

# CHULA VISTA BAYFRONT Master Plan



and PORT MASTER PLAN AMENDMENT

**VOLUME 2**

## **FINAL** Environmental Impact Report

April 2010

**FINAL  
ENVIRONMENTAL IMPACT REPORT (EIR)  
for the  
CHULA VISTA BAYFRONT MASTER PLAN  
UPD #83356-EIR-658  
SCH #2005081077**

**VOLUME 2**

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- 4.4-1 Visual Impact Assessment, Chula Vista Bayfront Master Plan (June 2006), prepared by KTU+A Consultants
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4.12-1	Hazardous Materials Technical Study (April 2005), prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants
4.12-2	Environmental Site Assessment for the Gaylord Parcel (H-3) Harbor District Option 2 (May 2006), prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants
4.12-3	Chula Vista Bayfront Master Plan Report—Review of Environmental Documents for the Phase I Project Areas (April 2008), prepared by Geocon Consultants, Inc.
4.12-4	Phase I Environmental Site Assessment, Sweetwater District Area S-2 (February 2008), prepared by Geocon Consultants, Inc.
4.12-5	Limited Phase II Environmental Site Assessment, Sweetwater District Area S-2 (April 2008), prepared by Geocon Consultants, Inc.
4.12-6	Human Health Screening Evaluation for the Harbor District (February 2006), prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants
4.12-7	Preliminary Investigation of Soil and Groundwater Contaminants, F & G Street Marsh, Sweetwater National Wildlife Refuge (April 2003), prepared by P & D Environmental
4.13-1	Service Agreement Between the Port and City for Police Protection Services to be Provided by the Chula Vista Police Department, in Force through June 30, 2009
4.14-1	Updated Water Supply Assessment and Verification Report (July 2006), issued by the Sweetwater Authority
4.14-2	Technical Memorandum—Water for the Chula Vista Bayfront Master Plan (January 2008), prepared by Kimley-Horn and Associates, Inc.
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4.14-6	Technical Memorandum—Sewer for the Chula Vista Bayfront, Gaylord Development (October 2007), prepared by Kimley-Horn and Associates, Inc.
4.14-7	Technical Memorandum—Sewer for the Chula Vista Bayfront, Pacifica Development (October 2007), prepared by Kimley-Horn and Associates, Inc.
4.15-1	Preliminary Geotechnical Evaluation for the Chula Vista Bayfront Master Plan Development Area (March 2005), prepared by Ninyo & Moore Geotechnical and Environmental Sciences Consultants
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4.15-3	Geotechnical Investigation for the Gaylord Hotels (January 2008), prepared by Geocon Consultants, Inc.
4.15-4	Preliminary Geotechnical Investigation for the Pacifica Companies (February 2008), prepared by Geocon Consultants, Inc.
7-1	Presentation of Report on Potential Economic Impacts of a Gaylord Hotel and Conference Facility by Economics Research Associates (February 2006)

## ERRATA TO THE FINAL ENVIRONMENTAL IMPACT REPORT CHULA VISTA BAYFRONT MASTER PLAN

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The San Diego Unified Port District (Port) has prepared this Errata to clarify and correct information in the Final Environmental Impact Report (Final EIR or FEIR) for the Chula Vista Bayfront Master Plan (UPD No. 83356-EIR-658/SCH No. 2005081077), which was issued in April 2010. In addition, since April 2010, the Port has approved the Chula Vista Bayfront Master Plan Settlement Agreement (Settlement Agreement), which provides additional community benefits and protection of natural resources and the environment in the project area above and beyond those required by the California Environmental Quality Act (CEQA) and other applicable laws and regulations. The Port agreed that the provisions of the Settlement Agreement would be treated as mitigation measures under CEQA and would be included in the Final EIR and the Mitigation Monitoring and Reporting Program (MMRP). The changes in the Final EIR are listed by section number and page number in Table ERRATA-1, with the added information shown in double underline and the deleted information shown in ~~double-strikeout~~ on the attached pages.

The information provided in this Errata document is provided to clarify and correct information within the Final EIR. Pursuant to CEQA Guidelines section 15088.5, a lead agency must recirculate an EIR when “significant new information” is added to the EIR after public notice has been given of the availability of the Draft EIR but prior to certification of a Final EIR. “Significant new information” requiring recirculation includes, for example, a disclosure showing that (1) a new significant impact would result from the project or from a new mitigation measure proposed to be implemented, (2) a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to below a level of significance, (3) a feasible project alternative or mitigation measure considerably different from other previously analyzed would clearly lessen the significant environmental impacts of the project but the project proponents decline to adopt it, and/or (4) the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

New information added to an EIR is not “significant,” and recirculation of an EIR is not required, unless the EIR is changed in a way that deprives the public of either a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent has declined to implement. The Port has reviewed the information in this Errata and has determined that it does not change any of the findings or conclusions of the Final EIR and does not constitute “significant new information” pursuant to CEQA Guidelines section 15088.5. Accordingly, the Port finds that recirculation of the Final EIR is not required.

## Revisions to the Final EIR

A summary of the revisions made to the Final EIR since issuance in April 2010 is provided in Table ERRATA-1; the table also provides the page number(s) in the Final EIR where each revision is located. Copies of the revised pages are provided as an attachment to this document for replacement in the Final EIR.

**Table ERRATA-1**  
**Revisions to the Final Environmental Impact Report**

Errata No.	Chapter/Section No. of Final EIR	Page Nos. of Revised Final EIR	Summary of Revision
1	1.0 (Executive Summary)	1-2	The Preface of the FEIR was revised to include the current Bayfront Coalition member organizations
2	1.0 (Executive Summary)	1-3	The Preface of the FEIR was revised to reflect the current status of the written agreement between the Port, the City of Chula Vista (City), the City of Chula Vista Redevelopment Agency (RDA), and the Bayfront Coalition and its member organizations
3	1.0 (Executive Summary)	1-57	Significant Impact 4.6-6 in Table 1-9 was revised to be consistent with Significant Impact 4.6-6 in Section 4.6 of the FEIR to state that program-level construction impacts affect all phases (not Phases II through IV).
4	1.0 (Executive Summary)	1-67	Mitigation Measure 4.8-6(D) in Table 1-9 was revised to clarify that security lighting will be limited to that required by applicable law enforcement regulations.
5	1.0 (Executive Summary)	1-68	Mitigation Measure 4.8-6(E) in Table 1-9 was revised to clarify that the provision of three fireworks events is an annual allowance.
6	1.0 (Executive Summary)	1-71	Mitigation Measure 4.8-6(G) was revised to clarify that trash filters required for storm drain pipes shall be fine trash filters and to provide clarification regarding monitoring of stormwater and non-point source runoff into Wildlife Habitat Areas.
7	1.0 (Executive Summary)	1-74	Mitigation Measure 4.8-6(I) in Table 1-9 was revised to include additional provisions to address boating impacts.
8	1.0 (Executive Summary)	1-75; 1-76; 1-77; 1-78; 1-79; 1-80; 1-80a; 1-80b; 1-80c; 1-80d; 1-80e; 1-80f; 1-80g; 1-80h; 1-80i; 1-80j	Mitigation Measure 4.8-7 in Table 1-9 was revised throughout the measure to provide clarification regarding the Natural Resources Management Plan (NRMP) and fencing separating the No Touch Buffer areas and the Wildlife Habitat Areas. Mitigation Measure 4.8-7 was also revised to incorporate additional community benefits and protection of natural resources and the environment in the project area above and beyond those required by CEQA and other applicable laws and regulations, pursuant to the approved Chula Vista Bayfront Master Plan Settlement Agreement, to clarify that Exhibit 2 to the MMRP identifies No Touch Buffer areas and that the NRMP Management Objectives apply to the Wildlife Habitat Areas.
9	1.0 (Executive Summary)	1-98	Mitigation Measure 4.8-23 in Table 1-9 was revised to include design and placement provisions for the resort conference center (RCC) buildings in order to reduce the potential for bird strikes and disorientation.



**Table ERRATA-1 (Continued)**

Errata No.	Chapter/Section No. of Final EIR	Page Nos. of Revised Final EIR	Summary of Revision
10	1.0 (Executive Summary)	1-105	Table 1-9 was revised to include Significant Impact 4.11-1 to paleontological resources and the associated Mitigation Measure 4.11-1, which reduces the impact to less than significant, to be consistent with the analysis and mitigation provided in Section 4.11 of the FEIR.
11	2.0 (Introduction)	2-1	Section 2.1.1 was revised to state that the public participation process was comprised of three phases.
12	2.0 (Introduction)	2-2	Section 2.1.1.1(a) was revised to include Terry Thomas as Citizens Advisory Committee member replacement for Rudy Ramirez during the master planning process.
13	2.0 (Introduction)	2-11	Section 2.1.1.3(a) was revised to include the current Bayfront Coalition member organizations.
14	2.0 (Introduction)	2-12	Section 2.1.1.3(a) was revised to reflect the current status of the written agreement between the Port, the City, the RDA, and the Bayfront Coalition and its member organizations.
15	2.0 (Introduction)	2-18	Section 2.3.2 was revised to state the beginning and end dates of the 60-day public review period for the Revised Draft Environmental Impact Report (Revised DEIR).
16	3.0 (Project Description)	3-10; 3-17; 3-18; 3-22; 3-25; 3-26; 3-38; 3-39; 3-40; 3-41; 3-43; 3-47; 3-67; 3-73; 3-78; 3-78a; 3-84; 3-85; 3-86; 3-90; 3-91; 3-92; 3-96	The description of Port and City jurisdiction was revised in several places in Chapter 3.0 to appropriately characterize "land use jurisdictional authority" (Section 3.3, Section 3.4.1.1(a), Section 3.4.1.2, Section 3.4.1.3, Section 3.4.1.5, Section 3.4.1.6, Section 3.4.4.1(a), Section 3.4.4.1(b), Section 3.4.4.2, Section 3.4.4.3, Section 3.4.4.4, and Section 3.4.5).
17	3.0 (Project Description)	3-18	Section 3.4.1.2 was revised to include an additional change to the Port Master Plan Amendment, establishing a maximum number of hotel rooms in the Chula Vista Bayfront Master Plan area.
18	3.0 (Project Description)	3-25	Section 3.4.1.4 was revised to clarify that the existing Chula Vista Local Coastal Plan (LCP) allows for 1,000 residential dwelling units.
19	3.0 (Project Description)	3-26	Section 3.4.1.6 was revised to clarify the existing Multiple Species Conservation Program designations for Parcels H-13, H-14, H-15, and HP-5.
20	3.0 (Project Description)	3-31a	Section 3.4.2.1 was revised to provide for an increased public participation and community benefits process, including the formation of a Bayfront Cultural and Design Committee.
21	3.0 (Project Description)	3-40	The description of the Signature Park improvements on Parcel S-2 was revised in Section 3.4.4.1(a)(i) to delete a parenthesis that was erroneously inserted into the FEIR and to capitalize the word "parcel" that specifically references Parcel SP-1.
22	3.0 (Project Description)	3-40; 3-88	The description of the Signature Park on Parcel S-2 in Section 3.4.4.1(a)(i) and the description of the OP-1A and OP-1B South Park in Section 3.4.4.3(b) were revised to include tot lots as a minimum park feature.

**Table ERRATA-1 (Continued)**

Errata No.	Chapter/Section No. of Final EIR	Page Nos. of Revised Final EIR	Summary of Revision
23	3.0 (Project Description)	3-41	The description of the Signature Park on Parcel S-2 was revised in Section 3.4.4.1(a)(i) to include a refined plan to address linkage between the parks over the F & G Street Channel and evaluation of a separate pedestrian bridge as part of concept approval for the Signature Park.
24	3.0 (Project Description)	3-42	The description of the Limited Use Zone in the SP-1 Ecological Buffer was revised in Section 3.4.4.1(a)(i) to clarify that 6-foot-high vinyl-coated fencing will be contiguous around the western portion of a berm.
25	3.0 (Project Description)	3-42	The description of the Limited Use Zone in the SP-1 Ecological Buffer was revised in Section 3.4.4.1(a)(i) to delete the provision of native cacti in lieu of fencing to prevent human activity in the sensitive areas. In response to public comment V-382 and others, the FEIR includes a 6-foot-high vinyl-coated chain-link fence within the buffer area to prevent unauthorized access. Native vegetation may be used strategically in addition to, but not in lieu of, fencing.
26	3.0 (Project Description)	3-47	The description in Section 3.4.4.1(b) of Parcels H-13 and H-14 was revised to correct the square footage of the proposed building footprint for Pacifica under the Proposed Project.
27	3.0 (Project Description)	3-74	The description in Section 3.4.4.1(b) of Parcel H-3 was revised to provide for the preparation of a supplement to the FEIR if any proposal is submitted to construct more than 1,600 rooms on Parcel H-3.
28	3.0 (Project Description)	3-76; 3-77	The description in Section 3.4.4.1(b) of Parcel H-3 was revised to include design and placement provisions for the RCC buildings in order to reduce the potential for bird strikes and disorientation
29	3.0 (Project Description)	3-78	Section 3.4.4.2(a) was revised to clarify that the existing street segment between F Street and G Street would be demolished as the E Street Extension is completed.
30	3.0 (Project Description)	3-78a	The description in Section 3.4.4.2(a) of the SP-2 Seasonal Wetland was revised to include a future feasibility investigation regarding the restoration of a tidal connection.
31	3.0 (Project Description)	3-84	The description in Section 3.4.4.3(b) of Otay District Phase III program-level development was revised to include updated information regarding relocation of the San Diego Gas & Electric (SDG&E) electrical switchyard.
32	3.0 (Project Description)	3-89	The description in Section 3.4.4.3(b) of the fencing along the No Use Zone in Parcel OP-2A Ecological Buffer was revised to emphasize that the 6-foot-high fencing would be permanent, contiguous, and made of vinyl-coated chain link, consistent with the description of fencing in the previous paragraph.
33	3.0 (Project Description)	3-107	Section 3.4.5.1(a) of the FEIR was revised to clarify that the existing street segment between F Street and G Street would be demolished as the E Street Extension is completed.
34	4.1 (Land/Water Use Compatibility)	4.1-1	The dates referenced for Appendices 3.4-1, 4.1-1, 4.1-2, and 4.1-3 were revised in the FEIR.

**Table ERRATA-1 (Continued)**

Errata No.	Chapter/Section No. of Final EIR	Page Nos. of Revised Final EIR	Summary of Revision
35	4.8 (Terrestrial Biological Resources)	4.8-100	The discussion in Section 4.8.5 of Preserve adjacency issues in the City's jurisdiction was revised to delete the provision of native cacti in lieu of fencing to prevent human activity in sensitive habitat areas.
36	4.8 (Terrestrial Biological Resources)	4.8-139	Mitigation Measure 4.8-6(D) was revised to clarify that security lighting will be limited to that required by applicable law enforcement regulations.
37	4.8 (Terrestrial Biological Resources)	4.8-139	Mitigation Measure 4.8-6(E) was revised to clarify that construction noise must be controlled to minimize impacts to Wildlife Habitat Areas.
38	4.8 (Terrestrial Biological Resources)	4.8-140	Mitigation Measure 4.8-6(E) was revised to clarify that the provision of three fireworks events is an annual allowance.
39	4.8 (Terrestrial Biological Resources)	4.8-143	Mitigation Measure 4.8-6(G) was revised to clarify that trash filters required for storm drain pipes shall be fine trash filters.
40	4.8 (Terrestrial Biological Resources)	4.8-143	Mitigation Measure 4.8-6(G) was revised to provide clarification regarding monitoring of stormwater and non-point source runoff into Wildlife Habitat Areas.
41	4.8 (Terrestrial Biological Resources)	4.8-154	Mitigation Measure 4.8-6(I) was revised to include additional provisions to address boating impacts.
42	4.8 (Terrestrial Biological Resources)	4.8-155; 4.8-156; 4.8-157; 4.8-158; 4.8-159; 4.8-160; 4.8-160a; 4.8-160b; 4.8-160c; 4.8-160d; 4.8-160e; 4.8-160f; 4.8-160g; 4.8-160h; 4.8-160i; 4.8-160j; 4.8-160k; 4.8-160l	Mitigation Measure 4.8-7 was revised throughout the measure to provide clarification regarding the NRMP and fencing separating the No Touch Buffer areas and the Wildlife Habitat Areas, as well as to incorporate additional community benefits and protection of natural resources and the environment in the project area above and beyond those required by CEQA and other applicable laws and regulations, pursuant to the approved Chula Vista Bayfront Master Plan Settlement Agreement.
43	4.8 (Terrestrial Biological Resources)	4.8-185	Mitigation Measure 4.8-23 was revised to include design and placement provisions for the RCC buildings in order to reduce the potential for bird strikes and disorientation.
44	4.15 (Geology and Soils)	4.15-1	As a revision to the Revised DEIR, a paragraph was added to Page 4.15-1 of the FEIR related to Appendix 4.15-2. This paragraph was supposed to be identified in strikeout/underline format for the issuance of the FEIR, but it was not. The FEIR was revised to identify this paragraph in double underline fashion.
45	4.15 (Geology and Soils)	4.15-2; 4.15-15; 4.15-16; 4.15-21; 4.15-27; 4.15-28; 4.15-30	Several revisions to the Revised DEIR were made in Section 4.15 of the FEIR to replace "Gaylord Resort and Convention Center (RCC)" with "Resort Conference Center (RCC)". These revisions were supposed to be identified in strikeout/underline format in the issuance of the FEIR, but they were not. The FEIR was revised to identify these revisions in double underline and double strikeout fashion.
46	4.16 (Energy)	4.16-18	Mitigation Measure 4.16-2(A) was revised to require a minimum of a 50% reduction in annual energy use by all development within the Proposed Project area.
47	4.16 (Energy)	4.16-19	Mitigation Measures 4.16-2(A)(2)(e) and (f) were revised to correct the references to SDG&E's Demand Reduction utility rates.

**Table ERRATA-1 (Continued)**

Errata No.	Chapter/Section No. of Final EIR	Page Nos. of Revised Final EIR	Summary of Revision
48	4.17 (Population and Housing)	4.17-4	A revision to the Revised DEIR was made in Section 4.17 of the FEIR to replace "Gaylord Resort and Convention Center (RCC)" with "Resort Conference Center (RCC)". This revision was supposed to be identified in strikeout/underline format in the issuance of the FEIR, but it was not. The FEIR was revised to identify this revision in double underline and double strikeout fashion.
49	4.17 (Population and Housing)	4.17-6	As a revision to the Revised DEIR, text was added and removed on Page 4.17-6 of the FEIR related to Mitigation Measure 4.17-1. This text was supposed to be identified in strikeout/underline format for the issuance of the FEIR, but it was not. The FEIR was revised to identify this text in double underline and double strikeout fashion.
50	5.0 (Alternatives)	5-3	Table 5.1-1 was revised to correct the land/water use compatibility impact under criteria 1, consistent with the impact analysis provided in Section 4.1 of the FEIR.
51	5.0 (Alternatives)	5-6	Table 5.1-1 was revised to correct the cumulative impact to energy, consistent with the impact analysis provided in Section 6.17 of the FEIR.
52	5.0 (Alternatives)	5-8	Section 5.3 (No Project Alternative) was revised to correct numeric references to allowed development in the Sweetwater District under the existing LCP.
53	5.0 (Alternatives)	5-13; 5-14	Sections 5.3.11 and Section 5.3.15 were revised to correct numeric references to allowed residential development in the Sweetwater District under the existing LCP.
54	5.0 (Alternatives)	5-26	Table 5.4-3 was revised to correct Significant Impacts 4.1-1 through 4.1-5 under criteria 1, consistent with the impact analysis in Section 4.1 of the FEIR.
55	5.0 (Alternatives)	5-26	Table 5.4-3 was revised to correct Significant Impact 4.1-6 (instead of Significant Impact 4.1-4) under criteria 2, consistent with the impact analysis in Section 4.1 of the FEIR.
56	5.0 (Alternatives)	5-26; 5-87; 5-139; 5-154	The discussions of land/water use compatibility impacts in Section 5.4.1 (Harbor Park Alternative), Section 5.5.1 (No Land Trade Alternative), Section 5.6.1 (Reduced Overall Density Alternative), and Section 5.7.1 (Alternate L-Ditch Remediation Alternative) were revised to clarify that land/water use compatibility impacts similar to the Proposed Project include the significant unmitigated impact on City of Chula Vista General Plan policies regarding view quality described in Section 4.1 of the FEIR.
57	5.0 (Alternatives)	5-69; 5-134; 5-143; 5-165	The discussions of public service impacts in Section 5.4.11 (Harbor Park Alternative), Section 5.5.11 (No Land Trade Alternative), Section 5.6.11 (Reduced Overall Density Alternative), and Section 5.7.11 (Alternate L-Ditch Remediation Alternative) were revised to clarify that public service impacts similar to the Proposed Project include the significant unmitigated impact to library services described in Section 4.13 of the FEIR.
58	5.0 (Alternatives)	5-71; 5-73	Sections 5.4.12.1 and 5.4.12.2 were misnumbered in the FEIR; they were corrected.

**Table ERRATA-1 (Continued)**

Errata No.	Chapter/Section No. of Final EIR	Page Nos. of Revised Final EIR	Summary of Revision
59	5.0 (Alternatives)	5-76; 5-138; 5-146; 5-166	The discussions of energy impacts in Section 5.4.14 (Harbor Park Alternative), Section 5.5.14 (No Land Trade Alternative), Section 5.6.14 (Reduced Overall Density Alternative), and Section 5.7.14 (Alternate L-Ditch Remediation Alternative) were revised to clarify that energy impacts similar to the Proposed Project include the significant unmitigated cumulative energy impact identified in Section 6.17 of the FEIR.
60	5.0 (Alternatives)	5-78	Section 5.5 (No Land Trade Alternative) was revised to correct numeric references to allowed development in the Sweetwater District under the existing LCP.
61	5.0 (Alternatives)	5-153	Table 5.7-1 was revised to correct the square footage of the proposed building footprint for the Pacifica project under the Proposed Project (381,990 square feet) and the building footprint under the Alternate L-Ditch Remediation Alternative (497,900 square feet).
62	Appendix 3.4-1	Entire appendix	Appendix 3.4-1 (Draft Port Master Plan Amendment) was revised to reflect the Port's commitments in the Settlement Agreement, as well as the recent SDG&E land exchange.
63	Appendix 4.1-1	Entire appendix	Appendix 4.1-1 (City of Chula Vista General Plan Amendment) was revised to reflect the change in land use from the recent SDG&E land exchange.
64	Appendix 4.1-2	Entire appendix	Appendix 4.1-2 (City of Chula Vista Bayfront Local Coastal Plan Amendment, Land Use Plan) was revised to reflect the recent SDG&E land exchange.
65	Appendix 4.1-3	Entire appendix	Appendix 4.1-3 (City of Chula Vista Bayfront Local Coastal Plan Amendment, Bayfront Specific Plan) was revised to reflect the recent SDG&E land exchange.

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# CHAPTER 1

## EXECUTIVE SUMMARY

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### Preface

This Final Environmental Impact Report (Final EIR) has been prepared to evaluate the potential environmental impacts that may result from implementation of the Chula Vista Bayfront Master Plan (Proposed Project). The Final EIR has been prepared in compliance with the California Environmental Quality Act (CEQA), Public Resources Code section 21000, *et seq.*, and its implementing guidelines (State CEQA Guidelines), California Code of Regulations, title 14, section 15000, *et seq.*

Pursuant to State CEQA Guidelines section 15132, this Final EIR consists of: the Draft Environmental Impact Report (DEIR) and its appendices, which were made available for public review and comment on September 29, 2006; the Revised Draft Environmental Impact Report (Revised DEIR) and its appendices, which were circulated and made available for public review and comment on May 23, 2008; and this Final EIR and its appendices, which include revisions to the Revised DEIR, the comments and recommendations received on the Revised DEIR, a list of persons, organizations and public agencies commenting on the Revised DEIR, the responses of the San Diego Unified Port District (Port) as the Lead Agency to significant environmental points raised in the review and consultation process, and other information added by the Port.

The Port has received numerous public comments and other information concerning the Proposed Project and its environmental review. Copies of the public comments on the Revised DEIR and the Port's responses to them are provided in *Volume 1* of this Final EIR. The Port and the City of Chula Vista (City) also engaged in continuing public outreach concerning the Proposed Project and its environmental review after the close of the public comment period on the Revised DEIR. A description of this public outreach and public participation is provided in *Section 2.1.1.3* of this Final EIR. The Port has prepared the Final EIR in a good faith effort to respond to the significant environmental points raised in the public comments and outreach efforts, to provide additional protection to the natural resources and environment in the project area above and beyond that required by CEQA and other applicable laws and regulations, and to address changes that have been made to various aspects of the Proposed Project.

In addition, a number of events have occurred since the Revised DEIR was made available for public review, which has resulted in changes to the Revised DEIR that are reflected in this Final EIR. These events include the following:

1. In November 2008, Gaylord Entertainment withdrew its proposal to develop a resort and convention center (RCC) on Parcel H-3 in the Harbor District. The specific RCC proposed by Gaylord was analyzed in the Revised DEIR at a project level. Although the Gaylord RCC is no longer part of the Proposed Project, Parcel

H-3 retains its designation for use as a RCC and the future development of an RCC on Parcel H-3 is analyzed in the Final EIR at a program level.

2. The Proposed Project includes a proposed land exchange between the Port and North C.V. Waterfront L.P. (Pacifica) which was analyzed in the Revised DEIR. On February 2, 2010, the Port entered into an Exchange Agreement with Pacifica, which provides for the transfer of approximately 97 acres of land in the Sweetwater District from Pacifica to the Port in exchange for the transfer of approximately 33 acres of land in the Harbor District from the Port to Pacifica. The specific parcels included in the exchange are depicted in *Figure 3-5* in *Chapter 3.0, Project Description* of this Final EIR. Pursuant to State CEQA Guidelines section 15004, the Exchange Agreement conditioned the future use of the exchange parcels on the Port's compliance with CEQA in this Final EIR. A copy of the Exchange Agreement is available for public review during normal business hours in the office of the Clerk of the San Diego Unified Port District, 1600 Pacific Highway, San Diego, California.
3. In response to comments received on the Revised DEIR, the Port and the City engaged in outreach efforts with Rohr, Inc., operating as Goodrich Aerostructures and a wholly owned subsidiary of The Goodrich Corporation (Goodrich), to address its concerns regarding the potential impacts of the Proposed Project on Goodrich's ongoing and future manufacturing operations and contamination remediation activities in and near the project area. As a result of these outreach efforts, which are described more fully in *Section 2.1.1.3(b)* of this Final EIR, the Port, the City and the City's Redevelopment Agency (RDA) entered into a Second Amendment to Relocation Agreement (Goodrich Agreement) with Goodrich on February 2, 2010, which addressed all of the concerns expressed by Goodrich to its satisfaction. A copy of the Goodrich Agreement is available for public review during normal business hours in the office of the Clerk of the San Diego Unified Port District, 1600 Pacific Highway, San Diego, California.
4. In response to comments received on the Revised DEIR, the Port and the City engaged in public outreach efforts with many interested persons and organizations, including representatives of the Bayfront Coalition and its member organizations, the Environmental Health Coalition, San Diego Coastkeeper, The Surfrider Foundation (San Diego Chapter), San Diego Audubon Society, Coastal Environmental Rights Foundation, Southwest Wetlands Interpretative Association, and Empower San Diego and the ~~Southwest Chula Vista Civic Association~~, to address their concern that the Proposed Project and its component parts would be implemented in a manner that provided community benefits and



preservation and protection of natural resources and the environment in the project area. ~~Although These outreach efforts resulted in a proposed written agreement between the Port, the City, the RDA and the Bayfront Coalition and its member organizations, the agreement had not been signed by the time this Final EIR was prepared. Nonetheless, which provides for incorporation into~~ the Final EIR ~~incorporates many of the~~ additional design features and mitigation measures ~~contained in the proposed agreement,~~ such as a natural resources management plan, cooperative agreements with resource agencies for additional habitat management and protection, standards for public parks, and additional measures to reduce the effects of bird strikes, storm water and urban runoff, noise, lighting, boating impacts, hazardous waste removal, and energy conservation and efficiency. Although these additional project design features and mitigation measures are above and beyond those required by CEQA and other applicable laws and regulations, the Port has included them in the Final EIR and the Mitigation Monitoring and Reporting Program (MMRP) to ensure their implementation. The public outreach efforts and proposed agreement with the Bayfront Coalition and its member organizations are described more fully in *Section 2.1.1.3(a)* of this Final EIR.

5. The Revised DEIR discussed the L-Ditch on Parcel HP-5, located to the north and east of parcels H-13 and H-14, which is considered a wetland and is subject to Cleanup and Abatement Order No. 98-08 (CAO) issued by the Regional Water Quality Control Board, San Diego Region (RWQCB). The CAO is a separate regulatory action under the jurisdiction of the RWQCB which requires the cleanup and remediation of existing contamination in the L-Ditch. Because a work plan for cleanup and remediation of the existing contamination had not yet been developed by the Port or approved by the RWQCB, the Revised DEIR analyzed two potential scenarios for Parcel HP-5: the Proposed Project, which assumed no development would occur if the existing contamination were excavated and removed and the L-Ditch remained a wetland; and the Alternate L-Ditch Remediation Alternative, which assumed that development would occur if the existing contamination were remediated in place and the L-Ditch were filled and therefore no longer was considered a wetland. On March 2, 2010, the Port adopted Resolution No. 2010-033, which approved a work plan that proposes to fill the L-Ditch and remediate the existing contamination in place, as provided in the Alternate L-Ditch Remediation Alternative that was analyzed in *Section 5.7* of the Revised DEIR. The proposed work plan has been submitted to the RWQCB for its review and approval.

The Final EIR reflects the above events and responds to significant environmental points raised in the public and agency comments by making changes in the Revised DEIR. With the exception of this *Preface* and *Section 1.1* below, any changes in the text of the Revised EIR are shown in *Volume 2* of this Final EIR in a “strike-out and underline” manner, such that information that has been deleted from the text of the Revised DEIR is shown in ~~strike-out~~ form; and information that has been added to the text of the Revised DEIR is shown in underline form.

This *Chapter 1.0, Executive Summary* of the Final EIR provides a brief synopsis of the project description, alternatives considered, and a summary of the potential environmental impacts of the Proposed Project. It does not contain the extensive background and substantive analysis provided in *Chapter 2.0, Introduction*; *Chapter 3.0, Project Description*; *Chapter 4.0, Environmental Analysis*; *Chapter 5.0, Alternatives*, *Chapter 6.0, Cumulative Impacts*; and *Chapter 7.0, Other Required Considerations* of this Final EIR. Therefore, the reader is encouraged to review the entire Final EIR to fully understand the Proposed Project and its environmental consequences. The Port welcomes your participation in the process and invites you to attend the public hearing of the Board of Port Commissioners, at which certification of this Final EIR and approval of the Proposed Project will be considered.

## **1.1 Introduction to the Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan**

This Final Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental impacts that may result from implementation of the Chula Vista Bayfront Master Plan (CVBMP) Proposed Project. This EIR revises, updates, and expands the Draft EIR for the Proposed Project, which previously was circulated for a 60-day public review period from September 29, 2006, to November 27, 2006. In response to multiple requests for additional review time, the public review period was extended an additional 45 days to January 11, 2007, bringing the total public review period to 105 days. Since that time, the San Diego Unified Port District (Port) has received numerous public comments and substantial additional information concerning the Proposed Project and its environmental review. The Port has prepared this Final EIR in a good faith effort to respond to the public comments, to provide additional information concerning the design of specific development projects, and to address changes that have been made to various aspects of the Proposed Project.

The Chula Vista Bayfront is located on the southeastern edge of San Diego Bay in the City of Chula Vista. In 2002, the San Diego Unified Port District (Port) and the City of Chula Vista (City) joined together to create a master plan for the approximately 556-acre Bayfront and reconfigure its 497 acres of land and 59 acres of water uses, connecting them in a way that would promote public access to and engagement with the water while enhancing the quality and protection of key habitat areas, with the ultimate goal of creating a world-class bayfront through strong planning and design, economic feasibility, and community outreach.

Key components of this project, known as the Chula Vista Bayfront Master Plan (CVBMP) or Proposed Project, include the following:

- A Signature Park, open space areas, and cultural use
- Improved visual corridors to the San Diego Bay
- A Resort and Convention Center and other hotels
- Residential and mixed-use office/commercial recreation uses
- Waterfront retail uses and public gathering spaces around the harbor
- A new commercial harbor and improved navigation channel
- A public promenade and bike trail through the entire Bayfront
- Large buffer zones to protect adjacent sensitive resources.

As this is a joint planning effort covering a large area of land and water, a number of jurisdictional issues must be addressed and resolved. The Port currently has jurisdiction over much of the land and water areas, while the City currently exercises jurisdiction over some of the inland portions of the planning area. In addition, a number of parcels that the Port wishes to develop into visitor-serving uses are currently held by Pacifica Companies, a private residential developer. For this reason, the CVBMP proposes an exchange of lands between the Port and Pacifica Companies, as well as corresponding adjustments to the jurisdictional boundaries of the Port and City. Such land exchange would require approval by the State Lands Commission, which oversees “public trust” lands like those that the Port manages along the Bayfront.

The extensive redrawing of land uses in the project area requires changes to the Port and City jurisdictional boundaries and various planning documents that the Port and City use to guide development in this part of San Diego Bay. Specifically, the Port proposes to amend its Port Master Plan to reflect the new land and water uses and to account for the land exchange. Likewise, the City proposes to amend its General Plan and Local Coastal Program, which includes the Land Use Plan and Bayfront Specific Plan, all of which would be affected by the newly designated land uses.

The purpose of this EIR is to analyze the potential environmental impacts of various actions of the Port and City. This EIR describes the Proposed Project and the existing physical and regulatory environment, thereby placing the project in its proper environmental context; it analyzes the project’s potential impacts on the environment; and it identifies opportunities to minimize significant impacts through mitigation measures and reasonable alternatives, in accordance with the California Environmental Quality Act (CEQA). This EIR is also a public accountability and disclosure document designed to inform the public, as well as decision makers, about the potential environmental impacts of the project. The Port welcomes your

comments and participation at the public meetings and Board of Port Commissioners certification hearing.

## 1.2 Public Outreach and Participation

Some years ago, the Port and the City recognized the need to revitalize the Chula Vista Bayfront by providing greater public amenities and a more synergistic mix of land and water uses. However, such a vast, complex, and important master planning project could not be devised without community input. Therefore, for more than two years beginning in January 2003, the Port and City engaged in an intensive, ~~award-winning~~ public outreach program for the CVBMP.

As part of this two-phase public outreach program, the Port and the City established two Citizens Advisory Committees and conducted approximately 40 public meetings between January 2003 and July 2005. The Port formed the South Bay Power Plant Working Group, which met several times between December 2003 and April 2004 to address issues specific to the planned uses at the power plant site. In addition, the Port and City conducted six public workshops and held four joint Board of Port Commissioners/Chula Vista City Council meetings to discuss the project. The Port and City also conducted more broad-based outreach efforts, including 45 community presentations and a number of focused discussions with affected public agencies and organizations. For those who could not attend any of these presentations or meetings, and to keep the public apprised of the progress of the CVBMP planning effort, the Port published newsletters and regularly updated its CVBMP webpage.

Phase I of the master planning process, which began in January 2003 and ended in May 2004, resulted in the development of two land use plans then referred to as Option C (which has evolved into the Harbor Park Alternative) and Option B (which has evolved into the No Land Trade Alternative). Phase II, which began in June 2004 and ended in August 2005, built upon the Phase I planning efforts and resulted in the development of master plan concepts that identified locations and development program/height ranges and phasing for specific land uses. At their August 9, 2005 joint meeting, the Board and City Council/Redevelopment Agency received a presentation on the master plan concepts and authorized staff to proceed with the environmental review process for the CVBMP. At that meeting, the Board/City Council authorized staff to include the following three plans in the CVBMP EIR: Plan A (referred to in this EIR as the Harbor Park Alternative), Plan A Option 2 (referred to in this EIR as the Proposed Project or Sweetwater Park Plan), and Plan B (referred to in this EIR as the No Land Trade Alternative).

## 1.3 Project Objectives

As a result of the extensive CVBMP public outreach effort, the Port and City were able to build from their original vision for the Bayfront and incorporate features recommended by members of

the public. To meet the ultimate goal of creating a world-class bayfront, the Port and City developed the following 10 objectives during the master plan process:

- Consistency with tidelands trust requirements and restrictions
- Broad community input into the planning process and support of the master plan
- Development of a master plan that protects and enhances environmental resources
- Seamless integration with adjoining properties
- Development of a visionary master plan that is economically sustainable, provides revenue generation, and would encourage private sector participation
- Development of a plan that creates future market opportunities and defines the market rather than simply responding to the existing market
- Development of a plan that eliminates or reduces barriers to linking the Bayfront to the rest of western Chula Vista
- Development of a plan that enhances a culturally diverse community and integrates the Bayfront with the rest of Chula Vista
- Development of a comprehensive funding program
- Development of a master plan that includes recreational, public art, and open space opportunities as significant components of the plan.

In addition, the CVBMP urban design consultant team developed the following design principles during the master planning process:

- Create one unified Chula Vista Bayfront
- Celebrate the serenity and Hispanic culture of Chula Vista's Bayfront setting
- Extend Chula Vista all the way to the Bayfront
- Take advantage of deep water at the harbor to create an active boating environment
- Create a Bayfront park system that marries ecological habitats and the recreational needs of the community
- New development should reinforce the sense of place at the Bayfront.

In the course of adopting these project objectives, it became evident that the current jurisdictional lines would have to be redrawn and that it would be desirable for the Port to exchange some of its public trust property with Pacifica Companies. Without such a land exchange, the land use potential of the project planning area could not be optimized. As is

discussed throughout this EIR, the proposed land exchange is a fundamental component of the Proposed Project and would require approval by the State Lands Commission.

## 1.4 The Four Phases of the Proposed Project

The approximately 556-acre CVBMP project area is divided into three districts: the northern 130-acre Sweetwater District; the central 282-acre Harbor District; and the southern 144-acre Otay District. The CVBMP project is proposed to be developed in four phases over an approximately 24-year period. Construction of Phase I ~~project--level and II~~ components would begin upon project approval and conclude approximately five years later. Phase I ~~project--level~~ components are envisioned to consist of high-quality development and public improvements that would be concentrated in the Harbor and Sweetwater Districts and would be a catalyst for surrounding public and private development. ~~Phase III would start in 2013 with an expected completion date of 2017. Phase IV is anticipated to conclude in 2031.~~ The proposed construction phasing schedule for the CVBMP represents a “best-case scenario” and will be contingent upon and subject to many factors, including availability and timing of public financing and construction of public improvements, terms of existing long-term leases, actual market demand for and private financing of proposed development, lease negotiations, approvals for and demolition and/or relocation of existing uses, approvals for new uses, and other approvals. The Port and City plan to enter into an agreement for the purpose of financing and development of the Proposed Project.

Phase I components of the Proposed Project, consisting of development on Parcels H-13, H-14, HP-5, and H-17, as well as proposed roadway and infrastructure improvements in the Sweetwater and Harbor Districts (except the new F Street segment), are analyzed in this report at a project-specific level and all other ~~the~~ Phase I, II, III, and IV components are analyzed at a programmatic level. The nature and extent of additional environmental review, which may be required for the Phase I, II, III, and IV components, will be determined pursuant to State CEQA Guidelines Section 15168.

## 1.5 The Proposed Project

The Proposed Project, or Sweetwater Park Plan, is composed of the following components:

- Amendments to the Port Master Plan (PMP), the City of Chula Vista General Plan, and the City’s Local Coastal Program (which includes the Land Use Plan and Bayfront Specific Plan), and the Chula Vista Multiple Species Conservation Plan (MSCP) Subarea Plan.
- A land exchange between the Port and Pacifica Companies (a private developer).

- Implementation of the CVBMP through redevelopment of the Sweetwater, Harbor, and Otay Districts with a variety of uses, including park, open space, ecological buffers, cultural, recreational, residential, hotel and conference space, mixed-use office/commercial recreation, and retail. The CVBMP includes a specific development projects such as the Resort Conference Center (RCC) proposed by Gaylord Entertainment and residential development proposed by Pacifica Companies. In addition, CVBMP redevelopment may potentially include a resort and conference center and proposed in- water uses, including a reconfigured marina basin and boat slips, a new commercial harbor, and realignment of the existing navigation channel.
- Redevelopment of the roadway and sewer and water infrastructure system to serve the Proposed Project area both on site and off site.
- Demolition and/or relocation of existing uses to allow for the above redevelopment to occur subject to lease agreements.

The Sweetwater, Harbor, and Otay planning districts are each divided into proposed parcels. A diverse range of uses is proposed for development on these parcels. *Figure 1-1* depicts the parcel plan map and development phases for the Proposed Project. As shown on *Figure 1-1*, parcel numbers that begin with “S” are located in the Sweetwater District, “H” in the Harbor District, and “O” in the Otay District. A district-by-district description of project components is set forth below. This summary provides a brief synopsis of the project description. The reader should refer to *Chapter 3, Project Description*, for more detail.

### 1.5.1 Sweetwater District Components

The Sweetwater District consists of approximately 130 acres. In the Sweetwater District, the project proposes the lowest-intensity development of the three districts and focuses on lower scale, environmentally sensitive, and environmentally themed uses, including a large ecological buffer; a signature park; a bike path; pedestrian trails; other open space areas; and low-intensity uses such as office/retail, hotel, parking for the Chula Vista Nature Center, and roadway and infrastructure improvements.

#### 1.5.1.1 Phase I Projects

The project proposes to construct an approximately 18-acre Signature Park that would be connected to the existing Chula Vista Greenbelt. As currently planned, it would be constructed as a passive-use, meadow-type park, with pedestrian and bicycle trails, tot lots, picnic areas, benches, interpretive signage, restrooms, and landscaping. In addition, a 100-space asphalt parking lot and realigned Gunpowder Point Drive access road for the Chula Vista Nature Center are proposed in Phase I on a vacant, approximately 3-acre parcel located in the center of the

Sweetwater District. This parking lot (on Parcel SP-3) would permanently replace the existing Chula Vista Nature Center parking lot located off the I-5 off-ramp at E Street.

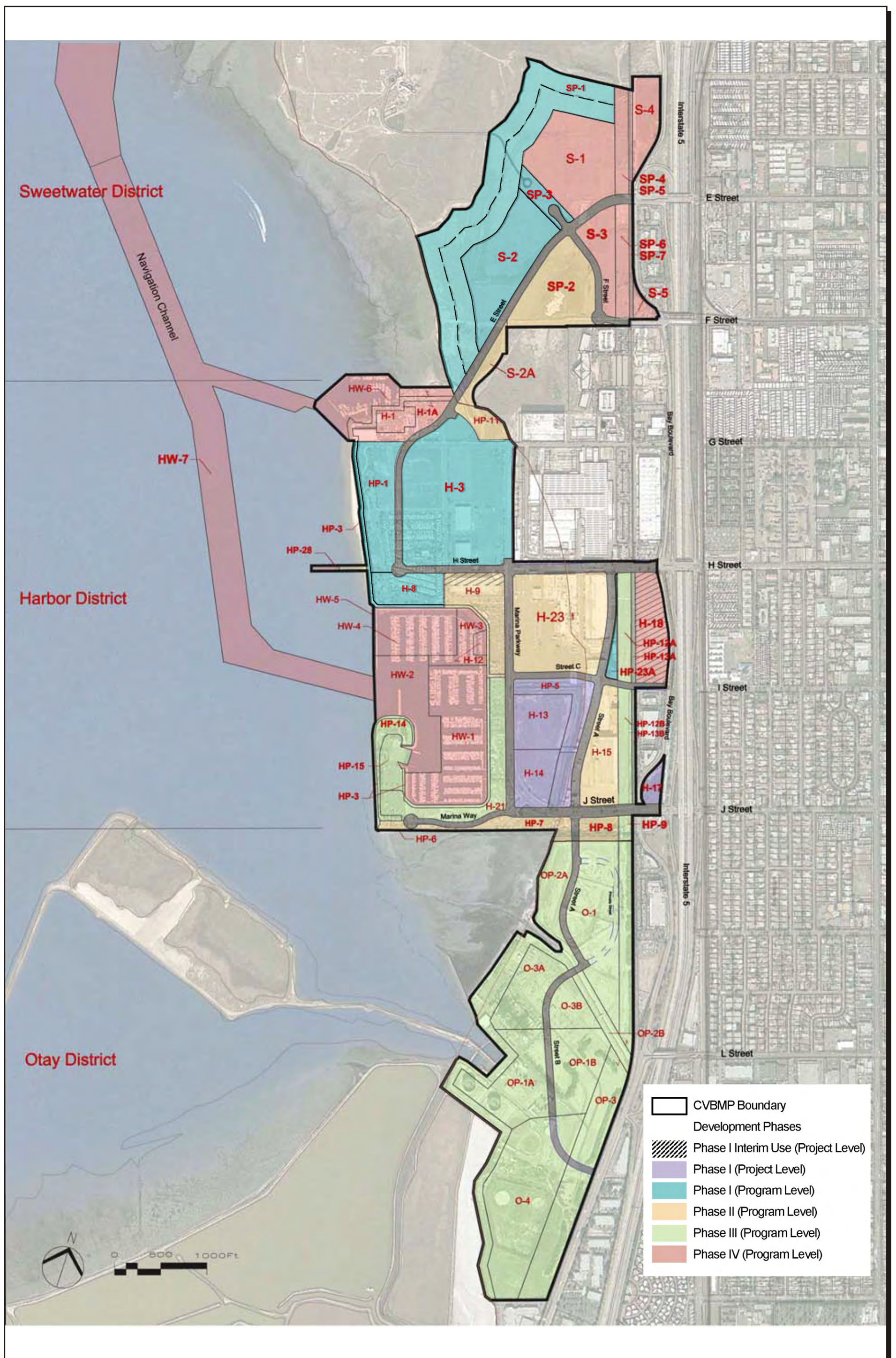
The project proposes to establish a 400-foot-wide ecological buffer zone surrounding the northern and western edges of the Sweetwater District and consisting of approximately 41 acres of undeveloped land on parcel SP-1. This buffer would protect the adjacent Sweetwater Marsh National Wildlife Refuge (NWR) from impacts associated with development in the Sweetwater District. From west to east, the buffer would consist of a 200-foot-wide No Use Zone, within which public access would be prohibited; wetland and upland habitat mitigation areas; a 100-foot-wide limited use zone, composed of revegetated open space areas with outlooks and trails; and a 100-foot-wide transitional use zone that would accommodate increased recreational uses such as picnic areas and trails and revegetated open space. The western portion will generally be used for potential upland and wetland mitigation and will contain no lookouts.

