as required. As such, implementation of these projects combined would not be expected to result in substantial adverse effects on special-status species, sensitive habitats, and state or federally protected wetlands, as well as conflicts with local policies or ordinances protecting biological resources. Therefore, cumulative impacts related to biological resources would be less than significant.

Cultural Resources

As described in Section 4.5, the project would have no impact related to historical and archaeological resources; therefore, no cumulative analysis is required for these topic areas. The project would have a less than significant impact related to human remains.

The cumulative study area for human remains includes all areas within the project site where ground disturbing activities would occur. There are no known cemeteries or burials within the cumulative study area.

As discussed in Section 4.5, the discovery of human remains is regulated under California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097. Because the project would comply with these statutes regarding the discovery, treatment, and disposition of human remains, impacts related to human remains would not be cumulatively considerable. Therefore, the project would not contribute to a cumulative effect on cultural resources and no further analysis is required.

Energy

As described in Section 4.6, the project would have less than significant impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources and conflicts with renewable energy or energy efficiency plans. The cumulative study area for energy includes the SDG&E service area, which is the energy provider for the project site.

Impacts related to energy consumption would not be cumulatively considerable because the project would comply with all applicable regulations aimed at increasing energy efficiency and renewable energy development. Therefore, the project would not contribute to a cumulative effect on energy and no further analysis is required.

Geology and Soils

As described in Section 4.7, the project would have no impact related to landslides, soil erosion, soils supporting septic tanks or alternative waste water disposal systems, and paleontological resources; therefore, no cumulative analysis is required for these topic areas. The project would have a less than significant impact related to rupture of earthquake faults, seismic ground shaking, and expansive soils. Impacts related to seismic-related ground failure and unstable geologic units would be less than significant with mitigation.

Impacts related to geology and soils would not be cumulatively considerable because the geographic context for geology and soils impacts is generally site-specific, rather than cumulative in nature. Each development site has unique geologic considerations that would be subject to uniform site development and construction standards. Therefore, the cumulative study area for geology and soils includes all areas within the project site where ground disturbing activities would occur. The cumulative study area is susceptible to seismic ground shaking due to the proximity of active faults.

As discussed in Section 4.7, the project would be designed and constructed in accordance with recommendations from the *Geotechnical Investigation* (TerraCosta Consulting Group 2020) and any supplemental geotechnical investigations as required by MM-GEO-1. Because all structures would be engineered to specifications based on site-specific geotechnical conditions, the project would not contribute to a cumulative effect on geology and soils and no further analysis is required.

Greenhouse Gas Emissions

As described in Section 4.8, the project would have a less than significant impact related to the generation of GHG emissions and conflicts with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The issue of global warming and climate change is inherently a cumulative issue because the GHG emissions associated with an individual project cannot be shown to have a material effect on global climate. Thus, the quantity of GHG emissions associated with project construction is addressed as a cumulative impact in Section 4.8. Because amortized GHG emissions associated with project construction would be below CAPCOA's threshold of 900 $MTCO_2e$ per year, impacts related to GHG emissions would not be cumulatively considerable. Therefore, the project would not contribute to a cumulative effect on GHG emissions, and no further analysis is required.

Hazards and Hazardous Materials

As described in Section 4.9, the project would have no impact related to handling hazardous materials or wastes within proximity to schools, airport safety hazards and noise, emergency response or evacuation plans, and wildland fires; therefore, no cumulative analysis is required for these topic areas. The project would have a less than significant impact related to the routine transport, use, or disposal of hazardous materials. With mitigation, the project would have less than significant impacts related to reasonably foreseeable accidental releases of hazardous materials and hazardous materials sites on the Cortese list.

Because project construction would occur over water, the cumulative study area for hazards and hazardous materials is the San Diego Bay. The RWQCB has issued several CAOs and Investigative Orders for the characterization and remediation of contaminated sediment throughout the cumulative study area, including CAO No. R9-2012-0024 for sediment contamination within the NASSCO and BAE Systems leaseholds.

As discussed in Section 4.9, project construction would involve the use of hazardous materials and generation of hazardous wastes. The project would comply with all applicable regulations and laws pertaining to the storage, handling, use and disposal of hazardous materials. However, the potential exists for hazardous materials to be accidentally released into the San Diego Bay, which could cause hazards to the public and wildlife. In addition, the project would involve the disturbance of cover materials associated with CAO No. R9-2012-0024 that may expose underlying contaminated sediments to the environment. Therefore, the project has potential to result in cumulatively

considerable impacts related to hazards and hazardous materials. Mitigation measures MM-HAZ-1 through MM-HAZ-11, as described in Section 4.9, would be implemented to ensure that potential impacts associated with hazards and hazardous materials would be less than significant.