*Table 1-1* summarizes the proposed development for the Sweetwater District during Phase I for the Proposed Project.

**TABLE 1-1**  
**Proposed Phase I Development for the Sweetwater District**

<b>Parcel Number</b>	<b>Proposed Use</b>	<b>Proposed Development</b>
SP-1	Ecological Buffer	41 acres
SP-3	Nature Center Parking and Access Road	3 acres
S-2	Signature Park/Open Space	18 acres





SOURCE: Port of San Diego



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### 1.5.1.2 Phase II Projects

Several Sweetwater District components have been moved from Phase I to Phase II, including SP-1 Ecological Buffer, SP-2 Seasonal Wetland, and S-2A Open Space.

The project proposes to establish a 400-foot wide ecological buffer zone surrounding the northern and western edges of the Sweetwater District and consisting of approximately 40 acres of undeveloped land. This buffer would protect the adjacent Sweetwater Marsh National Wildlife Refuge (NWR) from impacts associated with development in the Sweetwater District. From west to east, the buffer would consist of a 200-foot wide No Use Zone, within which public access would be prohibited; wetland and upland habitat mitigation areas; a 100-foot wide limited use zone, composed of revegetated open space areas with outlooks and trails; and a 100-foot wide transitional use zone that would accommodate increased recreational uses such as picnic areas and trails and revegetated open space. There will be no lookouts on the western 200 feet of the buffer; the western portion will generally be used for potential upland and wetland mitigation.

In addition to the SP-1 Ecological Buffer proposed in Phase I, an additional buffer, approximately 50–100 feet in width, would be constructed around the seasonal wetland that currently exists in the Sweetwater District (Parcel SP-2). This buffer would further protect the wetland from planned development.

Approximately 3 acres of land that are partially an existing street and partially vacant is proposed for open space and/or mitigation opportunities (see *Section 4.8, Terrestrial Biological Resources*) between the new E Street extension and F & G Street Marsh. It is likely that the existing street segment between F and G Streets would be demolished and vacated after the proposed E Street extension is completed.

Table 1-2 summarizes the proposed development for the Sweetwater District during Phase II.

**TABLE 1-2**  
**Proposed Phase II Development for the Sweetwater District**

Parcel Number	Proposed Use	Proposed Development
SP-1	Ecological Buffer	41 acres
SP-2	Seasonal Wetland	14 acres
S-2A	Open Space	3 acres

### 1.5.1.3 Phase III Projects

There is no Sweetwater District development planned for Phase III.

### 1.5.1.4 Phase IV Projects

The Sweetwater District components ~~that were in Phase III in the previous Draft EIR have been moved to~~ in Phase IV in the Revised EIR, including development on parcels S-3, S-4, S-5, SP-4, SP-5, SP-6, and SP-7. In addition, the S-1 Resort Hotel ~~was moved from Phase I~~ is in the previous Draft EIR to Phase IV in the Revised EIR. Parcel S-5 will remain as an existing park/open space.

The project proposes to construct mixed-use office and commercial recreation in Phase IV on two separate parcels. The S-4 office will include a 100-foot buffer on the north end. In addition, approximately 11 acres of open space would be constructed. Development proposed in the Sweetwater District in Phase IV also includes a 500-room to 750-room resort hotel. *Table 1-3* summarizes the proposed development for the Sweetwater District during Phase IV.

**TABLE 1-3**  
**Proposed Phase IV Development**  
**for the Sweetwater District**

Parcel Number	Proposed Use	Proposed Development
S-1	Resort Hotel	500–750 rooms, 2–8 stories, 40–100 feet high
SP-4, SP-5, SP-6, SP-7, S-5	Parks/Open Space	11 acres
S-3	Mixed-Use Office/Commercial Recreation	60,000–120,000 square feet, 2–3 stories, 30–45 feet high
S-4	Office	120,000 square feet, 8 stories, 125 feet high

### 1.5.2 Harbor District Components

The Harbor District is most directly accessible to downtown Chula Vista and would be redeveloped to provide a significant link from the City to the Bayfront. It is composed of approximately 223 acres of land and 59 acres of water. The Harbor District proposes the highest intensity development of the Proposed Project and encourages an active, vibrant mix of uses, including hotels and conference space; park and other open space areas; a bike path; a continuous waterfront promenade; residential uses; mixed-use retail, office, and cultural space; piers; and new roadways and infrastructure. Also proposed is a reconfiguration of the existing harbor to create a new commercial harbor, and realignment of the navigation channel. Construction and development for project components in the Harbor District would occur in all four phases.

### 1.5.2.1 Phase I Projects

Of the various Phase I development ~~projects-components~~ proposed for the Harbor District, the most prominent is the Resort and ~~Convention~~ Conference Center (RCC). Located on a 39-acre parcel, the RCC would ~~be an entertainment-themed resort with~~ include approximately 1,500 to 2,000 rooms; approximately 415,000 square feet of net meeting space; and hotel support space. In addition, the RCC would include restaurants, retail shops, swimming pools, a spa, sports bars, gardens, a nightclub, a business center, and expansive open space areas.

To better integrate the RCC with the greenbelt established in the Sweetwater District, the project proposes extending the Signature Park southward and wrapping the park around the RCC. This extension, consisting of approximately 17 acres of land, would enable the Signature Park to connect with the smaller Chula Vista Bayside Park that currently exists in the Harbor District to create one continuous park of approximately 40 acres.

The Proposed Project also includes construction of approximately 1,500 mid-rise and high-rise residential units, subject to a land exchange between the Port and a private developer. Under the Proposed Project, An existing “L”-shaped drainage channel on HP-5 (referred to as an L-Ditch in this EIR) containing wetland habitat that borders the proposed residential development on two sides would not be developed, and would contain an average 50-foot-wide buffer from the delineated wetland edge on either side to protect against encroachment into the wetlands, other than for the proposed bridge crossing. As described in the Preface to this Final EIR, the Port adopted Resolution No. 2010-033 on March 2, 2010, which approved a work plan to fill the L-Ditch and remediate the existing contamination in place, as provided in the Alternate L-Ditch Remediation Alternative that was analyzed in Section 5.7 of this EIR. The proposed work plan has been submitted to the RWQCB for its review and approval.

The Proposed Project includes an approximately 12,000-linear-foot, continuous shoreline promenade or “baywalk” from the existing boatyard south, around the marinas, and ending at the shoreline north of the J Street Marsh, which would provide visitors with visual and physical access to the water. Parts of the promenade will be built in each phase, with the portion abutting HP-1 and H-8 built in Phase I. The promenade in the Harbor District would be connected to the Sweetwater District by a multiuse trail.

Interim uses are proposed on Parcels H-9 and H-18. Parcel H-9 would contain approximately 2 acres of interim park/landscaping within its northern boundary along H Street. H-18 would consist of a 1,100-space interim surface parking lot. The Proposed Project includes the acquisition of Parcel H-17 by the City.

As part of the Proposed Project, a fire station shall be constructed on Parcel H-17 at the corner of J Street and Bay Boulevard. This property is currently within the Port’s jurisdiction and will be

acquired by the City prior to any use as a fire station. An interim facility may be utilized until final construction is completed.

Table 1-4 summarizes the proposed development for the Harbor District in Phase I.

**TABLE 1-4**  
**Proposed Phase I Development for the Harbor District**

Parcel Number	Proposed Use	Proposed Development
HP-1, H-8	Signature Park	17 acres
HP-3	Shoreline Promenade (abutting HP-1 and H-8)	3 acres
HP-5	Wetlands and Buffer	9 acres
H-3	Resort Conference Center	1,500–2,000 hotel rooms; 415,000 square feet net conference space; 100,000 square feet restaurant; 20,000 square feet retail; <del>300</del> 240 feet high
H-9	Interim Park/Landscaping	2 acres
H-13, H-14	Residential	1,500 units; 19 stories; 220 feet high
H-13, H-14	Ancillary Retail	15,000 square feet
H-17	Bayfront Fire Station	9,500 square feet; 2 stories; 27 feet high
H-18	Interim Surface Parking Lot	1,100 parking spaces
HP-23A	Industrial Business Park Use	1 acre

### 1.5.2.2 Phase II Projects

To complement park development in the Harbor District during Phase I, the Proposed Project would establish approximately 8 acres of parks and open space in Phase II.

Another major aspect of the Harbor District development plan is the reuse of the former Goodrich South Campus parcels with 420,000 square feet of mixed-use office/commercial recreation use and a 250-room hotel with ancillary facilities. The project also proposes a second hotel consisting of 500 rooms, conference areas, restaurants, open space, other ancillary uses, and up to 200,000 square feet of cultural and/or retail space.

Consistent with the goal of improved public access, the project also proposes to construct the first half of a new 36,000 square foot pier at the end of the newly extended H Street corridor. Construction of the Shoreline Promenade will continue in Phase II, during which the portion abutting Parcel H-9 will be built.

The project also proposes the development of approximately 50,000 square feet of visitor-serving retail and commercial recreation facilities around the northern end of the harbor.

Table 1-5 summarizes the proposed development for the Harbor District in Phase II.

**TABLE 1-5**  
**Proposed Phase II Development for the Harbor District**

Parcel Number	Proposed Use	Proposed Development
HP-6, HP-7, HP-8,	Parks/Open Space	8 acres
H-9	Retail/Commercial Recreation and Marina Support	25,000–50,000 square feet; 1–2 stories; 15–30 feet high
H-15	Mixed-Use Office/Commercial Recreation	420,000 square feet; 90–130 feet high
H-15	Hotel	250 rooms, 90–130 feet high
H-23	Resort Hotel	500 rooms, 300 feet high
H-23	Cultural/Retail	200,000 square feet; 30–65 feet high
HP-3	Shoreline Promenade (abutting H-9)	1 acre
HP-28	H Street Pier (first half)	0.4 acre

### 1.5.2.3 Phase III Projects

The project proposes approximately 150,000 square feet of retail/commercial recreation around the southern end of the harbor.

Construction of the Shoreline Promenade would continue in Phase III, during which the portion abutting Parcels HP-14, HP-15, and H-21 (approximately 3 acres) would be built.

Table 1-6 summarizes the proposed development for the Harbor District in Phase III.

**TABLE 1-6**  
**Proposed Phase III Development for the Harbor District**

Parcel Number	Proposed Use	Proposed Development
HP-3	Shoreline Promenade (abutting HP-14, HP-15, and HP-21)	3 acres
HP-9, HP-12, HP-13, HP-14, HP-15	Park/Open Space	18 acres
H-21	Retail/Commercial Recreation	75,000–150,000 square feet; 1–2 stories; 15–30 feet high

### 1.5.2.4 Phase IV Projects

The Proposed Project would establish approximately 5 acres of parks in Phase IV on the northern end of the Harbor District, completing the continuous signature park, totaling approximately 40 acres at build-out.

A portion of the former Goodrich land areas would also be redeveloped with 100,000 square feet of mixed-use office/commercial recreation use and a 1,100 to 3,000 space collector parking garage. This was moved from Phase I in the previous Draft EIR to Phase IV.

Currently, the Chula Vista Harbor, which contains two marinas with approximately 900 boat slips, lacks an active commercial harbor that encourages and enhances public access to the water and boating activity in the water. To facilitate the creation of an active commercial harbor, the existing marina slips would be reconfigured during Phase IV. Envisioned for this new commercial harbor are water taxis, dinner boats, harbor cruises, visiting historic vessels, and boat rentals. The commercial harbor would include a ferry terminal and second-story restaurant. The ferry terminal would provide alternative transportation for commuters and tourists traveling to the Bayfront. Also proposed in Phase IV is the realignment of the existing navigation channel, which would be straightened westward to make it easier for boats to enter the harbor from the San Diego Bay. The realignment would also place the boating channel further away from sensitive resources along the shoreline. Another major component of the Phase IV harbor project is the completion of the H Street Pier extension.

Construction of the Shoreline Promenade would continue in Phase IV, during which the portion abutting Parcels H-1 and H-1A (approximately 2 acres) would be built. The final Phase IV component includes a community boating center with 200 boat slips.

*Table 1-7* summarizes the proposed development for the Harbor District in Phase IV.

**TABLE 1-7**  
**Proposed Phase IV Development for the Harbor District**

Parcel Number	Proposed Use	Proposed Development
H-1	Community Boating Center	10,000-20,000 square feet; 1–2 stories; 15–30 feet high
H-1A	Signature Park	5 acres
H-18	Mixed-Use Office/Commercial Recreation	100,000 square feet; 6–10 stories; 85–155 feet high
H-18	Collector Parking Garage	1,100–3,000 parking spaces; 6–10 stories; 85–155 feet high
HP-3	Shoreline Promenade (abutting H-1 and H-1A)	2 acres
HW-6	Marina (see H-1)	200 slips
HW-7	Navigation Channel	60 acres
H-12	Ferry Terminal/Restaurant	10,000–25,000 square feet; 2 stories; 30–40 feet high
HW-1, HW-2, HW-3, HW-4	Marinas, Boat Navigation Area, Commercial Harbor	50 acres, 700 slips

### 1.5.3 Otay District Components

The Otay District is composed of approximately 144 acres, and proposes medium-density development that consists of industrial business park use, a recreational vehicle park, a new South Park, as well as other open space areas, an ecological buffer, bike path, pedestrian trails, and new roadways and infrastructure.



**1.5.3.1 Phase I Projects**

All of the Otay District components are proposed in Phase III. No construction in this district is proposed in Phase I.

**1.5.3.2 Phase II Projects**

All of the Otay District components are proposed in Phase III. No construction in this district is proposed in Phase II.

**1.5.3.3 Phase III Projects**

All Phase II Otay District components in the previous Draft EIR have been moved to Phase III. The project proposes a recreational vehicle park with approximately 236 RV parking spaces and ancillary facilities. Industrial Business Park uses are proposed on the northernmost and southernmost Parcels O-1 and O-4 in the Otay District, previously proposed for residential and Energy Utility Zone uses in the previous Draft EIR. No new power plant, Energy Utility Zone, or residential uses are proposed in the Otay District.

As with the Sweetwater and Harbor Districts, the Otay District would also include new parkland use. Specifically, a new passive South Park, composed of approximately 24 acres is proposed, as well as 27 acres of other open space areas on the eastern edge of the district. Like the Sweetwater District, the Otay District would have a buffer that would include a 170-foot-wide to 200-foot-wide No Use Zone that could be used for habitat mitigation opportunities. Finally, development in the Otay District would involve improvements to the existing concrete-lined drainage channel at Telegraph Creek within the Proposed Project limits to accommodate projected storm flows.

Table 1-8 summarizes the proposed development for the Otay District in Phase III.

**TABLE 1-8**  
**Proposed Phase III Development for the Otay District**

Parcel Number	Proposed Use	Proposed Development
OP-1A, OP-1B, OP-3	South Park/Open Space	51 acres
OP-2A, OP-2B	Ecological Buffer/Telegraph Creek Channel	27 acres
O-1	Industrial Business Park Use	18 acres
O-3A, O-3B	RV Park	175–236 RV spaces, 1–2 stories, 15–35 feet high
O-4	Industrial Business Park Use	28 acres

**1.5.3.4 Phase IV Projects**

All of the Otay District components are proposed in Phase III. No construction in this district is proposed in Phase IV.

### 1.5.4 Roadway System and Infrastructure

Over the course of the 24-year Proposed Project, roadways would be demolished, improved, realigned, or constructed anew to support development of the designated land uses. The proposed road improvements that serve the associated development for a particular phase would be constructed with all required utility systems so that the infrastructure is in place before individual development projects commence operation. The improvements for roadway system components, storm drains, water mains and connections, and sewers are summarized below.

#### 1.5.4.1 Roadway System Components

In the Sweetwater District, E Street would be realigned and extended. A new bridge and bike path would be built over the inlet that flows into the F & G Street Marsh. F Street/Lagoon Drive would terminate in a new cul-de-sac, and a new F Street segment would be constructed. The abandoned segment of the existing F Street would remain in place but would be accessible to only emergency vehicles, pedestrians, and bicycles. The realignment of Gunpowder Point Drive and a new parking lot for the Chula Vista Nature Center are also proposed. All of the roadway improvements in the Sweetwater District, as with all of the districts, will be constructed as mitigation measures in accordance with *Section 4.2, Traffic and Circulation*; however, should funding be available, some street and utility improvements may be installed earlier. The one exception would be surface improvements for a new F Street segment, which would be constructed in Phase IV.

In the Harbor District, E and H Streets would be extended and H Street would serve as the primary entry to the RCC. J Street/Marina Parkway and Marina Way would be realigned. Bay Boulevard would remain open and would not be removed as was proposed in the previous Draft EIR. A newly constructed Street A and Street C would also provide access to Proposed Project components in the Harbor District. All proposed roadway improvements in the Harbor District would occur in Phase I.

In the Otay District, a new Street A and Street B would be built during Phase III to accommodate the new uses. No other roadways in the Otay District are proposed.

Intersections throughout the project site and off site would be improved during all phases of the Proposed Project. These improvements would include through lanes and turning lanes, all-way and two-way stop-controlled intersections, and traffic signals. In addition, the project proposes enhanced pedestrian access within developed and open space areas, enhanced public access to the waterfront, and a bikeway loop connecting the Bayshore Bikeway with the various activity centers and elements of the Proposed Project.

As described in Section 4.2, Traffic and Circulation of this EIR, all of the roadway improvements within the Sweetwater and Harbor Districts (except for the new F Street segment) are evaluated at a project-level. The analysis was structured in this way to provide flexibility to construct identified roadway improvements sooner than required in the traffic analysis, if deemed necessary. The proposed timing of construction for roadway improvements, however, is tied to requirements of proposed adjacent development. For Phase I project-level components, therefore, only those improvements required for access, frontage, and traffic impact mitigation for development on Parcels H-13, H-14, HP-5, and H-17 are proposed for construction prior to or concurrently with development of these Phase I components. Roadway improvements necessary for Phase I program-level components and subsequent phase program-level components would be required prior to or concurrently with the development of these specific components. All impacts resulting from construction of roadway improvements for subsequent phases of development in the Otay District, and the new F Street segment in the Sweetwater District, are evaluated in this EIR as part of the program-level analysis.

#### **1.5.4.2 Storm Drains**

The additional outfalls and connections for the proposed storm drain system would be constructed during Phases I, II, and III. The primary storm drain infrastructure required for the Sweetwater District would be developed during Phase I, for the Harbor District during Phase I, and for the Otay District during Phase III.

#### **1.5.4.3 Water**

On-site and off-site water facility improvements would be required for the Sweetwater and Harbor Districts during Phase I and for the Otay District during Phase III. The Proposed Project would replace existing on-site water mains, except for a water main located in Lagoon Drive. The new on-site water facilities would consist of water mains that extend in the proposed streets with metered connections and fire services for each parcel within each district.

#### **1.5.4.4 Sewer**

The Proposed Project would require construction of new and replacement sewer facilities on the project site. The Proposed Project would require gravity sewer mains in the streets, sewer force mains, sewer lift stations, and connections to the existing City sewer system. The sewer system for the Sweetwater and Harbor Districts would be constructed during Phase I. The improvements and facilities for the Otay District would be constructed in Phase III.

## 1.6 Project-Related Impacts

Although designed to be sensitive to both the human and natural environment, the Proposed Project includes dramatic changes to the existing conditions at the site, resulting in a variety of impacts. This EIR evaluates the project's potential to adversely affect a wide range of resources and impact categories, including the following:

- Land/Water Use Compatibility
- Traffic and Circulation
- Parking
- Aesthetics/Visual Quality
- Hydrology/Water Quality
- Air Quality
- Noise
- Terrestrial Biological Resources
- Marine Biological Resources
- Cultural Resources
- Paleontological Resources
- Hazards and Hazardous Materials/Public Safety
- Public Services
- Public Utilities
- Seismic/Geologic Hazards
- Energy
- Population and Housing

This EIR also analyzes the Proposed Project's growth-inducing and cumulative impacts.

The complete analysis of the potential impacts and recommended mitigation measures is set forth in *Chapter 4, Environmental Analysis*, of this report. A summary of the impacts associated with the Proposed Project, recommended mitigation measures, and the level of impact significance after mitigation is provided in *Table 1-9*, located at the end of this chapter.

### **1.6.1 Insignificant Impacts**

As explained in this EIR, the relevant available data shows that the Proposed Project would have less than significant impacts on parking, cultural resources, and population and housing.

### **1.6.2 Significant Impacts**

This EIR indicates that the project has the potential to create significant adverse impacts on: land/water use compatibility, traffic and circulation, aesthetics/visual quality, hydrology/water quality, air quality, energy, noise, terrestrial biological resources, marine biological resources, paleontological resources, hazards and hazardous materials/public safety, public services, public utilities, and seismic/geologic hazards. These impacts would require mitigation to reduce or avoid impacts.

### **1.6.3 Impacts Not Mitigated to Insignificant Level**

The following project impacts would remain significant even after mitigation: traffic impacts on local freeway segments; visual impacts from the height and mass of buildings to be constructed in the Harbor District; and air quality impacts from emissions of nitrogen oxides, carbon monoxide, reactive organic gas, and particulate matter.

### **1.6.4 Cumulative Impacts**

Cumulative impacts are considered less than significant for land/water use, parking, water quality, noise, cultural resources, paleontological resources, hazards and hazardous materials, parks and recreation, integrated waste management, seismic/geologic hazards, energy, and population and housing.

Cumulative impacts on biological resources are reduced to less than significant with implementation of regional habitat conservation plans, as well as project-specific mitigation measures to be implemented on a project-by-project basis. Cumulative impacts on public services and utilities (e.g., fire protection, law enforcement, schools, library services, sewer and wastewater capacity) would also require appropriate mitigation to reduce or avoid impacts.

During Phase II and IV construction of the marina, pier, and navigation channel, the Proposed Project could cause significant cumulative impacts on open water resources. These impacts were analyzed at the program level; therefore, prior to implementation of these project components, the Port will conduct additional review of cumulative impacts pursuant to CEQA Section 15168.

When combined with the environmental effects of other past, present, and reasonably foreseeable future projects, the Proposed Project's cumulative impacts on traffic and circulation,

aesthetics/visual quality, and air quality would be **significant and unmitigated** despite measures to reduce impacts.

### 1.6.5 Growth-Inducing Impacts

The plan is expected to contribute greatly to the economy of the Chula Vista region in terms of jobs, personal income, and tax revenues. New development, including hotel and office uses, visitor-serving retail, residential, parkland and open space, would increase activity and use of the waterfront. Construction of additional housing would accommodate regional population projections. The Proposed Project would increase demand on public services and require more retail businesses, ultimately creating new jobs that could be filled from within and outside the community.

While development intensity would be shifted from areas adjacent to sensitive wildlife areas to central areas of the Bayfront, the Proposed Project could encourage or facilitate other activities in the south San Diego Bay area. These activities, either individually or cumulatively, could significantly affect the environment; therefore, the Proposed Project or its alternatives would have a significant impact on growth in the area.

## 1.7 Project Alternatives

### 1.7.1 CEQA Requirements Regarding Alternatives

Under CEQA (California Public Resources Code Section 21000 et seq.), an EIR must assess a reasonable range of alternatives, including a No Project Alternative, and thereby provide the public and decision makers with the means to compare the Proposed Project with other potentially suitable options. In order to merit consideration in the EIR, an alternative should meet all or most of the identified project objectives and should reduce one or more significant impacts of the Proposed Project. Due to the nature of the Proposed Project as a master plan for this specific geographic area, an alternative location was not included as part of this EIR.

CEQA recognizes that an EIR's assessment of an alternative's potential impacts would necessarily be less in depth than the assessment performed for the Proposed Project. This EIR discusses five alternatives. The Proposed Project EIR follows the standard protocol in respect to three of the proposed alternatives: the No Project Alternative, the Reduced Overall Density Alternative, and the Alternate L-Ditch Remediation Alternative. Although not legally required by CEQA, the Harbor Park Alternative and the No Land Trade Alternative are analyzed in greater detail. This was done to fulfill the Port's long-standing commitment to the community groups and resource agencies that have participated in planning efforts. The various alternatives to the Proposed Project are summarized below.

### 1.7.2 No Project Alternative

Under the No Project Alternative, no changes to existing or planned uses would occur, and there would be no land exchange. The Port Master Plan Precise Plan for District 7 would be retained in the Port lands. As a result, the lands could be developed pursuant to the existing Port Master Plan. Those parcels within the City's jurisdiction would be developed pursuant to the existing General Plan and Local Coastal Program (including the Land Use Plan and Specific Plan). These documents contemplate intense development of residential units in the Sweetwater District, as well as commercial, professional, recreation-oriented, public, and industrial uses throughout the project area.

Under this alternative, no residences would be constructed in either the Harbor or Otay Districts. As a result, the risk of human exposure to hazardous substances in these areas would be reduced.

The main biological benefit of this alternative is that it does not contemplate construction of a 300-foot-high hotel and high-rise residential in the Harbor District; therefore, it would likely result in fewer ~~bird strikes~~impacts to biological resources in that district.

Although this alternative would not create conflicts with existing development plans, it would concentrate intense development adjacent to key sensitive areas, such as the F & G Street Marsh and the Sweetwater Marsh NWR. In addition, this alternative would not meet the objectives of the Port and the City to create a vibrant waterfront that attracts visitors and activates the economic potential of this part of the San Diego Bay.

### 1.7.3 Harbor Park Alternative

In contrast to the Proposed Project, the Harbor Park Alternative would place an RCC on a parcel further removed from the Bayfront and would establish the Signature Park and a lower-scale, 350-room to 500-room hotel on parcels nearest the water in the Harbor District. In the Sweetwater District, a 400-room conference hotel with a maximum height of 60 feet would be constructed.

Up to 420,000 square feet of mixed-use office/commercial recreation and 50,000 square feet of cultural use would be built in the Sweetwater District in Phase IV. A 500-room hotel with a maximum height of 65 feet and a 200-slip marina would replace the community boating center in the Harbor District. Up to 100,000 square feet of retail would be built around the northern portion of the harbor, instead of up to 50,000 square feet of retail as in the Proposed Project. The E Street extension/Marina Parkway alignment within Sweetwater would be modified to direct traffic easterly as the road enters the Harbor District. In all other relevant respects, the Harbor Park Alternative is similar to the Proposed Project and would require Port and State Lands Commission approval of the proposed land exchange

The impacts associated with this alternative would be similar to those identified for the Proposed Project. However, the relocation of the RCC would incrementally reduce direct and indirect impacts to biological resources as compared to the Proposed Project. This alternative proposes locating less intensive uses closer to the open space areas. The road network would also be pushed back to serve the RCC; this would reduce impacts on the shoreline. In general, the Harbor Park Alternative would locate fewer intense uses adjacent to sensitive park and habitat areas, such as the F & G Street Marsh, and thus would generate fewer and/or less intense impacts on these resources.

#### **1.7.4 No Land Trade Alternative**

In addition to the No Project Alternative discussed above, this EIR evaluates the No Land Trade Alternative, which would keep the RCC in the Harbor District. The Sweetwater District would not be a part of the project; however, under existing entitled uses under the Midbayfront LUP/LCP, high-density residential units, a hotel, and ancillary retail and commercial uses in the Sweetwater District could be developed. Under this alternative, the proposed land trade would not take place. Tidelands trust properties in the Project Area would remain within the Port's jurisdiction. Parcels held under option by private developers would remain within the City's jurisdiction.

Impacts, including traffic, services, and utilities, would be similar to that expected with the Proposed Project, although impacts at specific intersections would differ slightly. Visual impacts to the adjacent Sweetwater Marsh NWR would be greater than for the Proposed Project, as more intensive residential, commercial, and retail development would be constructed in the Sweetwater District instead of the Harbor and Otay Districts. However, school impacts would be reduced, as the number of residential units, and therefore the number of potential students, is fewer under this alternative than under the Proposed Project.

#### **1.7.5 Reduced Overall Density Alternative**

The Reduced Overall Density Alternative (30 percent reduction) was selected for consideration to provide a development alternative that would reduce overall building mass and height and intensity of uses in order to reduce overall impacts. Because this alternative would develop 450 fewer residential units and reduce the square footage of all other proposed uses by one-third, this alternative would reduce the following significant impacts of the Proposed Project: traffic/circulation, aesthetics/visual quality, hydrology/water quality, air, noise, paleontological resources, hazards, public services, public utilities, seismic/geologic hazards, and energy.

The Reduced Overall Density Alternative retains all uses proposed for the project but provides for a 30 percent overall reduction of floor area/residential units throughout all development areas.



Given that this alternative calls for an across-the-board reduction in density, it would result in fewer and/or less intense impacts than those associated with the Proposed Project. This is true of virtually every resource or impact category. For this reason, the Reduced Overall Density Alternative has been identified as the Environmentally Superior Alternative, as required under CEQA Guidelines (14 CCR 15126.6(e)(2)). This alternative also assumes Port and State Lands Commission approval of the proposed land exchange.

### 1.7.6 Alternate L-Ditch Remediation Alternative

Cleanup and Abatement Order (CAO No. 98-08; revised April 2, 1998), issued by the RWQCB, requires the cleanup of existing contamination on the former Goodrich South Campus, including the L-Ditch on a portion of Parcel HP-5. Remediation of the contamination pursuant to the CAO is a regulatory enforcement action subject to the jurisdiction of the RWQCB, which is proceeding independently of the Proposed Project (see *Section 3.4.9.2, Goodrich South Campus Remediation*, of this document). The Proposed Project assumes that the remedial action plan approved by the RWQCB will require the L-Ditch to be remediated in place and will result in the L-Ditch retaining its status as a wetland area after the remediation is completed. The Alternative L-Ditch Remediation Alternative is based on the alternate assumption that the remedial action plan ultimately approved by the RWQCB would require the L-Ditch to be remediated and filled. Under this assumption, the L-Ditch would no longer be considered a wetland after the remediation is completed. This alternative analyzes the potential environmental impacts of a development plan for Parcels HP-5, H-13, and H-14, which may occur in the event the L-Ditch is filled pursuant to the CAO. This alternative assumes that all other aspects of development in all phases would be the same as the Proposed Project. On March 2, 2010, the Port District adopted a Work Plan that provides for clean-up of existing contamination and filling the L-Ditch in a manner consistent with the Alternate L-Ditch Remediation Alternative described in Section 5.7 of the Revised DEIR. The Work Plan is subject to review and approval by the RWQCB, which has jurisdiction over clean-up and remediation of the L-Ditch.

## 1.8 Project Approval Process

For purposes of CEQA, the Port is the lead agency for the Proposed Project, and therefore has the principal responsibility for carrying out and approving the project and is responsible for the preparation of this EIR. With the help of the City, the Port prepared ~~this~~ the Revised Draft EIR and ~~has now~~ made it available to the public for review and comment. The Port ~~will~~ has issued a Notice of Completion and circulated the Revised EIR for a ~~45-60~~ day public review period.

~~Once the~~ At the end of the public comment period ~~is closed~~, the Port ~~will~~ prepared responses to the CEQA-related questions, issues, and concerns raised by members of the public and the various agencies charged with reviewing this EIR. With the help of the City, the Port prepared this Final EIR and has now made it available to those who have commented previously. This

Final EIR considered those comments received on the Revised DEIR. Individual responses were prepared to comments received and included in *Volume 1* of this Final EIR. Any revisions to the EIR are indicated throughout this Final EIR in strike-out/underline text as per section 15088(d) of the CEQA Guidelines and as described in the *Preface* above.

In addition, to the extent that the comments identified areas where the EIR must be modified or augmented, such changes will be made during the process of finalizing the document. ~~When the Final EIR is ready for certification, the~~ The Port will hold a formal public hearing to consider whether to certify the EIR and approve the Proposed Project. If the project is approved, the Port will also adopt Findings of Fact, a Mitigation Monitoring and Reporting Program, and, if necessary, a Statement of Overriding Considerations. As part of this process, the Port may also approve its Port Master Plan Amendment, as well as the Phase I components of the project.

The City will likewise hold noticed public hearings to discuss the proposed amendments to its General Plan and Local Coastal Program (Land Use Plan and Specific Plan). Although the City, as a Responsible Agency under CEQA, is not required to formally certify the Final EIR, it will nevertheless rely on the document to support its decisions on the plan amendments and the specific Phase I projects that would take place within its jurisdiction.

The State Lands Commission will consult the Final EIR during its deliberations on the proposed land exchange between the Port and Pacifica Companies. Finally, the California Coastal Commission will use this EIR to determine whether the proposed amendments to the Port Master Plan and Local Coastal Program are consistent with the California Coastal Act. Such consistency determinations are required before the amendments can be formally implemented.

## 1.9 Conclusion

From the beginning, the CVBMP has been shaped by public needs, preferences, and concerns. During the planning process, the Port and the City have solicited and received public input on the project. The Port, as lead agency, encourages all interested persons to review the document carefully for completeness and accuracy.

**TABLE 1-9**  
**Summary of Impacts and Mitigation**

Impact	Mitigation	Significance After Mitigation
<b>4.1: Land Use/Water Compatibility</b>		
<p><b>Significant Impact 4.1-1:</b> During Phase III, the Proposed Project could impact CCC wetlands on HP-13B, through development within the Coronado Railroad ROW, and on HP-7 during Phase II. These impacts would be significant.</p>	<p><b>Mitigation Measure 4.1-1</b></p> <p><b>Port:</b></p> <p>Prior to the issuance of the first grading permit for activities that could impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall consult with the CCC to determine if the proposed impact is allowed under the <u>California</u> Coastal Act. If the impact is not allowed, then a design shall be developed that avoids impacts to CCC jurisdictional wetlands. In the event that the CCC concurs that the impact to CCC jurisdictional wetlands is allowed, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands to provide 2:1 mitigation for the impact to CCC wetlands on Parcels HP-13B and HP-7. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, <u>shall</u> detail the target functions and values, and <u>shall</u> address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and <u>shall</u> establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del>5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report, and remediation will occur within <del>three</del>3 months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p><b>Significant Impact 4.1-2:</b> There is a small seasonal pond located on Parcels O-1 and OP-3 in the Otay District near Soil Test Pits 9 and 10 that are considered CCC wetlands. These areas are designated for Industrial Park Use and Open Space, respectively, during Phase III of the Proposed Project. Phase III development at Parcel O-1 could result in a significant impact. Development of an industrial business park that impacts these wetlands would be considered significant.</p>	<p><b>Mitigation Measure 4.1-2</b> (Mitigation Measure 4.1-2 will reduce Significant Impacts 4.1-2 and 4.1-3 to below a level of significance.)</p> <p><b>Port:</b> The Port or Port tenants, as appropriate, will need to mitigate impacts to the areas identified as seasonal pond, mapped as a CCC wetland at a 2:1 ratio.</p> <p>The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether drainages mapped as a potential CCC wetland falls under CCC jurisdiction. If this area is not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the final development design must mitigate impacts at a 2:1 ratio.</p> <p>Prior to the issuance of the first <del>clearing and grubbing permit</del> or grading permit for projects that could impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall consult with the CCC to determine <del>if whether</del> the proposed impact is allowed under the <u>California</u> Coastal Act. If the impact is not allowed, then a design shall be developed that avoids impacts to CCC jurisdictional wetlands. In the event that the CCC concurs that the impact to CCC jurisdictional wetlands is allowed, the Port or Port tenants, as appropriate, shall prepare a restoration plan <del>to</del> detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, <u>shall</u> detail the target functions and values, and <u>shall</u> address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, <u>and</u> monitoring and maintenance practices, and <u>shall</u> establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del>5-year maintenance and monitoring period would be implemented following installation, to ensure each area is successful. The restoration plan shall address monitoring requirements and <u>shall</u> specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del>3 months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.1-3:</b> The former industrial facility sites occupy approximately 8.82 acres on Parcels O-1, OP2-A, O-4, and proposed Streets A and B. If it is determined that these areas are subject to Coastal Commission jurisdiction, the development proposed at these locations on Parcel O-1 and Streets A and B would be significant. The proposed restoration on Parcel OP-2A would not result in significant impacts because temporary impacts to CCC jurisdictional resources for restoration is allowed under Section 30233 of the Coastal Act.	<b>See Mitigation Measure 4.1-2 above.</b>	Less than significant
<b>Significant Impact 4.1-4:</b> The Proposed Project would be inconsistent with Land Use and Transportation objective LUT 11 in the City's adopted General Plan in regard to aesthetics and visual resources. This inconsistency would be a significant impact.	No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce this impact to view quality. See <i>Chapter 5, Alternatives</i> , for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed development.	Significant and unmitigated
<b>Significant Impact 4.1-5:</b> The Proposed Project would be inconsistent with Public Facilities and Services objective PFS 11 in the City's adopted General Plan in regard to library services and facilities. This inconsistency would be a significant impact.	<b>Mitigation Measure 4.1-3</b> <b>City:</b> Prior to the approval of a building permit for any residential project, the applicant shall pay a PFDIF or equivalent fee in an amount calculated according to the City's PFDIF program in effect at the time of permit issuance. Due to existing deficiency in library service in the City, the impact would remain significant.	Significant and unmitigated
<b>Significant Impact 4.1-6:</b> The Proposed Project would not conform to the adopted MSCP Subarea Plan unless an HLIT Permit is obtained for the development on Parcels H-13, H-14, H-15, and HP-5.	<b>Mitigation Measure 4.1-4</b> <b>City:</b> Prior to issuance of any permit for clearing, grubbing, or grading, <del>within the jurisdiction of the City of Chula Vista,</del> the project applicant shall be required to obtain an HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>4.2: Traffic and Circulation</b>		
<p><b>Significant Impact 4.2-1:</b> Development of the project components without adequate access and frontage would result in a significant impact related to roadway design.</p>	<p><b>Mitigation Measure 4.2-1</b></p> <p>Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall:</p> <ul style="list-style-type: none"> <li>• Construct H Street west of Marina Parkway as a 2-lane Class III Collector</li> <li>• Construct E Street as a <del>two</del>2-lane Class III Collector along Parcel H-3. This would provide a connection to Lagoon Drive via Marina Parkway.</li> <li>• Construct a traffic signal at H Street and <del>Gaylord</del>RCC Truck Driveway.</li> </ul> <p>Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall:</p> <ul style="list-style-type: none"> <li>• Rebuild <u>that portion of Marina Parkway fronting H-13 and H-14 between E Street Sandpiper Way and J Street</u> as a <del>three</del>3-lane Class II Collector with excess ROW used for pedestrian facilities, or secure such construction to the satisfaction to the City engineer. <u>Frontage improvements for the remaining segments of Marina Parkway J Street and Sandpiper Way will be constructed in conjunction with the development of the adjacent parcels to these frontages in subsequent phases.</u></li> <li>• Construct Street A north of J Street would be constructed as a <del>two</del>2-lane Class III Collector, <u>or secure such construction to the satisfaction of the City Engineer.</u></li> </ul>	Less than significant
<p><b>Significant Impact 4.2-2:</b> The Phase I roadway segment of Lagoon Drive/F Street (Marina Parkway to Bay Boulevard) will experience congested LOS F conditions and will require mitigation.</p>	<p><b>Mitigation Measure 4.2-2</b></p> <p>Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, Port or Port tenants, as appropriate, shall construct H Street from I-5 to Marina Parkway as a four-lane Major Street. <u>This mitigation is provided in lieu of widening of F Street due to environmental constraints associated with the widening of F Street in the vicinity of the F&amp;G Street Marsh.</u> At the completion of the H Street extension, the Port or Port tenants, as appropriate, shall also restrict access along the segment of Lagoon Drive/F Street (between Parcel H-3 and the BF Goodrich access on F Street) to emergency vehicle access only. This mitigation would reduce Significant Impact 4.2-2, 4.2-4, 4.2-6, 4.2-7, and 4.2-11 to below a level of significance.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-3:</b> The Phase I roadway segment of H Street (west of Marina Parkway) will experience congested LOS F conditions and will require mitigation.	<b>Mitigation Measure 4.2-3</b> Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, Port or Port tenants, as appropriate, shall widen H Street west of Marina Parkway from a <del>2</del> <u>three</u> -lane Class III Collector to a <del>3</del> <u>three</u> -lane Class II Collector. This mitigation would reduce Significant Impact 4.2-3 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-4:</b> The Phase I roadway segment of Marina Parkway (Lagoon Drive to G Street) will experience congested LOS F conditions and will require mitigation.	<b>See Mitigation Measure 4.2-2 above.</b>	Less than significant
<b>Significant Impact 4.2-5:</b> The Phase I roadway segment of Bay Boulevard (E Street to F Street) will experience congested LOS F conditions and will require mitigation.	<b>Mitigation Measure 4.2-4</b> Prior to the issuance of certificates of occupancy for development on H-3 and building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenants, or applicant, as appropriate, shall widen Bay Boulevard between E Street and F Street from a <del>two</del> <u>2</u> -lane Class III Collector to a <del>two</del> <u>2</u> -lane Class II Collector, or secure such widening to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-5 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-6:</b> The intersection of E Street and I-5 Southbound off-ramps will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	<b>See Mitigation Measure 4.2-2 above.</b>	Less than significant
<b>Significant Impact 4.2-7:</b> The intersection of F Street and Bay Boulevard will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	<b>See Mitigation Measure 4.2-2 above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-8:</b> The intersection of J Street and Bay Boulevard will be characterized by LOS F conditions during both AM and PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	<b>Mitigation Measure 4.2-5</b> Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall construct a traffic signal at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-8 and 4.2-14 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-9:</b> The intersection of L Street and Bay Boulevard will be characterized by LOS F conditions during both AM and PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	<b>Mitigation Measure 4.2-6</b> Prior to the issuance of certificates of occupancy for development on H-3 or building permits <u>for any development</u> on H-13 or H-14 <del>for any development</del> in Phase I, the Port, Port tenants, or applicants, as appropriate, shall construct a traffic signal at the intersection of L Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-9 and 4.2-15 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-10:</b> The intersection of I-5 southbound ramps and Bay Boulevard will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	<b>Mitigation Measure 4.2-7</b> Prior to the issuance of certificates of occupancy for development on H-3 or building permits on H-13 or H-14 <del>for any development</del> in Phase I, the Port, Port tenants, or applicants, as appropriate, shall construct a traffic signal at the intersection of I-5 southbound ramps and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-10 and 4.2-16 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-11:</b> The intersection of J Street and Marina Parkway will be characterized by LOS E conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	<b>See Mitigation Measure 4.2-2 above.</b>	Less than significant
<b>Significant Impact 4.2-12:</b> The addition of Phase I traffic would result in a direct project impact to the freeway segment of I-5 between SR-54 and E Street, resulting in LOS F during both AM and PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-8</b> The following mitigation measure would reduce, but not eliminate, project impacts on Interstate 5, as identified in <u>(Implementation of Mitigation Measure 4.2-11 would mitigate Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35 through, 4.2-37, and 4.2-46 through, 4.2-50, but not to below a level of significance.)</u>	Significant and unmitigated



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>The Port and the City shall participate in a multi-jurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed I-5 corridor level study that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources and phasing that would reduce congestion <del>management</del> with Caltrans standards on the I-5 South corridor from the SR-54 interchange to the Otay River (the "I-5 South Corridor") (hereafter referred to as the "Plan"). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following:</p> <ul style="list-style-type: none"> <li>a) The responsible entities (the Entities) included in this effort will include, but may not be limited to, the City, other cities along I-5, the Port, SANDAG, and Caltrans. Other entities will be included upon the concurrence of the foregoing Entities.</li> <li>b) The Plan will identify physical and operational improvements to I-5 adjacent to the project area, relevant arterial roads and transit facilities (the Improvements), that are focused on regional impacts and specific transportation impacts from the project, and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan will include an implementation element that includes each Entity's responsibilities and commitment to mitigate the impacts created by Phases I, II, III and IVall phases of the Proposed Project.</li> <li>c) The Plan will set forth a timeline and other agreed upon relevant criteria for implementation of each Improvement.</li> <li>d) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs.</li> <li>e) The Plan will include the parameters for any agreed upon fair-share funding to be implemented, that would require private and/or public developers to contribute to the costs, in a manner that will comply with applicable law.</li> <li>f) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement.</li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>g) The Port shall seek adoption of the Plan before the Port Board of Commissioners and the City shall seek adoption of the Plan before the City Council upon the completion of the multijurisdictional effort to develop the Plan. The Port and the City shall report, to their respective governing bodies regarding the progress made to develop the Plan within six 6 months of the first meeting of the entities. Thereafter, the Port and the City shall report at least annually regarding the progress of the Plan, for a period of not less than five years, which may be extended at the request of the City Council and/or Board of Commissioners.</p> <p>h) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan.</p> <p>i) Prior to issuance of certificates of occupancy or building permits for any development of individual projects within the Chula Vista Bayfront Master Plan, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of cumulative freeway impacts within the City's portion of the I-5 South Corridor by participating in the City's Western Traffic Development Impact Fee or equivalent funding program.</p> <p>The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure.</p> <p>However, because implementation of the physical improvements needed to reduce significant impact to the affected freeway segments is within the jurisdiction and control of Caltrans and not the Port or the City, the Port and the City cannot ensure that the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to freeway segments are considered significant and unmitigated.</p>	
<p><b>Significant Impact 4.2-13:</b> The intersection of H Street and <del>Gaylor</del> RCC Driveway will be characterized by LOS E conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street, and partial extension of E Street, and will require mitigation.</p>	<p><b>Mitigation Measure 4.2-9</b></p> <p>Prior to the issuance of certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall construct a westbound lane along H Street/<del>RCC</del><del>Gaylor</del> Driveway, which would result in widening H Street west of Marina Parkway to a three-lane Class II Collector. This mitigation would reduce Significant Impact 4.2-13 to below a level of significance.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-14:</b> The intersection of J Street and Bay Boulevard will be characterized by LOS F conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	<b>See Mitigation Measure 4.2-5 above.</b>	Less than significant
<b>Significant Impact 4.2-15:</b> The intersection of L Street and Bay Boulevard will be characterized by LOS F conditions during both the AM and PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	<b>See Mitigation Measure 4.2-6 above.</b>	Less than significant
<b>Significant Impact 4.2-16:</b> The intersection of the I-5 southbound ramps and Bay Boulevard will be characterized by LOS F conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	<b>See Mitigation Measure 4.2-7 above.</b>	Less than significant
<b>Significant Impact 4.2-17:</b> The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-18:</b> The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated
<b>Significant Impact 4.2-19:</b> The E Street and H Street intersections affected by an at-grade trolley crossing would experience additional delay along the arterial and at adjacent intersections from between 17 and 40 seconds per vehicle (depending on the direction and time of day), causing a deterioration in the LOS by at least one level.	<p><b>Mitigation Measure 4.2-10</b></p> <p>The following mitigation measure would reduce, but not eliminate impacts at intersections of E Street and H Street associated with trolley delays, as identified in Significant Impact 4.2-19. Prior to issuance of certificates of occupancy for Parcel H-3 or building permits for any development within the City, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of intersection impacts at H Street and E Street within the City's jurisdiction by participating in the City's Western Traffic Development Impact Fee or equivalent funding program.</p> <p>The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure.</p> <p>However, because implementation of the physical improvements needed to reduce the significant impacts to the affected intersections will require funding from other sources in addition to the WTDIF, such as local, state and federal funds, and such funding is not certain or under the control of the Port or the City, the Port and the City cannot ensure that the necessary improvements will be constructed as needed or that they will be constructed within any known time schedule. Accordingly, the Proposed Project's impacts to the E Street and H Street intersections affected by an at-grade trolley crossing are considered significant and unmitigated.</p>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-20:</b> Development of Phase II components without adequate roadway access and frontage would result in a significant impact.	<b>Mitigation Measure 4.2-11</b> Prior to the issuance of certificates of occupancy for development on Parcel H-23 in Phase I, the Port, or Port tenant, or applicant, as appropriate, shall construct Street A between H Street to Street C as a two-lane Class III Collector, and shall construct Street C between Marina Parkway and Street A as a two-lane Class II Collector. Implementation of this mitigation measure would reduce Significant Impact 4.2-20 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-21:</b> The Phase II roadway segment of H Street (Street A to I-5 ramps) will experience congested LOS F conditions and will require mitigation.	<b>Mitigation Measure 4.2-12</b> Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between Street A and I-5 Ramps to a <del>five</del> 5-lane Major Street, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-21 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-22:</b> The Phase II roadway segment of J Street (Street A to Bay Boulevard to I-5 ramps) would experience congested LOS D conditions and would require mitigation.	<b>Mitigation Measure 4.2-13</b> Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen J Street between Street A to I-5 Ramps to a <del>six</del> 6-lane Major Street, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-22 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-23:</b> The Phase II roadway segment of Street A (Street C to J Street) would experience congested LOS F conditions and would require mitigation.	<b>Mitigation Measure 4.2-14</b> Prior to the issuance of certificates of occupancy for any development in Phase II of the <del>development</del> , the Port, Port tenant, or applicant, as appropriate, shall widen Street A between Street C and J Street to a <del>four</del> 4-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-23 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-24:</b> As a result of Phase II conditions, the intersection of H Street and Gaylord Drive would be characterized by LOS E conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-15</b> Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal and add an exclusive left-turn lane at each approach at the intersection of H Street and RCC Gaylord Driveway, or secure such construction to the satisfaction of the City Engineer. The traffic signal and left-turn lanes shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-24 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-25:</b> As a result of Phase II conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-16</b> Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a westbound and eastbound through lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-25 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-26:</b> As a result of Phase II conditions, the intersection of H Street and Street A would be characterized by LOS F conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-17</b> Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of H Street and Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-26 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-27:</b> As a result of Phase II conditions, the intersection of J Street and Marina Parkway would be characterized by LOS F conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-18</b> Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, the developer shall construct a traffic signal at the intersection of J Street and Marina Parkway, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-27 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-28:</b> As a result of Phase II conditions, the intersection of J Street and Street A would be characterized by LOS F conditions during both AM and PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-19</b> Prior to the issuance of certificates of occupancy for any development in Phase II <del>of the development</del> , the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of J Street and Street A and add an exclusive westbound right-turn lane along J Street and an exclusive southbound right-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal and turning lanes shall operate and be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-28 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-29:</b> The addition of Phase II traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated
<b>Significant Impact 4.2-30:</b> The addition of Phase II traffic would result in a direct project impact to the freeway segment of I-5 from E Street to F Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated
<b>Significant Impact 4.2-31:</b> Development of Phase III components without adequate roadway access and frontage would result in a significant impact.	<b>Mitigation Measure 4.2-20</b> Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate shall construct the segment of Street A that would continue south from J Street, connecting to the proposed Street B in the Otay District, as a two-lane Class III Collector. In addition, prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, as appropriate shall construct the segment of Street B that would connect to the proposed Street A, bridge over the Telegraph Canyon Creek Channel, and continue south to Bay Boulevard, as a 2-lane Class III Collector. This mitigation would reduce Significant Impact 4.2-31 to below a level of significance	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-32:</b> As a result of Phase III conditions, the Street A roadway segment from H Street to Street C would experience congested LOS D conditions and would require mitigation.	<b>Mitigation Measure 4.2-21</b> Prior to the issuance of certificates of occupancy for any development in Phase III <del>of the development</del> , the Port, Port tenants, or applicant, as appropriate, shall widen Street A between H Street and Street C to a <del>four</del> 4-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-32 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-33:</b> As a result of Phase III conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-22</b> Prior to the issuance of certificates of occupancy for any development in Phase III <del>of the development</del> , the Port, Port tenants, or applicant, as appropriate, shall construct an exclusive eastbound right-turn lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-33 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-34:</b> As a result of Phase III conditions, the intersection of J Street and I-5 northbound ramps would be characterized by LOS E conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-23</b> Prior to the issuance of certificates of occupancy for any development in Phase III of the development, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive westbound right-turn lane along J Street at the intersection of J Street and I-5 <del>northbound</del> NB ramps, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-34 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-35:</b> The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated
<b>Significant Impact 4.2-36:</b> The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-37:</b> The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 4.2-8 above.</b>	Significant and unmitigated
<b>Significant Impact 4.2-38:</b> Without additional improvements to H Street, conditions on H Street from Street A to I-5 would degrade to LOS F.	<b>Mitigation Measure 4.2-24</b> Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct E Street from the <del>RCCGaylor</del> Driveway to Bay Boulevard as a two-lane Class III Collector. This mitigation would reduce Significant Impact 4.2-38 to below a level of significance	Less than significant
<b>Significant Impact 4.2-39:</b> Development of Phase IV components without adequate roadway access and frontage would result in a significant impact.	<b>Mitigation Measure 4.2-25</b> Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct a new F Street segment between the proposed terminus of the existing F Street and the proposed E Street extension, ending at the SP-3 Chula Vista Nature Center parking lot, as a two-lane Class III collector street, which shall also contain a Class II bike lane on both sides of the street. This mitigation would reduce Significant Impact 4.2-39 to below a level of significance.	Less than significant
<b>Significant Impact 4.2-40:</b> As a result of Phase IV conditions, the E Street roadway segment from F Street to Bay Boulevard would experience congested LOS F conditions and would require mitigation.	<b>Mitigation Measure 4.2-26</b> (Implementation of Mitigation Measure 4.2-30 <del>26</del> would reduce Significant Impacts 4.2-40 and 4.2-41 to below a level of significance.) Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port, Port tenant, or applicant, as appropriate, shall widen E Street between F Street and Bay Boulevard to a <del>4</del> four-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. Also, the widening of this segment of E Street would facilitate the flow of project traffic on Bay Boulevard between E Street to F Street.	Less than significant
<b>Significant Impact 4.2-41:</b> As a result of Phase IV conditions, the Bay Boulevard roadway segment from E Street to F Street would experience congested LOS D conditions and would require mitigation.	<b>See Mitigation Measure 4.2-26 above.</b>	Less than Significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-42:</b> As a result of Phase IV conditions, the H Street segment from I-5 to Broadway will experience congested LOS F conditions and would require mitigation.	<b>Mitigation Measure 4.2-27</b> Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between I-5 Ramps and Broadway to a 6-lane Gateway Street. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-42 to below a level of significance. The off-site traffic improvements described in this mitigation measure for direct traffic impacts would create secondary traffic impacts. Improvements associated with these secondary impacts would be required as a result of cumulative and growth-related traffic overall, of which the Proposed Project would be a component. The Western Chula Vista TDIF identifies these improvements in a cumulative context and attributes fair share contributions according to the impact. Therefore, the Proposed Project would be responsible for a fair share contribution and would not be solely responsible for implementation of necessary secondary impact improvements	Less than significant
<b>Significant Impact 4.2-43:</b> Under Phase IV Plus Project conditions, the intersection of E Street and Bay Boulevard would be characterized by LOS F conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-28</b> Prior to the issuance of certificates of occupancy for any development in Phase IV <del>of the development</del> , the Port, Port tenant, or applicant, as appropriate, shall construct an eastbound through lane and an exclusive eastbound right-turn lane along E Street at the intersection of E Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2- <del>4339</del> to below a level of significance.	Less than significant
<b>Significant Impact 4.2-44:</b> Under Phase IV Plus Project conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-29</b> Prior to the issuance of certificates of occupancy for any development in Phase IV <del>of the development</del> , the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive southbound right-turn lane along Bay Boulevard at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2- <del>404</del> to below a level of significance.	Less than significant
<b>Significant Impact 4.2-45:</b> Under Phase IV Plus Project conditions, the intersection of J Street and Street A would be characterized by LOS F conditions during PM peak hours and would require mitigation.	<b>Mitigation Measure 4.2-30</b> Prior to the issuance of certificates of occupancy for any development in Phase IV <del>of the development</del> , the Port, Port tenant, or applicant, as appropriate, shall construct a dual southbound left-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2- <del>415</del> to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.2-46:</b> The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
<b>Significant Impact 4.2-47:</b> The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
<b>Significant Impact 4.2-48:</b> The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
<b>Significant Impact 4.2-49:</b> The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
<b>Significant Impact 4.2-50:</b> The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>4.3: Parking</b>		
There were no significant impacts to parking identified for the Proposed Project.	<b>No mitigation is required.</b>	N/A
<b>4.4 AESTHETICS/VISUAL QUALITY</b>		
<b>Significant Impact 4.4-1:</b> The Pacifica Residential and Retail project will change the scale and character of the waterfront as the proposed buildings exceed the scale of the existing waterfront development. A moderate impact to the character of the view scene would result and would be considered significant under CEQA guidelines.	No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce this impact to view quality. See <i>Chapter 5, Alternatives</i> , for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed towers.	Significant and unmitigated
<b>Significant Impact 4.4-2:</b> The amount of blockage caused by the Pacifica project would be substantial, especially at the south end where views of the water exist. The Pacifica development will result in a moderate impact to view quality, which would be considered significant under CEQA guidelines.	No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce this impact to view quality. See <i>Chapter 5, Alternatives</i> , for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed towers.	Significant and unmitigated
<b>Significant Impact 4.4-3:</b> The Proposed Project would affect the view of the western tideland's/water's edge from the Sweetwater Marsh NWR, which is a regionally important public viewing scene. This would be a significant impact on view quality.	<b>Mitigation Measure 4.4-1</b> (Mitigation Measure 4.4-1 would mitigate Significant Impacts 4.4-3, 4.4-4, 4.4-5, 4.4-7, and 4.4-8 to below a level of significance.) <b>Port:</b> <b>A. View Protection:</b> As a condition for issuance of Coastal Development Permits, buildings fronting <del>on</del> H Street shall be designed to step away from the street. More specifically, design plans shall protect open views down the H Street Corridor by ensuring that an approximate 100-foot ROW width (curb–curb, building setbacks, and pedestrian plaza/walkway zone) remains clear of buildings, structures, or major landscaping. Visual elements above <del>six</del> 6 feet in height shall be prohibited in this zone if the feature would reduce visibility by more than 10 percent. Placement of trees should take into account potential view blockage. This mitigation should not be interpreted to not allow tree masses; however, trees should be spaced in order to ensure “windows” through the landscaping. Trees should also be considered to help frame the views and they should be pruned <del>up</del> to increase the views from pedestrians and vehicles, underneath the tree canopy. In order to reduce the potential for buildings to encroach into view corridors, and to address the scale and massing impact, buildings shall	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>step back at appropriate intervals or be angled to open up a broader view corridor at the ground plane to the extent feasible. All plans shall be subject to review and approval by the Port. All future development proposals shall conform to Port design guidelines and standards to the satisfaction of the Port.</p> <p><b>Port:</b></p> <p><b>B. Height and Bulk:</b> Prior to issuance of Coastal Development Permits for projects within the Port's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, stepping back of buildings, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the Port.</p> <p><b>City:</b></p> <p><b>C Height and Bulk:</b> Prior to design review approval for properties within the City's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for the large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the City of Chula Vista Planning Director.</p> <p><b>Port/City:</b></p> <p><b>D. Landscaping:</b> Prior to final approval of Phase I infrastructure design plans, the Port and City shall collectively develop a master landscaping plan for the project's public components and improvements. The plan shall provide sufficient detail to ensure conformance to streetscape design guidelines and that future developers/tenants, as applicable, provide screening of parking areas.</p> <p>Streetscape landscaping shall be designed to enhance the visitor experience for both pedestrians and those in vehicles. Specifically, detailed landscaping plans shall be</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>developed to enhance Marina Parkway, a designated scenic roadway and shall provide, where appropriate, screening of existing industrial uses and parking areas until such time as these facilities are redeveloped.</p> <p>Street landscaping design shall be coordinated with a qualified biologist or landscape architect to ensure that proposed trees and other landscaping are appropriate for the given location. For instance, vegetation planted adjacent to open water/shoreline areas must not provide raptor perches. Landscaping shall be drought tolerant or low water use, and invasive plant species shall be prohibited.</p> <p><b>City:</b></p> <p><b>E. Landscaping:</b> Prior to approval of a tentative map or site development plan for future residential development, the project developer shall submit a landscaping design plan for on-site landscaping improvements that is in conformance to design guidelines and standards established by the City of Chula Vista. The plan shall be implemented as a condition of project approval.</p> <p><b>Port/City:</b></p> <p><b>F. Gateway Plan:</b> Concurrent with the preparation of Phase I infrastructure design plans for "E and H" Streets, a Gateway plan shall be prepared for "E and H" Streets. Prior to issuance of occupancy for any projects within the Port's jurisdiction in Phase I, the "E and H" Street Gateway plan shall be approved by the Port and City's Directors of Planning and Building. The "E and H" Street Gateway plan shall be coordinated with the Gateway plan for J Street.</p> <p><b>City:</b></p> <p><b>G. Gateway Plan:</b> Concurrent with development of <u>Parcels</u> H-13 and H-14, the applicant shall submit a Gateway plan for "J" Street for City Design Review consideration. Prior to issuance of any building permits, the "J" Street Gateway plan shall be approved by the Director of Planning and Building in coordination with the Port's Director of Planning. The "J" Street Gateway plan shall be coordinated with the Gateway plan for "E and H" Streets.</p>	
<b>Significant Impact 4.4-4:</b> The Proposed Project would affect the background views of the Bay from the Silver Strand, which is a regionally important public viewing scene. This would be a significant impact on view quality.	<b>See Mitigation Measure 4.4-1 above.</b>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.4-5:</b> The Proposed Project would affect views of the San Diego Bay, a locally and regionally significant public resource, from within the project boundary. This would be a significant impact on view quality.	<b>See Mitigation Measure 4.4-1 above.</b>	
<b>Significant Impact 4.4-6:</b> Proposed Project may have a negative impact on sensitive light receptors or sensitive receptors affected by high levels of glare. The light and glare that may be associated with the Proposed Project elements may affect the viewing scene, views of the site or views of the area. A moderate impact to views associated with light and glare would be expected, which would be considered significant under CEQA guidelines.	<p><b>Mitigation Measure 4.4-2</b></p> <p><b>Port/City:</b></p> <p>Prior to design review approval, lighting design plans with specifications for outdoor lighting locations and other intensely lighted areas shall be submitted to the Port and City for review and approval. The specifications shall identify the lighting intensity needs and design light fixtures to direct light toward intended uses. Outdoor and parking lot lighting shall be shielded and directed away from adjacent properties, wherever feasible and consistent with public safety. Consideration shall be given to the use of low-pressure sodium lighting or the equivalent. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. The lighting plan shall incorporate specific design features including, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Where lighting must be used for safety reasons (FAA 2000 Advisory Circular), minimum intensity, maximum off-phased (3 _seconds_ between flashes) white strobes shall be used.</li> <li>• All event lighting shall be directed downward and shielded unless directed downward or shielded to minimize light spill beyond the area for which illumination is required.</li> <li>• Exterior lighting shall be limited to that necessary and appropriate to ensure general public safety and <u>way finding/navigation</u>, including signage for building identification and way finding.</li> <li>• Exterior lighting shall be directed downward and shielded to prevent upward lighting and to minimize light spill beyond the area for which illumination is required.</li> <li>• Office space, residential units and hotel rooms shall be equipped with motion sensors, timers, or other lighting control systems to ensure that lighting is extinguished when the space is unoccupied.</li> <li>• Office space, residential unit and hotel rooms shall be equipped with blinds, drapes or other window coverings that may be closed to minimize the effects of interior night lighting.</li> <li>• Reflective glass or the application of reflective coatings shall not be used on any glass surface, <del>except as may be required for low emittance (low e) coating for energy efficiency under Title 24 of the California Code of Regulations.</del></li> </ul>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.4-7:</b> The Pacifica Residential and Retail project will highly contrast with the scale of the surrounding development and the existing patterns of development in the surrounding area. The most northern of the buildings associated with the Pacifica development will increase the scale issue. Existing structures will most likely be overpowered by the scale of the new buildings, and will have limited ability to blend with the proposed development. A moderate impact to visual character associated with height and massing would be expected for this project and would be considered significant under CEQA guidelines.	<b>See Mitigation Measure 4.4-1 above.</b>	Less than significant
<b>Significant Impact 4.4-8:</b> Due to the disparity in scale between the proposed Gaylord RCC development and the existing structures on the project site, the project will contrast with the existing patterns of development in the surrounding area. The most eastern of the buildings associated with the Gaylord RCC, the Convention Center facility next to the Gaylord Hotel Tower, is the primary source of scale differential. A moderate impact to visual character associated with height and massing would be expected for this project and would be considered significant under CEQA guidelines.	<b>See Mitigation Measure 4.4-1 above.</b>	Less than significant
<b>4.5: Hydrology/Water Quality</b>		
<b>Significant Impact 4.5-1:</b> The increased pedestrian activity and debris-generating businesses on the waterfront, such as carryout food, would increase the potential for wind-blown litter entering the Bay. In addition to pollutants carried in runoff, wind blown litter has the potential to result in a significant impact on Bay water quality.	<b>Mitigation Measure 4.5-1 Port/City:</b> As a condition of approval of a Tenant Design Plan for projects within the Port's jurisdiction and a condition of the approval of a Final Map for projects within the City's jurisdiction, the project applicant shall include trash control measures that include <u>animal-proof, covered, and self-closing</u> trash containers <del>with attached lids</del> and trash control enclosures, <u>with frequent servicing,</u> <del>s-</del> to prevent litter from being wind blown off-site to the satisfaction of the Port/City as appropriate pursuant to their water quality technical reports.	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p><b>Significant Impact 4.5-2:</b> Construction-related dewatering (as required during the construction of utilities, excavation of the wet wells and emergency storage vaults for the sewer lift stations) would withdraw water from the aquifer, which may be contaminated, depending on the location in the plan area. The potential to contaminate runoff conflicts with the Basin Plan and the water quality objectives for the Bay. The project's potential to disturb contaminated soils and groundwater during construction activities would be a significant impact.</p>	<p><b>Mitigation Measure 4.5-2</b></p> <p><b>Port/City:</b></p> <p><b>A.</b> Prior to the issuance of a grading permit, the applicant shall notify the RWQCB of dewatering of contaminated groundwater during construction. If contaminated groundwater is encountered, the project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting requirements, which includes obtaining a permit from the Industrial Wastewater Control Program to the satisfaction of the RWQCB.</p> <p><b>B.</b> Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils and other pollutants exist on site, a pretreatment system shall be installed to pre-treat the water to the satisfaction of the RWQCB before it can be discharged into the sewer system.</p>	Less than significant
<p><b>Significant Impact 4.5-3:</b> Although not expected to occur, a spill or unintentional discharge of fuel, lubricants, or hydraulic fluid from the equipment used during construction, including dredge and fill activities and construction of the H Street Pier, in a worst-case scenario would result in significant impacts on water quality.</p>	<p><b>Mitigation Measure 4.5-3</b></p> <p><b>Port/City:</b></p> <p>Prior to the issuance of a grading, excavation, dredge/fill, or building permit for any <u>p</u>Parcel, the applicant shall submit a Spill Prevention/Contingency Plan for approval by the Port or City as appropriate. The plan shall:</p> <ul style="list-style-type: none"> <li>• Ensure that hazardous or potentially hazardous materials (e.g., cement, lubricants, solvents, fuels, other refined petroleum hydrocarbon products, wash water, raw sewage) that are used or generated during the construction and operation of any project as part of the Proposed Project shall be handled, stored, used, and disposed of in accordance with NPDES permitting requirements and applicable federal, state, and local policies;</li> <li>• Include material safety data sheets;</li> <li>• Require 40 hours of worker training and education as required by the Occupational Safety and Health Administration;</li> <li>• Minimize the volume of hazardous or potentially hazardous materials stored at the site at any one time;</li> <li>• Provide secured storage areas for compatible materials, with adequate spill containment;</li> <li>• Maintain all required records, manifest and other tracking information in an up-to-date and accessible form or location for review by the Port or City; <del>and</del></li> </ul>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<ul style="list-style-type: none"> <li>Demonstrate that all local, state, and federal regulations regarding hazardous materials and emergency response have been or will be complied with.</li> </ul>	
<b>Significant Impact 4.5-4:</b> Dredge and fill operations and in-water construction activities associated with improvements for the H Street Pier, the existing South Bay Boatyard Marina, Chula Vista Marina, and the realignment of the navigation channel could result in significant impacts to water quality and biological communities, including marine resources, if contaminated sediments are exposed, redistributed, or released into the water column.	<b>Mitigation Measure 4.5-4</b> <b>Port:</b> <b>A.</b> Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, <del>allowing it to drain, and analyzing the nature and extent of any contamination, and allowing it to drain.</del> Pending the outcome of the analytical results, a decision by RWQCB <del>and the Port/City</del> shall prescribe the <del>appropriate method</del> requirements for disposition of any contaminated sediment. <b>B.</b> Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.	Less than significant
<b>Significant Impact 4.5-5:</b> The dredge and fill activities and pile driving necessary for navigation channel realignment and harbor construction, and removal/placement of riprap, bulkheads, sheet pile, and construction of the H Street Pier would temporarily suspend bottom sediments into the water column. Suspension of sediments reduces water clarity,	<b>Mitigation Measure 4.5-5</b> <b>Port:</b> Prior to the commencement of in-water construction for all phases of development, the Port or Port tenants shall adhere to regulatory requirements including the use of BMPs, which shall include use of silt curtains during all sediment suspension activities.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
increases nutrients, and decreases dissolved oxygen available to marine organisms. Water clarity and dissolved oxygen concentrations would return to pre-construction conditions upon completion of these construction activities. These temporary impacts would be significant.		
<b>4.6: Air Quality</b>		
<b>Significant Impact 4.6-1:</b> Construction activities would result in significant air quality impacts for each of the criteria pollutants for all phases of the Proposed Project. Unmitigated PM <sub>10</sub> and PM <sub>2.5</sub> emissions are projected to exceed the standard during mass grading operations for each project phase. Construction emissions are projected to exceed the standards for NO <sub>x</sub> and reactive organic gases (ROG) during some years of construction, but not during others. These impacts would be potentially significant.	<p><b>Mitigation Measure 4.6-1</b> (Mitigation Measure 4.6-1 would reduce impacts to air quality identified in Significant Impacts 4.6-1 and 4.6-6.)</p> <p><b>Port/City:</b> Prior to the commencement of any grading activities, the following measures shall be placed as notes on all grading plans, and shall be implemented during grading of each phase of the project to minimize construction emissions. These measures shall be completed to the satisfaction of the Port and the Director of Planning and Building for the City of Chula Vista (These measures were derived, in part, from Table 11-4 of Appendix 11 of the SCAQMD CEQA Air Quality Handbook, and from SCAQMD Rule 403).</p> <p><b>See Mitigation Measure 4.6-1 in Section 4.6, Air Quality</b> for a list of Best Available Control Measures for Specific Construction Activities.</p>	Significant and unmitigated
<b>Significant Impact 4.6-2:</b> Operational emissions projected for Phase I of development are anticipated to exceed the standard for each criteria pollutant except SO <sub>2</sub> and PM <sub>2.5</sub> . The exceedance of the standard for criteria pollutants (ROG, NO <sub>x</sub> CO, and PM <sub>10</sub> ) would be a significant impact for Phase I development.	<p><b>Mitigation Measure 4.6-2</b> <b>City:</b></p> <p><b>A.</b> For development within the City's jurisdiction, applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled". There are two options to meet the AQIP requirement. The applicant shall either evaluate the project <u>in accordance with the computer modeling procedures outlined in the City's AQIP Guidelines, using the Chula Vista CO<sub>2</sub> Index Model</u> including any necessary site plan modifications, or participate in the</p>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><del>GreenStar Building Energy Program.</del></p> <p><b>Port/City:</b></p> <p><b>B.</b> Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards <del>for</del> for Residential and Nonresidential buildings. These requirements, along with the following measures, shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:</p> <ul style="list-style-type: none"> <li>• Use of low-NOx emission water heaters</li> <li>• Installation of energy efficient and automated air conditioners when air conditioners are provided</li> <li>• Energy efficient parking area lights</li> <li>• Exterior windows shall be doublepaned.</li> </ul> <p><del>Although these measures will reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.</del></p>	
<p><b>Significant Impact 4.6-3:</b> Operational emissions projected for Phase II of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub> and PM<sub>2.5</sub>. The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub> CO, and PM<sub>10</sub>) would be a significant impact for Phase II development.</p>	<p><b>Mitigation Measure 4.6-3</b></p> <p><b>City:</b></p> <p><b>A.</b> For development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled." There are two options to meet the AQIP requirement. The applicant shall <del>either evaluate the project in accordance with the computer modeling procedures outlined in the City's AQIP Guidelines using the Chula Vista CO<sub>2</sub> Index Model, including any necessary site plan modifications, or participate in the GreenStar Building Energy Program.</del></p>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><b>Port/City:</b></p> <p><b>B.</b> Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:</p> <ul style="list-style-type: none"> <li>• Use of low _NOx emission water heaters</li> <li>• Installation of energy efficient and automated air conditioners when air conditioners are provided</li> <li>• Energy efficient parking area lights</li> <li>• Exterior windows shall be doublepaned.</li> </ul> <p><u>Although these measures would reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.</u></p>	
<p><b>Significant Impact 4.6-4:</b> Operational emissions projected for Phase III of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub> and CO) would be a significant impact for Phase III development.</p>	<p><b>Mitigation Measure 4.6-4</b></p> <p><b>City:</b></p> <p><b>A.</b> For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled." There are two options to meet the AQIP requirement. The applicant shall <del>either evaluate the project in accordance with the computer modeling procedures outlined in the City's AQIP Guidelines, using the Chula Vista CO<sub>2</sub> Index Model including any necessary site plan modifications, or participate in the GreenStar Building Energy Program.</del></p> <p><b>Port/City:</b></p> <p><b>B.</b> Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and</p>	<p>Significant and unmitigated</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:</p> <ul style="list-style-type: none"> <li>• Use of low -NOx emission water heaters</li> <li>• Installation of energy efficient and automated air conditioners when air conditioners are provided</li> <li>• Energy efficient parking area lights</li> <li>• Exterior windows shall be doublepaned.</li> </ul> <p><u>Although these measures would reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.</u></p>	
<p><b>Significant Impact 4.6-5:</b> Operational emissions projected for Phase IV of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The exceedance of the standard for criteria pollutants (ROG and NO<sub>x</sub>) would be a significant impact for Phase IV development.</p>	<p><b>Mitigation Measure 4.6-5</b></p> <p><b>City:</b></p> <p><b>A.</b> For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled." There are two options to meet the AQIP requirement. The applicant shall either evaluate the project <u>in accordance with the computer modeling procedures contained in the City's AQIP Guidelines, using the Chula Vista CO<sub>2</sub> Index Model</u> including any necessary site plan modifications, <u>or participate in the GreenStar Building Energy Program.</u></p> <p><b>Port/City:</b></p> <p><b>B.</b> Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project shall comply with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of</p>	<p>Significant and unmitigated</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>Planning and Building for the City:</p> <ul style="list-style-type: none"> <li>• Use of low-NOx emission water heaters</li> <li>• Installation of energy efficient and automated air conditioners when air conditioners are provided</li> <li>• Energy efficient parking area lights</li> <li>• Exterior windows shall be doublepaned.</li> </ul> <p><u>Although these measures would reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.</u></p>	
<p><b>Significant Impact 4.6-6:</b> Construction of Phases II through IV would have the potential to affect additional sensitive receptors located on site once previous phases are complete. Because construction emissions during these phases would exceed the significance thresholds for ROG, NOx, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, impacts to sensitive receptors during construction of subsequent phases would be significant, albeit temporary. At the program level for the Proposed Project, impacts to sensitive receptors during construction of Phases II, III, and IV would be a significant impact.</p>	<p><b>Same as Mitigation Measure 4.6-1 above.</b></p> <p><b>See Mitigation Measure 4.6-1 in Section 4.6, Air Quality</b> for a list of Best Available Control Measures for Specific Construction Activities.</p>	Significant and unmitigated
<p><b>Significant Impact 4.6-7:</b> Program level components of the Proposed Project have not reached the design stage that enables the development of PDFs. As such no Specific PDFs have not been assigned to Phase II through Phase IV components of the Master Plan (other than the Pacifica Residential and Retail Development). The Program Master Plan developments will be required as conditions of approval to adopt GHG emission reduction measures similar to those adopted by the Gaylord Resort and Conference Center and the Pacifica Residential and Retail Development. New, more effective</p>	<p><b>Mitigation Measure 4.6-6</b></p> <p><b>Port/City:</b></p> <p>Development of Program Level components of the Chula Vista Bayfront Master Plan (Phases II through IV) shall implement measures to reduce GHG emissions. Specific measures related to energy efficiency, renewable energy, water conservation and efficiency, solid waste measures, and transportation and motor vehicles are outlined in Mitigation Measure 4.6-6 in Section 4.6, Air Quality of this report.</p> <p><b>See Mitigation Measure 4.6-6 in Section 4.6, Air Quality</b>, for a list of measures to reduce GHG emissions.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
design features may become available prior to the initiation of the program phases, and would be required of the project and would be identified in subsequent environmental analyses.		
<b>4.7: Noise</b>		
<b>Significant Impact 4.7-1:</b> Noise from project construction on the Pacifica project site would be expected to exceed the wildlife noise threshold of 60 dB(A) Leq during the breeding season at habitat in the J Street Marsh, which could have an adverse affect on nesting birds within the marsh. This would be considered a significant impact.	<b>Mitigation Measure 4.7-1</b> <b>City:</b> Construction-related noise shall be limited adjacent to the J Street Marsh during the typical breeding season of January 15 to August 31. Construction activity adjacent to these sensitive areas must not exceed 60 dB(A) Leq at any active nest within the marsh. Prior to issuance of a building permit, the project developer shall prepare and submit to the City for review and approval an acoustical analysis and nesting bird survey to demonstrate that the 60 dB(A) Leq noise level is maintained at the location of any active nest within the marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer shall construct noise barriers or implement other noise control measures to ensure that construction noise levels do not exceed the threshold.	Less than significant
<b>Significant Impact 4.7-2:</b> Future noise levels at the outdoor usable areas for the Pacifica development could exceed 65 dB(A), resulting in a potentially significant impact.	<b>Mitigation Measure 4.7-2</b> <b>City:</b> Prior to the approval of Design Review for the Pacifica project, the applicant shall submit a site plan for the project demonstrating to the satisfaction of the Director of Planning and Building of the City that outdoor use areas are not exposed to noise levels in excess of 65 dB(A) CNEL. Applicants shall submit project plans demonstrating that outdoor usable residential areas conform to the standards set by the City of Chula Vista General Plan. <b>City:</b> Prior to issuance of building permits, the developer shall install noise barriers that would reduce sound levels to 65 dB(A) CNEL or below at outdoor usable areas on the Pacifica site. To preserve a view, glass or Plexiglas with a minimum density of 3.5 pounds per square foot may be substituted for other construction materials. The barrier locations, heights, and lengths for the Pacifica development, as summarized in <i>Table 4.7-15</i> and illustrated on <i>Figure 4.7-10</i> of <i>Section 4.7, Noise</i> would achieve these necessary reductions.	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.7-3:</b> Future noise levels at the building façades of the Pacifica development could exceed 60 dB(A) CNEL; therefore, interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would result in a potentially significant impact.	<b>Mitigation Measure 4.7-3</b> <b>City:</b> Prior to the issuance of building permits for residential units adjacent to circulation element roadways in the Harbor District, the applicant shall perform and submit an acoustical analysis to the City demonstrating that the proposed building plans provide interior noise levels due to exterior sources are 45 dB(A) CNEL or less in any habitable room. The analysis must also identify Sound Transmission Loss (STL) rates of each window.	Less than significant
<b>Significant Impact 4.7-4:</b> Noise levels from the operation of the mechanical equipment for the Pacifica development, could exceed the sound level limits for noise sensitive receptors along Marina Parkway, Street C, J Street and Street A, resulting in a potentially significant impact.	<b>Mitigation Measure 4.7-4</b> <b>City:</b> Prior to the approval of Design Review for the Pacifica project, the applicant shall submit a design plan for the project demonstrating to the satisfaction of the City's Director of Planning and Building that the noise level from operation of mechanical equipment will not exceed 50 dB(A) Leq at any property line. Noise control measures may include, but are not limited to, the selection of quiet equipment, equipment setbacks, silencers, and/or acoustical louvers. Such measures must be designed and installed so as to achieve a cumulative sound level from mechanical equipment that does not exceed 40 dB(A) at 50 feet from the building façades adjacent to Marina Parkway, Street C and J Street; or 54 dB(A) at 50 feet from the building façades facing Street A. <b>City:</b> Prior to the approval of Design Review for the Pacifica project, the applicant shall prepare and submit to the City for review and approval an acoustical analysis and nesting bird survey to demonstrate that operation of mechanical equipment will not exceed the 60 dB(A) Leq noise level at the location of any active nest within the J Street Marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer shall construct noise barriers and/or implement noise control measures to maintain operational noise levels below the threshold.	Less than significant
<b>Significant Impact 4.7-5:</b> Construction activity occurring within 800 feet of noise-sensitive wildlife habitat located in the F&G Street Marsh to the northeast of the project site during the breeding season would result in a significant impact and would require mitigation.	<b>Mitigation Measure 4.7-5</b> <b>Port/City:</b> To avoid significant impacts to the F & G Street Marsh and reduce the construction noise level to 60 dB(A) or below, the developer of <a href="#">Parcel H-3</a> shall install and place a 20-foot-high temporary noise barrier or wall along the northeast project property line and returns along the east and west	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>property lines. This mitigation would be necessary for construction activity occurring within 800 feet of the habitat during the extended breeding season. As demonstrated on <i>Figure 4.7-11</i>, the barrier must be of solid construction, with no gaps or cracks through or below the wall, and have a minimum density of 3.5 pounds per square foot. The barrier must block line-of-sight between the source and receiver and be long enough to prevent flanking around the ends.</p> <p><b>Port/City:</b></p> <p>Prior to the start of construction, upon selection of a contractor and once specific equipment models and locations, phasing, and operational duration, etc. are known, a detailed analysis shall be conducted by the project developer and approved by the Port and/or City to determine proper placement of the temporary noise barrier.</p>	
<p><b>Significant Impact 4.7-6:</b> Traffic on area roadways would be expected to generate noise levels at ground-level sensitive receptors in excess of the City's residential exterior standard of 65 dB(A) CNEL. Future noise levels at noise sensitive areas in excess of 65 dB(A) would result in a potentially significant impact.</p>	<p><b>Mitigation Measure 4.7-6</b></p> <p><b>Port/City:</b></p> <p>Prior to the approval of Design Review, the applicant shall submit a site plan for the project demonstrating to the satisfaction of the Director of Planning and Building of the City and the Port, that outdoor use areas are not exposed to noise levels in excess of 65 dB(A) CNEL. As part of CEQA review for subsequent execution of actions associated with project construction phases, applicants shall submit project plans demonstrating that outdoor usable residential areas conform to the standards set by the City of Chula Vista General Plan.</p> <p><b>Port/City:</b></p> <p>Prior to the issuance of building permits or certificates of occupancy, the developer shall install noise barriers that would reduce sound levels to 65 dB(A) CNEL or below at ground-level noise sensitive receptors on the project site. To preserve a view, glass or Plexiglas with a minimum density of 3.5 pounds per square foot may be substituted for other construction materials.</p>	Less than significant
<p><b>Significant Impact 4.7-7:</b> Exterior noise levels at proposed residential sites would exceed 60 dB(A) CNEL; therefore, interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would be a significant impact.</p>	<p><b>See Mitigation Measure 4.7-3 above.</b></p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.7-8:</b> The segment of E Street between <del>RCC Gaylord</del> Driveway and F Street would experience a future noise level of 64 dB(A) at 50 feet. The highest noise level at the habitat would be approximately 62 dB(A). This noise level exceeds the wildlife noise threshold of 60 dB(A) during breeding season at habitat in the F&G Street Marsh, resulting in a significant impact.	<b>Mitigation Measure 4.7-7</b> <b>Port/City:</b> To avoid significant impacts to the F&G Street Marsh and reduce the noise level at habitat to 60 dB(A) or below, the developer shall install a 3-foot-high noise barrier along the east right-of-way of E Street for the extent of the habitat, as shown on <i>Figure 4.7-12</i> in <i>Section 4.7, Noise, of this report</i> . The barrier must be of solid construction, with no gaps or cracks through or below the wall, and have a minimum density of 3.5 pounds per square foot. The barrier must block line-of-sight between the source and receiver and be long enough to prevent flanking around the ends.	Less than significant
<b>Significant Impact 4.7-9:</b> Construction of off-site improvements such as water mains in Phase I could result in noise impacts that would affect residents along J Street between Bay Boulevard and Broadway, L Street between Bay Boulevard and Broadway, and Broadway between J Street and Main Street. These noise impacts would be considered significant.	<b>Mitigation Measure 4.7-8</b> <b>Port/City:</b> To avoid significant construction-related noise impacts, the following measures shall be followed: <ul style="list-style-type: none"> <li>Construction activity shall be prohibited Monday through Friday from 10:00 P.M. to 7:00 A.M., and Saturday and Sunday from 10:00 P.M. to 8:00 A.M., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J).</li> </ul>	Less than significant
<b>Significant Impact 4.7-10:</b> Construction noise during subsequent phases of the project could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phases II through IV. Because subsequent phases of development could result in noise impacts that would affect uses created during Phase I of development, noise impacts are significant.	<ul style="list-style-type: none"> <li>All stationary noise generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors, as practicable. Where practicable, noise-generating equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible.</li> <li>All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust.</li> <li>Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use.</li> <li>Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5, provided the route does not expose additional receptors to noise.</li> <li>Construction equipment <i>items</i> shall be selected as those capable of performing the necessary tasks with the lowest sound level and the lowest acoustic height possible to perform the required construction operation.</li> </ul>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<ul style="list-style-type: none"> <li>Construction equipment shall be operated and maintained to minimize noise generation. Equipment shall be kept in good repair and fitted with “manufacturer-recommended” mufflers.</li> </ul>	
<b>Significant Impact 4.7-11:</b> The construction activities in the Sweetwater District would occur between an area as far away from the Sweetwater Marsh National Wildlife Refuge as 1,320 feet to a location adjacent to the refuge. The projected noise levels at the edge of the refuge could be as high as 77 dB. During the breeding season, this would be a significant impact.	<b>Mitigation Measure 4.7-9</b> <b>Port/City:</b> Construction-related noise shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR and F&G Street Marsh. The current accepted noise threshold is 60 dB(A) $L_{eq,eq}$ ; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the project developer shall prepare and submit an acoustical analysis to the Port and/or City that shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers, construction activities, or other methods are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.	Less than significant
<b>4.8: Terrestrial Biological Resources</b>		
<b>Significant Impact 4.8-1:</b> There is potential for raptors to nest on site during the nesting season of January 15 to July 31 within all districts during all phases of construction. All active raptor nests, regardless of state or federal listing status, are protected under the California Fish and Game Code Section 3503.5. Direct impacts to nesting raptors due to the removal of an active nest would be significant.	<b>Mitigation Measure 4.8-1</b> <b>Port/City:</b> Prior to construction in any areas with suitable nesting locations for raptors (such as trees, utility poles, or other suitable structures), and if grading or construction occurs during the breeding season for nesting raptors (January 15 through July 31), the project developer(s) within the Port's or City's jurisdiction shall retain a qualified, Port- or City-approved biologist, as appropriate, who shall conduct a pre-construction survey for active raptor nests. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If an active nest is found, an appropriate setback distance will be determined in consultation with the applicant, Port or City, USFWS, and CDFG. The construction setback shall be implemented until the young are completely independent of the nest; or, the nest is relocated with the approval of the USFWS and CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	
<b>Significant Impact 4.8-2:</b> Impacts to the western burrowing owl or any burrowing owl burrows may occur during implementation of program-level components in the Otay District on parcels in both the Port's and City's jurisdiction. The impacts would consist of the loss of burrowing owls and/or their nests, which may result from grading and construction activities during development of the Otay District. The potential loss of western burrowing owls and/or their nests would be a significant impact.	<p><b>Mitigation Measure 4.8-2</b></p> <p><b>Port/City:</b></p> <p>Prior to construction in any areas with suitable nesting habitat for burrowing owl, and if grading or construction occurs during the breeding season for the burrowing owl (<del>April</del> January 15 through July <del>31</del>45), the project developer(s) within the Port's or City's jurisdiction, as appropriate, shall retain a qualified biologist, who shall be approved by the Port or City, respectively, to conduct a pre-construction survey within all suitable habitat prior to any grading activities. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If an active burrow is detected during the breeding season of <del>April</del> January 15 to July <del>45</del>31 construction setbacks of 300 feet from occupied burrows shall be implemented until the young are completely independent of the nest. If an active burrow is found outside of the breeding season, or after an active nest is determined to no longer be active by a qualified biologist, the burrowing owl would be passively relocated according to the guidelines provided by CDFG (1995) and in coordination with CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.</p>	Less than significant
<b>Significant Impact 4.8-3:</b> There is a potential for a number of birds protected by the MBTA to nest within the open space and trees in the Port's and City's jurisdiction. Destruction or removal of active nests during the breeding season could occur during construction or grading activities. These impacts would be significant.	<p><b>Mitigation Measure 4.8-3</b></p> <p><b>Port/City:</b></p> <p>If grading or construction occurs during the breeding season for migratory birds (January 15 through <del>July</del> August 31), the project developer(s) shall retain a qualified biologist, approved by the Port/City (depending on the jurisdiction), to conduct a pre-construction survey for nesting migratory birds. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	appropriate, for review and approval. If active nests are present, the Port will consult with USFWS and CDFG to determine the appropriate construction setback distance. Construction setbacks shall be implemented until the young are completely independent of the nest, or, relocated with the approval of the USFWS and CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	
<p><b>Significant Impact 4.8-4:</b> During Phase I of the Proposed Project, impacts would occur to the inlet of the F &amp; G Street Marsh as a result of the construction of the extension of E Street and development of Sweetwater Park. Direct impacts to the light-footed clapper rail and loss of foraging habitat for the species could occur. Construction activity within the inlet would potentially impact clapper rails directly if circumstances prevented the birds from escaping back to the protected marsh habitat during construction. Impacts to the inlet would reduce the amount of available foraging habitat and could directly impact the light-footed clapper rail.</p>	<p><b>Mitigation Measure 4.8-4</b></p> <p><b>Port/City:</b></p> <p>Prior to construction or grading in any areas of suitable nesting or foraging habitat for light-footed clapper rail, and, regardless of the time of year, if grading or construction within these areas occurs during the breeding season for light-footed clapper rail (February 15 through July 31), the project developer(s) shall retain a qualified biological monitor who shall be approved by the Port or City, as appropriate, and shall be present during removal of southern coastal salt marsh vegetation within the inlet to the F &amp; G Street Marsh to ensure that there are no direct impacts to foraging light-footed clapper rails. If a light-footed clapper rail is encountered, construction will be temporarily halted until the bird leaves the area of construction. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint. The project developer(s) shall consult with the U.S. Fish and Wildlife Service prior to impacting any areas of suitable nesting or foraging habitat for light-footed clapper rail so as not to prevent any unauthorized take of the light-footed clapper rail. Any take must be authorized by U.S. Fish and Wildlife Service.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.8-5:</b> Project construction could potentially impact the following MSCP-covered species within the City's jurisdiction during all phases of development: salt marsh skipper, orange-throated whiptail, northern harrier, Cooper's hawk, peregrine falcon, light-footed clapper rail, long-billed curlew, western burrowing owl, and Belding's savannah sparrow. Of these species, only the northern harrier, Cooper's hawk, and western burrowing owl were observed on or directly adjacent to City jurisdiction during the current surveys; therefore, impacts to northern harrier, Cooper's hawk, and western burrowing owl would be significant.	<b>Mitigation Measure 4.8-5</b> <b>City:</b> Prior to issuance of any clearing and grubbing, or grading permits within the jurisdiction of the City, the project applicant within the City's jurisdiction shall be required to obtain a HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan. In addition, the MSCP requires additional protective measures for the western burrowing owl, as identified in Mitigation Measure 4.8-2 above.	Less than significant
<b>Significant Impact 4.8-6:</b> Because of the proximity of the proposed project to the F & G Street Marsh and the Sweetwater Marsh National Wildlife Refuge, there is a potential for impacts to special status bird species including California least tern, light-footed clapper rail, and western snowy plover. Impacts could result from the increased predation on special status bird species as a result of the creation of perch sites in areas that do not naturally contain such vantage points. Indirect effects would be significant because they would potentially result in increased predation, abandonment of nests or degradation of nesting and foraging habitat for the light-footed clapper rail, Belding's savannah sparrow, all raptor species, and migratory birds, which can ultimately cause a drop in population numbers of these species.	<b>Mitigation Measure 4.8-6</b> <b>Port/City:</b> <b>A.</b> Construction-related noise shall be limited adjacent to the <u>Sweetwater Marsh and South San Diego Bay Units of the San Diego Bay National Wildlife Refuge, F &amp; G Street Marsh, the mudflats west of the Sweetwater District, and the J Street Marsh during the typical general avian breeding season of January 15 to August 31. During the avian breeding season, noise levels from construction activities adjacent to these sensitive areas must not exceed 60 dB(A) <math>L_{eq,eq}</math>, or ambient noise levels if higher than 60 dB(A), during the breeding season.</u> The project developer(s) shall prepare and submit to the Port/City for review and approval an acoustical analysis and nesting bird survey to demonstrate that the 60 dB(A) $L_{eq,eq}$ noise level is maintained at the location of any active nest within the marsh. <u>If the noise attenuation measures or modifications to construction activities are unable to reduce the noise level below 60 dB(A), either the developer(s) must immediately consult with the Service to develop a noise attenuation plan or construction in the affected areas must cease until the end of the breeding season. threshold is anticipated to be exceeded at the nest location, the project developer(s) shall construct noise barriers to maintain construction noise levels below the threshold.</u> Because potential construction noise levels above 60 dB(A) $L_{eq,eq}$ have been identified at the F & G Street Marsh, specific noise attenuation measures have been identified and are addressed in <u>Section 4.7, Noise</u> , of the EIR. <b>B. Perching of raptors.</b> To reduce the potential for raptors to perch within the landscaping and hunt sensitive bird species from those perches, <u>the following design criteria shall be</u>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><u>identified in the CVBMP master landscape plan and incorporated into all building and landscape plans within 500 feet of the preserves to reduce the potential for raptors to perch and prey on sensitive bird species a line of site to the City's MSCP Preserve, buffer zones, and on-site open space:</u></p> <ul style="list-style-type: none"> <li>• Light posts shall have anti-perching spike strips along any portions that would be accessible to raptors.</li> <li>• The top edge of buildings shall be rounded with sufficient radius to reduce the amount of suitable perching building edges.</li> <li>• If building tops are hard corners, spike strips shall be used to discourage raptors from perching and building nests.</li> <li>• Decorative eaves, ledges, or other protrusions shall be designed to discourage perching by raptors.</li> <li>• <u>To the extent practicable, buildings on Parcels S-1 and S-4 will be oriented to reduce raptor perches within the line of sight to adjacent sensitive habitats.</u></li> </ul> <p><b>C. Raptor management and monitoring.</b> Prior to the issuance of a Coastal Development Permit, the project developer shall prepare a raptor nest management plan to be implemented once the project is built. A biologist retained by the project developer and approved by the Port and/or City shall be responsible for monitoring the buildings and associated landscaping to determine <u>whether</u> <del>if</del> raptor nests have been established on Port or City lands within 500 feet of the Preserves. If a nest is discovered, the nest would be removed in consultation with USFWS, CDFG, and the Port/City outside of the raptor breeding season of January 15 to July 31.</p> <p><b>D. Lighting.</b> The following mitigation measure is required during all phases of development to ensure that outdoor lighting throughout the project area is minimized upon any of the habitat buffers, Preserve areas, habitats, or open water.</p> <p>Prior to issuance of a building permit, each applicant within the Port's or City's jurisdiction shall prepare a lighting design plan, including a photometric analysis, to be reviewed by the Port or City, as appropriate. Each plan shall include the following features, as appropriate to the specific locations:</p> <ul style="list-style-type: none"> <li>• All exterior lighting shall be directed away from the habitat buffers, Preserve Areas, habitats, or open water, wherever feasible and consistent with public safety. Where</li> </ul>	