Past projects have contributed to the release of hazardous wastes and materials into the San Diego Bay, as identified in the environmental setting in Section 4.9.1. Several of the present and reasonably foreseeable projects listed in Table 4.21-1 would require in-water work in the San Diego Bay. These projects have the potential to result in the accidental release of hazardous materials into the San Diego Bay or disturb existing contaminated sediment and release it to the environment. Because some of the projects listed in Table 4.21-1 would require extensive in-water work, such as those requiring pier replacement, these projects could contribute to the exacerbation of hazardous conditions in the San Diego Bay. However, all present and reasonably foreseeable cumulative projects would be required to comply with applicable federal, state, and local regulations; obtain the requisite permits for in-water construction; and comply with the stipulations of the applicable CAOs issued by the RWQCB. Where applicable, mitigation measures would be implemented to reduce significant effects.

Based on the above discussion, the project, in combination with past, present, and probable future projects, could contribute to cumulative effects related to hazards and hazardous materials. However, these effects would be reduced through compliance with applicable regulations and permit conditions, as well as implementation of mitigation measures, as required. As such, implementation of these projects combined would not be expected to pose a substantial hazard to the public or environment from the routine transport, use, or disposal of hazardous materials; reasonably foreseeable accidental releases of hazardous materials; and hazardous materials sites on the Cortese list. Therefore, cumulative impacts related to hazards and hazardous materials would be less than significant.

Hydrology and Water Quality

As described in Section 4.10, the project would have less than significant impacts related to groundwater supplies and recharge, alteration of drainage patterns, and project inundation. With mitigation, the project would have less than significant impacts related to violation of water quality standards and degradation of surface water quality, as well as conflicts with water quality control plans or sustainable groundwater management plans.

The cumulative study area for hydrology and water quality is the San Diego Bay, which is the receiving water body for the project site. Major contaminants found in San Diego Bay include chlorinated hydrocarbons, toxic components of petroleum hydrocarbons, PAHs, PCBs, heavy metals, and organotins (i.e., organic compounds with one or more tin atoms) such as tributyltin. Groundwater within the cumulative study area is saline from saltwater intrusion. The cumulative study area is subject to flooding during the 100-year storm event.

Impacts related to groundwater would not be cumulatively considerable because (1) groundwater at the project site is not used as a groundwater supply source or for recharge and (2) the project would not require dewatering. In addition, impacts related to drainage patterns would not be cumulatively considerable because all stormwater runoff from the NASSCO facility would continue to be captured and contained for subsequent discharge to the San Diego Metropolitan Sanitary Sewer System; NASSCO would be required to maintain all existing operational and maintenance BMPs for stormwater runoff as required by NASSCO's individual NPDES Permit (Order R9-2016-0116). Furthermore, impacts related to inundation would not be cumulatively considerable because all permanent in-water structures would be designed in accordance with the structural requirements of FEMA. Therefore, the project would not contribute to a cumulative effect on groundwater, drainage patterns, and inundation; no further analysis is required for these topic areas.

As discussed in Section 4.10, construction activities would generate trash and other debris that have potential to degrade water quality if these materials were to enter the San Diego Bay. Project construction would include methods with potential to result in increased turbidity levels. Therefore, the project has potential to result in cumulatively considerable impacts related to water quality. The contractor would be required to comply with permit conditions imposed by USACE, the San Diego RWQCB, and other regulatory agencies during construction, including the CWA Section 401 Water Quality Certification and Section 404 permit, as well as the NPDES Construction General Permit and NASSCO's individual NPDES permit (Order R9-2016-0116). Any potentially hazardous materials would be properly stored, handled, used, and disposed of in accordance with applicable regulations and laws. In addition, mitigation

measures MM-HAZ-1 through MM-HAZ-11, MM-BIO-4, and MM-WQ-1 and MM-WQ-2 would be implemented to reduce water quality impacts from potential upset conditions involving hazardous materials, releases of impaired sediments into the environment, and generation of turbidity plumes.