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>necessary, lighting of all developed areas adjacent to the habitat buffers, Preserve Areas, habitats, or open water shall provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the habitat buffers, Preserve Areas, habitats, or open water and sensitive species from night lighting. The light structure themselves shall have shielding (and incorporate anti-raptor perching criteria); but the placement of the light structures shall also provide shielding from wildlife habitats and shall be placed in such a way as to minimize the amount of light reaching adjacent habitat buffers, Preserve Areas, habitats, or open water. This includes street lights, pedestrian and bicycle path lighting, and any recreational lighting.</p> <ul style="list-style-type: none"> <li>• All exterior lighting immediately adjacent to habitat buffers, Preserve Areas, habitats, or open water shall be low-pressure sodium lighting or other approved equivalent.</li> <li>• No sports field lights shall be planned on the recreation fields near the J Street Marsh or the Sweetwater Marsh.</li> <li>• <u>All roadways will be designed, and where necessary edges bermed, to ensure automobile light penetration in the Wildlife Habitat Areas, as defined in Mitigation Measure 4.8-7, will be minimized, subject to applicable City and Port roadway design standards.</u></li> <li>• <u>Explicit lighting requirements to minimize impacts to Wildlife Habitat Areas will be devised and implemented for all Bayfront uses including commercial, residential, municipal, streets, recreational, and parking lots. Beacon and exterior flood lights are prohibited where they would impact a Wildlife Habitat Area and use of this lighting should be minimized throughout the project. All street and walkway lighting should be shielded to minimize sky glow.</u></li> <li>• <u>To the maximum extent feasible, all external lighting will be designed to minimize any impact to Wildlife Habitat Areas, and operations and maintenance conditions and procedures will be devised to ensure appropriate long-term education and control. To the maximum extent feasible, ambient light impacts to the Sweetwater or J Street Marshes will be minimized.</u></li> <li>• <u>In Sweetwater and Otay District parks, lighting will be limited to that which is necessary for security purposes. <b>Security lighting will be strictly limited to that required by applicable law enforcement requirements.</b> All lighting proposed for the Sweetwater and Otay District parks and the shoreline promenade will be placed only where needed for human safety. Lights will be placed on low-standing bollards, shielded, and flat bottomed,</u></li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>so the illumination is directed downward onto the walkway and does not scatter. Lighting that emits only a low-range yellow light will be used since yellow monochromatic light is not perceived as natural light by wildlife and minimized eco-disruptions. No night lighting for active sports facilities will be allowed.</p> <ul style="list-style-type: none"> <li>• <u>Sweetwater and Otay District parks will open and close in accordance with Port park regulations.</u></li> <li>• <u>Laser light shows will be prohibited.</u></li> <li>• <u>Construction lighting will be controlled to minimize Wildlife Habitat Area impacts.</u></li> </ul> <p><b>E. Noise.</b></p> <p><b>Construction Noise.</b> Mitigation Measure 4.8-6, and the measures outlined in <i>Section 4.7, Noise</i>, shall be implemented in order to reduce potential indirect construction-noise impacts to sensitive species within the F &amp; G Street Marsh, and <del>the</del> J Street Marsh. In order to further reduce construction noise, equipment staging areas shall be centered away from the edges of the project, and construction equipment shall be maintained regularly and muffled appropriately. <u>In addition, construction noise <del>will</del> <b>must</b> be controlled to minimize impacts to Wildlife Habitat Areas.</u></p> <p><b>Operational Noise.</b> Noise levels from loading and unloading areas, rooftop heating, ventilation, and air conditioning facilities, and other noise-generating operational equipment shall not exceed 60 dBA Leq. at the boundaries of the F &amp; G Street Marsh, and the J Street Marsh during the typical breeding season of January 15 to August 31.</p> <p><b>Fireworks.</b> <u>A maximum of three (3) fireworks events can be held <b>per year</b>, all outside of Least Tern nesting season except 4<sup>th</sup> of July, which may be allowed if in full regulatory compliance and if the nesting colonies are monitored during the event and any impacts reported to the Wildlife Advisory Committee so they can be addressed. All shows must comply with all applicable water quality and species protection regulations. All shows must be consistent with policies, goals, and objectives in the Natural Resource Management Plan (NRMP), described in Mitigation Measure 4.8-7.</u></p> <p><b>F. Invasives.</b> All exterior landscaping plans shall be submitted to the Port or City, as appropriate, for review and approval to ensure that no plants listed on the California Invasive Plan Council (Cal-IPC) List of Exotic Pest Plants of Greatest Ecological Concern in California (<i>Appendix 4.8-7 of this Final EIR</i>), the California Invasive Plant Inventory Database, <del>or the list included in</del> <u>Appendix N of the City's MSCP Subarea Plan, or any related updates shall be</u></p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><del>planted throughout the plan</del> Proposed Project area. Any such invasive plant species that establishes itself within the Proposed Project area will be removed immediately to the maximum extent feasible and in a manner adequate to prevent further distribution into Wildlife Habitat Areas <del>during project construction and operation. The Cal-IPC list is contained in Appendix 4.8-11 of this report.</del></p> <p>The following landscape guidelines will apply to the Proposed Project area:</p> <ul style="list-style-type: none"> <li>• Only designated native plants will be used in No Touch Buffer Areas, habitat restoration areas, or in the limited and transitional zones of Parcel SP-1 adjacent to Wildlife Habitat Areas.</li> <li>• Non-native plants will be prohibited adjacent to Wildlife Habitat Areas and will be strongly discouraged and minimized elsewhere where they will provide breeding of undesired scavengers.</li> <li>• Landscaping plans will be prohibited adjacent to Wildlife Habitat Areas and will be strongly discouraged and minimized elsewhere where they will provide breeding of undesired scavengers.</li> <li>• No trees will be planted in the No Touch Buffer Areas or directly adjacent to a National Wildlife Refuge, J Street Marsh, or SP-2 areas where there is no Buffer Area.</li> </ul> <p><b>G. Toxic Substances and Drainage.</b> Implementation of general water quality measures outlined in Mitigation Measures 4.5-2 through 4.5-4 identified in <i>Section 4.5, Hydrology/Water Quality</i>, would reduce impacts associated with the release of toxins, chemicals, petroleum products, and other elements that might degrade or harm the natural environment to below a level that is significant, and would provide benefits to wetland habitats. As a reference, these mitigation measures are repeated below and apply to the Port and City:</p> <ul style="list-style-type: none"> <li>• If contaminated groundwater is encountered, the project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting requirements, which includes obtaining a permit from the Industrial Wastewater Control Program to the satisfaction of the RWQCB. The project developer(s) shall demonstrate satisfaction of all permit requirements prior to issuance of a grading permit.</li> <li>• Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils, and other pollutants exist on site, a pre-treatment system shall be installed to pre-treat the water</li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>to the satisfaction of the RWQCB before it can be discharged into the sewer system.</p> <ul style="list-style-type: none"> <li>• Prior to the issuance of a grading, excavation, dredge/fill, or building permit for any parcel, the applicant shall submit a Spill Prevention/Contingency Plan for approval by the Port or City as appropriate. The plan shall: <ul style="list-style-type: none"> <li>○ Ensure that hazardous or potentially hazardous materials (e.g., cement, lubricants, solvents, fuels, other refined petroleum hydrocarbon products, wash water, raw sewage) that are used or generated during the construction and operation of any project as part of the Proposed Project shall be handled, stored, used, and disposed of in accordance with NPDES permitting requirements and applicable federal, state, and local policies;</li> <li>○ Include material safety data sheets;</li> <li>○ Require 40 hours of worker training and education as required by the Occupational Safety and Health Administration;</li> <li>○ Minimize the volume of hazardous or potentially hazardous materials stored at the site at any one time;</li> <li>○ Provide secured storage areas for compatible materials, with adequate spill containment;</li> <li>○ Maintain all required records, manifest and other tracking information in an up-to-date and accessible form or location for review by the Port or City; <del>and</del></li> <li>○ <del>D</del> Shall demonstrate compliance with all local, state, and federal regulations regarding hazardous materials and emergency response.</li> </ul> </li> <li>• Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE, EPA, and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, analyzing the nature and extent of any contamination, and allowing it to drain. Pending the outcome of the analytical results, the RWQCB and the Port shall prescribe the appropriate method for disposition of any contaminated sediment.</li> <li>• Prior to issuance of a grading permit for marina redevelopment on <u>Parcels</u> HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt</li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.</p> <p><u>In addition, the following measures will apply:</u></p> <ul style="list-style-type: none"> <li>• <u>Vegetation-based storm water treatment facilities, such as natural berms, swales, and detention areas are appropriate uses for Buffer Areas so long as they are designed using native plant species and serve dual functions as habitat areas. Provisions for access for non-destructive maintenance and removal of litter and excess sediment will be integrated into these facilities. In areas that provide for the natural treatment of runoff, cattails, bulrush, mulefat, willow, and the like are permissible.</u></li> <li>• <u>Storm water and non-point source urban runoff into Wildlife Habitat Areas must be monitored and managed so as to prevent unwanted ecotype conversion or weed invasion. A plan to address the occurrence of any erosion or type conversion will be developed and implemented, if necessary. <b>Monitoring will include an assessment of stream bed scouring and habitat degradation, sediment accumulation, shoreline erosion and stream bed widening, loss of aquatic species, and decreased base flow.</b></u></li> <li>• <u>The use of persistent pesticides or fertilizers in landscaping that drains into Wildlife Habitat Areas is prohibited. Integrated Pest Management must be used in all outdoor, public, buffer, habitat, and park areas.</u></li> <li>• <u><b>Fine</b> <del>Trash</del> filters (as approved by the agency having jurisdiction over the storm drain) are required for all storm drain pipes that discharge toward Wildlife Habitat Areas.</u></li> </ul> <p><b>H. Public Access.</b> In addition to site-specific measures designed to prevent or minimize the impact to adjacent open space preserve areas from humans and domestic animals, the following would prevent or minimize the impact to adjacent open space preserve areas from humans and domestic animals.</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><b>Buffers:</b> All buffers shall be established and maintained by the Port/City. Appropriate signage will be provided at the boundary and within the buffer area to restrict public access. Within the western 200-foot -width of <u>Parcel SP-1</u>, a portion of the buffer areas would be re-contoured and restored to provide habitat consistent with the native vegetation communities in the adjacent open space preserve areas and to provide mitigation opportunities for project impacts. <u>Appendix 4.8-8+2</u> provides more specific detail of the mitigation opportunities available within the buffer area included within the Proposed Project. <u>Table 4.8-5</u> provides a breakdown of the available maximum mitigation acreage that is available within the buffer. <u>Figure 4.8-23</u> depicts the conceptual mitigation opportunities within the Sweetwater District. <u>Figures 4.8-24 and 4.8-25</u> display the cross section of the buffer zones in the Sweetwater District indicated on the conceptual illustration. <u>Figure 4.8-26</u> depicts the conceptual mitigation opportunities within the Otay District. The proposed restoration includes creating and restoring coastal salt marsh and creating riparian scrub vegetation communities. In addition, the coastal brackish marsh, disturbed riparian habitat, and wetland would be enhanced.</p> <p><u>The first 200 feet of buffer areas adjacent to sensitive habitats, or full width in the case of reduced buffer areas, will be maintained as a “no touch” buffer and will not contain any trails or overlooks. Fencing, consisting of a 6-foot-high vinyl-coated chain link fence will be installed within the buffer area to prevent unauthorized access. Fencing in Parcel SP-1 will be installed prior to occupancy of the first buildings constructed in Phase I. District enforcement personnel will patrol these areas and be trained in the importance of preventing human and domestic animal encroachment in these areas. In addition, signs will be installed adjacent to these sensitive areas that provide contact information for the Harbor Police to report trespassing within the sensitive areas.</u></p> <p>Impacts to disturbed coastal sage scrub would be mitigated by the restoration of a coastal sage scrub/native grassland habitat also within this buffer. There is the potential to provide a maximum of 20.71 acres of mitigation credit for impacts to wetland habitats and 22.21 acres for impacts to upland habitats. This would exceed the required mitigation needed for impacts within the Port’s and City’s jurisdiction.</p> <p>A detailed coastal sage scrub (CSS) and maritime succulent scrub (MSS) restoration plan that describes the vegetation to be planted shall be prepared by a Port- or City-approved biologist and approved by the Port or City, as appropriate. The City or Port shall develop guidelines for restoration in consultation with USFWS and CDFG.</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>The restoration plan shall detail the site selection process; shall propose site preparation techniques, planting palettes, implementation procedures, and monitoring and maintenance practices; and shall establish success criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum 5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions are expected. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within 3 months from the date the report is submitted.</p> <p>The project developer(s) shall be responsible for implementing the proposed mitigation measures and ensuring that the success criteria are met and approved by the City or Port, as appropriate, and other regulatory agencies, as may be required.</p> <p><b><u>Strategic Fencing:</u></b></p> <p><b><u>Temporary Fencing.</u></b> Prior to issuance of any clearing and grubbing or grading permits, temporary orange fencing shall be installed around sensitive biological resources on the project site that will not be impacted by the Proposed Project. Silt fencing shall also be installed along the edge of the SDBNWR during grading within the western portion of the ecological buffer. In addition, the applicant must retain a qualified biologist to monitor the installation and ongoing maintenance of this temporary fencing adjacent to all sensitive habitat. This fencing shall be shown on both grading and landscape plans, and installation and maintenance of the fencing shall be verified by the Port's or City's Mitigation Monitor, as appropriate.</p> <p><b><u>Permanent Fencing.</u></b> Prior to approval of landscape plans, a conceptual site plan or fencing plan shall be submitted to the Port or City, as appropriate, for review and approval to ensure areas designated as sensitive habitat are not impacted. Fencing shall be provided within the buffer area only, and not in sensitive habitat areas.</p> <p><b><u>Domestic Animals.</u></b> In all areas of the Chula Vista Bayfront, especially on the foot path adjacent to the marsh on the Sweetwater District property, mandatory leash laws shall be enforced. Appropriate signage shall be posted indicating human and domestic animal access is prohibited within the designated Preserve areas.</p> <p><b><u>Trash.</u></b> Illegal dumping and littering shall be prohibited within the Preserve areas.</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>Throughout the Proposed Project site, easily accessible trash cans and recycling bins shall be placed along all walking and bike paths, and shop walkways. These trash cans shall be "animal-proof" and have self-closing lids, to discourage scavenger animals from foraging in the cans. The trash cans shall be emptied daily or more often if required during high use periods. Buildings and stores shall have large dumpsters in a courtyard or carport that is bermed and enclosed. This ensures that, if stray trash falls to the ground during collection, it does not blow into the Bay or marshes.</p> <p><u>Training.</u> Pursuant to permitting requirements of the Resource Agencies, pre-construction meetings will take place with all personnel involved with the project, to include training about the sensitive resources in the area.</p> <p><b><u>I. Boating Impacts. All boating, human and pet intrusion must be kept away from F &amp; G Street channel mouth and marsh.</u></b></p> <ul style="list-style-type: none"> <li>• <b><u>Water areas must be managed with enforceable boating restrictions.</u></b> The Port will exercise diligent and good faith efforts to enter into a cooperative agreement with the Resource Agencies and Coast Guard to ensure monitoring and enforcement of no-boating zones and speed limit restrictions to prevent wildlife disturbances.</li> <li>• <b><u>No boating will be allowed in vicinity of the J Street Marsh or east of the navigation channel in the Sweetwater District during the fall and spring migration and during the winter season when flocks of bird are present.</u></b></li> <li>• <u>All rentals of jet-skis and other motorized personal watercraft (PWCs), as defined in Harbors and Navigations Code Section 651(s) will be prohibited in the Proposed Project area.</u></li> <li>• <u>Use of PWCs will be prohibited in Wildlife Habitat Areas, subject to applicable law.</u></li> <li>• <b><u>A five (5) mile-per-hour speed limit will be enforced in areas other than the navigation channels.</u></b></li> <li>• <b><u>Nothing in this mitigation measure shall preclude bona fide research, law enforcement, or emergency activities.</u></b></li> </ul>	



Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.8-7:</b> The Proposed Project would result in potential indirect impacts on preserve areas adjacent to the project site from lighting, noise, invasives, toxic substances and public access. These impacts would be significant.	<b>See Mitigation Measure 4.8-6 above.</b>	Less than significant
There was no significant impact identified; however, this measure provides further mitigation to reduce impacts to biological resources.	<p><b>Mitigation Measure 4.8-7</b></p> <p>Mitigation Measure 4.8-7 is intended to provide additional measures to reduce further the indirect impacts to biological resources already addressed in and reduced to below a level of significance by Mitigation Measure 4.8-6. This additional measure provides for the creation, implementation, <u>funding</u>, and enforcement of a Natural Resources Management Plan (“NRMP”) <u>and</u> good faith efforts to enter into a cooperative management agreement with the USFWS or other appropriate agency or organization, <b>restoration priorities, the creation of a South Bay Wildlife Advisory Group, and education</b>, as follows:</p> <p><b>A. Natural Resources Management Plan:</b> In recognition of the sensitivity of the natural resources and the importance of protection, restoration, management and enforcement in protecting those resources, the Port, City and RDA will cause to be prepared an NRMP to be prepared in accordance with the mitigation measure. The NRMP will be designed to achieve the Management Objectives (defined below) for the Wildlife Habitat Areas (defined below). The NRMP will be an adaptive management plan, reviewed and amended as necessary by the Port and City <b>in compliance with the process described in Section 4.8-7D of this measure.</b></p> <p>a. <b>“Wildlife Habitat Areas”</b> are defined as:</p> <ol style="list-style-type: none"> <li>All National Wildlife refuge lands, currently designated and designated in the future, in the South San Diego Bay and Sweetwater Marsh National Wildlife Refuge Units. National Wildlife Refuge lands are included in the definition of Wildlife Habitat Areas for the sole purpose of addressing adjacency impacts and not for the purpose of imposing affirmative resource management obligations with respect to the areas within the National Wildlife Refuge lands.</li> <li>All Port designated lands and open water areas in the Conservation Land Use Designations of Wetlands, Estuary, and Habitat Replacement as depicted in the Draft Precise Plan for Planning District 7.</li> <li>Parcels 1g and 2a from the City’s Bayfront Specific Plan.</li> <li>The Wildlife Habitat Areas are depicted on Exhibit 1 to the MMRP.</li> <li><b>No Touch</b> Buffer areas <del>are as</del> depicted on Exhibit 2 to the MMRP.</li> </ol>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>b. <u>NRMP Management Objectives <b>for Wildlife Habitat Areas</b></u>: Taking into consideration the potential changes in functionality of Wildlife Habitat Areas due to rising sea levels, the NRMP will promote, at a minimum, the following objectives ("Management Objectives") for the Wildlife Habitat Areas:</p> <p>i. <u>Long term protection, conservation, monitoring, and enhancement of:</u></p> <ol style="list-style-type: none"> <li>1. <u>Wetland habitat, with regard to gross acreage as well as ecosystem structure, function and value.</u></li> <li>2. <u>Coastal sage and coastal strand vegetation.</u></li> <li>3. <u>Upland natural resources for their inherent ecological values, as well as their roles as buffers to more sensitive adjacent wetlands. Upland areas in the Sweetwater and Otay Districts will be adaptively managed <b>to provide additional habitat or protection to create appropriate transitional habitat during periods of high tide</b>, taking into account future sea level rise.</u></li> </ol> <p>ii. <u>Preservation of the biological function of all Bayfront habitats serving as avifauna for breeding, wintering, and migratory rest stop uses.</u></p> <p>iii. <u>Protection of nesting, foraging, and rafting wildlife from disturbance.</u></p> <p>iv. <u>Avoidance of actions within the Proposed Project area that would adversely impact or degrade water quality in San Diego Bay or watershed areas or impair efforts of other entities for protection of the watershed.</u></p> <p>v. <u>Maintenance and improvement of water quality where possible and coordination with other entities charged with watershed protection activities.</u></p> <p>c. <u>Implementation of <b>NRMP</b> Management Objectives</u>: NRMP will include a plan for achieving Management Objectives as they related to the Buffer Areas and Wildlife Habitat Areas ("WHA's") and the Proposed Project area, which will:</p> <ol style="list-style-type: none"> <li>i. <u>Ensure the Port, City and RDA are not required to expend funds for NRMP implementation until project-related revenues are identified and impacts initiated.</u></li> <li>ii. <u>Require coordination with the Resource Agencies of the Port's City's and Resource Agencies' respective obligations with respect to the Buffer Areas and Wildlife Habitat Areas.</u></li> <li>iii. <u>Designate "No Touch" Buffer Areas as that term is defined and described in this Final EIR. Such areas will contain <b>contiguous</b> fencing designed specifically to</u></li> </ol>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><u>limit the movement of domesticated, feral, and nuisance predators (e.g. dogs, cats, skunks, opossums and other small terrestrial animals [collectively, "Predators"]) and humans between developed park and No Touch Buffer Areas and Wildlife Habitat Areas. The fence will be at a minimum 6-foot high, black vinyl chain link fence or other suitable barrier (built to the specifications described in this Final EIR). Fence design may include appropriate locked access points for maintenance and other necessary functions. Installation of the fence will include land contouring to minimize visual impacts of the fence. The installation of such fencing in the Sweetwater and Harbor Districts must be completed prior to the issuance of Certificates of Occupancy for development projects on either Parcel H-3 or H-23 and in conjunction with the development or road improvements in the Sweetwater District., <b>with the exception of Parcel S-4 which will retain the existing fencing until that parcel is redeveloped and the fencing of the No Touch Buffer installed.</b></u></p> <p>iv. <u>Prohibit active recreation, construction of any road (whether paved or not), within No Touch Buffer Areas, Limited Use Buffer Areas, and Transition Buffer Areas as that term is defined and described in this Final EIR, with the exception of existing or necessary access points for required maintenance.</u></p> <p>v. <u>Result in the fencing of No Touch Buffer Areas including, without limitation, fencing necessary to protect the Sweetwater Marsh and the Sweetwater parcel tidal flats, the J Street Marsh next to the San Diego Bay Refuge and the north side of Parcel H-3.</u></p> <p>vi. <u>Include additional controls and strategies restricting movement of humans and Predators into sensitive areas beyond the boundaries of the designated Buffer Areas, <del>as necessary.</del></u></p> <p>vii. <u>Require the Recreational Vehicle Park to install fencing or other barriers sufficient to prevent passage of Predators and humans into sensitive adjacent habitat.</u></p> <p>viii. <u>Require all dogs to be leashed in all areas of the Proposed Project at all times except in any designated and controlled off-leash areas.</u></p> <p>ix. <u><b>Impose and enforce restrictions on all residential development to keep cats and dogs indoors or on leashes at all times.</b></u> Residential developments will be required to provide education to owners and/or renters regarding the rules and</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>restrictions regarding the keeping of pets.</p> <p>d. <u>Walkway and Path Design: Detail conditions and controls applicable to the walkways, paths, and overlooks near Wildlife Habitat Areas and outside of the No Touch Buffer Areas in accordance with the following:</u></p> <ul style="list-style-type: none"> <li>i. <u>Alignment, design, and general construction plans of walkways and overlooks will be developed to minimize potential impacts to Wildlife Habitat Areas.</u></li> <li>ii. <u>Path routes will be sited with appropriate setbacks from Wildlife Habitat Areas.</u></li> <li>iii. <u>Paths running parallel to shore or marsh areas that will cause or contribute to bird flushing will be minimized throughout the Proposed Project.</u></li> <li>iv. <u>Walkways and overlooks will be designed to minimize and eliminate, where possible, perching opportunities for raptors and shelter for skunks, opossums or other Predators.</u></li> <li>v. <u>Walkways and overlooks that approach sensitive areas <del>will</del> <b>must</b> be blinded, raised, or otherwise screened so that birds are not flushed or frightened. In general, walkway and overlook designs will minimize visual impacts on the Wildlife Habitat Areas of people on the walkways.</u></li> </ul> <p>e. <u>Predator Management: The NRMP will include provisions designed to manage Predator impacts on Wildlife Habitat Areas which will include and comply with the following:</u></p> <ul style="list-style-type: none"> <li>i. <u>Year-round Predator management will be implemented for the life of the Proposed Project with clearly delineated roles and responsibilities for the Port, City and Resources Agencies. The primary objective of such provisions will be to adequately protect terns, rails, plovers, shorebirds, over-wintering species, and other species of high management priority as determined by the Resource Agencies.</u></li> <li>ii. <u>Predator management will include <b>regular foot patrols and utilize tracking</b> techniques to find and remove domestic or feral animals.</u></li> <li>iii. <u>Address Predator attraction and trash management for all areas of the Proposed Project by identifying clear management measures and restrictions. Examples of the foregoing include design of trash containers, including those in park areas and commercial dumpsters, to be covered and self-closing at all times, design of containment systems to prevent access by sea gulls, rats, crows, pigeons, skunks, opossums, raccoons, and similar animals and adequate and frequent servicing of</u></li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><u>trash receptacles.</u></p> <p>iv. <u>All buildings, signage, walkways, overlooks, light standards, roofs, balconies, ledges, and other structures that could provide line of sight views of Wildlife Habitat Areas will be designed in a manner to discourage their use as raptor perches or nests.</u></p> <p>f. <u>Miscellaneous Additional Requirements of the NRMP: In addition to the standards described above, the NRMP will include:</u></p> <p>i. <u>All elements which address natural resource protection in the MMRP including but not limited to those which assign responsibility and timing for implementing mitigation measures consistent with the City's MSCP Subarea Plan;</u></p> <p>ii. <u>Pertinent sections of the MSCP Subarea Plan;</u></p> <p>iii. <u>References to existing Port policies and practices, such as Predator management programs and daily trash collections with public areas and increase service during special events.</u></p> <p>iv. <u>Establishment of design guidelines to address adjacency impacts, such as storm water, landscape design, light and noise and objectives ad discussed below;</u></p> <p>v. <u>Establishment of baseline conditions and management objectives; and</u></p> <p>vi. <u>Habitat enhancement objectives and priorities.</u></p> <p>g. <u>Creation, <b>Periodic Review</b>, and Amendment of the NRMP: The NRMP will be a natural resource adaptive management and monitoring plan <b>initially prepared in consultation with the Wildlife Advisory Group, and</b> reviewed and amended <b>in further consultation with the Wildlife Advisory Group one year following adoption of the NRMP and annually thereafter for the first five (5) years after adoption, after which it will be reviewed and amended</b> as necessary every other year for the first 6 years, then once every 5 years thereafter. <b>If the RCC is not pursued in the first five (5) years after certification of the FEIR, this schedule will be amended to ensure that NRMP is evaluated every year for five years after the development of the RCC. The periodic review of the NRMP described in the preceding sentences is hereinafter called "Periodic Review."</b> A material revision of the NRMP is hereinafter called an "NRMP Amendment". However, nothing in this schedule will be interpreted to preclude a speedy response or revision to the NRMP if necessary to abate an emergency condition or to accommodate relevant new information or</u></p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><u>necessary management practices consistent with the NRMP management objectives. Preparation of the NRMP will begin within six months of the filing of the Notice of Determination for the Final EIR by the Port and will be completed prior to the earlier of: (a) Development Commencement; (b) issuance of a Certificate of Occupancy for the residential development; or (c) three years. The adaptive management components of the NRMP <b>Periodic Review</b> will address, among other things, monitoring of impacts of development as it occurs and monitoring the efficacy of water quality improvement projects (if applicable) and management and restoration actions needed for resource protection, resource threats, <del>and</del> management (i.e., sea-level rise, trash, window bird strikes, lighting impacts, bird flushing, water quality, fireworks, human-wildlife interface, education and interpretation programs, public access, involvement, and use plan, management of the human-wildlife interface, wildlife issues related to facilities, trails, roads, overlooks planning, and watershed coordination), <b>and other issues affecting achievement of NRMP Management Objectives.</b></u></p> <p><u>i. The Port and City will cause the preparation, consideration negotiation and approval of the NRMP including, staff and administrative oversight and engagement of such consultants as are reasonable and necessary for their completion, approval and amendment in accordance with this mitigation measure.</u></p> <p><u>ii. The Port and City will each provide a written notice of adoption to the Wildlife Advisory Group upon their respective approval of the NRMP.</u></p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>h. <u>DISPUTE RESOLUTION FOR PLAN CREATION AND AMENDMENT. The NRMP and any material amendments to the NRMP will require submission, review, and approval by the CCC after final adoption by the Port and City. Nonetheless, the participants would benefit if the NRMP is developed through a meaningful stakeholder process providing for the resolution of as many disagreements as possible prior to NRMP submission to the CCC. This section provides a process by which the Coalition can participate in the creation and amendment of the NRMP.</u></p> <p>i. <u>PLAN CREATION AND AMENDMENT. Where this mitigation measure contemplates the creation of the NRMP following the Effective Date or an NRMP Amendment, this section will provide a non-exclusive mechanism for resolution of disputes concerning the content of the NRMP and such NRMP Amendments. The standard of review and burden of proof for any disputes arising hereunder shall be the same as those under the California Environmental Quality Act.</u></p> <p><u>1. PLAN CREATION AND AMENDMENT INFORMAL NEGOTIATIONS. Any dispute that arises with respect to the creation or amendment of the NRMP will in the first instance be the subject of informal negotiations between the parties to the dispute. A dispute will be considered to have arisen when one (1) party (the "Disputing Party") sends the other party a written Notice of Dispute. During the informal negotiations, the Disputing Party will identify in writing and with specificity the issue, standard, or proposed requirement which is the subject of the dispute (the "Notice of Dispute"). The period for informal negotiations will not exceed thirty (30) days from the date the Notice of Dispute is received.</u></p> <p><u>2. PLAN CREATION AND AMENDMENT FORMAL DISPUTE RESOLUTION, PHASE I. In the event the Parties cannot resolve a dispute by informal negotiations, the Disputing Party may invoke formal dispute resolution procedures by providing the other parties a written statement of position on the matter in dispute, including, but not limited to, any facts, data, analysis or opinion supporting that position and any supporting documentation relied</u></p>	

TABLE 1-9 (Cont.)

	<p>upon by the Disputing Party (the "Position Statement"). The Position Statement must be transmitted (via electronic mail or verifiable post) within thirty (30) days of the end of informal negotiations, and will be provided to the other parties and to each member of the Wildlife Advisory Group. If informal negotiations are unsuccessful, and the Disputing Party does not invoke formal dispute resolution within thirty (30) days, the position held by the Port, City or Agency (the respective public agency involved in such dispute is hereinafter called "Managing Agency") will be binding on the Disputing Party, subject to submission, review, and approval by the CCC.</p> <p>a. The other parties will submit their position statements ("Opposition Statements"), including facts, data, analysis or opinion in support thereof, to the Disputing Party and the Wildlife Advisory Group members within thirty (30) days of transmission of the Position Statement.</p> <p>b. Within twenty-one (21) days after transmission of the Opposition Statement(s), the Wildlife Advisory Group will convene, consider and, within a reasonable period of time thereafter, render its proposed resolution of the dispute. The Wildlife Advisory Group's decision will not be binding upon the Disputing Party, but rather, will be considered purely advisory in nature. The proposed resolution of the Wildlife Advisory Group will be that comprehensive recommendation supported by a majority of Wildlife Advisory Group members after vote, with each member entitled to one vote. The Wildlife Advisory Group's proposal will be transmitted to all parties by an appointed Wildlife Advisory Group member via electronic mail.</p> <p>3. <b>PLAN CREATION AND AMENDMENT FORMAL DISPUTE RESOLUTION, PHASE II.</b> If any party does not accept the advisory decision of the Wildlife Advisory Group, it must invoke the second phase of formal dispute resolution by presenting the dispute to the governing board ("Governing Board") of the Managing Agency (i.e., Board of Port Commissioners or City Council). This phase of the dispute resolution process is initiated by such party providing written notice to the other parties within thirty (30) days of receipt of the Wildlife Advisory Group proposal ("MA Notice"). The MA Notice will include the Position Statement, Opposition Statement, the Wildlife Advisory Group proposal, and any other information such party desires to include. Any supplement to the Opposition Statement will be filed</p>	
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TABLE 1-9 (Cont.)

	<p>with the Managing Agency within fourteen (14) days. The Governing Board of the Managing Agency will review the transmitted information and within sixty (60) days from receipt of the MA Notice will schedule a public hearing to consider the dispute and within ten (10) days of such public hearing, render a decision. The decision of the Governing Board of the Managing Agency will be final and binding on the Managing Agency but will not bind the members of the Coalition. If the members of the Coalition accept the decision of the Governing Board of the Managing Agency, the decision will dictate the manner in which the dispute is resolved in the NRMP or amendment to the NRMP. Nothing herein will preclude such party from publicly opposing or supporting the Governing Board's decision before the CCC.</p> <p>i. <u>DISPUTE RESOLUTION REGARDING NRMP IMPLEMENTATION AND ENFORCEMENT.</u> Once the CCC approves the NRMP or any NRMP Amendment, the Governing Board will issue a Notice of Adoption with respect to the NRMP or NRMP amendment. Once a Notice of Adoption is issued with respect to the NRMP or NRMP Amendment, this section will be the exclusive mechanism for the parties to resolve disputes arising under, or with respect to implementation or enforcement of, the NRMP including when the NRMP is reviewed during an Adaptive Management Review or Periodic Review and such review does not require an NRMP Amendment. This provision will not be used to challenge the adequacy of the NRMP or an NRMP Amendment after the issuance of a Notice of Adoption with respect thereto. The standard of review and burden of proof for any disputes arising hereunder shall be the same as those under CEQA.</p> <p>i. <u>PLAN ENFORCEMENT INFORMAL NEGOTIATIONS.</u> Any dispute that arises with respect to implementation or enforcement of the NRMP will in the first instance be the subject of informal negotiations between the parties to the dispute. A dispute will be considered to have arisen when one Disputing Party sends the other party a written Notice of Dispute. During the informal negotiations, the Disputing Party will send a written Notice of Dispute to the other parties specifying the aspect of the NRMP it believes is not being implemented properly and the way in which the Disputing Party believes the NRMP should be implemented according to its terms (the "Notice of Dispute"). The period for informal negotiations will not exceed forty-five (45) days from the date such Notice of Dispute is received.</p> <p>ii. <u>PLAN ENFORCEMENT FORMAL DISPUTE RESOLUTION, PHASE I.</u> In the</p>	
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TABLE 1-9 (Cont.)

	<p>event the Parties cannot resolve a dispute by informal negotiations under the preceding section, the Disputing Party may invoke a formal dispute resolution procedure by presenting the dispute to the Governing Board of the Managing Agency by providing the other parties a written statement of position on the matter in dispute, including, but not limited to, any facts, data, analysis or opinion supporting that position and any supporting documentation relied upon by the Disputing Party (the "Position Statement"). The Position Statement must be transmitted (via electronic mail or verifiable post) within thirty (30) days of the end of informal negotiations, and will be provided to the other parties, to each member of the Wildlife Advisory Group. If informal negotiations are unsuccessful, and the Disputing Party does not invoke formal dispute resolution within thirty (30) days, the Managing Agency's position will be binding on the Disputing Party subject to any periodic review and/or approval by the CCC, if required by law.</p> <p>1. The other parties will submit their position statements ("Opposition Statements"), including facts, data, analysis, or opinion in support thereof, to the Disputing Party, the Wildlife Advisory Group members, and the Governing Board within thirty (30) days of transmission of the Position Statement.</p> <p>2. Within forty-five (45) days after transmission of the Opposition Statement(s), the Disputing Party will provide a written notice ("MA II Notice") to the other parties, the Wildlife Advisory Group and the Governing Board. The MA II Notice will include the Position Statement, Opposition Statement, the Wildlife Advisory Group proposal, and any other information the Disputing Party desires to include. Any supplement to the Opposition Statement will be filed with the Managing Agency within fourteen (14) days following receipt of the MA II Notice. The Governing Board will review the transmitted information and within sixty (60) days from receipt of the MA II Notice will schedule a public hearing to consider the dispute and within ten (10) days of such public hearing, render a decision. The decision of the Governing Board will be final and binding on the Managing Agency but will not bind the members of Coalition. If the members of the Coalition accept the decision of the Governing Board of the Managing Agency, the decision will dictate the manner in which the dispute is resolved in the NRMP. If any member of the Coalition disagrees with the decision of the Governing Board, it shall have the right to seek a petition for writ of mandate from the Superior</p>	
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TABLE 1-9 (Cont.)

	<p><u>Court of California, San Diego Division.</u></p> <p>iii. <u>WAIVER OF DEFENSE. To the extent permitted by law, the Port, City and RDA agree that lack of funds shall not be a defense to any claim of failure to adequately fund implementation and enforcement of the adopted NRMP.</u></p>	
	<p><b><u>B. Additional Habitat Management and Protection:</u></b></p> <p>a. <u>The Port will exercise diligent and good faith efforts to enter into the following cooperative agreements with the USFWS or other appropriate agency or organization:</u></p> <p>i. <u>An agreement providing for the long-term protection and management of the sensitive biological habitat running north from the South Bay Boatyard to the Sweetwater River Channel (known as the Sweetwater Tidal Flats) and addressing educational signage, long-term maintenance, and additional protection measures such as increased monitoring and enforcement by Harbor Police, shared jurisdiction and enforcement <b>by District personnel with legal authority to enforce applicable rules and regulations (“District Enforcement Personnel”)</b>, <b>shared jurisdiction and enforcement by District Enforcement Personnel and other appropriate Resource Agencies</b> of resource regulations, and placement of enforcement signage. Subject to the cooperation of the applicable Resource Agency, such cooperative agreement will be executed prior to the Development Commencement of any projects subject to Port’s jurisdiction within the Sweetwater or Harbor Districts.</u></p> <p>ii. <u>An agreement for the long-term protection and management of the J Street Marsh and addressing additional protective measures such as educational signage, long-term maintenance, and monitoring and enforcement <del>by Harbor Police</del> <b>by District Enforcement Personnel</b>, shared jurisdiction and enforcement of resource regulations <b>by District Enforcement Personnel and other Resource Agencies</b>, and placement of enforcement signage. Subject to the cooperation of the applicable Resource Agency, such cooperative agreement will be executed prior to the Development Commencement within the Otay District.</u></p> <p><u>The Port will include an analysis of the appropriate level and method for wetland and marine life habitat restoration of the intake/discharge channels associated with the South Bay Power Plant in the environmental review document for the demolition of the South Bay Power Plant.</u></p> <p>iii. <u>If either of the cooperative agreements contemplated above are not achievable within three (3) years after Final EIR certification, the Port will</u></p>	

TABLE 1-9 (Cont.)

	<p><u>develop and pursue another mechanism that provides long-term additional protection and natural resource management for these areas.</u></p> <p>b. <u>The Port will include an analysis of the appropriate level and method for wetland and marine life habitat restoration of the intake/discharge channels associated with the South Bay Power Plant in the environmental review document for the demolition of the South Bay Power Plant.</u></p> <p>c. <u>As a future and separate project, the Port will investigate, in consultation with the USFWS, the feasibility of restoring an ecologically meaningful tidal connection between the F &amp; G Street Marsh and the upland marsh on parcel SP-2 consistent with USFWS restoration concepts for the area. At a minimum, the investigation will assess the biological value of tidal influence, the presence of hazardous materials, necessary physical improvements to achieve desired results, permitting requirements, and funding opportunities for establishing the tidal connection. This investigation will be completed prior to the initiation of any physical alteration of SP-2, F Street, and/or the F &amp; G Street Marsh. In addition, once emergency access to the Proposed Project area has been adequately established such that F Street is no longer needed for public right-of-way for vehicular use, but may reserve it for pedestrian and bicycle use if ecologically appropriate.</u></p> <p>C. <u>Restoration Priorities: The following will supplement the description of the conceptual mitigation opportunities in the Final EIR (including Appendix 4.8-8 Mitigation Opportunities). The following restoration priorities will not be included in the NRMP but rather will be applicable (i) if and only to the extent that Port or City are required to restore degraded habitat in accordance with the terms of the MMRP or (ii) to establish priorities for Port's pursuit of grant funding.</u></p> <p>a. <u>Restoration priorities for the Proposed Project are those mitigation opportunities in the Final EIR as depicted in the conceptual mitigation opportunities (Figures 4.8-23 and 4.8-26) and the projects located in the South Bay in the Port's Adopted Restoration and Enhancement Plan.</u></p> <p>b. <u>With the exception of the restoration described in Section (d) below, shoreline/marsh interface restorations in the Sweetwater and Otay Districts should be natural and gradually sloped and planted with salt marsh and upland transition plants in a manner that will stabilize the bank without the need for additional riprap areas. Upland slopes should be contoured to provide a very gentle grade so as to maximize tidal elevation of mudflats, salt marsh habitat and</u></p>	
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TABLE 1-9 (Cont.)

	<p><u>upland transition areas. This area should be wide enough to encourage or allow wildlife to move between the Sweetwater Marsh and the F &amp; G Marsh and between the J Street and the South San Diego Bay Unit of the NWR. The shoreline should be improved and restored to facilitate a more effective upland refuge area for species during high tides and to accommodate the impacts from global sea rise.</u></p> <p>c. <u>The Telegraph Creek should be improved to be a more natural channel as part of the redevelopment of the Otay District. Efforts to naturalize and revegetate the creek will be maximized as is consistent with its function as a storm water conveyance.</u></p> <p>d. <u>The Port will perform an analysis of the appropriate level and method for environmental restoration of the intake/discharge channels associated with the South Bay Power Plan in the environmental review document for the demolition of the power plant.</u></p> <p>D. <u>South Bay Wildlife Advisory Group: A South Bay Wildlife Advisory Group (“Wildlife Advisory Group”) will be formed to advise the Port and City in the creation of the NRMP, cooperative management agreements, Adaptive Management Review (defined below) and any related wildlife management and restoration plans or prioritizations. The Wildlife Advisory Group will also address management issues and options for resolution. The Wildlife Advisory Group will initiate and support funding requests to the Port and City, identify priorities for use of these funds and engage in partnering, education, and volunteerism to support the development of the Proposed Project in a manner that effectively protects and enhances the fish, wildlife, and habitats of the area and educates and engages the public.</u></p> <p>a. <u>Port and City will provide such administrative and staff support to the Wildlife Advisory Group as is necessary to perform the functions and achieve the goals described herein.</u></p> <p>b. <u>The Wildlife Advisory Group will be comprised of the following: one (1) representative from each the Environmental Health Coalition, San Diego Audubon Society, San Diego Coastkeeper, Coastal Environmental Rights Foundation, Southwest Wetlands Interpretative Association, Surfrider Foundation (San Diego Chapter), and Empower San Diego; two (2) representatives from the Chula Vista Natural Center (one from educational programs and one from programs/operations); up to three (3) representatives from major developers or tenants with projects in the CVBMP (including one from Pacifica Companies,</u></p>	
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TABLE 1-9 (Cont.)

	<p>which on completion, may be succeeded by a representative of its homeowner association); one (1) representative from the City's Resource Conservation Commission; one (1) from either Harborside or Mueller elementary school or the School District; Western and Eastern Chula Vista residents selected by the City (one from Northwest one from the Southwest and one from east of I-805); one (1) representative from eco-tourism based business; two (2) individuals appointed by Port; and 6 representatives from Resources Agencies (two from the USFWS, one from Refuges and one from Endangered Species and one (1) each from California Department of Fish and Game, National Marine Fisheries Service, Regional Water Quality Control Board and CCC).</p> <p>c. <u>The Wildlife Advisory Group will meet as needed, but at a minimum of every six months for the first ten (10) years and annually thereafter. The Wildlife Advisory Group will be formed within six months of the filing of the Notice of Determination for the FEIR by the Port.</u></p> <p>d. <u>The Wildlife Advisory Group will meet at the intervals described above to review the NRMP to: (i) determine the effectiveness of the NRMP in achieving the Management Objectives; (ii) identify any changes or adjustments to the NRMP required to better achieve the Management Objectives; (iii) identify any changes or adjustments to the NRMP required to respond to changes in the man-made and natural environments that are affecting or, with the passage of time may affect, the effectiveness of the NRMP in achieving the Management Objectives; and (iv) review priorities relative to available funding. At its periodic meetings, the Wildlife Advisory Group may also consider and make recommendations regarding (x) implementation of the NRMP as needed, (y) Adaptive Management Review and (z) NRMP Amendments.</u></p> <p>e. <u>The Wildlife Advisory Group will advise the joint powers authority (JPA) on the expenditure of the Community Benefits Fund, subject to the applicable law.</u></p> <p>E. <u>Education: An environmental education program will be developed and implemented and will include the following:</u></p> <p>a. <u>The program will continue for the duration of the Proposed Project and will target both residential and commercial uses as well as park visitors.</u></p> <p>b. <u>The program's primary objective will be to educate Bayfront residents, visitors, tenants and workers about the natural condition of the Bay, the ecological importance of the Proposed Project area and the public's role in the restoration and protection of wildlife resources of the Bay.</u></p>	
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TABLE 1-9 (Cont.)

	<p>c. <u>The program will include educational signage, regular seminars and interpretive walks on the natural history and resources of the area, regular stewardship events for volunteers (shoreline and beach cleanups, exotic plant removal, etc.).</u></p> <p>d. <u>Adequate annual funding for personnel or contractor/consultant and overhead to ensure implementation of the following functions and activities in collaboration with the Chula Vista Nature Center or USFWS:</u></p> <ul style="list-style-type: none"> <li>i. <u>Coordination of Volunteer programs and events;</u></li> <li>ii. <u>Coordination of Interpretive and educational programs;</u></li> <li>iii. <u>Coordination of Tenant, resident and visitor educational programs;</u></li> <li>iv. <u>Docent educational; and</u></li> <li>v. <u>Enhancements and restoration.</u></li> </ul> <p>F. <u>Personnel and Funding: Funding for the implementation of the NRMP will be provided by the Port, City and RDA. To meet these obligations, the Port, City and RDA will commit revenues or otherwise provide funding to a JPA formed pursuant to the California Marks-Roos Act, Articles 1, 2, 3 and 4 of Chapter 5 of Division 7 of Title 1 of the California Government Code. Port, City and RDA will ensure the JPA is specifically charged to treat the financial requirements of this Agreement as priority expenditures that must be assured as project-related revenues are identified and impacts initiated. The Port, City and RDA expressly acknowledge the funding commitments contemplated herein will include, but not be limited to, funding for personnel and overhead or contractor(s)/consultant(s) to implement and ensure the following functions and activities:</u></p> <ul style="list-style-type: none"> <li>a. <u>On-site management and enforcement for parks and Wildlife Habitat Areas as necessary to enforce restrictions on human and Predator access regarding Wildlife Habitat Areas;</u></li> <li>b. <u>Enforcement of mitigation measures including, but not limited to, trash collection, noise restrictions, removal of invasive plants, habitat restoration, and park use restrictions;</u></li> <li>c. <u>Coordination, development, implementation and evaluation of effectiveness of education and mitigation programs, including implementation of NRMP.</u></li> <li>d. <u>Evaluation of effectiveness of bird strike mitigation and design measures;</u></li> <li>e. <u>Water quality protections; and,</u></li> <li>f. <u>Coordination of injured animal rehabilitation activities.</u></li> </ul>	
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TABLE 1-9 (Cont.)

<b>Significant Impact 4.8-8:</b> Within the Port's jurisdiction, the construction of the H Street Pier could reduce surface water foraging habitat in the Bay by approximately 36,000 square feet, or 0.8 acre, which would result in the reduction of foraging area for birds. This impact would be significant based on the USFWS policy of no-net-loss of habitat.	<b>Mitigation Measure 4.8-8</b> <b>Port:</b> Prior to construction of the H Street Pier, the Port shall create 0.96 acre of eelgrass habitat to mitigate for the loss of surface water foraging habitat in accordance with the Southern California Eelgrass Mitigation Policy. The creation of eelgrass habitat shall be conducted in accordance with Mitigation Measures 4.9-1 and 4.9-2 in <i>Section 4.9, Marine Biological Resources</i> .	Less than significant
<b>Significant Impact 4.8-9:</b> Detailed plans are not available for program-level components such as reconfiguration of the marinas, or for dredging and filling of the navigation channels. Removal of some existing facilities and construction of new facilities would result in changes to existing surface water habitat, which would impact surface water foraging habitat. The above impacts from program-level components would result in a total net loss of approximately 1.61 acre of surface water foraging habitat and would be significant based on the USFWS policy of no-net-loss.	<b>Mitigation Measure 4.8-9<del>8</del></b> <b>Port:</b> <b>A.</b> Prior to completion in-harbor work in Phase IV, the Port shall create 1.93 acres of eelgrass habitat. The creation of eelgrass habitat shall be conducted in accordance with Mitigation Measure 4.9-2 in <i>Section 4.9, Marine Biological Resources</i> .  When project-specific designs are proposed for the remaining project components affecting 1.61 acres of surface water foraging habitat and intertidal mudflats, the mitigation of impacts shall be re-evaluated by the Port during subsequent environmental review pursuant to State CEQA Guidelines Section 15168 to determine accurate net loss and mitigation for the loss of foraging habitat.	Less than significant
<b>Significant Impact 4.8-10:</b> The grading for project-level, Phase I elements within the Port's jurisdiction would impact disturbed coastal sage, non-native grassland, mulefat scrub/riparian scrub, and southern coastal salt marsh. These impacts are significant.	<b>Mitigation Measure 4.8-10</b> <b>Port:</b> <b>A.</b> Prior to the commencement of grading for development in each phase that impacts riparian habitat or sensitive vegetation communities, the Port or Port tenants, as appropriate, shall	Less than significant



Impact	Mitigation	Significance After Mitigation
	<p>prepare and initiate implementation of a restoration plan for impacts to riparian habitat and sensitive vegetation communities in accordance with the mitigation requirements presented in <i>Table 4.8-6</i>.</p> <p>Prior to the commencement of Phase I grading that impacts riparian habitat or sensitive vegetation communities, the Port shall coordinate with the wildlife agencies for the preparation and approval of a detailed restoration plan within the Port's jurisdiction. The restoration plan shall be prepared by a qualified biologist, and the plan shall be approved by the Port. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process, and shall propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and shall establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies.</p> <p><b>B.</b> Prior to initiating any construction activities in each phase that would affect riparian habitat or sensitive vegetation communities, including clearing and grubbing associated with program-level phases, an updated project-level assessment of potential impacts shall be made based on a specific project design. The Port, or project developer(s), as appropriate, shall retain a qualified, Port-approved biologist to update appropriate surveys, identify the existing conditions, quantify impacts, and provide adequate mitigation measures to reduce impacts to below a level of significance. This updated assessment shall be submitted to the Port for review and approval.</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.8-11:</b> Grading for program-level elements within the Port's jurisdiction would impact disturbed coastal sage scrub, non-native grassland, disturbed riparian, and disturbed seasonal pond. These impacts are significant.	See Mitigation Measure 4.8- <del>109</del> above.	Less than significant
<b>Significant Impact 4.8-12:</b> Approximately 1.52 acre of southern coastal salt marsh in the Port's jurisdiction would be impacted during program-level activities. These impacts are significant.	See Mitigation Measure 4.8- <del>109</del> above.	Less than significant
<b>Significant Impact 4.8-13:</b> Approximately 17.42 acres of non-native grassland in the City's jurisdiction would be impacted in the Harbor District during Phase I. These impacts are significant.	<p><b>Mitigation Measure 4.8-<del>1011</del></b></p> <p><b>City:</b></p> <p><b>A.</b> Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that would affect riparian habitat or sensitive vegetation communities, the project developer(s) shall acquire mitigation credits or prepare and initiate implementation of a restoration plan for impacts to riparian habitats and sensitive vegetation communities in accordance with the acreages identified in <i>Table 4.8-7</i>.</p> <p>Mitigation credits shall be secured in a City-approved mitigation bank or land acquisition shall be provided at an approved location. Verification of mitigation credits or an approved restoration plan shall be provided to the City for review and approval prior to issuance of any clearing and grubbing or grading permits.</p> <p>The project developer(s) shall prepare and implement a detailed restoration plan to the satisfaction of the City and the regulatory agencies. <u>As previously addressed above in Section 4.8.6, Mitigation Measures</u>, the guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; <del>and shall</del> propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; <del>and shall</del> establish <del>a</del> performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del> 5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del><u>3</u> months or the start of the growing season.</p> <p><b>B.</b> Prior to issuance any clearing and grubbing or grading permits within the City's jurisdiction that affects riparian habitat or sensitive vegetation communities associated with the program-level development phases, an updated assessment of potential impacts shall be made based on a specific project design. The project developer(s) shall retain a City-approved biologist to update appropriate surveys, identify the existing conditions, quantify impacts, and provide adequate mitigation consistent with the City's MSCP Subarea Plan. This updated assessment shall be submitted to the City for review and approval.</p> <p><b>C.</b> Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that affects riparian habitat or sensitive vegetation communities, the project applicant within the City's jurisdiction shall be required to obtain an HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan.</p>	
<b>Significant Impact 4.8-14:</b> Approximately 0.03 acre of southern coastal salt marsh in the City's jurisdiction would be permanently impacted within the Sweetwater District during project-level activities.	<b>See Mitigation Measure 4.8-110 above.</b>	Less than significant
<b>Significant Impact 4.8-15:</b> Approximately 0.03 acre of mulefat scrub/riparian scrub in the City's jurisdiction would be permanently impacted within the Sweetwater District during program-level activities. The Proposed Project would permanently impact a total of 0.25 acre of disturbed coastal sage scrub (Tier II – uncommon uplands) in program-level activities of the Sweetwater District. Grading and construction activities during development of the Proposed Project will directly remove these sensitive vegetation communities. Impacts to mulefat/riparian scrub and disturbed coastal sage scrub would be significant.	<b>See Mitigation Measure 4.8-110 above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p><b>Significant Impact 4.8-16:</b> The circulation roads and bridges proposed within the Port's jurisdiction in the Sweetwater and Harbor Districts would permanently impact 0.55 acre of USACE wetlands and non-wetland waters of the U.S. Impacts would be significant.</p>	<p><b>Mitigation Measure 4.8-1<del>2</del>1</b></p> <p><b>Port:</b></p> <p><b>A.</b> The Port or Port tenants, as appropriate, shall mitigate for permanent and temporary impacts to USACE jurisdictional waters at the following ratios: 1:1 for permanent impacts to non-wetland waters of the U.S.; 4:1 for impacts to wetlands; and 1:1 for all temporary impacts. A minimum of 1:1 mitigation must be created in order to achieve the no-net-loss requirement of the CWA. <i>Table 4.8-8</i> provides a breakdown of the required mitigation acreages for all USACE impacts within the Port's jurisdiction, which totals 2.12 acres. Mitigation for impacts from the Bay and Marina components of the proposed project will be established through USACE regulations once final designs for this work in Phases II through IV are finalized.</p> <p>Prior to the commencement of grading activities for any projects that impact USACE jurisdictional waters, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a restoration plan detailing the measures needed to achieve the necessary mitigation. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; <del>and shall</del> propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; <del>and shall</del> establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del>5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del>3 months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies.</p> <p><b>City:</b></p> <p><b>B.</b> Prior to the issuance of the first clearing and grubbing or grading permit for activities that impacts USACE jurisdictional waters, the project developer(s) within the City's jurisdiction shall prepare a restoration plan <del>to</del> detailing the measures needed to create/restore impacts</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>to USACE jurisdictional waters within the City's jurisdiction in accordance with the acreage identified in <i>Table 4.8-9</i>. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; <del>and shall</del> propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; and <del>shall</del> establish <del>a</del> performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del> 5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del> 3 months or the start of the growing season. The project developer(s) shall be required to implement the restoration plan subject to the oversight and approval of the City.</p> <p><b>Port/City</b></p> <p><b>C.</b> Prior to issuance of the first clearing and grubbing or grading permit, for activities that impacts USACE jurisdictional waters, the Port or Port tenants, as appropriate, and project developer(s) within the City's jurisdiction shall obtain a Section 404 permit from USACE. The permit application process would also entail approval of the restoration plan from the USACE as described above, <del>in</del>with regards to areas that fall under the jurisdiction of USACE.</p>	
<b>Significant Impact 4.8-17:</b> Program-level development within the Port's jurisdiction would disturb a total of 1.24 acre of non-wetland waters of the U.S. and 0.42 acre of impacts to USACE wetlands. These impacts would be significant.	<b>See Mitigation Measure 4.8-12<del>1</del> above.</b>	Less than significant
<b>Significant Impact 4.8-18:</b> The establishment of an ecological buffer on Parcel OP-2A would result in temporary impacts to 0.03 acre of non-wetland waters of the U.S. through restoration activities.	<b>See Mitigation Measure 4.8-12<del>1</del> above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.8-19:</b> The reconfiguration of the harbor and marina could impact an additional 61.96 acres of USACE jurisdictional waters within the Harbor District during program-level activities. This impact would be significant.	<b>See Mitigation Measure 4.8-121 above.</b>	Less than significant
<b>Significant Impact 4.8-20:</b> The bridges proposed on Parcel HP-5 in the Harbor District would permanently impact 0.02 acre of USACE wetland within the City's jurisdiction. This impact would be significant.	<b>See Mitigation Measure 4.8-121 above.</b>	Less than significant
<b>Significant Impact 4.8-21:</b> The Proposed Project would disturb a total of 1.1 acres of CDFG streambed and associated riparian habitat during program-level activities in the Harbor and Otay Districts within the Port's jurisdiction. This includes permanent impacts to 0.14 acre within the Harbor District and permanent (0.72 acre) and temporary (0.23 acre) impacts in the Otay District. Permanent and temporary removal of riparian habitat is a significant impact.	<b>Mitigation Measure 4.8-132</b> <b>Port:</b> The Port or Port tenants, as appropriate, shall mitigate for permanent and temporary impacts to CDFG jurisdictional areas at a 2:1. <i>Table 4.8-8</i> provides a breakdown of the required mitigation acreages for all CDFG impacts within the Port's jurisdiction. Prior to the issuance of the first grading permit that may impact CDFG jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a restoration plan detailing the measures needed to achieve the necessary mitigation. The plan shall outline the timeline and procedures for restoring/enhancing the potential enhancement/mitigation sites, which include the native buffer areas and the F & G Street Marsh. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; <del>and shall</del> propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; <del>and shall</del> establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del> 5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del> 3	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including CDFG.</p> <p>Prior to issuance of the first grading permit that may impact CDFG jurisdictional areas, the Port, or Port tenants, as appropriate, shall obtain permits from CDFG. The permit application process would also entail approval of the restoration plan as described above, <del>within</del> regards to areas that fall under the jurisdiction of CDFG. Pursuant to Fish and Game Code 1602, the Port and other applicants are required to obtain a Streambed Alteration Agreement for impacts to streambeds and associated riparian habitat that fall within CDFG's jurisdiction.</p>	
<p><b>Significant Impact 4.8-22:</b> The E Street road improvements proposed in the Sweetwater District would directly and permanently impact 0.07 acre of CCC wetland located within the road easement and Parcel S-1 adjacent to the roadway at Bay Boulevard and E Street (near Soil Test Pits 22 and 23). This wetland is composed of mulefat scrub. Development at this location would result in a significant impact.</p>	<p><b>Mitigation Measure 4.8-1 <del>43</del></b></p> <p><b>Port:</b></p> <p><b>A.</b> Mitigation for permanent direct and indirect (from bridge shading) impacts would be at a 2:1 ratio as detailed in <i>Table 4.8-8</i>.</p> <p>Prior to the commencement of grading activities for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; <del>and shall</del> propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; and <del>shall</del> establish <del>a</del> performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del> 5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del> 3 months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><b>City:</b></p> <p><b>B.</b> Mitigation for permanent direct and indirect (from bridge shading) impacts would be at a 2:1 ratio as detailed in Table 4.8-9.</p> <p>Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the project applicants within the City's jurisdiction shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process; <del>and shall</del> propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices; and <del>shall</del> establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum <del>five</del>5-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within <del>three</del>3 months or the start of the growing season. The City shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the City in consultation with the regulatory agencies, including the CCC.</p>	
<b>Significant Impact 4.8-23:</b> The Port would also construct a bridge on E Street over the inlet to the F & G Street Marsh as part of the circulation element. The bridge would span the wetland and would indirectly impact approximately 0.01 acre of CCC wetland through shading. This impact would be significant.	<b>See Mitigation Measure 4.8-143 above.</b>	Less than significant
<b>Significant Impact 4.8-24:</b> During implementation of program-level components, the Port/City would construct two additional bridges in the Otay District. This includes the Street A Bridge over the J Street Channel and the Street B Bridge over the Telegraph Canyon Channel.	<p><b>Mitigation Measure 4.8-154</b></p> <p><b>Port:</b></p> <p>Mitigation for permanent direct and indirect (from bridge shading) impacts from circulation road construction/improvements and the riprap removal and bulkhead replacement totaling 0.51 acre,</p>	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p>These bridges would result in indirect permanent impacts from shading to 0.05 acre of CCC wetland. These impacts would be significant.</p>	<p>would be at a 2:1 ratio as detailed in <i>Table 4.8-8</i>. This would require a total mitigation of 1.02 acres. Mitigation for temporary impacts within Parcel OP-2B from the re-channelization of the Telegraph Canyon Channel would require mitigation at a ratio of 1:1 as detailed on <i>Table 4.8-8</i> for a total of 0.16 acre.</p> <p>Prior to the commencement of grading activities, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.</p> <p>Prior to approval of grading permits for projects impacting CCC wetlands, the Port or Port tenants, as appropriate, shall obtain permits and/or approvals from CCC.</p>	
<p><b>Significant Impact 4.8-25:</b> The riprap removal and bulkhead placement proposed as a component to the Chula Vista Marina improvements, would permanently impact approximately 0.46 acre of CCC wetlands on Parcels HW-1, HW-3, and H-12 within the Harbor District. Impacting CCC wetlands for the purpose of improving navigation and harbor access would be consistent with the Coastal Act; however, the biological impacts would be significant.</p>	<p><b>See Mitigation Measure 4.8-154 above.</b></p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.8-26:</b> The Telegraph Canyon Channel in the Otay District would be re-channelized within the program-level phases of development. This would temporarily impact 0.16 acre of CCC wetland. This would be significant. This temporary impact to re-contour a pre-existing channelized drainage would be allowed under the Coastal Act.	<b>See Mitigation Measure 4.8-154 above.</b>	Less than significant
<b>Significant Impact 4.8-27:</b> The establishment of an ecological buffer on Parcel OP-2A would result in temporary impacts to 0.05 acre of CCC wetland, 0.04 acre of potential CCC wetlands, and 1.50 acres of former industrial areas in the process of remediation. Impacts to the 0.05 acre of CCC wetlands would be significant. The impacts to the 1.54 acres of areas of former industrial areas in the process of remediation would only be significant if the CCC asserts jurisdiction. Impacts for restoration purposes are allowed under the Coastal Act.	<p><b>Mitigation Measure 4.8-165</b></p> <p><b>Port:</b></p> <p>Mitigation for temporary impacts from the restoration of the ecological buffer would require mitigation at a ratio of 1:1 as detailed on <i>Table 4.8-8</i>. The ecological buffer area supports 0.05 acre that has been mapped as a CCC wetland and will require 0.05 acre of mitigation. There is an additional 0.04 acre that is mapped as a potential CCC wetland and 1.50 acres that are former industrial areas in the process of remediation. The Port or Port tenants, as appropriate, will need to confer with CCC in order to determine whether the areas of potential jurisdiction, totaling 1.54 acres actually fall under CCC jurisdiction. If these areas are not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the restoration will need to include the creation/enhancement of an additional 1.54 acres of CCC wetlands.</p> <p>Prior to the issuance of the first grading permit for activities that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
<p><b>Significant Impact 4.8-28:</b> Additional road extensions are proposed in the Otay District. This includes Street A improvements, which would permanently impact 0.55 acre of the former industrial site in the process of remediation, and Street B improvements, which would impact 0.03 acre of potential CCC wetland. If CCC claims jurisdiction over these two areas, impacts would be significant. If CCC does not assert jurisdiction over these areas, these impacts would not be significant.</p>	<p><b>Mitigation Measure 4.8-176</b></p> <p><b>Port:</b></p> <p>The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether the 0.58 acre of areas fall under CCC jurisdiction. If these areas are not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the Port will need to mitigate the impacts at a ratio of 2:1 as detailed in <i>Table 4.8-8</i> for a total mitigation of 1.16 acres.</p> <p>Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.8-29:</b> The Port could impact CCC wetland on HP-13B and CCC wetland on HP-7. These impacts would be significant.	<b>Mitigation Measure 4.8-187</b> <b>Port:</b> Prior to the issuance of the first grading permit for activities that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands to provide 0.32 acre of mitigation for the 0.16 acre impact to CCC wetlands on Parcels HP-13B and HP-7. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	Less than significant
<b>Significant Impact 4.8-30:</b> The development of a park on Parcel OP-1B would impact 0.16 acre of a drainage that has been mapped as a CCC potential wetland site. If the Coastal Commission asserts jurisdiction, the development proposed on Parcel OP-1B in the Otay District would be significant.	<b>Mitigation Measure 4.8-198</b> <b>Port:</b> The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether the 0.16 acre of areas identified as potentially CCC jurisdictional areas actually fall under CCC jurisdiction. If these areas are not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the Port will need to mitigate the impacts at a ratio of 2:1 as detailed in <i>Table 4.8-8</i> for a total mitigation of 0.32 acres. Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.</p>	
<p><b>Significant Impact 4.8-31:</b> Program component development on Parcel O-4 could result in significant impacts to the 0.10-acre pond, and 2.37 acres of potential CCC wetland. Impacts to the potential CCC wetland would only be significant if CCC asserts jurisdiction.</p>	<p><b>Mitigation Measure 4.8-2019</b>  <b>Port:</b>  The Port or Port tenants, as appropriate, will need to mitigate impacts to the 0.10-acre seasonal pond, mapped as a CCC wetland at a 2:1 ratio.  The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether the 2.37 acre depressed area that exists where the LNG plant was formerly located, mapped as a potential CCC wetland, falls under CCC jurisdiction. If this area is not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the final Phase II design of this parcel must mitigate impacts the 2.37-acre depressed area at a 2:1 ratio.  Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover,</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
<b>Significant Impact 4.8-32:</b> There would be 0.03 acre of permanent impact in the Sweetwater District during Phase I from improvements to the existing E Street along the road easement and SP-4. These impacts would be significant.	<b>See Mitigation Measure 4.8-143 above.</b>	Less than significant
<b>Significant Impact 4.8-33:</b> A bridge is proposed to cross the HP-5 drainage ditch in the Harbor District. This development would result in a permanent indirect impact from bridge shading to 0.03 acre within the City's jurisdiction. This impact would be significant.	<b>See Mitigation Measure 4.8-143 above.</b>	Less than significant
<b>Significant Impact 4.8-34:</b> RWQCB has jurisdiction over all waters of the U.S and isolated waters of the state as mandated by both the federal CWA and the California Porter-Cologne Water Quality Control Act. RWQCB will verify the extent of area under their jurisdiction as part of the permitting process. Impacts to waters under the jurisdiction of RWQCB are significant.	<b>Mitigation Measure 4.8-210</b> <b>Port:</b> <b>A.</b> Prior to the commencement of grading activities for project components impacting RWQCB jurisdictional waters, the Port or Port tenants, as appropriate, shall prepare and implement a restoration plan detailing the measures needed to create/restore RWQCB jurisdictional waters in accordance with the acreage identified in <i>Table 4.8-8</i> . <b>City:</b> <b>B.</b> Prior to the issuance of the first grading permit for project components impacting RWQCB jurisdictional waters, the project developer(s) within the City's jurisdiction shall prepare and implement a restoration plan detailing the measures needed to create/restore RWQCB jurisdictional waters in accordance with the acreage identified in <i>Table 4.8-8</i> to the satisfaction of the City. The guidelines for this plan will be developed in consultation with the regulatory agencies.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><b>Port/City:</b></p> <p><b>C.</b> Prior to the commencement of grading activities for project components impacting RWQCB jurisdictional waters, the Port or Port tenants, as appropriate, and applicants within the City's jurisdiction shall obtain permits from RWQCB. The permit application process would also entail approval of the restoration plan as described above. Pursuant to the CWA, the Port and other applicants are required to obtain a Section 401 Water Quality Certification permit from RWQCB.</p> <p><b>Port/City:</b></p> <p><b>D.</b> Prior to the commencement of grading activities for project components impacting RWQCB jurisdictional waters, including clearing and grubbing, the Port or Port tenants, as appropriate, and the project developer(s) within the City's jurisdiction shall consult with the RWQCB to determine if Waste Discharge Requirements from the RWQCB shall be required for impacts to isolated waters of the State.</p>	
<p><b>Significant Impact 4.8-35:</b> The bridge proposed to cross the HP-5 drainage ditch in the Harbor District would result in 0.03 acre of permanent indirect impact to southern coastal salt marsh. This impact would be significant. There would be 0.11 acre of permanent impact in the Sweetwater District during Phase I from improvements to the existing E Street. This consists of impact to 0.06 acre of mulefat/riparian scrub and 0.02 acre of southern coastal salt marsh from development within the road easement and 0.02 acre of mulefat/riparian scrub on Parcel SP-4. These impacts would be significant.</p>	<p><b>Mitigation Measure 4.8-22<sup>1</sup></b></p> <p><b>City:</b></p> <p><b>A.</b> Prior to issuance of any clearing and grubbing or grading permits for projects that impact City of Chula Vista designated wetlands, the project developer(s) shall acquire mitigation credits or prepare and initiate implementation of a restoration plan for Phase I impacts to mulefat scrub/riparian scrub at a ratio of 2:1 and southern coastal salt marsh at a ratio of 4:1. Mitigation credits shall be secured in a City-approved mitigation bank or other approved location. Verification of mitigation credits or an approved restoration plan shall be provided to the City prior to issuance of any clearing and grubbing or grading permits. Alternatively, completion of Mitigation Measure 4.8-11 will satisfy this mitigation measure as well.</p> <p>The project developer(s) shall prepare and implement a detailed restoration and enhancement plan to the satisfaction of the City for impacts to wetland resources protected under the City's MSCP Subarea Plan. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The City shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the City in consultation with the regulatory agencies.</p> <p><b>B.</b> Prior to issuance of any clearing and grubbing or grading permits for areas that impact jurisdictional waters, the project developer(s) shall provide evidence to the City that all required regulatory permits, such as those required under Section 1602 of the California Fish and Game Code and the California Water Code Section 13260, have been obtained.</p>	
<p><b>Significant Impact 4.8-36:</b> the following project components in both Port and City jurisdiction could potentially impact avian flight patterns and habitat use along the project frontage: construction of the RCC on H-3, construction of residential development on H-13 and H-14, construction of a hotel up to 300 feet in height on H-23, and construction of buildings between 90 and 130 feet high on Parcel H-15. Although there are no studies in which it has been identified specific to the West Coast in regards to bird strike impacts, studies conducted in other areas indicate that construction of buildings over 100-feet in height on a project of this size may result in a potentially significant increase in bird strikes within the project area. This impact to both Port and City jurisdiction is significant.</p>	<p><b>Mitigation Measure 4.8-232</b></p> <p><b>Port/City:</b></p> <p>Prior to issuance of any building permits, building plans shall be reviewed by a qualified biologist retained by the developer and approved by the Port or the City, to verify that the proposed building has incorporated specific design features to avoid or to reduce the potential for bird strikes, including but not limited to the following:</p> <p><b>Lighting</b></p> <ul style="list-style-type: none"> <li>• No solid red or pulsating red lights shall be installed on or near the building unless required by the Federal Aviation Administration (FAA).</li> <li>• Where lighting must be used for safety reasons (FAA 2000 Advisory Circular), minimum intensity, maximum off-phased (3_-seconds_ between flashes) white strobes shall be used.</li> <li>• No solid spot lights or intense bright lights shall be used during bird migration periods in the spring (<del>from March to</del>_May) and fall (<del>from August to</del>_October). All event lighting shall be directed downward and shielded, <u>unless such directed downward or</u> <del>and shielded to</del> <u>minimized light spills</u> beyond the area for which illumination is required.</li> <li>• Exterior lighting shall be limited to that necessary and appropriate to ensure general public safety and way finding, including signage for building identification and way finding.</li> </ul>	<p>Less than significant</p>



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<ul style="list-style-type: none"> <li>• Exterior lighting shall be directed downward and shielded to prevent upward lighting and to minimize light spill beyond the area for which illumination is required.</li> <li>• Office space, residential units, and hotel rooms shall be equipped with motion sensors, timers, or other lighting control systems to ensure that lighting is extinguished when the space is unoccupied.</li> <li>• Office space, residential units, and hotel rooms shall be equipped with blinds, drapes, or other window coverings that may be closed to minimize the effects of interior night lighting.</li> </ul> <p><b>Glass and Reflection</b></p> <ul style="list-style-type: none"> <li>• <del>Reflective glass or the application of reflective coatings shall not be used on any glass surface, except as may be required for low emittance (low-e) coating for energy efficiency under Title 24 of the California Code of Regulations. Use of reflective coatings on any glass surface is prohibited.</del></li> <li>• Buildings shall incorporate measures to the satisfaction of the Port or the City to indicate to birds that the glass surface is solid by creating visual markers and muting reflection.</li> <li>• <u>Project design standards will encourage window stenciling and angling.</u></li> </ul> <p>These measures may include but are not limited to the following:</p> <ul style="list-style-type: none"> <li>• Glass surfaces <del>that</del> <u>which</u> are non-reflective</li> <li>• Glass surfaces <del>which</del> <u>that</u> are tilted at a downward angle</li> <li>• Glass surfaces <del>which</del> <u>that</u> use fritted or patterned glass</li> <li>• Glass surfaces <del>which</del> <u>that</u> use vertical or horizontal mullions or other fenestration patterns</li> <li>• Glass surfaces <del>which</del> <u>that</u> are fitted with screening, decorative grills, or louvers</li> <li>• Glass surfaces <del>which</del> <u>that</u> use awnings, overhangs, bris sole, or other exterior sun-shading devices</li> <li>• Glass surfaces <del>which</del> <u>that</u> use external films or coatings perceivable by birds</li> <li>• Artwork, drapery, banners, and wall coverings that counter the reflection of glass surfaces or block “see-through” pathways.</li> </ul> <p><b>Building Articulation</b></p> <ul style="list-style-type: none"> <li>• <u>Structure d</u>Design features that reduce or avoid the potential for bird strikes, such as <u>secondary and tertiary setbacks, stepped-back building design, protruding balconies,</u></li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>recessed windows, and mullioned glazing systems shall be incorporated to the extent feasible. <u>Balconies and other elements will step back from the water's edge.</u></p> <ul style="list-style-type: none"> <li>• Design features that increase the potential for bird strikes, such as walkways constructed of clear glass and “see-through” pathways through lobbies, rooms, and corridors, shall be avoided to the extent feasible.</li> <li>• Buildings will be sited and designed to minimize glass and windows facing Wildlife Habitat Areas to the maximum extent possible. <b><u>Design for towers on Parcel H-3 should avoid east-west monolith massing and should include architectural articulation.</u></b></li> <li>• <b><u>The tallest buildings on Parcel H-3 will be located generally on the southern portion of the parcel with building heights decreasing towards the north and west. The foregoing will not be interpreted to preclude incorporating secondary and tertiary setbacks along public streets.</u></b></li> <li>• <u>Parcels containing surface parking, such as those depicted for the Sweetwater District, will be designed with parking lots nearer Wildlife Habitat Areas. Site plans for parcels adjacent to Wildlife Habitat Areas will maximize distance between structures and such areas.</u></li> </ul> <p><b>Landscaping</b></p> <ul style="list-style-type: none"> <li>• Exterior trees and landscaping shall be located and glass surfaces shall incorporate measures so that exterior trees and landscaping are not reflected on building surfaces.</li> <li>• In small exterior courtyards and recessed areas, the building's edge shall be clearly defined with opaque materials and non-reflective glass.</li> <li>• Interior plants shall be located a minimum of <del>ten</del> <u>10</u> feet away from glass surfaces to avoid or reduce the potential for attracting birds.</li> </ul> <p><b>Public Education</b></p> <ul style="list-style-type: none"> <li>• The owner or operator of each building shall implement an on-going procedure to the satisfaction of the Port or the City to encourage tenants, residents and guests to close their blinds, drapes or other window coverings to reduce or avoid the potential for bird strikes.</li> <li>• The owner or operator of each building shall enroll in the Fatal Light Awareness Program's “Bird-Friendly Building Program” and shall implement on-going tenant, resident and guest education strategies, to the satisfaction of the Port or the City, to reduce or avoid the potential for bird strikes, such as elevator and lobby signage and educational displays, e-mail alerts and other bulletins during spring and fall migratory seasons, and other activities</li> </ul>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>designed to enlist cooperation in reducing bird collisions with the building.</p> <p><b>Monitoring</b></p> <ul style="list-style-type: none"> <li>For Phase I projects, the project applicant shall retain a qualified biologist to design a protocol and schedule, in consultation with the U.S. Department of Fish and Wildlife and subject to the approval of the Port or City, as appropriate depending on jurisdiction, to monitor bird strikes that may occur during the first twelve months after the completion of construction. Within sixty days after completion of the monitoring period, the qualified biologist shall submit a written report to the Port or the City, which shall state the biologist's findings and recommendations regarding any bird strikes that occurred. Based on the findings of those reports, the Port or the City, as appropriate depending on jurisdiction, in coordination with the U.S. Department of Fish and Wildlife, will evaluate whether further action is required, which may include further monitoring.</li> <li><u>Bird strikes must be monitored in accordance with the NRMP and measures developed to address persistent problem areas. Nighttime lighting in tower buildings must be addressed and evaluated through adaptive management. Minimization of impacts of buildings on birds and the Wildlife Habitat Areas will be a priority in the selection of window coverings, glass color, other exterior materials, and design of exterior lighting and lighting of signs.</u></li> </ul>	
<b>Significant Impact 4.8-37:</b> Construction of buildings between 100 and 200 feet high within the program-level phases of development, could potentially impact avian flight patterns and habitat use along the project frontage, as well as result in a potential significant increase in the number of bird strikes within the project area. These impacts would be significant.	<b>See Mitigation Measure 4.8-232 above.</b>	Less than significant
<b>4.9: Marine Biological Resources</b>		
<b>Significant Impact 4.9-1:</b> Construction of the H Street Pier project (in Phase II) would impact 0.4 acre of eelgrass habitat in South Bay from the driving of piles for pier support into shallow subtidal benthic habitat where eelgrass is known to occur, as well as the increased shading that would possibly result in a loss of eelgrass habitat in the area. Impacts to eelgrass are significant	<p><b>Mitigation Measure 4.9-1</b> (Mitigation Measure 4.9-1 would mitigate Significant Impacts 4.9-1, 4.9-2 and 4.9-4.)</p> <p><b>Port:</b></p> <p><b>A.</b> Prior to construction of the H Street Pier during Phases II and IV or work within Parcel HW-4, a pre-construction eelgrass survey shall be conducted by a qualified marine biologist to confirm the exact amount of eelgrass to be affected at the time of pile driving operations. The pre-construction survey must be conducted during the period of March through October and</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
and would require mitigation at a ratio of 1.2:1 to reduce impacts to below a level of significance. The project impacts to eelgrass would also conflict with the INRMP and SCEM.	<p>would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1st.</p> <p><b>B.</b> Prior to construction of the H Street Pier during Phases II and IV or work within Parcel HW-4, the Port shall establish and implement a plan to create new eelgrass habitat. The loss of eelgrass habitat must be mitigated at a 1.2:1 ratio as described in the SCEMP (NMFS 1991, Revision 11). Impacts to approximately 0.4 acre of eelgrass shall require the creation of approximately 0.48 acre of eelgrass to mitigate losses caused by construction of the H Street Pier.</p> <p><b>C.</b> Prior to or concurrent with the completion of the H Street Pier or within Parcel HW-4, the Port shall create new eelgrass habitat at a ratio of 1.2:1 for the actual amount of impacts. This shall be done by removing the existing eelgrass currently located at the proposed H Street Pier site and transplanting it at an appropriate location within the filled area of the existing navigation channel, to the satisfaction of a qualified marine biologist.</p> <p><b>D.</b> Subsequent to construction of the H Street Pier during Phases II and IV or Parcel HW-4, a post-construction eelgrass survey shall be conducted by a qualified biologist. The post-construction survey shall be conducted within 30 days of the cessation of construction activities to confirm the exact amount of eelgrass affected. The difference between the pre-construction and post-construction eelgrass surveys shall determine the amount of required mitigation. In addition, the Port shall:</p> <ul style="list-style-type: none"> <li>• Conduct transplant reports following construction (Initial Report).</li> <li>• Conduct monitoring reports at 6, 12, 24, 36, 48, and 60 months post-transplant. Specific milestones and criteria for success are directed in the SCEMP along with guidelines for remedial actions if the success criteria are not met <u>(including presence of green sea turtles based on soundings from the existing tagging program)</u>, which would require (based on the absence of other mitigating environmental considerations) a Supplementary Transplant Area to be constructed and monitored for an additional <del>five</del> 5 years.</li> <li>• Initiate mitigation within 135 days of project inception; projects requiring more than 135 days to complete would result in additional mitigation.</li> <li>• <u>Coordinate with Sweetwater Authority to share monitoring reports, as necessary.</u></li> </ul>	
<b>Significant Impact 4.9-2:</b> Construction of the H Street Pier is planned for completion in Phase IV. Although design plans have not been completed, the additional work would	<b>See Mitigation Measure 4.9-1 above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
result in an increase of 18,000 square feet, or an additional 0.4 acre, of eelgrass impacts if constructed as currently planned. This increased impact to 0.4 acre of eelgrass during Phase IV would be significant. The project impacts to eelgrass would also conflict with the INRMP and SCEM.		
<p><b>Significant Impact 4.9-3:</b> As part of the navigation channel realignment in Phase IV, channel dredging and filling would temporarily affect approximately 62 acres of soft subtidal habitat, resulting in the loss of 45.9 acres of eelgrass and shallow-water habitat. This loss of eelgrass and shallow-water habitat would be significant and would require mitigation at a ratio of 1.2:1 for eelgrass and 1:1 for shallow-water habitat to reduce impacts to below a level of significance. The project impacts to eelgrass would also conflict with the INRMP and SCEM.</p>	<p><b>Mitigation Measure 4.9-2</b></p> <p><b>Port: A.</b> An estimated 83 acres of the existing navigation channel shall be filled to -3 to -5.5 feet MLLW. The fill would modify deep and moderately deep open-water habitat to create approximately 83 acres of shallow-water habitat. This area would provide enough transplantable habitat at a depth ideal for eelgrass in this section of the Bay to mitigate for the loss of eelgrass from the channel realignment and completion of the H Street Pier.</p> <p><b>B.</b> A mitigation plan with an implementation schedule shall be prepared 30 days prior to any construction or dredge activities. The loss of eelgrass habitat shall be mitigated at a 1.2:1 ratio as described in the SCEMP (NMFS 1991, Revision 11). Based on this formula, impacts to 45.9 acres of eelgrass would require approximately 55.1 acres of eelgrass restoration.</p> <p><b>C.</b> Prior to the commencement of in-water work on the channel realignment, a pre-construction eelgrass survey shall be conducted to confirm the exact area of impact at the time of dredging and fill operations. The pre-construction survey shall be conducted during the period of March through October and would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1.</p> <p><b>D.</b> Subsequent to dredge and fill operations a post-construction eelgrass survey shall be conducted by a qualified biologist. The post-construction survey shall be conducted within 30 days of the cessation of construction activities to confirm the exact area of eelgrass affected. The difference between the pre-construction and post-construction eelgrass surveys shall determine the amount of required mitigation. In addition, the Port shall:</p> <ul style="list-style-type: none"> <li>• Conduct transplant reports following construction (Initial Report).</li> <li>• Conduct monitoring reports at 6, 12, 24, 36, 48, and 60 months post-transplant. Specific milestones and criteria for success are directed in the SCEMP along with guidelines for remedial actions if the success criteria are not met <u>(including presence of green sea turtles based on soundings from the existing tagging program)</u>, which would require (based on the absence of other mitigating environmental considerations) a Supplementary Transplant Area to be constructed and monitored for an additional five years.</li> </ul>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<ul style="list-style-type: none"> <li>Initiate mitigation within 135 days of project inception; projects requiring more than 135 days to complete would result in additional mitigation.</li> <li><u>Coordinate with Sweetwater Authority to share monitoring reports as necessary.</u></li> </ul>	
<b>Significant Impact 4.9-4:</b> Reconfiguration of the Chula Vista Harbor in Phase IV would result in a potential loss of up to 775 square feet, or approximately 0.02 acre, of eelgrass during construction of the harbor on Parcel HW-4. Impacts to eelgrass are significant and would require mitigation at a minimum ratio of 1.2:1 to reduce impacts to below a level of significance. The project impacts to eelgrass would also conflict with the INRMP and SCEM.	<b>See Mitigation Measure 4.9-1 above.</b>	Less than significant
<b>Significant Impact 4.9-5:</b> Reconfiguration of the Chula Vista Harbor in Phase IV would involve bulkhead placement on Parcel HW-3 and would result in the loss of about 1,200 square feet (0.03 acre) of intertidal mudflat inside the Marina. In addition, bulkhead placement on the northern side of the Chula Vista Marina would impact approximately 53.82 square feet (less than 0.001 acre) of the existing pickleweed. The project impacts to approximately 0.001 acre of pickleweed, specifically from reconfiguration of the Chula Vista Harbor, would also conflict with the INRMP.	<p><b>Mitigation Measure 4.9-3</b></p> <p><b>Port: A.</b> Prior to the commencement of harbor improvements on Parcel HW-3, which includes the placement of bulkheads, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a plan to create new habitat at a ratio of 2:1 <u>for intertidal mudflat and 4:1 for pickleweed</u>. Impacts to approximately 0.03 acre of intertidal mudflat shall require the <u>in-kind</u> creation of approximately 0.06 acre and less than 0.001 acre of pickleweed shall require creation of approximately <u>0.0024</u> acre of comparable habitat.</p> <p><b>B.</b> Restoration shall occur in accordance with <i>Appendix 4.8-12</i>. At the time project specific designs are proposed for the Phase IV harbor reconfiguration, the mitigation for impacts to intertidal mudflat and pickleweed shall be re-evaluated by the Port during subsequent environmental review pursuant to State CEQA Guidelines Section 15168 to identify the total impact area and required mitigation for the loss of intertidal mudflat and pickleweed.</p> <p><b>C.</b> Restoration shall occur in accordance with Mitigation Opportunities, <i>Appendix 4.8-12</i> to this report, which includes the creation of additional mudflat through the removal of riprap on the Bay shore in the Sweetwater District. As detailed in Mitigation Opportunities, this created habitat would be dominated by pickleweed (<i>Salicornia virginica</i>) with subdominants including saltwort (<i>Batis maritima</i>), fleshy Jaumea (<i>Jaumea carnosa</i>), alkali heath (<i>Frankenia salina</i>), and others as list in Table 4 of <i>Appendix 4.8-12</i>. Currently, the mitigation opportunities detailed in <i>Appendix 4.8-12</i> are anticipated to be implemented during Phase I. The Port shall verify that the creation of intertidal mudflat satisfies the required mitigation once the final impacts are verified.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p><b>Significant Impact 4.9-6:</b> Construction of phased improvements for the H Street Pier, the existing South Bay Boatyard Marina, Chula Vista Marina, and the realignment of the navigation channel could increase turbidity by disturbing sediments, which may be contaminated. Increased turbidity and unintentional release of contaminated material can result in temporary direct impacts to water quality and marine resources. Impacts from these construction activities would also conflict with the INRMP and indirectly with the SCЕМ.</p>	<p><b>Mitigation Measure 4.9-4</b></p> <p><b>Port:</b></p> <p><b>A.</b> Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, allowing it to drain, and analyzing the nature and extent of any contamination. Pending the outcome of the analytical results, a decision by RWQCB shall prescribe the requirements for disposition of any contaminated sediment.</p> <p><b>B.</b> Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and the Port/City an evaluation showing that the sediment would be suitable for ocean disposal.</p>	Less than significant
<p><b>Significant Impact 4.9-7:</b> Construction of the South Bay Boatyard Marina (at Parcel HW-6) during Phase IV, harbor reconfiguration and marina access navigation channel realignment would require dredging of material that may contain contaminants necessitating storage to enable testing and potential alternative disposal. No storage area for the dredged material, if contaminated, has been identified. This impact would be significant.</p>	<p><b>Mitigation Measure 4.9-5</b></p> <p><b>Port:</b></p> <p>For the in-water construction components to be completed in Phase IV, the amount of dredging shall be determined during final design of the marinas and harbor reconfiguration. Prior to any dredging, the Port shall develop and implement a plan for the dredging and storage of material to the satisfaction of responsible resource agencies, including USACE. The storage and/or landside disposal of dredge material shall be performed in accordance with the provisions of Mitigation Measure 4.6-6 in <i>Section 4.6, Air Quality</i> and all applicable federal, state, and local regulations.</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.9-8:</b> Construction and operation of the proposed marinas would result in increased artificial lighting compared to existing conditions. The increase in lighting over water areas is considered a significant indirect impact to marine resources, including sensitive species such as eelgrass and turtles within the Bay. This would also conflict with the INRMP and indirectly with the SCEM.	<b>Mitigation Measure 4.9-6</b> <b>Port:</b> Prior to issuance of Coastal Development Permits, applicants shall submit a lighting plan and photometric analysis to the Port for review and approval. Lighting of all developed areas adjacent to open water shall be directed away from the water, wherever feasible and consistent with public safety. Lighting fixtures shall provide adequate shielding to protect the aquatic habitat and marine life from night lighting. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. Low-pressure sodium lighting or the equivalent shall be used if feasible and shall be subject to the approval of the Port.	Less than significant
<b>4.10 Cultural Resources</b>		
There were no significant impacts to cultural resources identified for the Proposed Project.	<p><u>Although no impacts are anticipated, the Port shall implement a grading, monitoring, and data recovery program to reduce potential impacts to undiscovered buried archaeological resources on the Proposed Project to the satisfaction of the Director of Land Use Planning. Elements of the program will include that only certified archaeologists and Native American monitors are accepted. The project archaeologist shall monitor all areas identified for excavation, including off-site improvements. The monitors shall be present during the original cutting of previously undisturbed deposits. In the event that a previously unidentified potentially significant cultural resource is discovered, the archaeological monitor shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant resource. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared and approved by the County, then carried out using professional archaeological methods.</u></p> <p><u>In the event that human bones are discovered, the County coroner shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD) as identified by the Native American Heritage Commission shall be contacted by the project archaeologist to determine proper treatment and disposition of the remains. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the context shall be completed and submitted to the satisfaction of the Director of Land Use Planning.</u></p> <p><b>No mitigation is required.</b></p>	N/A