Past projects have contributed pollutants to the San Diego Bay, as evidenced by the CWA Section 303(d) List of Water Quality Limited Segments Requiring Total Maximum Daily Loads. The entire San Diego Bay is a listed impaired water body for PCBs, PAHs, and mercury. Portions of the Bay shoreline are listed as impaired for benthic community effects, sediment toxicity, heavy metals, PAHs, and PCBs. This is primarily due to historic uses of the Bay and the surrounding area, as well as current uses.

Current and probable future projects listed in Table 4.21-1 may involve activities that could exacerbate existing impacts on the water quality of the San Diego Bay, including disturbing contaminated sediment that is released into the water column. Current and probable future projects could also contribute pollutants such as oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens into the stormwater conveyance system and receiving waters. Current and probable future projects would be subject to CWA regulations that require compliance with water quality standards, including state and local water quality regulations and stormwater management plans. In addition, projects affecting waters of the United States would also need to comply with CWA Section 404 and 401 regulations, requiring implementation of additional BMPs to protect water quality during construction. Where applicable, mitigation measures would be implemented to reduce significant effects.

Based on the above discussion, the project, in combination with past, present, and probable future projects, could contribute to cumulative effects on water quality. However, these effects would be reduced through compliance with applicable regulations and permits, as well as implementation of mitigation measures, as required. As such, implementation of these projects combined would not be expected to violate water quality standards, substantially degrade water quality, or conflict with water quality control plans. Therefore, cumulative impacts related to hydrology and water quality would be less than significant.

Land Use and Planning

As described in Section 4.11, the project would have no impact related to dividing an established community; therefore, no cumulative analysis is required for this topic area. The project would have a less than significant impact related to conflicts with land use plans, policies, and regulations.

The cumulative study area for land use includes the project site and the areas included in the Marine Related Industrial (Land) and Specialized Berthing (Water) land use designations of the PMP.

Impacts related to land use and planning would not be cumulatively considerable because (1) the project would not result in any changes in existing land uses and (2) NASSCO would be required to obtain all necessary approvals from agencies governing land use of the project site, including the SLC, CCC, District, and FAA. Rather, the project would result in operational improvements that would ensure the continued use of the project site for its designated uses. Therefore, the project would not contribute to a cumulative effect on land use and planning and no further analysis is required.

Noise

As described in Section 4.13, the project would have no impact related to excessive noise exposure from airports or private airstrips. The project would have less than significant impacts related to the generation of a substantial increase in ambient noise levels in excess of applicable standards and the generation of excessive groundborne vibration or noise levels.

The cumulative study area for noise includes the project site and adjacent land uses, including nearby noise-sensitive receptors. The cumulative study area is in a highly industrialized area with ambient noise levels influenced by adjacent transportation corridors and industrial land uses.

Based on the analysis in Section 4.13, noise impacts would not be cumulatively considerable because (1) no noise-sensitive receptors would be subject to noise levels in excess of City standards or excessive groundborne vibration and (2) no buildings or structures would be close enough to experience structural damage from groundborne

vibration resulting from construction activities. Furthermore, the project would not result in the expansion of existing operations and would not contribute to any long-term noise impacts. Therefore, the project would not contribute to a cumulative effect on noise and no further analysis is required.

Population and Housing

As described in Section 4.14, the project would have no impact related to displacement of people or housing; therefore, no cumulative analysis is required for this topic area. The project would have a less than significant impact related to inducing unplanned population growth.

The cumulative study area for population and housing includes the project site and the boundaries of Planning District 4 (Tenth Avenue Marine Terminal) of the PMP. According to the PMP, there are approximately 50,000 jobs within Planning District 4 (San Diego Unified Port District 2020a). There are no residential land uses within the District's jurisdiction.

Impacts related to population and housing would not be cumulatively considerable because the project would not induce unplanned population growth. Approximately 10 workers would be present on the project site each day during the construction period and are expected to commute from the surrounding area. The number of jobs created for project construction would represent a negligible and temporary increase in employment within Planning District 4. Furthermore, the project does not propose new homes or businesses and would not expand existing infrastructure, including existing shipyard operations. Therefore, the project would not contribute to a cumulative effect on population and housing and no further analysis is required.

Public Services

As described in Section 4.15, the project would have no impact on schools, parks, and other public facilities; therefore, no cumulative analysis is required for these topic areas. The project would have less than significant impacts on fire and police protection.