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p><b>4.11 Paleontological Resources</b></p> <p><del>There were no significant impacts to paleontological resources identified for the Proposed Project.</del></p> <p><u>Significant Impact 4.11-1: Excavation in the Sweetwater District during Phases I through IV of the Proposed Project would result in direct and significant impacts to paleontological resources of the Bay Point Formation.</u></p>	<p><del>No mitigation is required.</del></p> <p>Mitigation Measure 4.11-1</p> <p><u>Port/City: Prior to the issuance of any grading permit in the Sweetwater District, the applicant shall retain a qualified paleontologist (defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques) who shall carry out the following mitigation program. Fieldwork may be conducted by a qualified paleontological monitor (defined as an individual who has experience in the collection and salvage of fossil materials) who at all times shall work under the direction of the qualified paleontologist.</u></p> <ul style="list-style-type: none"> <li><u>The paleontologist shall attend all pre-grading meetings to inform the grading and excavation contractors of this paleontological resource mitigation program and shall consult with them with respect to its implementation.</u></li> <li><u>The paleontological monitor shall be on site at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations to inspect cuts for contained fossils in the low coastal mesa adjacent to Bay Boulevard in the northeastern portion of the Sweetwater District. The paleontological monitor shall be on site during the original cuts in deposits with a moderate resource sensitivity.</u></li> <li><u>If fossils are discovered, the paleontologist or monitor shall recover them. In instances where recovery requires an extended salvage time, the paleontologist or monitor shall be allowed to temporarily direct, divert, or halt grading to allow recovery of fossil remains in a timely manner. Where deemed appropriate by the paleontologist or monitor, a screen-washing operation for small fossil remains shall be set up.</u></li> <li><u>Recovered fossils, along with copies of all pertinent field notes, photographs, and maps, shall be deposited (with the applicant's permission) in a scientific institution with paleontological collections. A final summary report that outlines the results of the mitigation program shall be completed. This report shall include discussion of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils.</u></li> </ul>	<p><del>N/A</del></p> <p><u>Less than significant</u></p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>4.12 Hazards And Hazardous Materials/Public Safety</b>		
<p><b>Significant Impact 4.12-1:</b> During excavation, construction and demolition activities associated with the Proposed Project, hazardous materials may be encountered within or adjacent to the boundaries of the site in the vicinity of several on-site areas of concern and three off-site areas of concern. Although excavation, demolition, and construction activities are short-term, the potential to encounter contamination during such activities associated with the proposed project is considered a significant impact.</p>	<p><b>Mitigation Measure 4.12-1</b> (Implementation of Mitigation Measure 4.12-1 would reduce <b>Significant Impacts 4.12-1, 4.12-3, 4.12-7, 4.12-12, 4.12-13, 4.12-17, and 4.12-18</b> to below a level of significance.)</p> <p><b>Port/City:</b> Prior to the issuance of any permit for excavation, demolition, grading, or construction activities in the area described in the relevant permit based on the planned future use, the following shall occur:</p> <p><b>A.</b> The applicant shall contact the lead regulatory agency (RWQCB/DEH/DTSC) to discuss the appropriate course of action for the area of concern described in the permit based on the planned future site use. Remediation of contaminated soil and/or groundwater in these areas shall meet cleanup requirements established by the local regulatory agency based on the planned future use of the area and shall be protective of human health with regard to future occupants of these areas. The applicant shall submit documentation showing that contaminated soil and/or groundwater in the area covered by the permit shall have been avoided or remediated to meet cleanup requirements established by the local regulatory agencies (RWQCB/DEH/DTSC).</p> <p><b>B.</b> The applicant shall obtain written authorization from the regulatory agency (RWQCB/DEH/DTSC) confirming the completion of any remediation required for development of the site, exclusive of any on-going monitoring obligations. A copy of the authorization shall be submitted to the Port and City to confirm meeting all requirements acceptable to the governing agency and that the proposed development parcel has been cleaned up or is in process to the satisfaction of the regulatory agency. In the situation where previous contamination has occurred on a site that has a previously closed case or on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the DEH shall be notified of the proposed land use.</p> <p><b>C.</b> A Soil and Water Management Plan (SWMP) for Phase I activities shall be developed to provide procedures for addressing unknown contamination and subsurface equipment ( <i>ie.eg.</i>, pipes, and tanks) or debris encountered during construction and excavation. A SWMP for subsequent phases shall be prepared prior to construction and excavation for such development. The plan shall be developed by a qualified environmental consultant and shall identify notification, monitoring, sampling, testing, handling, storage, and disposal of</p>	Less than significant

TABLE 1-9 (Cont.)

	<p>contaminated media or substances (soil, groundwater) measures to avoid or reduce impacts associated with hazardous materials contamination to a less than significant impact. The SWMP shall be approved by the Port and/or City prior to commencement of excavation, grading, demolition or construction. A qualified environmental consultant shall monitor excavations, grading, and construction activities in accordance with the plan. Any excess soil generated by construction shall be characterized to determine disposal options.</p> <p>If indications of contamination are encountered during construction, a qualified environmental consultant shall be retained to observe the contamination, consult with the regulatory oversight agency, perform environmental media (soil, soil gas, and groundwater) sampling and analysis as necessary, report the result, and provide recommendations for further action.</p> <p>In areas that have been identified as being contaminated, appropriate observation by a qualified environmental professional and sampling is required to characterize soil prior to off-site disposal. Contaminated soil shall be properly disposed of at an off-site facility. Fill soils shall be sampled to ensure that imported soil is free of contamination.</p> <p>Within one month of completion of cleanup activities, a report summarizing the results of monitoring shall be submitted by the applicant to the satisfaction of the Port and/or City.</p> <p><b>D.</b> In the event that grading or construction activities result in the discovery of hazardous waste, the Port and/or City shall ensure compliance with State of California CCR Title 23 Health and Safety Regulation. Excavated soils impacted by hazardous materials or waste shall be characterized and disposed of in accordance with CCR Title 14 and 22. The San Diego Regional Water Quality Control Board <u>RWQCB</u> shall be contacted regarding provisions for possible reuse as backfill of soils impacted by hydrocarbons. Excavated soils shall be lined and covered with an impermeable material to prevent spread of contaminated material.</p> <p>The applicant must have an Industrial Hygienist registered in the State of California on site while working in areas where contamination is encountered. The responsibility of this professional would be to monitor the work site for contamination and to implement mitigation measures as needed to prevent exposure to the workers or public. These measures may include signage and dust control.</p>	
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Impact	Mitigation	Significance After Mitigation
	Dewatering activities during construction shall be limited to the extent practicable and water generated by dewatering shall be tested to determine treatment and disposal options in accordance with all applicable laws and regulations.	
<p><b>Significant Impact 4.12-2:</b> Although not expected to occur, a spill or unintentional discharge of fuel, lubricants, or hydraulic fluid from the transportation of construction materials and/or the equipment used during construction, including dredge and fill activities would result in significant impacts on water quality in a worst-case scenario.</p>	<p><b>Mitigation Measure 4.12-2</b></p> <p><b>Port/City:</b></p> <p>Prior to construction, all contractor and subcontractor project personnel shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures.</p> <p>Hazardous materials shall not be disposed of or released onto the ground, the underlying groundwater, or any surface water. Totally enclosed containment shall be provided for all trash. All construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.</p> <p>The Port of San Diego shall require that a Business Emergency Plan (BEPP) is prepared for the construction of the Proposed Project, if not covered under their approved SWPPP. The plan shall identify all hazardous materials (e.g., fuels, <del>and</del> solvents) that would be present on any portion of the construction area and project site. Contingency analysis and planning shall be presented to identify potential spill or accident situations, how to minimize their occurrence, and how to respond should they occur. The plan shall also identify spill response materials (e.g., absorbent pads, shovels) to be kept at the construction site and their locations.</p> <p>Hazardous materials spill kits shall be maintained on site for small spills.</p>	Less than significant
<p><b>Significant Impact 4.12-3:</b> Dewatering activities associated with trenching, boring, and excavation may result in potential exposure of contaminated groundwater and/or soils. This would be considered a significant impact.</p>	<p><b>See Mitigation Measure 4.12-1 above.</b></p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<p><b>Significant Impact 4.12-4:</b> Dredge and fill activities and in-water construction could release contaminants into the subtidal areas of the harbor basin, which would potentially upset and suspend or release hazardous contaminants into the marine environment. The suspension and/or release of contaminants in the water could create a significant hazard to the marine resources living at this location and in the surrounding area.</p>	<p><b>Mitigation Measure 4.12-3</b></p> <p>In-water construction activities shall be conducted in accordance with Mitigation Measure 4.5-4 in <i>Section 4.5, Hydrology/Water Quality</i>, which is repeated below:</p> <p><b>Port:</b></p> <p><b>A.</b> Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, allowing it to drain, and analyzing the nature and extent of any contamination. Pending the outcome of the analytical results, a decision by RWQCB shall prescribe the requirements for disposition of any contaminated sediment.</p> <p><b>B.</b> Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.</p>	<p>Less than significant</p>
<p><b>Significant Impact 4.12-5:</b> Due to the previous uses throughout the project site, both existing and undocumented USTs are located throughout the site and may require removal during construction activities. The potential to encounter contaminated soils associated with removal of identified and unidentified USTs is considered a significant impact.</p>	<p><b>Mitigation Measure 4.12-4</b></p> <p><b>Port/City:</b></p> <p>In event of removal of USTs, the soil and groundwater within the vicinity of the USTs shall be adequately characterized and remediated, if necessary, to a standard that would be protective of water quality and human health, based on future site use. In areas to be redeveloped, a geophysical survey shall be conducted by the applicant to evaluate if there are any previously unidentified USTs or piping still existing in areas to be redeveloped.</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>In the event that USTs are not identified in the HMTS or undocumented areas of contamination are encountered during grading activities (as indicated by odors, discolored soil, etc.), all work shall cease until appropriate health and safety procedures are implemented pursuant to the applicant's contingency plan. The applicant shall prepare a contingency plan to address contractor procedures for such an event, to minimize the potential for construction delays. In addition, the lead regulatory agency (DEH or RWQCB, depending on the nature of the contamination) shall be notified regarding the contamination. Each agency and program within the respective agency has its own mechanism for initiating an investigation. The applicant shall conduct contamination remediation and removal activities in accordance with pertinent local, state, and federal regulatory guidelines, under the oversight of the appropriate regulatory agency. <u>Parcels contaminated with hazardous materials will be remediated to levels adequate to protect human health and the environment.</u></p>	
<p><b>Significant Impact 4.12-6:</b> Demolition of existing structures within the Sweetwater, Harbor, and Otay Districts could result in a potential exposure to hazardous substances, including asbestos-containing materials (ACMs), lead-based paints (LBPs) and other hazardous materials. This is considered a significant impact.</p>	<p><b>Mitigation Measure 4.12-5</b></p> <p><b>Port/City:</b></p> <p>Prior to the issuance of a demolition permit for buildings scheduled for demolition that have not been surveyed to date for ACMs and LBPs, the applicant shall conduct a survey to determine the locations and amounts of ACMs and LBPs present, as well as other miscellaneous hazardous materials, such as potential mercury-containing thermostats and switches, light ballasts and switches that might contain PCBs, fluorescent light tubes that might contain mercury vapor, exit signs that might contain a radioactive source, air conditioning systems, lead-acid batteries and batteries associated with emergency lighting systems, and Freon™-containing refrigeration systems. Should ACMs, LBPs, or other miscellaneous hazardous building materials be encountered in the site structures, the applicant shall obtain a licensed abatement contractor to remove the hazardous materials in accordance with all applicable federal, state, and local laws, regulations, and permitting requirements prior to initiation of demolition activities.</p> <p>Prior to any proposed demolition activities, the applicant shall conduct a thorough inspection of the facilities that have permits to store hazardous materials to confirm whether a release of hazardous materials at these facilities has impacted the underlying soil and/or groundwater. The facilities that currently store hazardous materials are located at 596 Sandpiper Way, 997 G Street, and 979 G Street. If indications of contamination are encountered during demolition, a qualified environmental consultant shall be retained to observe the contamination, consult with the regulatory oversight agency, perform environmental media (soil, soil gas, and groundwater) sampling and analysis as necessary, report the result and provide</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	recommendations for further action.	
<b>Significant Impact 4.12-7:</b> Construction workers and individuals working on site and within proximity to hazardous materials and contaminated soil conditions may be exposed to contaminated soil, soil gas, and/or groundwater. This is considered a significant impact.	<b>Mitigation Measure 4.12-6</b> <b>Port/City:</b> Prior to construction, remediation activities for known contamination shall be performed to be protective of construction workers on the project site as required by Mitigation Measure 4.12-1.	Less than significant
<b>Significant Impact 4.12-8:</b> In regards to operation of the signature park throughout the site, fertilizers and landscape chemicals may be used for regular maintenance activities. The potential for hazardous irrigation runoff to contaminate surface waters and/or habitat areas is considered a significant impact.	<b>Mitigation Measure 4.12-7</b> <b>Port/City:</b> Management of the parks throughout the project site must be required to comply with the Port and City's Integrated Pest Management Policies (IPM). IPM shall be used on all landscaped areas. In addition, fertilizers must be minimized and only non-toxic products used. Runoff from irrigation sprinklers into surface waters must be minimized and use of mulching and drip irrigation, where needed, maximized. Measures shall be employed to ensure that landscape chemicals and wastes do not get into surface waters or habitat areas.	Less than significant
<b>Significant Impact 4.12-9:</b> In the Sweetwater District, it would be necessary to prevent exposure to future site occupants from pesticides/herbicides in the soil and groundwater. Given the existing hazardous materials conditions throughout the project site, operation of the Proposed Project could result in exposure to residents and/or users of the site to health risks, depending on type of contamination and the proposed use of the site. Methods of exposure can be via dermal exposure, ingestion, and/or inhalation. This impact would be considered significant.	<b>Mitigation Measure 4.12-8</b> <b>Port/City:</b> For development in the Sweetwater District that would result in exposure of any soil containing pesticides/herbicides, excavation and disposal of the contaminated soils at an appropriately licensed facility, shall be conducted as required by applicable law, to reduce potential for future site occupants' exposure. Otherwise, soil capping shall be implemented. Capping could be performed by placement of a clean soil fill layer over the impacted soil, which in turn could be overlain by other surface covers (i.e., turf and other vegetative cover and pavement).	Less than significant
<b>Significant Impact 4.12-10:</b> An assessment of human health risk associated with future development in the Sweetwater, Harbor, and Otay Districts in subsequent phases has not been determined for all parcels and for all land use types. The potential for development in Phases II through IV of the Proposed Project to expose residents and/or users of the site to health risks would be	<b>Mitigation Measure 4.12-9</b> <b>Port/City:</b> At the time project specific designs are proposed for any development in Phases II through IV, a site assessment must be conducted by a qualified expert satisfactory to the City and/or Port to determine concentrations of contaminants in soil, soil gas, and groundwater on the parcel proposed for development. Further site assessment may be required as part of subsequent	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
a significant impact.	<p>environmental review pursuant to State CEQA Guidelines.</p> <p><b>Port/City:</b></p> <p>An <del>Human Health Risk Assessment (HHRA)</del>, or other means of evaluation, must be prepared for any new development in Phases II through IV, analyzing each parcel proposed for development within the Proposed Project area. If the calculated risk from the HHRA (or other means of evaluation) is considered to be significant for a receptor in a parcel, mitigation measures shall be implemented to reduce the risk to below a level of significance. These measures may include one or both of the following:</p> <ul style="list-style-type: none"> <li>• Remediating the contaminant sources and impacts in the respective media (i.e., soil, soil gas, groundwater) to levels below the health-based remediation criteria. <u>Parcels contaminated with hazardous materials will be remediated to levels adequate to protect human health and the environment.</u></li> <li>• Implementing institutional and/or engineering controls to eliminate the pathway of concern or attenuate the contaminant exposure to levels below the health-based remediation criteria</li> </ul>	
<b>Significant Impact 4.12-11:</b> No sources of contamination were identified on the H-3 area and the only direct exposure pathway identified was potential vapor intrusion into indoor air spaces of structures to be built on H-3. Although inhalation risk from intrusion of CVOC vapors into future building is less than significant, the uncertainty with regard to future migration of CVOCs from the former Goodrich North Campus beneath H-3 presents a significant impact.	<p><b>Mitigation Measure 4.12-10</b></p> <p>(Implementation of Mitigation Measure 4.12-10 would reduce <b>Significant Impacts 4.12-11, 4.12-16, 4.12-19, and 4.12-20</b> to below a level of significance.)</p> <p><b>Port/City:</b></p> <p>Prior to the approval of Design Review for development on Parcels H-3, H-13, H-14, H-15, and HP-5, the applicant shall submit a design plan for the project demonstrating to the satisfaction of the City and/or Port that proposed buildings shall be designed so as to prevent a risk to human health associated with intrusion of CVOC vapors into future buildings on these parcels. Such design measures may include vapor barriers or passive vent systems.</p>	Less than significant
<b>Significant Impact 4.12-12:</b> Chemicals of potential concern were considered “non-detect” for all locations on Parcel H-3. Although excavation, demolition, and construction activities would be short-term, the potential to encounter contamination during such activities associated with development of the Gaylord RCC is considered a significant impact.	<b>See Mitigation Measure 4.12-1 above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.12-13:</b> Dewatering activities associated with trenching, boring, and excavation on Parcel H-3 may result in potential exposure of contaminated groundwater and/or soils. This would be considered a significant impact.	<b>See Mitigation Measure 4.12-1 above.</b>	Less than significant
<b>Significant Impact 4.12-14:</b> There are three exposure areas (EAs) that are within or overlapping into HP-5 have COPC concentrations in soil that exceed health-based remediation criteria. The existence of soils on Parcel HP-5 that exceed health-based remediation criteria is considered a significant impact.	<b>Mitigation Measure 4.12-11</b> (Implementation of Mitigation Measure 4.12-11 would mitigate <b>Significant Impacts 4.12-14 and 4.12-15</b> to below a level of significance.) <b>Port/City:</b> <b>A.</b> Remediation in soil locations identified as exceeding health-based remediation criteria shall be performed prior to redevelopment as targeted “hotspot” removal with confirmation sampling to demonstrate that the COPCs have been removed and concentrations in remaining soil are less than the remediation criteria. <b>B.</b> Remediation of the areas of HP-5 that contain COPCs at concentrations exceeding remediation criteria shall be completed prior to construction activities depending on the design of proposed development and the potential for workers to be exposed to contamination in these areas. <b>C.</b> Remediation of the areas of HP-5 that contain concentrations of CVOCs may be performed by various methods, including soil vapor extraction and treatment. Any required remediation shall be performed prior to construction activities in order to protect construction workers in these areas. <u>This parcel shall be remediated to levels adequate to protect human health and the environment.</u>	Less than significant
<b>Significant Impact 4.12-15:</b> There are three exposure areas (EAs) near or overlapping onto HP-5 with concentrations of CVOCs in soil gas that exceed health-based remediation criteria. The existence of soils on Parcel HP-5 that exceed health-based remediation criteria is considered a significant impact.	<b>See Mitigation Measure 4.12-11 above.</b>	Less than significant
<b>Significant Impact 4.12-16:</b> groundwater is impacted with CVOCs beneath HP-5, H-13, and H-14. One EA on the northeast corner of HP-5 exceeds health-based remediation criteria. The location of CVOCs at this EA is	<b>See Mitigation Measure 4.12-10 above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
relatively shallow (A zone). The route of exposure to CVOCs in shallow A zone is through volatilization to indoor air. The uncertainty with regard to future migration of CVOCs from the northeast corner of HP-5 presents a significant impact.		
<b>Significant Impact 4.12-17:</b> The potential to encounter contamination during excavation, demolition and related construction activities associated with development of Parcels H-13 or H-14 would be considered a significant impact.	<b>See Mitigation Measure 4.12-1 above.</b>	Less than significant
<b>Significant Impact 4.12-18:</b> Dewatering activities associated with trenching, boring, and excavation on Parcels H-13 and H-14 may result in potential exposure of contaminated groundwater and/or soils. This would be considered a significant impact.	<b>See Mitigation Measure 4.12-1 above.</b>	Less than significant
<b>Significant Impact 4.12-19:</b> Two overlapping EAs with concentrations of CVOCs in soil gas that exceed health-based remediation criteria exist on Parcel H-15. Both of these EAs are near or overlap onto the adjacent HP-5 parcel. The uncertainty with regard to future migration of CVOCs from the EAs on H-15 presents a potentially significant impact.	<b>See Mitigation Measure 4.12-10 above.</b>	Less than significant
<b>Significant Impact 4.12-20:</b> Groundwater beneath H-15 is impacted with CVOCs, primarily beneath the southern portion of former Building 30 and the northern half of former Building 5. The uncertainty with regard to future migration of CVOCs in groundwater on Parcel H-15 presents a significant impact.	<b>See Mitigation Measure 4.12-10 above.</b>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>4.13: Public Services</b>		
<b>4.13.1 Fire Protection</b>		
<b>Significant Impact 4.13.1-1:</b> Construction of the new fire station on Parcel H-17 could result in potentially significant impacts to air quality, water quality, noise, hazards, and geology and soils unless mitigated.	The mitigation measures outlined in <i>Section 4.5, Hydrology/Water Quality; Section 4.6, Air Quality; Section 4.7, Noise; Section 4.12, Hazards and Hazardous Materials/Public Safety; and Section 4.15, Geology and Soils</i> are required to reduce <b>Significant Impact 4.13.1-1</b> to below a level of significance. Specifically, Mitigation Measures 4.5-2, 4.5-3, 4.6-1, 4.7-5, 4.7-9, 4.12-1, 4.12-2, 4.12-4, 4.12-6, and 4.15-1 will reduce these impacts to below a level of significance.	Less than significant
<b>4.13.2 Police Protection</b>		
There were no significant impacts to police protection identified for the Proposed Project.	<b>No mitigation is required.</b>	N/A
<b>4.13. Parks and Recreation</b>		
<b>Significant Impact 4.13.3-1:</b> Development of the Proposed Project would result in temporary, short-term significant impacts to park and recreation levels of service due to temporary closure of existing area parks during project construction.	<b>Mitigation Measure 4.13.3-1</b> <b>Port:</b> Prior to reconstruction and/or reconfiguration of existing parks within the Project, the Port shall post a public notice at each affected park site at least 30 days prior to commencement of construction activity and maintain the posting throughout reconstruction of each affected park. Said public notice shall identify the duration of park closure and information related to optional locations for public park and recreational facilities.	Less than significant
<b>Significant Impact 4.13.3-2:</b> The introduction of residential units and hotel rooms within the City's jurisdiction in the project area would result in potentially significant impacts due to an increase in demand for developed parkland and recreation facilities.	<b>Mitigation Measure 4.13.3-2</b> <b>City:</b> Prior to approval of a building permit for any project within the City's jurisdiction, the applicant shall pay all applicable recreation and park fees, including those set forth in Chapters 3.50 and 17.10 in the City's Municipal Code.	Less than significant
<b>4.13.4 Schools</b>		
<b>Significant Impact 4.13.4-1:</b> The addition of 819 students during Phase I would have a significant impact on CVESD and SUHSD.	<b>Mitigation Measure 4.13.4-1</b> <b>City:</b> Prior to the issuance of building permits for any residential project, the applicant shall pay required school mitigation fees. <u>As indicated above</u> , the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects (Government Code Section 65996(a)). They are "deemed to provide full and complete school facilities mitigation" (Government Code Section 65996(b)). Once the	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	statutory school mitigation fee (sometimes referred to as a “developer fee”) is paid, the impact would be deemed mitigated as a matter of law.	
<b>Significant Impact 4.13.4-2:</b> Because the location of a school site within the jurisdiction of the school district is currently unknown, the evaluation of the environmental effects of the provision of the school is speculative and beyond the scope of this analysis.	<b>See Mitigation Measure 4.13.4-1 above.</b>	Less than significant
<b>4.13.5 Library Services</b>		
<b>Significant Impact 4.13.5-1:</b> The need for additional library square feet to serve the Proposed Project would place substantial pressure on existing library facilities and would worsen the present shortfall in library square footage and books per capita.	<b>Mitigation Measure 4.13.5-1</b> <b>City:</b> Prior to the approval of a building permit for any residential project, the applicant shall pay a PFDIF or equivalent fee in an amount calculated according to the City’s PFDIF program in effect at the time of permit issuance.  Because the service demand for libraries is only applied to residential use, and there is no residential use within the Port’s jurisdiction, no mitigation by the Port is required.	Significant and unmitigated
<b>Significant Impact 4.13.5-2:</b> Until new library facilities are constructed or existing facilities are expanded to meet the increased demand, a significant impact to library services would exist.	<b>See Mitigation Measure 4.13.5-1 above.</b>	Significant and unmitigated
<b>4.14 Public Utilities</b>		
<b>4.14.1 Water Supply and Availability</b>		
<b>Significant Impact 4.14.1-1:</b> Construction of off-site water system improvements during Phase I within J Street between Bay Boulevard and 2 <sup>nd</sup> Avenue would result in noise impacts that would affect residents in those areas. These noise impacts would be significant.	<b>Mitigation Measure 4.14.1-1</b> <b>Port/City:</b> Construction activity shall be prohibited Monday through Friday from 10:00 p.m. to 7:00 a.m., and Saturday and Sunday from 10:00 p.m. to 8:00 a.m., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J). <u>It should be noted, however, that construction may require connections to existing water facilities, both on- and off-site, and may need to occur between the hours of 10:00 p.m. and 6:00 a.m. in order to minimize to existing customers who cannot experience flow restrictions during daytime hours.</u>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>All stationary noise generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors. Where practicable, noise-generating equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible.</p> <p>All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust.</p> <p>Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use.</p> <p>Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5 provided the route does not expose additional receptors to noise.</p> <p><u>Construction equipment shall be selected as those capable of performing the necessary tasks with the lowest sound level and the lowest acoustic height possible to perform the required construction operation.</u></p>	
<b>Significant Impact 4.14.1-2:</b> Construction of off-site water system improvements during Phases II and III would result in noise impacts that could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phases II and III. Noise impacts would be significant.	<b>See Mitigation Measure 4.14.1-1 above.</b>	Less than significant
<b>Significant Impact 4.14.1-3:</b> Construction and operational noise from off-site water system improvements would have the potential to adversely affect birds nesting and foraging in the Sweetwater Marsh NWR located north of the Project site. Projected noise levels at the edge of the refuge resulting from construction could be as high as 77 dB. During the breeding season, this would be a significant impact.	<p><b>Mitigation Measure 4.14.1-2</b></p> <p><b>Port/City:</b></p> <p>Construction-related noise from off-site water improvements shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR, <u>F &amp; G Street Marsh, and the J Street Marsh</u>. The current accepted noise threshold is 60 dB(A) Leq.; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the <u>Project developer</u> shall prepare and submit an acoustical analysis</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	to the Port and/or City, which shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers or construction activities are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.	
<b>Significant Impact 4.14.1-4:</b> Construction of major infrastructure on and off site would also result in temporary traffic impacts. Depending on the location (on site and off site), equipment, and type of work being performed, vehicular and pedestrian traffic may have to be rerouted, and/or slowed. This would be a temporary but significant impact for road segments and ROWs within the Project area and outside of the Project boundaries.	<b>Mitigation Measure 4.14.1-3</b> <b>Port/City:</b> <ol style="list-style-type: none"> <li>Prior to commencement of grading activities for all Phase I projects, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction).</li> <li>Prior to commencement of grading activities for all subsequent phases, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction).</li> </ol>	Less than significant
<b>4.14.2 Sewer</b>		
<b>Significant Impact 4.14.2-1:</b> As the City does not have capacity for future sewage generation, the City would not have adequate capacity to serve the additional 1.328 MGD generated by the Proposed Project. Although additional capacity is being negotiated in the MWWWD sewer interceptor, the capacity is currently not available. This is a significant impact.	<b>Mitigation Measure 4.14.2-1</b> <b>City:</b> Prior to the approval of a building permit for any development <u>in Phases III and IV</u> , the City shall verify that it has adequate sewer capacity to serve the proposed development. In the event the City does not have adequate sewer capacity to serve the proposed development, no building permit shall be approved for the proposed development until the City has acquired adequate sewer capacity to serve the proposed development.	Less than significant
<b>Significant Impact 4.14.2-2:</b> Construction of sewer system improvements during Phase II would result in noise impacts that could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phase II. Noise impacts would be significant.	<b>Mitigation Measure 4.14.2-2</b> <b>Port/City:</b> To avoid significant construction-related noise impacts, the following measures shall be followed: <ul style="list-style-type: none"> <li>Construction activity shall be prohibited Monday through Friday from 10:00 P.M. to 7:00 A.M., and Saturday and Sunday from 10:00 P.M. to 8:00 A.M., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J).</li> <li>All stationary noise-generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors. Where practicable, noise-generating</li> </ul>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, and equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible.</p> <ul style="list-style-type: none"> <li>• All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust.</li> <li>• Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use.</li> <li>• Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5, provided the route does not expose additional receptors to noise.</li> <li>• Construction equipment shall be selected as those capable of performing the necessary tasks with the lowest sound level and the lowest acoustic height possible to perform the required construction operation.</li> </ul>	
<p><b>Significant Impact 4.14.2-3:</b> Construction and operational noise from sewer system improvements would have the potential to adversely affect birds nesting and foraging in the Sweetwater Marsh NWR located north of the Project site. Projected noise levels at the edge of the refuge resulting from construction could be as high as 77 dB. During the breeding season, this would be a significant impact.</p>	<p><b>Mitigation Measure 4.14.1-3</b></p> <p><b>Port/City:</b></p> <p>Construction-related noise <del>from off-site water improvements</del> shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR, <u>F&amp;G Street Marsh, and the J Street Marsh</u>. The current accepted noise threshold is 60 dB(A) Leq; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the Project developer shall prepare and submit an acoustical analysis to the Port and/or City, which shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers or construction activities are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.</p>	Less than significant
<p><b>Significant Impact 4.14.2-4:</b> Construction of major infrastructure on and off site would also result in temporary traffic impacts. Depending on the location (on site and off site), equipment, and type of work being</p>	<p><b>Mitigation Measure 4.14.1-4</b></p> <p><b>Port/City:</b></p> <p><b>A.</b> Prior to commencement of grading activities for all Phase I projects, the applicant(s) shall</p>	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
performed, vehicular and pedestrian traffic may have to be rerouted, and/or slowed. This would be a temporary but significant impact for road segments and ROWs within the Project area and outside of the Project boundaries.	submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction).  <b>B.</b> Prior to commencement of grading activities for all <del>subsequent phases</del> Phase II-IV projects, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction).	
<b>Significant Impact 4.14.2-5:</b> Temporary dewatering during construction of the sewer improvement system would be required during the excavation of the wet wells and emergency storage vaults for the sewer lift stations due to the close proximity to the Bay and high groundwater. Construction-related dewatering would withdraw water from the aquifer, which could be contaminated, depending on the location in the plan area. The potential to contaminate runoff conflicts with the Basin Plan and the water quality objectives for the Bay, as well as policies relating to the discharge of contaminated water to the sewer system. The Project's potential to disturb contaminated soils and groundwater during construction activities would be a significant impact.	<b>Mitigation Measure 4.14.4-5</b> <b>Port/City:</b> <b>A.</b> Prior to the issuance of a Coastal Development Permit for Properties within the Port's jurisdiction and prior to the issuance of a grading permit for properties within the City's jurisdiction, the applicant shall notify the RWQCB of dewatering of contaminated groundwater during construction. If contaminated groundwater is encountered, the Project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting requirements, which includes obtaining a permit from the Industrial Wastewater Control Program to the satisfaction of the RWQCB. <b>B.</b> Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils and other pollutants exist on site, a pretreatment system shall be installed to pre-treat the water to the satisfaction of the RWQCB before it can be discharged into the sewer system.	Less than significant
<b>4.14.3 Solid Waste Management</b>		
There were no significant impacts to solid waste management identified for the Proposed Project.	<b>No mitigation is required.</b>	N/A
<b>4.15 Seismic/Geologic Hazards</b>		
<b>Significant Impact 4.15-1:</b> There is potential for strong ground motions to occur at the project site; therefore, impacts associated with strong motion and surface rupture are significant and apply to all development phases.	<b>Mitigation Measure 4.15-1</b> (Mitigation Measure 4.15-1 would mitigate Significant Impacts 4.15-1 through 4.15-6.) <b>Port/City:</b> Prior to the grading of parcels for specific developments, the applicant shall provide a comprehensive site-specific geotechnical evaluation, including subsurface exploration and	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>laboratory testing showing that individual parcels are suitable for proposed development work and that on-site fill materials and soils can support proposed structures. The applicant shall submit a geotechnical design report to the Port or City, depending on jurisdiction, for approval showing site-specific measures to be employed. As applicable, these measures shall include:</p> <ul style="list-style-type: none"> <li>• Conformance to the California Building Code Seismic Zone 4 Design Parameters, as detailed in Table 1 of the geotechnical study (see <i>Appendix 4.15-1</i>)</li> <li>• Design capable of withstanding strong seismic accelerations</li> <li>• Earthwork procedures, including removal, moisture conditioning, and recompaction of existing fills on the site</li> <li>• Selective grading, densification of the subsurface soils, and/or deep foundations</li> <li>• Removal, moisture conditioning, and compaction of bay deposits/alluvial soils. Deep foundations shall be used for structural support in areas of relatively thick bay deposits/alluvium</li> <li>• Removal or deep burial of expansive soils during grading, moisture conditioning, or specially designed foundations and slabs</li> <li>• Removal, moisture conditioning, and compaction of the topsoil on site.</li> </ul>	
<p><b>Significant Impact 4.15-2:</b> Loose granular soils (i.e., fill materials and bay deposits/alluvium) underlie portions of the site combined with a relatively shallow groundwater table. The project proposes development on these areas during Phases I, II, and III. These soils have a moderate to high potential for liquefaction and settlement to occur during an earthquake and are not considered suitable for structural support. The potential of lateral spreading in the liquefiable soil below the groundwater table is considered an adverse impact to the proposed development on the existing boat yard on G Street and in the immediate vicinity of the Chula Vista Harbor. Therefore, impacts associated with liquefaction and seismically induced settlement are significant.</p>	<p><b>Mitigation Measure 4.15-2</b></p> <p><b>Port/City:</b></p> <p>For all phases, the project applicant shall prepare a site specific geotechnical study. Mitigation of potential hazards due to liquefaction may include the densification or removal of the potentially liquefiable soil and placement of surcharge fills within building areas, or the use of deep foundation systems and mat slabs, which still provide acceptable structural support should liquefaction occur. Soil densification can be accomplished by surcharging, compaction grouting, vibrocompaction, soil mixing, and deep dynamic compaction. Deep foundation systems may be used to transmit structural loads to bearing depths below the liquefiable zones and may consist of driven piles or drilled piles.</p>	<p>Less than significant</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 4.15-3:</b> Groundwater could be a factor in development in liquefaction remediation, deep foundation design and construction, design and construction of subterranean parking structures, and utility installation on the Pacifica project site. This is a significant impact.	<b>Mitigation Measure 4.15-3</b> <b>Port/City:</b> Prior to the grading of parcels for the Pacifica development, the applicant shall adhere to the site-specific geotechnical evaluation prepared for the project or any amendment as approved by the Port/City ( <i>Appendix 4.15-5, Geocon Preliminary Geotechnical Investigation prepared for Pacifica Companies (February 2008), Sections 7 and 8 Conclusions and Preliminary Recommendations</i> ), which outlines general requirements and specific recommendations regarding soil and excavation, seismic design criteria, grading, consolidation settlement, ground improvement methods, slope stability, temporary slopes and shoring, groundwater and dewatering, shallow and deep foundations, subterranean structures, concrete slabs-on-grade, concrete flatwork, retaining walls and lateral loads, pavement, and drainage and maintenance. <b>See also Mitigation Measure 4.15-1 above.</b>	Less than significant
<b>Significant Impact 4.15-4:</b> There are layers of loose sand within the bay deposits in the western portion of the Pacifica site that have a potential for liquefaction and which may result in seismically induced settlement. In general, these liquefiable soils are approximately 6 to 8 feet thick and are overlain by about 7 to 10 feet of non-liquefiable cover. A preliminary evaluation of liquefaction settlement indicates 2 to 3 inches of ground surface settlement may occur over portions of the site. Therefore, impacts as a result of seismically induced settlement are potentially significant.	<b>See Mitigation Measure 4.15-3 above.</b>	Less than significant
<b>Significant Impact 4.15-5:</b> There is a high potential for liquefaction to occur within scattered layers in the undocumented fill and bay deposits/alluvium below the groundwater table within a depth of 50 feet from the existing ground surface on the Gaylord RCC project site. Adverse impacts could include lateral spreading, ground rupture and/or sand boils, and settlement of the liquefiable layers. This is a potentially significant impact.	<b>Mitigation Measure 4.15-4</b> <b>Port/City:</b> Prior to the grading of parcels for the <del>Gaylord RCC</del> development, the applicant shall adhere to the site-specific geotechnical evaluation prepared for the project or any amendment as approved by the Port/City ( <i>Appendix 4.15-4, Geocon Geotechnical Investigation prepared for Gaylord Hotels (January 2008), Section 6. Conclusions and Recommendations</i> ), which outlines general requirements and specific recommendations regarding soil and excavation, seismic design criteria, grading, temporary slopes and shoring, groundwater and dewatering, hotel/convention center/parking structure/flex space foundation, ancillary structure foundation, concrete slabs-on-	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	grade, retaining walls and lateral loads, preliminary pavements, and drainage and maintenance. <b>See also Mitigation Measure 4.15-1 above.</b>	
<b>4.16 Energy</b>		
<b>Significant Impact 4.16-1:</b> The increased demand for energy resulting from development of the Proposed Project and the potential to exceed the available supply would result in a significant impact.	<b>Mitigation Measure 4.16-1</b> <b>Port/City:</b> Prior to issuance of certificates of occupancy or building permits, the project applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements, along with the following measures, shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City: <ul style="list-style-type: none"> <li>• Use of low _NOx emission water heaters</li> <li>• Installation of energy _efficient and automated air conditioners when air conditioners are provided</li> <li>• Energy _efficient parking area lights</li> <li>• Exterior windows shall be double paned.</li> </ul> Implementation of these measures along with the SDG&E efforts for long-term energy supply as outlined in their filing with the CPUC that proposes a mix of conservation, demand response, generation, and transmission ( <a href="http://www.sdenenergy.org/uploads/7-9-04SDG&amp;E_LTRP.pdf">http://www.sdenenergy.org/uploads/7-9-04SDG&amp;E_LTRP.pdf</a> ) would reduce the potential significant impact to below a level of significance.	Less than significant
<u>There was no significant impact identified; however, this measure provides further mitigation to reduce impacts related to energy consumption.</u>	<b>Mitigation Measure 4.16-2</b> <u>Although this mitigation is not required to reduce impacts to below a level of significance, development of all individual parcels within the Proposed Project area, except Parcels HP-5, H-13, H-14, and H-15, will implement measures to increase energy efficiency as outlined in Mitigation Measure 4.16-2 in Section 4.16, Energy of this report.</u> <b>See Mitigation Measure 4.16-2 in Section 4.16, Energy, for a list of measures to reduce energy consumption.</b>	
<b>4.17 Population and Housing</b>		
There were no significant impacts to population and housing identified for the Proposed Project.	<u>Although no mitigation is required to reduce impacts to below a level of significance, the following measure is provided to ensure appropriate implementation and enforcement .</u>	N/A

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p><b>Mitigation Measure 4.17-1</b></p> <p>The Redevelopment Agency will use all Low and Moderate Income Housing funds generated from within the Bayfront Redevelopment Project Area on the production of affordable housing units, inside and/or outside of redevelopment areas, for very low, low and moderate income individuals/families only in areas located west of I-805 in the City of Chula Vista.</p> <p><del>No mitigation is required.</del></p>	
<b>6 CUMULATIVE IMPACTS</b>		
<p><b>Significant Impact 6.5-1:</b> The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between E Street and H Street, resulting in LOS F during both AM and PM peak hours and would require mitigation.</p>	<p><b>Mitigation Measure 6.5-1</b></p> <p>(Mitigation Measure 6.5-1 would mitigate for Significant Impacts 6.5-1, 6.5-2, 6.5-3 6.5-4, 6.5-5, 6.5-6, 6.5-7, 6.5-8, 6.5-9, 6.5-10, 6.5-14, 6.5-15, 6.5-21, 6.5-22, 6.5-23, 6.5-24 and 6.5-25, but not to below a level of significance.)</p> <p><b>Port/City:</b></p> <p>The Port and the City shall participate in a multijurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed I-5 corridor-level study that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources and phasing that would reduce congestion management with Caltrans standards on the I-5 South corridor from the SR-54 interchange to the Otay River (the "I-5 South Corridor") (the "Plan"). Local funding sources identified in the Plan shall include fair-share contributions related to private and/or public development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following:</p> <ol style="list-style-type: none"> <li>The responsible entities (the Entities) included in this effort will include, but may not be limited to, the City, other cities along I-5, the Port, SANDAG, and Caltrans. Other entities will be included upon the concurrence of the foregoing Entities.</li> <li>The Plan will identify physical and operational improvements to I-5 adjacent to the project area, relevant arterial roads, and transit facilities (the Improvements), that are focused on regional impacts and specific transportation impacts from the project, and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan will include an implementation element that includes each Entity's responsibilities and commitment to mitigate the impacts created by <del>Phases I, II, III and IV</del>all phases of the Proposed Project.</li> <li>The Plan will set forth a timeline and other agreed upon relevant criteria for implementation of each Improvement.</li> </ol>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>d) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs.</p> <p>e) The Plan will include the parameters for any agreed upon fair-share funding to be implemented, that would require private and /or public developers to contribute to the costs, in a manner that will comply with applicable law.</p> <p>f) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities, <u>in order to avoid duplication of effort and expenditure</u> <del>financing plans and programs, in order to avoid duplication of effort and expenditure</del>; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement.</p> <p>g) The Port shall seek adoption of the Plan before the Port Board of Commissioners and the City shall seek adoption of the Plan before the City Council upon the completion of the multi-jurisdictional effort to develop the Plan. The Port and the City shall report, to their respective governing bodies regarding the progress made to develop the Plan within 6 months of the first meeting of the entities. Thereafter, the Port and the City shall report at least annually regarding the progress of the Plan, for a period of not less than <del>five</del> <u>5</u> years, which may be extended at the request of the City Council and/or Board of Commissioners.</p> <p>h) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan.</p> <p>i) Prior to issuance of certificates of occupancy or building permits for any development of individual projects within the Chula Vista Bayfront Master Plan, the Port and the City shall require project applicants to make their fair-share contribution toward mitigation of cumulative freeway impacts within the City's portion of the I-5 South Corridor by participating in the City's Western Traffic Development Impact Fee or equivalent funding program.</p> <p>The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure.</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 6.5-2:</b> The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between H Street to J Street resulting in LOS F during both AM and PM peak hours and would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-3:</b> The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between J Street to L Street resulting in LOS F during both AM and PM peak hours and would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-4:</b> The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between L Street to Palomar Street resulting in LOS F during both AM and PM peak hours and would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-5:</b> The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a cumulative impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-6:</b> The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-7:</b> The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a cumulative	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.		
<b>Significant Impact 6.5-8:</b> The addition of Phase II traffic would result in a cumulative impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-9:</b> The addition of Phase II traffic would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-10:</b> The addition of Phase II traffic would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-11:</b> The addition of Phase III traffic would result in a cumulative impact on the roadway segment of H Street between Street A to the I-5 Ramps, resulting in LOS D conditions. This impact would require mitigation.	<b>Mitigation Measure 6.5-2</b> In assessing the impact of the project on the Phase III network, it was determined that H Street between Street A and the I-5 Ramps was already widened in Phase II to accommodate growth in traffic, and it would be difficult to widen more, due to right-of-way constraints. To accommodate traffic from the project and to provide another route to I-5, the Port shall extend E Street from the <del>RCC Gaylord</del> Driveway to west of Bay Boulevard. The segment shall be built as a <del>two</del> 2-lane Class III Collector prior to the issuance of either a building permit or final map for a Phase II project. This mitigation would reduce Significant Impact 6.5-11 <u>and 6.5-12</u> to below a level of significance.	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 6.5-12:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact on the intersection of H Street and I-5 Southbound ramps, resulting in LOS E conditions during the PM peak hours. This impact would require mitigation.	<b>Refer to Mitigation Measure 6.5-2 above.</b>	Less than significant
<b>Significant Impact 6.5-13:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact on the intersection of J Street and I-5 northbound ramps, resulting in LOS E conditions during the PM peak hours. This impact would require mitigation.	<b>Mitigation Measure 6.5-3</b> Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct an exclusive westbound right-turn lane at the intersection of J Street and I-5 northbound ramps. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-13 to below a level of significance.	Less than significant
<b>Significant Impact 6.5-14:</b> The addition of Phase III traffic would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during AM northbound direction, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-15:</b> The addition of Phase III traffic would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during PM peak hours in SB direction, with or without the project. This impact would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-16:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact on the roadway segment of E Street (west of Bay Blvd). This segment will experience congested LOS D conditions and would require mitigation.	<b>Mitigation Measure 6.5-4</b> Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall widen E street between the <del>RCC Gaylord</del> Driveway and Bay Boulevard to a <del>two</del> 2-lane Class II Collector. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 6.5-16 to below a level of significance.	Less than significant
<b>Significant Impact 6.5-17:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the roadway segment of Street A (H Street to Street C). This segment would experience congested LOS F conditions and would require mitigation.	<b>Mitigation Measure 6.5-5</b> Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall widen Street A between H Street and Street C to a <del>four</del> 4-lane Class I Collector. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 6.5-17 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 6.5-18:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the intersection of E Street and Bay Boulevard. This intersection would be characterized by LOS F conditions during the PM peak hours and would require mitigation.	<b>Mitigation Measure 6.5-6</b> Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct southbound left- and right-turn lanes at the intersection of E street and Bay Boulevard. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-18 to below a level of significance.	Less than significant
<b>Significant Impact 6.5-19:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the intersection of J Street and Bay Boulevard. This intersection would be characterized by LOS E conditions during the PM peak hours and would require mitigation.	<b>Mitigation Measure 6.5-7</b> Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct an exclusive eastbound right-turn lane at the intersection of J Street and Bay Boulevard. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-19 to below a level of significance.	Less than significant
<b>Significant Impact 6.5-20:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the intersection of J Street and I-5 northbound ramps. This intersection would be characterized by LOS E conditions during the PM peak hours and would require mitigation.	<b>Mitigation Measure 6.5-8</b> Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct an exclusive westbound right-turn lane at the intersection of J Street and I-5 <del>northbound-NB</del> ramps. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-20 to below a level of significance.	Less than significant
<b>Significant Impact 6.5-21:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated
<b>Significant Impact 6.5-22:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	<b>See Mitigation Measure 6.5-1 above.</b>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 6.5-23:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
<b>Significant Impact 6.5-24:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
<b>Significant Impact 6.5-25:</b> The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
<b>Significant Impact 6.5-26:</b> The addition of Phase IV traffic would result in a cumulative impact to the intersection of H Street and Woodlawn Avenue. This intersection would be characterized by LOS F conditions during both the AM PM peak hours and would require mitigation.	<b>Mitigation Measure 6.5-940</b> Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port shall construct <del>an eastbound and westbound through lane along H Street (as part of roadway segment mitigation) and a westbound through- and right-turn lane along H Street</del> at the intersection of H Street and <del>Woodlawn Avenue</del> <u>Broadway</u> . The lane shall be constructed to the satisfaction of the City Engineer. With mitigation, this intersection would still operate at LOS E during the PM peak hour. This is consistent with the result from the Chula Vista Urban Core traffic study, which concluded that no additional mitigation is desired at this location. <del>The additional lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-267 to below a level of significance.</del>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 6.5-27:</b> The addition of Phase IV traffic would result in a cumulative impact to the intersection of H Street and Broadway. This intersection would be characterized by LOS F conditions during the PM peak hours and would require mitigation.	<b>Mitigation Measure 6.5-10<del>1</del></b> Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port shall construct a <del>westbound through and right-turn</del> <u>dual eastbound left-turn</u> lane along <del>H-J Street</del> <u>J Street</u> at the intersection of <del>H-J Street and Broadway</del> <u>I-5 NB Ramps</u> . <del>The lane shall be constructed to the satisfaction of the City Engineer. With mitigation this intersection would still operate at LOS E during the PM peak hour. This is consistent with the result from the Chula Vista Urban Core traffic study, which concluded that no additional mitigation is desired at this location. The additional lanes shall be constructed to the satisfaction of the City Engineer.</del> This mitigation would reduce Significant Impact 6.5-27 <del>8</del> to below a level of significance.	Less than significant
<b>Significant Impact 6.5-28:</b> The addition of Phase IV traffic would result in a cumulative impact to the intersection of J Street and I-5 northbound ramps. This intersection would be characterized by LOS E conditions during the PM peak hours and would require mitigation.	<b>Mitigation Measure 6.5-11<del>2</del></b> Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port shall construct a dual eastbound left-turn lane along J Street at the intersection of J Street and I-5 northbound ramps. The additional lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-28 to below a level of significance.	Less than significant
<b>Significant Impact 6.6-1:</b> The Proposed Project would add to the intensification of land use and further change the character of the area. The Proposed Project would result in a cumulative impact related to view protection, height and bulk, landscaping, gateways, and lighting.	<b>Mitigation Measure 6.6-1</b> <b>Port:</b> <b>A. View Protection:</b> As a condition for issuance of Coastal Development Permits, buildings fronting on H Street shall be designed to step away from the street. More specifically, design plans shall protect open views down the H Street Corridor by ensuring that an approximate 100-foot ROW width (curb-curb, building setbacks and pedestrian plaza/walkway zone) remains clear of buildings, structures, or major landscaping. Visual elements above <del>six-6</del> feet in height shall be prohibited in this zone if the feature would reduce visibility by more than 10 percent. Placement of trees should take into account potential view blockage. This mitigation should not be interpreted to not allow tree masses; however, trees should be spaced in order to ensure “windows” through the landscaping. Trees should also be considered to help frame the views, and they should be pruned up to increase the views from pedestrians and vehicles, underneath the tree canopy. In order to reduce the potential for buildings to encroach into view corridors, and to address the scale and massing impact, buildings shall step back at appropriate intervals or be angled to open up a broader view corridor at the groundplane to the extent feasible. All plans shall be subject to review and approval by the Port. All future development proposals shall conform to Port design guidelines and standards	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>to the satisfaction of the Port.</p> <p><b>Port:</b></p> <p><b>B. <i>Height and Bulk:</i></b> Prior to issuance of Coastal Development Permits for projects within the Port's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques, such as articulated facades, distributed building massing, horizontal banding, stepping back of buildings, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the Port.</p> <p><b>City:</b></p> <p><b>C. <i>Height and Bulk:</i></b> Prior to design review approval for properties within the City's jurisdiction, the project developer shall ensure that design plans for any large-scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, and varied color schemes, to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for the large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the City of Chula Vista Planning Director.</p> <p><b>Port/City:</b></p> <p><b>D. <i>Landscaping:</i></b> Prior to final approval of Phase I infrastructure design plans, the Port and City shall collectively develop a master landscaping plan for the project's public components and improvements. The plan shall provide sufficient detail to ensure conformance to streetscape design guidelines and that future developers/tenants, as applicable, provide screening of parking areas.</p> <p>Streetscape landscaping shall be designed to enhance the visitor experience for both pedestrians and those in vehicles. Specifically, detailed landscaping plans shall be developed to enhance Marina Parkway, a designated scenic roadway, and shall provide, where appropriate, screening of existing industrial uses and parking areas until such time as these facilities are redeveloped.</p>	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<p>Street landscaping design shall be coordinated with a qualified biologist or landscape architect to ensure that proposed trees and other landscaping are appropriate for the given location. For instance, vegetation planted adjacent to open water/shoreline areas must not provide raptor perches. Landscaping shall be drought tolerant or low water use, and invasive plant species shall be prohibited.</p> <p><b>City:</b></p> <p><b>E. Landscaping:</b> Prior to approval of a tentative map or site development plan for future residential development, the project developer shall submit a landscaping design plan for on-site landscaping improvements that is in conformance to design guidelines and standards established by the City of Chula Vista. The plan shall be implemented as a condition of project approval.</p> <p><b>Port/City:</b></p> <p><b>F. Gateway Plan:</b> Concurrent with the preparation of Phase I infrastructure design plans for "E and H" Street, a Gateway plan shall be prepared for "E and H" Streets. Prior to issuance of occupancy for any projects within the Port's jurisdiction in Phase I, the "E and H" Street Gateway plan shall be approved by the Port and City's Directors of Planning and Building. The "E and H" Street Gateway plan shall be coordinated with the Gateway plan for J Street.</p> <p><b>City:</b></p> <p><b>G. Gateway Plan:</b> Concurrent with development of H-13 and H-14, the applicant shall submit a Gateway plan for "J" Street for City Design Review consideration. Prior to issuance of any building permits, the "J" Street Gateway plan shall be approved by the Director of Planning and Building in coordination with the Port's Director of Planning. The "J" Street Gateway plan shall be coordinated with the Gateway plan for "E and H" Streets.</p>	
<p><b>Significant Impact 6.8-1:</b> Because of the air basin's non-attainment status for ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>, the potential increase in residential units and the construction activities associated with the proposed project, the project would contribute to cumulative construction-related air quality impacts</p>	<p><b>Mitigation Measure 6.8-1</b></p> <p><b>Port/City:</b></p> <p>Prior to the commencement of any grading activities, the following measures shall be placed as notes on all grading plans, and shall be implemented during grading of each phase of the project to minimize construction emissions. These measures shall be completed to the satisfaction of the Port and the Director of Planning and Building for the City of Chula Vista (These measures were derived, in part, from Table 11-4 of Appendix 11 of the <u>South Coast</u> CAQMD CEQA Air Quality Handbook, and from (SCAQMD Rule 403)).</p>	<p>Significant and unmitigated</p>

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	See Mitigation Measure 6-8-1 in <i>Chapter 6, Cumulative Impacts</i> for a list of Best Available Control Measures for Specific Construction Activities.	
<b>Significant Impact 6.8-2:</b> Because of the air basin's non-attainment status for ozone, PM <sub>2.5</sub> , and PM <sub>10</sub> , the potential increase in residential units and the construction activities associated with the proposed project, the project would contribute to cumulative <i>operational</i> air quality impacts	<p><b>Mitigation Measure 6.8-2</b></p> <p><b>City:</b></p> <p>A. For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an <u>Air Quality Improvement Plan (AQIP)</u> with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled. There are two options to meet the AQIP requirement. The applicant shall <del>either evaluate the project in accordance with the computer modeling procedures outlined in the City's AQIP Guidelines, using the Chula Vista CO<sub>2</sub> Index Model</del> including any necessary site plan modifications, <del>or participate in the GreenStar Building Energy Program.</del></p> <p><b>Port/City:</b></p> <p>B. Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project shall comply with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:</p> <ul style="list-style-type: none"> <li>• Use of low-NOx emission water heaters</li> <li>• Installation of energy efficient and automated air conditioners when air conditioners are provided</li> <li>• Energy efficient parking area lights</li> <li>• Exterior windows shall be doublepaned</li> </ul> <p><u>Although these measures would reduce the air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, cumulative air quality impacts remain <b>significant and unmitigated.</b></u></p>	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
<b>Significant Impact 6.8-3:</b> The program level components of the Master Plan would potentially contribute to a result in a significant impact to global climate change because they would potentially conflict with the goals or strategies of AB 32 or related Executive Orders, which would be considered a cumulatively significant impact to global climate change.	<b>Mitigation Measure 6.8-3</b> <b>Port/City:</b> Development of <del>P</del> program-level components of the Chula Vista Bayfront Master Plan (Phases II through IV) shall implement measures to reduce GHG emissions. Specific measures related to energy efficiency, renewable energy, water conservation and efficiency, solid waste measures, and transportation and motor vehicles are outlined in <u>Mitigation Measure 6.8-3 in Chapter 6.0, Cumulative Impacts</u> , as well as Mitigation Measure 4.6-6 in <i>Section 4.6, Air Quality</i> and Mitigation Measure 4.16-2 in <i>Section 4.16, Energy</i> , of this report. <b>See Mitigation Measure 6.8-3 in Chapter 6, Cumulative Impacts</b> for a list of measures to reduce GHG emissions.	Less than significant
<b>Significant Impact 6.11-1:</b> The 0.1 acre of impact from the Glorietta Bay project combined with the 45.9 acres of impacts resulting from the construction of the pier and the realignment of the access channel amounts to a total of 46.0 acres of impact. These impacts to eelgrass, combined with potential impacts from the Wharf Extension project, would be cumulatively considerable.	<b>Mitigation Measure 6.11-1</b> <b>Port:</b> <ol style="list-style-type: none"> <li>A. Prior to construction of any program-level components of the project that impact eelgrass, a pre-construction eelgrass survey shall be conducted by a qualified biologist to confirm the exact extent of the impact at the time of pile driving operations. The pre-construction survey must be conducted during the period of March through October and would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1st.</li> <li>B. Prior to the construction of any program-level components of the project that impact eelgrass, the Port shall establish and implement a plan to create new eelgrass habitat at a ratio of 1.2:1. The Port shall create new eelgrass habitat by removing the existing eelgrass currently located in the impacted areas and transplanting it at the new location. Identification and planting of the restoration site shall be completed to the satisfaction of the Port prior to commencement of construction.</li> <li>C. Subsequent to construction of any program-level components of the project that impact eelgrass, a post-construction eelgrass survey shall be conducted by a qualified biologist. The post-construction survey shall be conducted within 30 days of the cessation of construction activities to confirm the exact amount of eelgrass affected. The difference between the pre-construction and post-construction eelgrass surveys shall determine the amount of required additional mitigation. In addition, the Port shall:               <ul style="list-style-type: none"> <li>• Conduct transplant reports following construction (Initial Report). It would take 1 to 2 years for all of the fine sediment to dissipate in the water column for the movement of such a large amount of sediment. Based on this, eelgrass transplant success would not be possible for 1 to 2 years. Mitigation would be required for additional time delays.</li> </ul> </li> </ol>	Less than significant



TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	<ul style="list-style-type: none"> <li>Conduct monitoring reports at 6, 12, 24, 36, 48, and 60 months post-transplant. Specific milestones and criteria for success are directed in the SCEMP along with guidelines for remedial actions if the success criteria are not met, which would require (based on the absence of other mitigating environmental considerations) a Supplementary Transplant Area to be constructed and monitored for an additional 5 years.</li> <li>Initiate any potential additional mitigation within 135 days of project inception; projects requiring more than 135 days to be completed may result in further additional mitigation.</li> </ul> <p>D. If an appropriate mitigation site is not available at the time of construction of the program components that would impact eelgrass, mitigation habitat shall be created through fill or appropriate habitat in the Bay. Any delays to eelgrass planting after the impact occurs would require additional mitigation of 7 percent per month of additional eelgrass.</p>	
<p><b>Significant Impact 6.15.2-1:</b> Proposed Project would increase the demand for sewage treatment. While the City currently has adequate capacity available in the Metro system, by the year 2030 there would be a short-fall; the Proposed Project represents a cumulatively considerable contribution to that short-fall.</p>	<p><b>Mitigation Measure 6.15.2-1</b></p> <p><b>Port/City:</b></p> <p>Prior to the approval of a building permit for any phase of development, the City shall verify that it has adequate sewer capacity to serve the proposed development. In the event the City does not have adequate sewer capacity to serve the proposed development, no building permit shall be approved for the proposed development until the City has acquired adequate sewer capacity to serve the proposed development. <del>Prior to approval of a building permit, the applicant shall pay its fair share portion for the acquisition of 2.578 MGD of Metro treatment capacity as determined by and to the satisfaction of the City.</del></p> <p>In accordance with Section 15130(a)(3), a significant cumulative impact would be rendered less than cumulatively considerable, and thus, is not significant when the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The requirement for the contribution to provide a fair share contribution to the provision of the needed sewer service mitigates the cumulative impact to below significance.</p>	Less than significant
<p><b>Significant Impact 6.15.6-1:</b> The additional students created by the Proposed Project, the Urban Core Specific Plan, and the other specific plans called for in the General Plan Update would result in significant cumulative impacts to the existing school districts, which are currently at or near capacity.</p>	<p><b>Mitigation Measure 6.15.6-1</b></p> <p><b>Port/City:</b></p> <p>Prior to the issuance of a building permit, the applicant shall pay all required school mitigation fees.</p> <p>Payment of statutory school fees would ensure that project impacts to school services remain below a level of significance. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities</p>	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	impacts of projects (Government Code Section 65996(a)). Once the statutory school mitigation fee (sometimes referred to as a “developer fee”) is paid, the impact would be deemed mitigated as a matter of law. Therefore, this mitigation measure would reduce the cumulative impact to schools to below a level of significance.	
<b>Significant Impact 6.15.7-1:</b> Development of the Proposed Project would increase demands on the existing library services in the project area to serve its residents. As identified in Section 4.13.5 of this report, the project would contribute an incremental demand on libraries services and facilities.	<p><b>Mitigation Measure 6.15.7-1</b></p> <p><b>City:</b></p> <p>For Phase I residential project, prior to the approval of a building permit, the applicant(s) shall pay a Public Facilities Development Impact Fee (PFDIF) or other equivalent fee in an amount calculated according to the City’s PFDIF program in effect at the time of permit issuance.</p> <p>Implementation of Mitigation Measure 6.15.7-1 would provide funds that can be used to construct new facilities, as required, to meet the need resulting from project development. Due to existing library deficiency and inability to demonstrate that fees would fully mitigate, implementation of the measure would not reduce the significant impact to library services to a level below significance.</p>	Significant and unmitigated
<b>Significant Impact 6.17-1:</b> Due to the uncertain nature of long-term energy supply, energy impacts are cumulatively significant	<p><b>Mitigation Measure 6.17-1</b></p> <p><b>Port/City:</b></p> <p>Encourage compact development featuring a mix of uses that locate residential areas within reasonable walking distance to jobs, services, and transit.</p> <ul style="list-style-type: none"> <li>• Promote and facilitate transit system improvements in order to increase transit use and reduce dependency on the automobile.</li> <li>• Encourage innovative energy conservation practices and air quality improvements in new development and redevelopment projects consistent with the City’s AQIP Guidelines or its equivalent, pursuant to the City’s Growth Management Program.</li> </ul> <p>Despite the fact that the Proposed Project would result in adoption of these conservation measures, the cumulative impact relative to energy supply would remain <b>significant and unmitigated</b> because of the uncertainty of the future supply of energy, which is within the responsibility and control of SDG&amp;E and <u>other entities responsible for arranging electric energy supplies</u>, not the Port or the City.</p>	Significant and unmitigated

## CHAPTER 2 INTRODUCTION

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### 2.1 Background

The Chula Vista Bayfront is situated on the southern edge of San Diego Bay in the County of San Diego, California. The majority of the Bayfront is currently under the jurisdiction of the Port, to which the State Legislature conveyed (1) the tidelands bayward of the mean high-tide line and (2) the submerged lands generally to the U.S. Pierhead Line. The Port acts as trustee for administration of these lands. The Port has regulatory duties and proprietary rights with respect to these lands and any lands the Port subsequently acquires; the Port manages them for the benefit of the State of California. The remaining portions of the Chula Vista Bayfront are under jurisdiction of the City of Chula Vista (City).

#### 2.1.1 Public Participation in the Planning Process

Public outreach has been the cornerstone of the master planning process. The ~~award-winning~~ public outreach and participation program for the Chula Vista Bayfront Master Plan (CVBMP) was one of the most comprehensive public outreach efforts conducted to date by the Port and City and was recognized for excellence by the San Diego Section of the American Planning Association.; ¶The effort was led by agency staff, developer team members, and key consultants. The program occurred in ~~two~~ three phases, which are described below.

##### 2.1.1.1 Initial Public Outreach

During the initial master planning process, which began in January 2003 and ended in May 2004, the Port and City engaged in an extensive public outreach and participation program. The program consisted of: 15 Citizens Advisory Committee (CAC) meetings, seven power plant working group meetings, eight public workshops and joint Board of Port Commissioners (Board)/Chula Vista City Council (City Council) meetings, and other activities as summarized below. The initial master planning process resulted in the development of two land use plans, then referred to as “Option C” (which has evolved into the “Harbor Park” alternative) and “Option B” (which has evolved into the “No Land Trade” alternative); both plans are discussed in *Chapter 5, Alternatives*.

##### a. Citizens Advisory Committee

In July 2003, a 21-member CAC was formed to increase citizen participation in the CVBMP process and to allow for a constructive exchange of ideas with a diverse group of interested parties. These included private citizens, community organizations, environmental groups, labor, state and local agencies, business groups, Port tenants, adjacent landowners, and other groups. The CAC was to meet regularly, review consultant deliverables, and make recommendations to

staff and the consultant team throughout the process, leading to a recommendation for a preferred plan. The initial master planning process CAC members included:

1. Keri Weaver, California Coastal Commission
2. Chris Lewis, Chula Vista Chamber of Commerce
3. Jack Blakely, Chula Vista Downtown Business Association
4. Susan Fuller, Chula Vista Nature Center
5. Rudy Ramirez/Terry Thomas, Chula Vista Vision 2020 General Plan Update Steering Committee
6. Bruce Warren, Citizens Coordinate for Century 3
7. Patricia Aguilar, Crossroads II
8. Laura Hunter, Environmental Health Coalition
9. Clay Hinkle, Goodrich Aerostructures Group
10. Jennifer Badgley, San Diego-Imperial Counties Labor Council
11. Jennifer Williamson, San Diego Association of Governments
12. Jim Peugh, San Diego Audubon Society
13. Allison Rolfe, San Diego Baykeeper
14. Sal Giametta, San Diego Convention and Visitors Bureau
15. Fred Sainz, San Diego Convention Center Corporation
16. Nick DeLorenzo, San Diego Council of Design Professionals
17. Eduardo Landeros, San Diego County Hispanic Chamber of Commerce
18. Beverly Mascari, San Diego Port Tenants Association
19. Kelly Hruska, San Diego Regional Economic Development Corporation
20. Charles Moore, South County Economic Development Council
21. Victoria Touchstone, U.S. Fish and Wildlife Service.

Fifteen CAC meetings were held between July 2003 and May 2004 and were well-attended by the public. The following is a summary of CAC meetings during the initial master planning process:

- CAC meeting #1 was held on July 28, 2003, and was an orientation to the CVBMP site and planning process. The CVBMP initial urban design consultant team, led by Carrier Johnson/Cooper Robertson & Partners and Wade Communications, presented their preliminary findings regarding existing conditions, opportunities, and constraints. Several CAC members suggested that the CVBMP area be jointly planned with the adjacent “Midbayfront” property and requested Port and City staff to further explore a land

exchange between the Port and Midbayfront properties, which could allow residential use to be placed on existing Port property.

- CAC meeting #2 was held on September 15, 2003, and consisted of a bus tour of the CVBMP project area and a brief presentation by Port staff on the land exchange concept. The CAC requested that State Lands Commission (SLC) staff present on this topic at a future CAC meeting.
- CAC meeting #3 was held on October 13, 2003, and focused on the South Bay Power Plant (SBPP) site and its relationship to the CVBMP master planning process. Presentations were made regarding the SBPP site, tax increment funding, regional energy efforts, and the power plant licensing process.
- CAC meeting #4 was held on November 3, 2003, and included an update on the formation of a power plant working group; discussions of a goal matrix; and discussions of topics such as the SBPP, tax increment funding, community impact report, and joint planning/land exchange. A representative from the existing South Bay Boatyard made a presentation on its proposed boat hoist upgrade project.
- CAC meeting #5 was held on November 17, 2003, and focused on land trading. Staff from the SLC and Attorney General's Office made presentations on the Public Trust Doctrine, SLC jurisdiction and authority, the Public Resources Code, and constitutional requirements.
- CAC meeting #6 was held on December 8, 2003, and was a joint meeting with the Chula Vista General Plan Update Steering Committee to discuss the two planning processes and coordinate efforts on them.
- CAC meeting #7 was held on January 12, 2004 and the CAC participated in a visioning exercise. The urban design consultant team presented its preliminary planning framework.
- CAC meeting #8 was held on March 1, 2004, and primarily consisted of a presentation by economic consultant Sedway Group and CAC discussion of Sedway's draft market study findings.
- CAC meeting #9 was held on March 29, 2004, and primarily consisted of the urban design consultant's presentation on, and CAC discussion of, the preliminary concepts for the master plan.
- CAC meeting #10 was held on April 12, 2004, and primarily consisted of the urban design consultant's presentation on, and CAC discussion of, the three draft land use plans (open space, land, and water plans).
- CAC meeting #11 was held on April 19, 2004, and included a presentation on the Power Plant Working Group report and continued discussion of the draft land use plans. At this

meeting, Laura Hunter of Environmental Health Coalition presented two concepts: one with a land exchange and one without.

- CAC meeting #12 was held on April 26, 2004, and consisted of presentations on, and CAC discussion of, preliminary financial considerations, a revised land use plan Option C, and open space concepts. At this meeting, the CAC approved two motions: first, to have four alternatives analyzed in the Environmental Impact Report (two with a land exchange and two without); and second, to hold a special CAC meeting on May 3, 2004, for further CAC discussion.
- CAC meetings #13 and #14 were held on May 3 and May 10, 2004, to allow the CAC to “vote” on those elements of the draft land use plans that they agreed on or could “live with” and wanted further analyzed. Consultant Wade Communications prepared a facilitated exercise for the CAC’s self-guided discussion at both meetings.
- CAC meeting #15 was held on May 17, 2004, and consisted of the urban design consultant’s presentation of the revised draft land use plans to be considered by the Board/City Council, and the CAC’s discussion of those plans.

b. South Bay Power Plant Working Group

The SBPP Working Group, a separate committee outside the CAC, was formed in December 2003 to identify and examine potential relocation, reconstruction, and/or removal of the SBPP and adjacent energy infrastructure, in greater detail than would be possible within the broader mission of the CAC. As such, the SBPP Working Group was asked to provide its input to Port staff and report its findings to the CAC.

The SBPP Working Group consisted of representatives from the State Lands Commission, environmental groups (Environmental Health Coalition, San Diego Baykeeper, and San Diego Audubon Society), Utility Consumers’ Action Network, San Diego Regional Energy Office, San Diego Gas & Electric, the City of Chula Vista, Sweetwater Authority, South County Economic Development Council, and others. The SBPP Working Group recommended two land use alternatives for the power plant site and summarized them in a report. Seven working group meetings were held from December 2003 through April 2004. Meeting topics included:

- Regulatory framework and policies for power plant permitting, “reliability must-run” status, and cost recovery
- Current leases, contracts, and easements for the facilities
- Regional energy plans and their relationship to the SBPP
- An understanding of the transmission network and how electricity is currently delivered in the San Diego Region

- Environmental and health concerns associated with current facilities and the potential benefits and costs of closing, relocating, or replacing them with smaller, underground, and/or newer technology facilities (including alternative cooling techniques, such as dry cooling for gas-fired power plants and implementing renewable energy sources)
- Approximate costs of various alternative facilities
- Revenues produced by current facilities and projected value if facilities were relocated elsewhere in the master plan area.

c. Public Workshops and Joint Board/City Council Meetings

Five public workshops and three joint Board and City Council/Redevelopment Agency meetings, held between January 2003 and May 2004, served as another forum for soliciting public input and support during the master planning process.

- Public Workshop #1 was held on January 16, 2003, and was conducted by Port and City staff to introduce the public to the planning area and process. A wide variety of questions and comments were received from the public regarding: the study area, public outreach and participation, the planning process, potential opportunities and issues, and preliminary development ideas for the Bayfront.
- Public Workshop #2 was held on May 21, 2003, to introduce the urban design consultant team and scope of the public outreach program, and to facilitate discussion with the public on opportunities within the project area. A brief presentation was made on the CVBMP project, including the planning, regulatory, and coastal processes. The public made comments regarding joint planning of the Midbayfront and Port properties and the necessity to remove the power plant.
- Public Workshop #3 was held on July 30, 2003, and the urban design consultant team presented its preliminary findings regarding existing conditions, opportunities, and constraints for the CVBMP.
- Public Workshop #4 was held on March 1, 2004, and consisted of a presentation on the master plan progress, summary of public input received to date, urban design consultant design principles and development framework, and draft market study findings.
- Public Workshop #5 was held on April 19, 2004, and consisted of the urban design consultant team's presentation on the preliminary concepts and draft land use plans.
- At the first joint Board/City Council meeting held on July 29, 2003, the urban design consultants presented their preliminary findings regarding existing conditions, opportunities, and constraints. As a result of public comment, the Board and City Council directed Port and City staff to conduct a separate public workshop on the power plant and

to explore joint planning of the CVBMP and Midbayfront properties, as well as the feasibility of a land exchange between the two properties, which could allow residential use to be placed on existing Port property. Consequently, in December 2003, a power plant working group was established to focus on the complexity of issues associated with the entire 150-acre power plant parcel. Furthermore, in March 2004, the Board and City Council approved an amendment to the Port/City Joint Planning Agreement to incorporate the 128-acre Midbayfront properties into the CVBMP project area. Pacifica Companies, which has an option to acquire the privately-held portion of the Midbayfront properties, met regularly with staff to provide input to the joint plan and further discuss the land exchange concept.

- The second joint meeting was held on March 30, 2004. The Board and City Council received a presentation on the consultant's draft market study findings and preliminary concepts for the master plan. Much public input was received concerning various aspects on, and potential ideas for, the draft land use plans.
- The third joint meeting was held on May 25, 2004. The Board and City Council received a presentation on the three draft land use plans. After hours of public testimony on the plans and praise of the public outreach effort, including near unanimous community support of two of the land use plans, the Board and City Council approved the two staff-recommended land use plans and authorized staff to prepare a development program, conduct a financial feasibility analysis, and commence the environmental review process for the two land use plans (then referred to as Options B and C). Option B has since evolved and been renamed the No Land Trade alternative. Option C has also evolved and was renamed Plan A and subsequently the Harbor Park alternative.

d. Other Public Outreach and Public Participation Efforts

In addition to the CAC and SBPP Working Group meetings, public workshops, and joint Board/Council meetings, approximately 30 community presentations were made to interested stakeholders, agencies, and organizations.

Furthermore, three CVBMP newsletters were published to keep the public apprised of the master planning progress. The first newsletter was issued in June 2003 and described the master planning site; process, allowable uses on Port tidelands; a summary of the May 21, 2003, public workshop; the Port/City master plan objectives; and opportunities for public input. The second newsletter was issued in January 2004 and described the CAC formation, a CVBMP timeline, availability of the CVBMP webpage and online survey, and an article written by the CAC. The third newsletter was issued in May 2004 and provided an update on the master planning phase and a summary of the January CAC visioning exercise results.



The Port also kept the public apprised of the planning effort and solicited further public input by creating a CVBMP webpage, which contained: a description of the project area, planning process, and schedule; public input opportunities through public meetings; and access to major consultant deliverables. The webpage also allowed the public to register to be placed on the CVBMP mailing list (that contained approximately 1,500 contacts) and provided an online survey where the public could express concerns and provide ideas on the vision for the Bayfront, master plan alternatives, public outreach, and the planning process. Over 75 individuals completed the survey either online or in written format.

The Port and City also participated in various community events, such as “Celebrate Chula Vista,” to educate the public about the CVBMP planning process and encourage their participation. Finally, the Port and City issued media releases and maintained contact with media representatives throughout the planning process.

### **2.1.1.2 Subsequent Public Outreach**

During subsequent stages of the master planning process, which began in June 2004 and ended in August 2005, built upon the initial master planning efforts and resulted in the development of three master plan alternatives with specific uses and locations, development program and height ranges, and phasing recommendations.

During the continued master planning process, the Port and City continued their extensive, award-winning public outreach and participation program, which consisted of: 16 CAC meetings, including two “charrette” workshops that enabled participants to review plan alternatives in three-dimensions; five meetings on economics; a Bayfront tour; a public workshop; a joint Board/City Council meeting; six separate CVBMP-related Board/City Council meetings; 15 community presentations, and other activities summarized as follows:

#### **a. Citizens Advisory Committee**

During subsequent phases of the master planning process, the CAC was reorganized and expanded to 28 members, including 14 of the initial CAC members and 14 new members. The CVBMP subsequent master planning CAC members included:

1. Patricia Aguilar, Crossroads II
2. Jennifer Badgley, San Diego–Imperial Counties Labor Council
3. Ken Baumgartner, The Corky McMillin Companies
4. Lowell Billings, Chula Vista Elementary School
5. Jack Blakely, Chula Vista Downtown Business Association
6. John Chavez, South Bay Forum

7. Kurt Chilcott, CDC Small Business Finance Corporation
8. Nick DeLorenzo, San Diego Council of Design Professionals
9. Lisa Freedman, San Diego International Sports Council
10. Susan Fuller, Chula Vista Nature Center
11. Ian Gill, Highland Partnership, Inc.
12. Clay Hinkle, Goodrich Aerostructures Group
13. Laura Hunter, Environmental Health Coalition
14. Chris Lewis, Chula Vista Chamber of Commerce
15. Mark Marchand, Pacific Southwest Association of Realtors
16. Beverly Mascari, San Diego Port Tenants Association
17. Charles Moore, South County Economic Development Council
18. Jim Peugh, San Diego Audubon Society
19. Diane Powers, Bazaar del Mundo
20. Rudy Ramirez, Chula Vista 2020 General Plan Update Steering Committee
21. Allison Rolfe, San Diego Baykeeper
22. Bruce Walton, GMS Realty Development
23. Bruce Warren, Citizens Coordinate for Century 3
24. Jeff Wells, Voit Commercial Brokerage Company
25. Fran Cornell, Chula Vista Cultural Arts Commission
26. Tony Fulton, San Diego State University
27. Emerald Randolph, Chula Vista Boys and Girls Club, CAST
28. Kent Youngberg, marina expertise.

Sixteen CAC meetings were held between September 2004 and July 2005 and were well attended by the public. The following is a summary of the CAC meetings during subsequent phases of the master planning process:

- CAC meeting #1 was held on September 1, 2004, and provided an orientation to new and returning CAC members on the CVBMP process, CAC structure and roles, and CVBMP next steps.
- CAC meeting #2 was held on October 8, 2004, and consisted of a bus tour of the Chula Vista Bayfront to familiarize new and returning CAC members with the CVBMP Proposed Project site.

- CAC meeting #3 was held on October 27, 2004, and included a presentation by Cooper, Robertson & Partners, a CVBMP urban design consultant, and discussion of issue areas in preparation for the November charrette.
- CAC meeting #4 was held on November 18, 2004, and was a six-hour charrette that gave the CAC an opportunity to view and comment on conceptual plans for the Bayfront. Plans were presented in the form of interchangeable three-dimensional models created by the consultant team.
- CAC meeting #5 was held on December 2, 2004, and included a presentation by consultant Economics Research Associates on development economics; a summary by Cooper, Robertson & Partners of the November 18 charrette comments; and discussion of the CAC members' vision for the master plan (general vision and infrastructure).
- CAC meeting #6 was held on December 16, 2004, and was the second six-hour charrette. CAC members were given the opportunity to raise comments and concerns regarding specific elements of the master plan (open space, water, and traffic) to CVBMP consultants specializing in these areas.
- CAC meeting #7 was held on January 12, 2005, and was an introductory course on development economics held for members of the CAC.
- CAC meeting #8 was held on February 7, 2005, and provided the CAC members with a preview of the CVBMP update scheduled to be given on February 8 to the Board and City Council.
- CAC meeting #9 was held on March 10, 2005, and included presentations on current master plan concepts, preliminary master plan cost estimates, and the benefits of residential development.
- CAC meeting #10 was held on March 30, 2005, and included a discussion on power plant aesthetics, as well as a presentation by Pacifica Companies' representatives regarding potential residential design concepts.
- CAC meeting #11 was held on May 26, 2005, and included a presentation by Economics Research Associates on the Draft CVBMP Financial-Fiscal Impact Report findings.
- CAC meeting #12 was held on June 9, 2005, and included a follow-up discussion on the Draft CVBMP Financial-Fiscal Impact Report findings and discussion on the Option B (No Land Trade) draft land use plan.
- CAC meeting #13 was held on June 15, 2005, and included a discussion on the Option C draft land use plan development program, specifically residential use.

- CAC meeting #14 was held on June 23, 2005, and included a presentation by Gaylord Entertainment (Gaylord) on its proposed Resort Conference Center (RCC) and a discussion with the CAC on completing the CAC's CVBMP program discussion.
- CAC meeting #15 was held on July 13, 2005, and included a status update on the potential RCC, as well as a discussion with the CAC regarding the proposed development ranges within each of the three CVBMP planning districts (Sweetwater, Harbor, and Otay).
- CAC meeting #16 was held on July 25, 2005, and provided the CAC with a preview of the proposed CVBMP development program ranges to be presented to the joint Board/City Council on August 9, 2005.

**b. Public Workshop and Board and City Council Meetings**

One public workshop and six Board and City Council/Redevelopment Agency meetings served as another forum for soliciting public input and support during the subsequent master planning process.

- A public workshop was held on December 15, 2004, at which the public had the opportunity to view a three-dimensional model of potential development, parks, and open space for the master plan. Attendees were also encouraged to provide written comments on each of the master plan's three planning districts.
- On February 28, 2005, the Board and City Council received a brief CVBMP update at two separate meetings.
- On March 8, 2005, Port and SLC staff gave a presentation to the Board on the land exchange concept in general and its application to the CVBMP.
- At the June 21, 2005, Board meeting and at the June 28 City Council meeting, representatives from Gaylord presented on their interest in developing a major hotel and conference/ entertainment center on the Chula Vista Bayfront.
- On August 9, 2005, a joint Board and City Council/Redevelopment Agency meeting was held, at which staff and consultants presented the CVBMP master plan components and financial analysis. At this meeting, the Board and the City Council each adopted resolutions granting preliminary approval of the master plan and authorizing staff to proceed with the environmental review process.

**c. Other Public Outreach and Public Participation Efforts**

In addition to the CAC meetings, public workshop, and Board and City Council meetings, approximately 15 community presentations were made to interested stakeholders, agencies, and

organizations during subsequent phases of the master planning process. One four-page color newsletter was issued in January 2005 that discussed the CAC master planning process, summarized the two CAC charrettes, and provided a sampling of comments received from the public during the December 2004 public meeting. The CVBMP webpage continued to be maintained during the master planning process to keep the public apprised of the planning effort. As in the initial master planning process, the Port and City continued to participate in various community events during subsequent phases of the process to educate the public about the CVBMP planning process and encourage their participation. Finally, the Port and City continued to issue media releases and maintain contact with media representatives throughout the master planning process.

In May 2005, the CVBMP project was selected to receive the Education Project Award from the San Diego Chapter of the American Planning Association for successful public outreach.

### **2.1.1.3 Public Outreach Concerning the Revised Draft EIR**

After the close of the public comment period for the Revised Draft EIR in August 2008, the Port and the City continued an extensive public outreach and participation program. Over a period of approximately 9 months, the Port and the City met with numerous interested individuals, organizations, and public agencies to address issues raised in public and agency comments on the Proposed Project and the Revised Draft EIR. The continuing public outreach and participation program was highly productive and resulted in a variety of specific recommendations for improving the design of the Proposed Project and increasing the protection of natural resources in and around the project area. Although these recommendations provide for changes in the Proposed Project and for additional protection of natural resources and the environment above and beyond that required by CEQA and other applicable federal, state and local laws and regulations, the Port and the City have agreed to include them in the Final EIR and the MMRP as design features and mitigation measures for implementation and monitoring purposes.

The Port and the City appreciate the interest and contribution of the numerous individuals, organizations and public agencies who participated in the continuing public outreach and participation program. In addition to their efforts, the following participants engaged in outreach efforts which address specific concerns expressed during the public comment period for the Revised Draft EIR:

- a. The Port, the City and the City's Redevelopment Agency (RDA) met with representatives of the Bayfront Coalition and its member organizations, including the Environmental Health Coalition, San Diego Coastkeeper, The Surfrider Foundation (San Diego Chapter), and San Diego Audubon Society, **Coastal Environmental Rights Foundation, Southwest Wetlands Interpretative Association, and Empower San Diego** to address their concerns that the Proposed Project and its component parts would be implemented in a manner that provides community benefits, including but not limited to the

preservation and protection of natural resources and the environment. Over a period of approximately 9 months, the Port, and the City and the RDA met with representatives of the Bayfront Coalition to address specific concerns and to develop specific recommendations for improvements in project design and increased protection of natural resources in the project area. As a result of these efforts, **the parties entered into a written agreement which provides for a variety of measures, above and beyond those required by CEQA or other applicable laws and regulations, which** have been incorporated into the Final EIR, including the creation, implementation and enforcement of a Natural Resource Management Plan (NRMP), additional habitat management and protection through cooperative agreements with the USFWS or other appropriate agency, the design and timing of Phase I Signature Park improvements and minimum standards for the Sweetwater and Otay District public parks, and additional mitigation measures regarding bird strikes and disorientation, storm water and urban runoff, landscaping and vegetation, lighting and illumination, noise, boating impacts, hazardous waste removal, and energy conservation and efficiency. (See *Chapter 3.0, Project Description and Mitigation Measures* 4.8-6 , 4.8-7. 4.8-23, 4.12-4, 4.12-8, 4.12-9, 4.12-11, and 4.16-2.)