The cumulative study area for public services includes the project site and areas within a 0.5-mile radius of the project site. Fire and police departments in proximity to the project site are identified in Section 4.15.

Impacts related to public services would not be cumulatively considerable because the project would not (1) contribute to congestion on surrounding roadways that would affect response times for emergency services providers and (2) would not result in population growth that would increase the demand for public services. Therefore, the project would not contribute to a cumulative effect on public services and no further analysis is required.

Recreation

As described in Section 4.16, the project would have no impact related to the construction or expansion of recreational facilities; therefore, no cumulative analysis is required for this topic area. The project would have a less than significant impact on increasing the use of parks and recreational facilities.

The cumulative study area for recreation includes the project site and areas within a 0.5-mile radius of the project site. Parks in proximity to the project site are identified in Section 4.16.

Impacts related to recreation would not be cumulatively considerable because the project would not contribute to a permanent increase in population that would increase the use of existing parks or recreational facilities. Therefore, the project would not contribute to a cumulative effect on recreation and no further analysis is required.

Transportation

As described in Section 4.17, the project would have a less than significant impact related to conflicts with programs, plans, ordinances, or policies addressing the circulation system; conflicts with CEQA Guidelines section 15064.3, subdivision (b); hazards from geometric design features or incompatible uses; inadequate emergency access; and insufficient parking that would decrease public coastal access.

The cumulative study area for transportation includes the project site and areas within a 0.5-mile radius of the project site. Existing roadways, bicycle and pedestrian facilities, and public transit services within the cumulative study area are identified in Section 4.17.

Impacts related to the circulation system would not be cumulatively considerable because all project improvements would be within the NASSCO shipyard and would not disrupt or increase the demand for existing transportation facilities. In addition, the project would not generate new vehicle trips, other than temporary and minor increases in vehicle trips associated with project construction. With implementation of a Traffic Control Plan during construction activities, the project would not result in any transportation-related hazards. Furthermore, the project would not result in inadequate emergency access or reduce parking spaces utilized for public coastal access. Therefore, the project would not contribute to a cumulative effect on transportation and no further analysis is required.

Utilities and Service Systems

As described in Section 4.19, the project would have a less than significant impact on water, wastewater treatment and stormwater drainage, electric power, natural gas, telecommunications, and solid waste facilities.

The cumulative study area for utilities and service systems includes the service areas for the utility providers serving the project site. These utility providers include the City of San Diego Public Utilities Department for water and wastewater treatment, San Diego Gas & Electric for electricity and natural gas, the City of San Diego Environmental Services for solid waste, as well as local landfills operated by Republic Services (contractor) in San Diego County (e.g., Sycamore and Otay Landfills).

Impacts related to utilities and service systems would not be cumulatively considerable because the project would not result in a permanent increase in demand for water, wastewater treatment, electric power, natural gas, telecommunications, and solid waste disposal services. Construction activities would require negligible and temporary increases in demand for water, wastewater treatment, and energy. The project's demand could be accommodated by the service providers in combination with the providers' existing and reasonably foreseeable commitments. No new or expanded facilities or infrastructure would be required. Therefore, the project would not contribute to a cumulative effect on utilities and service systems and no further analysis is required.

Required Mitigation Measures

With implementation of **MM-BIO-1 through MM-BIO-6** described in Section 4.4, **MM-HAZ-1 through MM-HAZ-11** described in Section 4.9, and **MM-WQ-1 and MM-WQ-2** described in Section 4.10, the project would not result in significant impacts.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant with mitigation incorporated. As discussed in Sections 4.3, 4.9, 4.10, and 4.13, project construction would result in air quality health risk that exceeds an established threshold, potential releases of hazardous materials into the environment, and degradation of water quality. With implementation of BMPs and mitigation measures **MM-AQ-1, MM-BIO-4, MM-HAZ-1 through MM-HAZ-11,** and **MM-WQ-1 and MM-WQ-2**, these environmental effects would not cause substantial adverse effects on human beings. Following construction, the project site would be returned to a similar condition as the existing setting. The project would not introduce new activities during operations that would have potential to cause substantial adverse effects on human beings.

Required Mitigation Measures

With implementation of **MM-BIO-4** described in Section 4.4, **MM-HAZ-1 through MM-HAZ-11** described in Section 4.9, and **MM-WQ-1 and MM-WQ-2** described in Section 4.10, the project would not result in significant impacts.

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