- b. The Port, the City and the City's Redevelopment Agency (RDA) met with representatives of Rohr, Inc., operating as Goodrich Aerostructures and a wholly owned subsidiary of The Goodrich Corporation (Goodrich), to address Goodrich's concerns regarding its potential costs and liabilities that could result from the proposed development of residential uses on Parcels H-13 and H-14 in close proximity to ongoing and future operations on the Goodrich property, and the remediation of existing soil and groundwater contamination. Over a period of approximately 7 months, the Port, the City and the RDA met with Goodrich representatives to address these and other related concerns set forth in Goodrich's written comments (Letter R) on the Revised Draft EIR and to develop specific recommendations for resolving the concerns expressed. As a result of these efforts, the parties entered into a written agreement, referred to as the Second Amendment to Relocation Agreement (Goodrich Agreement), which provides specific measures for the disclosure of information regarding Goodrich's operations to future occupants of the residential project proposed on Parcels H-13 and H-14, for a minimum distance between residential dwellings and the northern boundary of the Goodrich property, for development conditions for the residential parcels relating to foundation systems, grading requirements, development sequencing, vapor intrusion requirements, and interior noise levels, and for fencing, landscaping, screening and buffer areas where appropriate. The Goodrich Agreement also provides specific measures to ensure cooperation among the Port, the City, the RDA and Goodrich with respect to development and implementation of the Proposed Project and activities relating to the remediation of existing contamination, including measures designed to mitigate risks to human health and the environment, the placement and relocation of remediation facilities,

to reduce the potential for lateral groundwater migration in utility corridors and vertical migration of contaminants, and to avoid the infiltration of hazardous substances into storm drain lines. The Port, the City and the RDA have approved the Goodrich Agreement and Goodrich agrees that the Port, the City and the RDA have adopted significant and meaningful measures that adequately address all of the issues raised and concerns expressed in its written comments on the Revised Draft EIR (Comment Letter R). The Goodrich Agreement is a matter of public record and is available to the public during normal business hours in the office of the District Clerk, located at 1600 Pacific Highway, San Diego, California. Pursuant to CEQA Guidelines Section 15150, the Goodrich Agreement is incorporated in this EIR as though set forth in full.

### 2.1.2 Project Site History

Shortly after the City incorporated in 1911, companies emerged and built plants along the Bayfront. At that time, the site primarily consisted of undeveloped land covered with native vegetation, a few residential and commercial structures, and several orchards.

In 1916, the Hercules Powder Company began the design and construction of a kelp processing plant to make gunpowder. The plant was located on a 30-acre parcel in the northern portion of the Bayfront. The plant, which was located northeast and adjacent to the CVBMP project site, was located on what is now known as Gunpowder Point and is the current location of the Chula Vista Nature Center. The area within the CVBMP project site that is near the gunpowder manufacturing plant was in agricultural production for some time and remains completely undeveloped. For purposes of the CVBMP, this area is proposed as the “Sweetwater District.”

World War II ushered in changes that would affect the City forever. The principal reason was the relocation of Rohr Aircraft Corporation (Rohr) to the central portion of the Chula Vista Bayfront, or the proposed “Harbor District,” in early 1941, just months before the attack on Pearl Harbor. Rohr operated an aircraft parts manufacturing plant that employed 9,000 workers in the area at the height of its wartime production. With the demand for housing, the land never returned to being orchard groves. In the 1970s, portions of the Bayfront area were filled and additional structures were constructed at the Rohr manufacturing plant.

In 1969, San Diego Gas & Electric (SDG&E) constructed the SBPP on lands in the southern portion of the Chula Vista Bayfront. In 1987, the City completed construction of the Chula Vista Nature Center (which is outside the Proposed Project area). That same year, the Goodrich Aerostructures Group (Goodrich) acquired and expanded the Rohr facility. In 1999, through a land exchange the Port acquired parcels referred to as the “former Goodrich South Campus.” Goodrich consolidated its operations north of H Street within the Bayfront and has remained active. Demolition of the former Goodrich South Campus is currently underway.

By 1990, various public amenities and recreation facilities were developed on Port property in the central area of the Bayfront. These included two recreational marinas (with approximately

900 boat slips), a yacht club and boat launching ramp, a public fishing pier, a boat repair yard, a recreational vehicle (RV) park, and two restaurants. In addition, two other public recreational parks, a shoreline park with a lawn area, a promenade walkway, shaded picnic areas, and public art were constructed on the shorefront, offering landscaped viewing areas and parking.

In the same year that the Port acquired the former Goodrich South Campus facility (1999), the Port also acquired land on the southern end of the Bayfront, proposed in the CVBMP as the “Otay District.” This area is occupied by the SBPP, a former liquefied natural gas (LNG) storage facility, and an electrical switchyard, all of which had been operated by SDG&E. The LNG site has since been cleared. The Port leases the SBPP to a private operator—previously Duke Energy South Bay (Duke), then LS Power Generation (LS Power), and currently Dynegy, Inc.—and the SBPP continues to provide electricity to the region. The switchyard, also located on Port lands, continues to be operated by SDG&E.

Although the Port acquired the former Goodrich South Campus, power plant properties, and other parcels over the last nine years, there have been many unsuccessful development proposals on the Chula Vista Bayfront, including hotels, a biomedical/pharmaceutical manufacturing plant, and mixed-use development. Therefore, in June 2002, the joint Board and City Council authorized Port and City staff to proceed with a master planning effort for the Chula Vista Bayfront that only covered Port properties and at that time excluded the property known as the “MidBayfront.”

At the same time, Pacifica Companies had proposed a mixed-use plan for the Midbayfront properties that included 2,000 residential units; hotel, office, and retail uses; and open space areas. There was much public opposition to this proposal, and many community members requested that the MidBayfront and Port properties be comprehensively master planned. The community also requested that staff explore the feasibility of a land exchange between the MidBayfront and Port properties, which could allow residential use to be developed on existing Port property, instead of on the MidBayfront, adjacent to the Sweetwater Marsh National Wildlife Refuge. Port and City staff felt that residential development in the Harbor District could enhance development opportunities on, and add to the mix of uses proposed for, the Bayfront through the CVBMP.

In response to the community’s concerns, in March 2004 the Board and City Council approved the expansion of the then 420-acre CVBMP planning area to incorporate the approximately 140 acres of privately and publicly owned “Midbayfront” properties. This enabled staff to begin joint planning for the two properties totaling approximately 560 acres, as well as to begin exploring the feasibility of a land exchange between the two properties. The land exchange would allow private property on which residential uses were allowed in the MidBayfront (Sweetwater District), near the Sweetwater Marsh National Wildlife Refuge, to be exchanged for



Port property in the more highly developed Harbor District. At that point, Pacifica Companies, the potential developer of the residential uses, became a partner with the Port and City in the CVBMP master planning effort. The specific parcels involved in the proposed land exchange are described in *Section 3.4.1.1* of the *Project Description*.

During the initial master planning effort, which began in January 2003 and ended in May 2004, the CVBMP consultant team, led by Carrier Johnson/Cooper, Robertson & Partners/SWA Group and Wade Communications, engaged in extensive public outreach, assessed the potential opportunities and constraints for the planning area, conducted a market study, and developed preliminary concepts and two draft land use plans. At the May 25, 2004, joint Board and City Council/Redevelopment Agency meeting, the Board and City Council approved the staff-recommended land use plans then referred to as Option B and Option C, and authorized staff to prepare a development program, conduct a financial feasibility analysis, and commence the environmental review process for the two land use plans. Note that Option B has since evolved and has been renamed as the No Land Trade alternative. Furthermore, Option C has also evolved and has been renamed Plan A and subsequently the Harbor Park Alternative.

During subsequent stages of the master planning effort, which began in June 2004 and ended in August 2005, the CVBMP consultant team, led by Cooper, Robertson & Partners and Katz & Associates, continued to engage in extensive public outreach, conducted a financial feasibility analysis, and developed master plan concepts with site-specific uses, development program and height ranges for those uses, and proposed phasing. At the August 9, 2005, joint Board and City Council/Redevelopment Agency meeting, the Board and City Council received a presentation on the master plan concepts and authorized staff to proceed with the environmental review process for the CVBMP. At that meeting, the Board/City Council authorized staff to include the following three plans in the CVBMP Environmental Impact Report (EIR): Plan A (referred to in this EIR as the Harbor Park alternative), “Plan A Option 2” (referred to in this EIR as the Proposed Project or “Sweetwater Park Plan”) and Plan B (referred to in this EIR as the No Land Trade alternative).

In early 2005, Gaylord—, operator of several large-scale convention center resort hotels in the United States, approached the Port and City and expressed their interest in the Chula Vista Bayfront for their west coast expansion. In June 2005, Gaylord formally expressed their interest in immediately developing a large RCC with up to 2,000 hotel rooms, approximately 415,000 square feet of net convention space, and several restaurants on the San Diego Bay. In August 2005, at the Board’s direction, Port staff initiated a competitive Request for Qualifications (RFQ) process for lease and development of a major RCC on the Chula Vista Bayfront, and in November 2005, after Board consideration of the RFQ responses received, unanimously agreed to enter into an exclusive negotiating agreement with Gaylord for development of a new RCC on the Chula Vista Bayfront. In March 2007, the City of Chula Vista held two separate public

hearings to present the Gaylord Resort and Convention Center (RCC) project. In November 2008, Gaylord announced that they were no longer interested in pursuing development of the RCC as part of the CVBMP. As a result, the ultimate build-out of an approximately 2,000 hotel room RCC on Parcel H-3 is expected to become part of a future project-specific development proposal submitted to the Port for review and consideration.

### **2.1.3 — Draft Environmental Impact Report**

## **2.2 Purpose and Need for the Project**

Because Port-owned tidelands are state public trust lands, their uses must serve statewide public purposes in addition to local public purposes. The uses are generally limited to water-dependent or water-related uses including commerce, fisheries, and navigation, environmental preservation and recreation. The Chula Vista Bayfront has the potential to be a world-class visitor destination. The shoreline and natural areas provide an excellent compliment to the visitor-serving amenities that could be placed in the already-developed portions of the CVBMP. Up to this point, however, the Bayfront's potential has been largely unrealized. Therefore, the purpose of the CVBMP is to:

- Create a vibrant, active, unified waterfront with strong connections to the rest of the City and region
- Create new public access, recreational amenities, and shoreline enhancements
- Protect biological resources in the project vicinity
- Stimulate economic growth for the Port, City of Chula Vista, the South Bay area, and the region
- Improve land use compatibility (shift the power distribution facilities from active use areas and relocate residential development away from resources in the Sweetwater Marsh National Wildlife Refuge)
- Develop economically feasible land uses throughout the Bayfront to serve the local community and region as well as serving the public trust purposes
- Develop property in a manner that minimizes environmental impacts and reinforces the public realm in a manner befitting the setting and regional significance of the area
- Balance the cost of public improvements with private development so that public costs can be paid for by the increased revenues from the private development.

### **2.2.1 Project Objectives**

The Chula Vista Bayfront is located within an ecologically sensitive area of South San Diego Bay. Comprised of rich biological resources, the surrounding marshes, mudflats, and open water

provide important foraging habitat to many birds and mammal species. The waterfront parks also offer many public amenities for local residents. Its bayside setting on the western edge of Chula Vista offers an opportunity for cooperative planning combining public amenities, private development, ecological preservation, shoreline enhancement, and the preservation of open space. This cooperative planning venture reflects an understanding of the potential of the Chula Vista Bayfront as a world-class waterfront district in the City and an appreciation for a coordinated, comprehensive vision for the area.

The following are the 10 objectives that the Port and City developed during the CVBMP master planning process, with the ultimate goal of creating a world-class bayfront:

- Consistency with tidelands trust requirements and restrictions
- Broad community input into the planning process and support of the master plan
- Development of a master plan that protects and enhances environmental resources
- Seamless integration with adjoining properties
- Development of a visionary master plan that is economically sustainable, provides revenue generation, and will encourage private sector participation
- Development of a plan that creates future market opportunities and defines the market rather than simply responding to the existing market
- Development of a plan that eliminates or reduces barriers linking the Bayfront to the rest of western Chula Vista
- Development of a plan that enhances a culturally diverse community and integrates the Bayfront with the rest of Chula Vista
- Development of a comprehensive funding program
- Development of a master plan that includes recreational, public art, and open space opportunities as significant components of the plan.

In addition, the CVBMP urban design consultants developed the following design principles, which provided a framework in developing the initial land use concepts for the Bayfront during the master planning process:

- Create one Chula Vista Bayfront
- Celebrate the serenity and Hispanic culture of Chula Vista's Bayfront setting
- Extend Chula Vista all the way to the Bayfront
- Take advantage of deep water at the harbor to create an active boating environment

- Create a Bayfront park system that marries ecological habitats and recreational needs of the community
- New development should reinforce the sense of place at the Bayfront.

## 2.32.2 Environmental Procedures

At the August 9, 2005, meeting, the joint Board and City Council authorized staff to prepare an EIR that would address the environmental impacts related to the proposed master plan and planning document amendments within the CVBMP area. As lead agency for the purpose of compliance with the California Environmental Quality Act (CEQA), the Port has determined that this EIR will be a combined project and program level EIR. This means that the more defined, short-term components will be assessed at a high level of detail, while the more conceptual, long-term components will be assessed at a “planning” level or programmatic level of detail. The project description presented in this EIR represents the proposed master plan that would guide development on the Chula Vista Bayfront through 2031. The project description describes the development as proposed over the course of an approximately 24-year period that would include four construction phases—approximately 5 years for Phases I and II; approximately 5 years for Phase III, ~~ending in 2017~~; and approximately 14 years for Phase IV ~~ending in 2031~~.

As indicated above, the EIR provides support for the CVBMP and related City General Plan, Local Coastal Program, and Port Master Plan (PMP) amendments. It analyzes certain Phase I components, consisting of development on Parcels H-13, H-14, HP-5, and H-17, at a project-specific level. All other Phase I components, as well as Phase II through IV components, are evaluated at a programmatic level and would require subsequent environmental review as “subsequent activities” pursuant to *California Environmental Quality Act Statutes and Guidelines* (CEQA Guidelines) (AEP 2008) Section 15168.

### 2.3.1 Draft Environmental Impact Report

The Draft EIR (September 2006) was circulated for a 60-day public review period from September 29 to November 27, 2006, and further extended an additional 45 days to January 11, 2007. Fifty-nine individual comment letters were received by the Port. Many of the community members requested more information and project specific data, specifically for the project-level components (i.e., the proposed RCC, Pacifica Residential Site, and the Signature Park). The Port and project applicants subsequently commissioned project-level technical studies for those Phase I components and have incorporated this data into each issue section of the document.

### 2.3.2 Revised Draft EIR

The Revised Draft EIR was circulated for a 60-day public review period **(May 23, 2008 to August 7, 2008)** to further make project description refinements and revisions that were

analyzed throughout the document. Fifty-three comment letters, including nearly 1,000 individual comments, were received by the Port. As noted above, since the circulation of the Revised Draft EIR, the specific development project previously proposed on Parcel H-3 is no longer part of the Proposed Project. Project-level technical studies prepared for the former RCC project are still relied upon in this Final EIR for the general program-level analysis of the proposed RCC on Parcel H-3, however. As a result, the proposed development of an RCC on parcel H-3 is evaluated in the Final EIR on a program level. When the Port District receives a specific proposal to develop an RCC on Parcel H-3, it will be subject to environmental review pursuant to CEQA Guidelines Section 15168.

This Final EIR is intended to serve as a project EIR for the development of Parcels H-13, H-14, HP-5, and H-17 proposed in Phase I. This Final EIR is intended to serve as a program EIR for all other Phase I development, and all development proposed in Phases II, III, and IV.

### **2.3.32.3 Previous Environmental and Technical Documents**

The CEQA Guidelines (AEP 2008, Section 15150) specifically provide for incorporation of relevant existing information by reference, as a means of reducing repetition in environmental documents for related projects, or where other existing information has been recognized as valid and applicable to the subject project. A substantial amount of environmental information, including previously certified environmental documents, is available and directly applicable to the Proposed Project:

- *Port Master Plan*, prepared by the Port, certified by the California Coastal Commission (CCC) in 1981, amended August 2004
- *Chula Vista General Plan*, prepared by the City of Chula Vista, adopted by the City of Chula Vista December 2005
- *Chula Vista Local Coastal Program Land Use Plan*, prepared and approved by the City of Chula Vista in 1992, and certified by the CCC in 1993
- *Bayfront Specific Plan*, prepared and approved by the City of Chula Vista January 2003
- *BF Goodrich Relocation Agreement Mitigated Negative Declaration* (Case No: IS-99-21), prepared and approved by the City of Chula Vista Redevelopment Agency June 1999
- *Chula Vista Business Park Expansion and Port Master Plan Amendment Final Environmental Impact Report*, certified by the Port October 1997
- *Chula Vista Multiple Species Conservation Plan*, prepared February 2003
- *San Diego Bay National Wildlife Refuge, Sweetwater Marsh, and South San Diego Bay Units Draft Comprehensive Conservation Plan and Environmental Impact Statement*, U.S. Fish and Wildlife Service July 2005

- *San Diego Bay Integrated Natural Resources Management Plan*, U.S. Department of the Navy September 2000
- *Final Environmental Impact Report Midbayfront LCP Re-submittal No. 8*, City of Chula Vista July 1991
- *Final Environmental Impact Report for the Bayfront Specific Plan*, prepared by RECON 1984
- *Final Environmental Impact Report for the City of Chula Vista General Plan Update*, certified by the City of Chula Vista December 2005.

Each of these documents is incorporated by reference. Applicable data and analyses from these environmental and technical reports are summarized, where appropriate, and referenced to the source document.

These environmental and technical reports are available for public review during normal business hours at the District Clerk's Office, San Diego Unified Port District, 3165 Pacific Highway, San Diego, California, 92101.

#### **2.3.42.4 Notice of Preparation and Responses**

The Port published a Notice of Preparation (NOP) on August 12, 2005, describing its intent to prepare a Draft EIR (UPD #83356-EIR-658) for the proposed CVBMP development and amendments to the PMP, Chula Vista General Plan, and Chula Vista LCP (which includes the LUP and Specific Plan). The NOP was mailed to federal, state, and local agencies, as well as surrounding property owners, tenants, CVBMP CAC members, environmental groups, and other interested individuals and groups, to solicit their comments on the scope and content of the environmental analysis to be included in the EIR. Additionally, notice of the NOP availability was mailed to the 1,500 individuals/groups currently on the Port's CVBMP mailing list database. Notice of the NOP availability was also published in the *San Diego Union Tribune*, *San Diego Daily Transcript*, and *Star News* on August 12, 2005. The NOP was made available at the Downtown San Diego Central Library, the Chula Vista Civic Center Library, and electronically on the Port's internet site.

Copies of the August 12, 2005 NOP, the NOP distribution list, and responses to the NOP are contained in *Appendix 2-1* of this EIR. A public scoping meeting was held on September 1, 2005, to further solicit comments on the scope, focus, and content of the EIR. The following is a list of those respondents who submitted comments in response to the NOP within the 30-day period, which began on August 12 and ended on September 12:

- U.S. Fish and Wildlife Service
- U.S. Department of Commerce–NOAA–National Marine Fisheries Service
- California Department of Transportation District 11
- California Department of Fish and Game
- California State Lands Commission
- San Diego County Archaeological Society, Inc.
- Native American Heritage Commission
- Southwest Wetlands Interpretive Association
- San Diego County Office of Education
- South Bay Greens/Green Party of San Diego
- San Diego & Midwestern Railway Partners LLC
- Chula Vista Marina/RV Park
- City of San Diego Land Development Review Division
- San Diego Gas & Electric
- Crossroads II
- Crossroads II, South Bay Forum
- Duke Energy North America
- Laura Hunter et al.: Environmental Health Coalition, San Diego Baykeeper, Local 30 UNITE HERE, South Bay Greens, San Diego Audubon Society, Local 569 IBEW, San Diego County Building and Construction Trades Council, Surfrider Foundation, San Diego Chapter, Friends of the San Diego National Wildlife Refuges, San Diego and Imperial Counties Labor Council
- Theresa Acerro.

## **2.43 Scope of this EIR**

The general areas of environmental impact to be addressed in this EIR are contained in the environmental considerations section of the NOP issued for this EIR by the Port, in accordance with the Port's Procedures for Environmental Review. The comments received in response to the NOP and 2006 Draft EIR were used to assist in determining the scope of this EIR. As specified by the CEQA Statutes and Guidelines (AEP 2008), the impact analysis documented in this EIR evaluates the project's potential to adversely affect a wide range of resources and impact categories, including:

- Land/water use compatibility
- Traffic and circulation
- Parking
- Aesthetics/visual quality
- Hydrology/water quality
- Air quality
- Noise
- Terrestrial biological resources
- Marine biological resources
- Cultural resources
- Paleontological resources
- Hazards and hazardous materials/public safety
- Public services
- Public utilities
- Seismic/geologic hazards
- Hazards and hazardous materials
- Energy
- Housing and population.

This EIR also analyzes the project's growth-inducing and cumulative impacts.

This EIR indicates that the project has the potential to create significant adverse impacts on land/water use compatibility, traffic and circulation, aesthetics/visual quality, hydrology/water quality, air quality, noise, terrestrial biological resources, marine biological resources, paleontological resources, hazards and hazardous materials/public safety, public services, public utilities, seismic/geologic hazards, and energy. These impacts would require mitigation to reduce or avoid impacts.

The analysis for this EIR identified parking, cultural resources, and population and housing as areas of potential environmental concern where no significant adverse impacts are anticipated as a result of the Proposed Project.

In addition, the analysis conducted for the CVBMP considered the potential for the development of the project to indirectly affect the economic condition of the City of San Diego to such an



extent that it might lead to the physical deterioration of that City. The analysis determined that the Proposed Project would not have a substantial negative effect on the economic conditions in the City of San Diego. This issue, for which the effect was found not to be significant, is briefly described in *Chapter 7, Other Required Considerations (Section 7.3)* of this EIR (CEQA Guidelines, Section 15128).

## 2.54 Intended Uses of this EIR

This EIR will be used by the Port, City of Chula Vista, the California SLC, and the CCC in considering the approval of the following discretionary actions necessary for the implementation of the Proposed Project, which include but are not limited to:

- ~~Approval of the Chula Vista Bayfront Master Plan by the Port and the City~~
- Approval of the proposed land exchange by the Port and the SLC
- Adoption of the proposed Port Master Plan Amendment by the Port
- Approval of the proposed General Plan Amendment by the City
- Approval of the proposed City of Chula Vista Bayfront LCP Specific Plan Amendment by the City
- Approval of the proposed LCP LUP Amendment by the City
- Certification of the proposed Port Master Plan Amendment by the CCC
- Certification of the proposed LCP Amendment by the CCC
- Approval and issuance of Coastal Development Permits for the specific CVBMP project components by the Port and City
- Approval of Port tenant projects and lease agreements for specific CVBMP development components by the Port
- Approval by the Port and City of Chula Vista and its Redevelopment Agency for financing of public improvements in the project area
- Approval of Development Agreement and/or Owner Participation Agreement by the City and/or Redevelopment Agency
- Approval of Habitat Loss and Incidental Take Permit (HLIT)
- Amendment to the City of Chula Vista MSCP Subarea Plan
- Approval of Port Capital Development Program funds for the parks, streets, utilities, and future public improvements in the project area by the Port.

In addition, other agencies may use the information contained in this EIR when considering issuance or authorization of the requisite permits for construction of the specific development projects addressed herein. Agencies expected to use this EIR in their decision-making process include but are not limited to the following:

- City of Chula Vista
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Department of Commerce, National Marine Fisheries Service
- California Coastal Commission
- California State Lands Commission
- California Department of Transportation (Caltrans)
- California Department of Fish and Game
- Regional Water Quality Control Board Region 9
- San Diego County Department of Environmental Health.

## 2.65 Organization of this Report

~~This Volumes 2 and 3 of the Final EIR is~~ are organized to provide a comprehensive project analysis (for certain Phase I components) and a programmatic analysis (for remaining Phase I components, as well as all Phases II through IV components) of the potentially significant environmental impacts, mitigation measures, and alternatives for the proposed CVBMP development. In order to describe the direct, indirect, and cumulative impacts, mitigation measures, and alternatives for the CVBMP, this EIR is organized as follows:

- *Chapter 3, Project Description*—describes the project location, environmental setting, and project description of the Proposed Project elements.
- *Chapter 4, Environmental Analysis*—provides a programmatic and project level analysis of the significant environmental impacts and mitigation measures for the Proposed Project, for land/water use compatibility, traffic/circulation, parking, urban design/visual quality, hydrology/water quality, air quality, noise, terrestrial biological resources, marine biological resources, cultural resources, paleontological resources, hazards and hazardous materials/public safety, public services and utilities, seismic/geologic hazards, energy, and population and housing.
- *Chapter 5, Alternatives*—discusses five alternatives, including a No Project Alternative.

- *Chapter 6, Cumulative Impacts*—includes a comprehensive review of past, present, and reasonably foreseeable future cumulative projects and an analysis of their potential cumulative effects on the environment.
- *Chapter 7, Other Required Considerations*—includes growth-inducing impacts, unavoidable and irreversible significant environmental effects, and effects found not to be significant.
- *Chapter 8, Citations.*
- *Chapter 9, Agencies, Organizations, and Persons Contacted.*
- *Chapter 10, EIR Preparation and Certification.*
- *Chapter 11, Acronyms and Abbreviations.*
- *Appendices*—includes various technical studies and correspondence prepared for the CVBMP, as listed in the Table of Contents.

The identified agency (Port/City) is responsible for enforcing and verifying that each mitigation measures is implemented and required; however, each project applicant/developer shall be responsible for implementing the mitigation measures as required by their respective projects.

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## CHAPTER 3 PROJECT DESCRIPTION

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### 3.1 Project Location

The Proposed Project area is located within Port tidelands and the City of Chula Vista in San Diego County, situated on the southeastern edge of the San Diego Bay (*Figure 3-1*) and located approximately 1.5 miles west of the City's traditional commercial downtown area (Third Avenue). The project site (also referred to as the planning area) encompasses approximately 556 acres that includes 497 acres of land area and 59 acres of water area. The planning area is generally bordered by the Sweetwater Marsh NWR, the mouth of the Sweetwater River, and the jurisdictional boundary of National City on the north. Interstate 5 (I-5), and commercial development along Bay Boulevard are to the east. Palomar Street and the South Bay Unit of the San Diego Bay National Wildlife Refuge (SDBNWR), which includes the salt evaporation ponds, at the southern end of San Diego Bay, border the planning area to the south and west.

The Proposed Project site is located in an unsectioned portion of Township 18 South, Range 2 West, of the Imperial Beach and National City, California U.S. Geological Survey (USGS) 7.5-minute topographic map series quadrangles. *Figure 3-2* shows the aerial photograph of the project site.

The following document is referenced within this section and attached to the EIR as an appendix:

Draft Port Master Plan Amendment Text and Graphics (March 2008), *Appendix 3.4-1*.

### 3.2 Environmental Setting

For planning purposes, the project site has been organized into three distinct districts. From north to south, these include the Sweetwater, Harbor, and Otay Districts, respectively (*Figure 3-3*). The Sweetwater District, approximately 130 acres, includes the northern section of the project site just south of the Sweetwater Marsh NWR and north of the current boatyard site. The Harbor District, approximately 282 acres, includes the middle section of the project site, between the boatyard on the north and J Street/Marina Parkway to the south. The Otay District, approximately 144 acres, includes the southern section of the Proposed Project site, south of J Street to Palomar Street.

Topographically, the Proposed Project site is relatively flat, although a slightly elevated area is located in the Sweetwater District. The surface elevation of the site ranges between approximately 5 and 25 feet above mean sea level. The Sweetwater District is undeveloped and is currently composed primarily of fallow fields. The majority of vegetation is generally ruderal with small areas of disturbed native habitats, including California coastal sage scrub. The Harbor

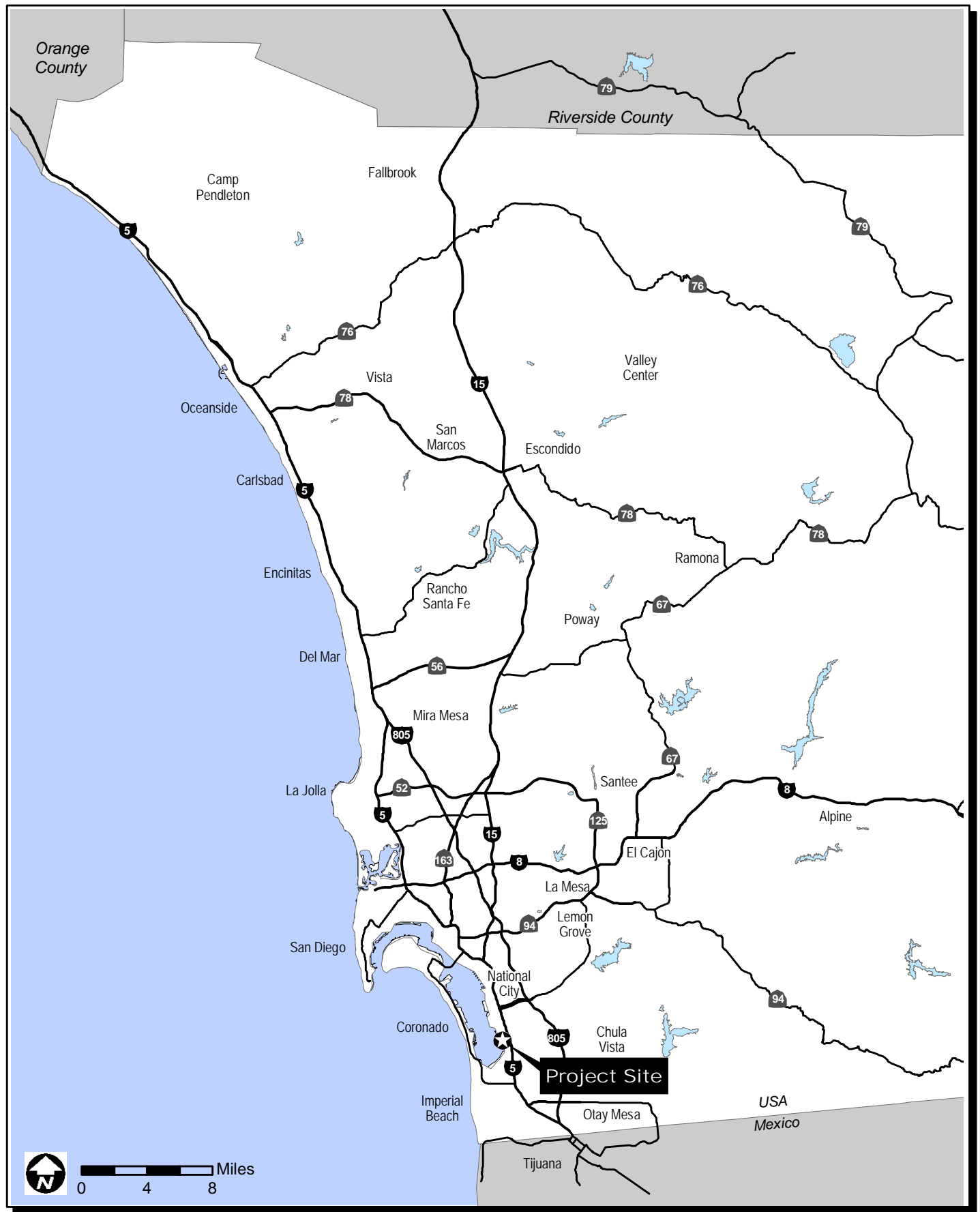
and Otay Districts are generally developed and consist of limited areas designated as jurisdictional waters.

Marine and biological resources are abundant in the Proposed Project area, primarily due to its proximity to San Diego Bay and the estimated 3,940-acre SDBNWR. The SDBNWR preserves mudflats, salt marsh, submerged lands, and eelgrass beds, which provide a fertile breeding ground for a wide range of species, including many designated threatened and endangered species. The 316-acre Sweetwater Marsh NWR, the Chula Vista Nature Center, located adjacent to and north of the Proposed Project site, and the 17-acre F & G Street Marsh located between the Sweetwater and Harbor Districts are all components of the larger SDBNWR. The unique ecosystem characteristics of the south San Diego Bay area make it a resting area on the Pacific Flyway for a wide range of resident and migratory shore birds and water fowl, as well as a fertile breeding ground for a range of aquatic and land species.

A wide range of land uses currently exist within the project boundary. These include commercial, retail, industrial, warehousing, natural open space, marinas, active and passive parks, marine/visitor-related uses, bikeways, transit corridor, and roads. San Diego Gas & Electric (SDG&E) transmission lines and 40-foot-wide Coronado Railroad track easements extend the entire length of the project site on its eastern edge. The majority of developed use areas currently accessible by the public are located within the Harbor District. The Otay District is currently characterized by industrial uses and primarily closed to the public. The Sweetwater District is generally undeveloped.

The Harbor District encompasses the greatest diversity of existing uses. The Marina View, Bayside and Bayfront Parks; South Bay Boatyard; Chula Vista harbor, waterfront restaurants, yacht club, RV resort, and former industrial and parking facilities associated with the former Goodrich South Campus are all located in this area, as are the now vacant, former AFS Industries warehouses located off Sandpiper Way north of the harbor. The harbor includes two marinas, primarily used for recreational boat berthing. One marina, occupying about five acres of land on Marina Parkway, has 559 slips in the north half of the harbor. The other marina, south of the first, occupies almost four acres of land and has 352 slips. The harbor also contains a boat launching ramp, with landscaping, parking, and picnic facilities located nearby. The boatyard, marinas, and RV Park uses are currently under long-term leases with the Port: the Chula Vista Marina and RV Resort leases expire in 2021; the California Yacht Marina lease expires in 2029; and the South Bay Boatyard lease expires in 2020.

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Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Regional Location

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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Project Location on Aerial Photograph

FIGURE

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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Proposed Project Districts

FIGURE

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The Otay District currently consists primarily of industrial facilities such as the SDG&E 230-kilovolt (kV) transmission lines, the SDG&E electrical switchyard with associated rights-of-way (ROWs), and the South Bay Power Plant (SBPP). The SBPP facility, or power block, includes power islands, air-cooled condensers, parking areas, other ancillary facilities, and fuel storage tanks abutting the south side. At the southernmost end of the Otay District is the former Liquefied Natural Gas (LNG) site. Remnants of aboveground storage tanks (ASTs) still exist at this location.

Access to the Bay and shoreline amenities, including the marinas and boat launch, is complicated, as there is currently no easily recognizable entrance to the Bayfront. Primary vehicle access to bayshore facilities is provided (from north to south) via E, F, and J Streets. Freeway exits are available from I-5 at E, H, J, and L Streets. Views of the Bay are limited from I-5, primarily due to a lack of elevated viewing areas and intervening maritime, industrial, and transportation development between the freeway and the bayshore. From the E Street entrance, railroad tracks and trees along Bay Boulevard obscure views of the Bay and undeveloped land in the northern portion of the site. Power lines in the area also dominate views to and from the project site. Travelers on Lagoon Drive from E or F Streets pass large industrial facilities, including the South Bay Boatyard, on their way to the shoreline and parks. Chain link fencing and barbed wire encircle a number of industrial parcels. Undeveloped or vacant lots and warehouse structures also exist. Large scale development, including the Goodrich corporate office and the Community Health Group office buildings, obstructs views of the Bay from some areas to the east. Views of the water are visible only from E and F Streets, Marina Parkway near J Street, and Bay Boulevard across from SBPP.

Immediately to the east of the I-5 is Chula Vista's Urban Core. The downtown area is east of the project site, and is home to many families and local businesses. Residents of this community frequent the waterfront parks on the project site. However, there is currently no single street or bike path system to connect the Urban Core with the Bayfront's many public use amenities. Land uses immediately adjacent to the project site include restaurants and a motel along Bay Boulevard north of F Street/Lagoon Drive, the Goodrich North Campus, commercial and professional office and medical buildings (Marina Gateway Business Park) along Bay Boulevard north of J Street, and the County Health Department across from the SBPP.

The project site includes recorded hazardous material releases at several Goodrich industrial locations, historic resources, and sensitive paleontological formations. These environmental issues and resources are discussed in more detail in *Sections 4.10, Cultural Resources; 4.11, Paleontological Resources; and 4.12, Hazards and Hazardous Materials/Public Safety.*

### 3.3 Planning Process Overview

The Chula Vista Bayfront Master Plan (CVBMP) is a joint planning effort of the Port, City, and Pacifica Companies, a private developer that currently has rights to build on the northern portion of the Bayfront, or Sweetwater District, on an area previously known as the Midbayfront. Land use planning responsibility for the master plan area is divided between the Port and City. The majority of the project site is located in the Port's land use jurisdictional authority; therefore, the Port is serving as the lead agency for CEQA purposes. Approvals for areas within the land use jurisdictional authority of the City are the responsibility of the City. *Figure 3-4* shows the current Port and City's land use jurisdictional authority boundaries with respect to the project site. The Port is identified as the lead agency pursuant to CEQA compliance for this project; the City is identified as a responsible agency (CEQA Section 21002.1.d).

As stated in *Chapter 2, Introduction* of this report, the CVBMP planning process was initiated in January 2003 and included an extensive award-winning public participation program, which was recognized for excellence by the San Diego Section of the American Planning Association. The land use plans (then referred to as Land Use Plan Options B and C ) were based on extensive CVBMP Citizens Advisory Committee (CAC) and community input and approved by the Port's Board of Port Commissioners and the Chula Vista City Council/Redevelopment Agency in May 2004. Plans further evolved during Phase II of the master planning process that ended in August 2005 into master plan concepts that identified locations and development program/height ranges and phasing for specific land uses. The intent was to provide maximum flexibility to attract development and to facilitate timely implementation of the master plan components.

This report analyzes one master plan concept, the Sweetwater Park Plan (previously Plan A Option 2), referred to as the Proposed Project. In addition to the Proposed Project, this report analyzes a Harbor Park alternative (previously referred to as Plan A), and a No Land Trade alternative (previously referred to as Plan B) in greater detail than is normally required, as more fully described in *Chapter 5, Alternatives* of this report.

If approved, the CVBMP will guide the development of the Bayfront over the next 24 years. The Proposed Project emphasizes development of waterfront amenities to enhance the Bayfront's appearance and improve access and connection to the Chula Vista Urban Core and neighborhoods to the east. The mix of proposed land uses include hotel and conference space, retail and commercial recreation, office, residential, industrial business park, cultural, marina, RV Park, natural open space, and parkland. Proposed water uses include reconfiguration of the existing marina basin and boat slips, a new commercial harbor, and realignment of the existing navigation channel. Some of these uses, such as the marinas, already exist in the project site but will be improved.





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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Existing Port & City Jurisdictions

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### 3.4 Project Description

The Proposed Project (Sweetwater Park Plan) comprises the following components:

- Amendments to the Port Master Plan (PMP); the City of Chula Vista General Plan; and the City's Local Coastal Program (LCP), which includes the Land Use Plan and Bayfront Specific Plan; and Multiple Species Conservation Program (MSCP) Chula Vista Subarea Plan
- A land exchange between the Port and Pacifica Companies (a private developer)
- Redevelopment of the Sweetwater, Harbor, and Otay Districts with a variety of uses: park, open space, ecological buffers, cultural, recreational, residential, hotel and conference space, mixed-use office/commercial recreation, and retail. ~~This includes specific development projects proposed by the Resort Conference Center (RCC) developer and a private residential developer. Redevelopment will also~~ may potentially include a resort and conference center and proposed water uses such as a reconfigured marina basin and boat slips, a new commercial harbor, and realignment of the existing navigation channel.
- Redevelopment of the roadway system and infrastructure serving the Proposed Project area both on site and off site
- Demolition and/or relocation of existing uses to allow for the above redevelopment to occur subject to lease agreements.

Described below are the discretionary actions necessary to implement the Proposed Project including applicable planning document amendments, an overview of the major project characteristics, a detailed description of the project components planned for each parcel, and the Proposed Project roadway and infrastructure system.

#### 3.4.1 Discretionary Actions

Implementation of the Proposed Project will require discretionary approvals by State and local agencies as shown in *Table 3-1*. Discretionary approvals include but are not limited to amendments to the PMP (adopted in 1981 and last amended in 2004<sup>9</sup>), the Chula Vista LCP (which includes the LUP and Specific Plan), the City of Chula Vista General Plan, and the City of Chula Vista's MSCP, coastal development permits, a land exchange, and tentative maps.

**TABLE 3-1  
Project Approvals**

<b>Authorizing Jurisdiction or Agency</b>	<b>Action</b>
<b>San Diego Unified Port District — Lead Agency</b>	
<del>Chula Vista Bayfront Master Plan</del>	<del>Approval</del>
Port/Private Developer Land Exchange	Approval
Port Master Plan: Planning District 7 Chula Vista Bayfront Precise Plan	Amendment
Coastal Development Permit	Approval
Lease Agreements, Amendments, and Conceptual Design Review	Approval
<del>Financing Agreement</del>	<del>Approval</del>
<del>Memorandum of Understanding</del>	<del>Approval</del>
<del>Joint Powers Agreement</del>	<del>Approval</del>
<b>City of Chula Vista <del>Redevelopment</del> Agency</b>	
<del>Chula Vista Bayfront Master Plan</del>	<del>Approval</del>
Chula Vista General Plan Amendment (including Bayfront Area Plan)	Amendment
Land Use Plan of the Chula Vista Local Coastal Program	Amendment
Bayfront LCP Specific Plan	Amendment
Coastal Development Permit	Approval
Habitat Loss Incidental Take Permit	Approval
Chula Vista MSCP Subarea Plan Amendment	Amendment
Tentative Map	Approval
<del>Financing Agreement</del>	<del>Approval</del>
<del>Memorandum of Understanding</del>	<del>Approval</del>
<del>Joint Powers Agreement</del>	<del>Approval</del>
<b>City of Chula Vista <del>Redevelopment</del> Agency</b>	
<del>Bayfront/Town Centre I Redevelopment Plan</del>	<del>Amendment</del>
<del>Owner Participation Development Agreement and/or Owner Participation Agreement (Pacifica)</del>	<del>Approval</del>
<b>California State Lands Commission</b>	
Port/Pacifica Land Exchange	Approval
Dredging Permit	Approval
<del>Acquisition of Goodrich/Marina Wayplay wedge</del>	<del>Approval</del>
<b>California Coastal Commission</b>	
Port Master Plan Amendment	Certification
City Local Coastal Program Amendment	Certification
<b>U.S. Army Corps of Engineers</b>	
Clean Water Act Section 404 Permit	Approval
Section 10 Rivers and Harbor Act Permit	Approval
<b>U.S. Fish and Wildlife Service</b>	
Chula Vista MSCP Subarea Plan Amendment	Amendment
<b>California Department of Transportation</b>	
Right-of-Way Encroachment Permit	Approval
<b>California Department of Fish and Game</b>	
Title 14 of California Code of Regulations 1600 permit	Approval
MSCP Chula Vista Subarea Plan Amendment	Amendment
<b>Regional Water Quality Control Board</b>	
Clean Water Act Section 401 Permit	Approval

The following discussion describes the relationship between the agencies, their existing planning documents, and how they relate to the Proposed Project.

#### **3.4.1.1 State Lands Commission (Land Exchange)**

The California State Legislature created the SLC in 1939 as an independent body. The SLC manages and protects important natural and cultural resources on some 4.5 million acres of land held in trust for the people of California, and ensures the public's right to access these lands. Pursuant to Division 6 of the California Public Resources Code, the SLC has jurisdiction and control over two types of property—sovereign lands and school lands. Sovereign lands include the water and beds of California's naturally navigable rivers, lakes, and streams as well as a three-mile-wide section of tidal and submerged lands along the coastline, including offshore islands, bays, estuaries, and lagoons. The State holds these lands in trust for all the people of the State of California for the public trust purposes of water-related commerce, navigation, fisheries, recreation, and ecological preservation. The SLC also manages 585,000 acres of school lands granted to the state by the federal government to support public education. No State Trust school lands occur within the project site.

The SLC is a Responsible and/or Trustor Agency for any and all projects that could directly or indirectly affect sovereign lands, their accompanying public trust resources or uses, and the public easement in navigable waters.

##### **a. Land Exchange**

Assigned by the State Legislature to act as trustee for administration (pursuant to Chapter 67, Statutes of 1962, as amended, the Port District Act), the Port manages and protects the State's coastal tidelands and submerged lands surrounding San Diego Bay for the people of the State of California. These state lands are held in public trust for purposes of water-related commerce, navigation, fisheries, recreation, and ecological preservation, for which private development, including residential use, is not constitutionally allowed. The Port, as a Trustee of these sovereign lands, must ensure that the specific uses proposed in the plan are consistent with the provisions of the relevant granting statutes and the Public Trust Doctrine.

In unique situations the exchange of trust lands for non-trust lands is authorized pursuant to Public Resources Code Section 6307, which requires the abandonment of the public trust be consistent with the purposes of the trust. Section 6307 authorizes the Commission to exchange lands of equal value, whether filled or unfilled, whenever it finds that it is "in the best interests of the state, for the improvements of navigation, aid in reclamation, for flood control protection, or to enhance the configuration of the shoreline for the improvement of the water and upland, on navigable rivers, sloughs, streams, lakes, bays, estuaries, inlets, or straits, and that it will not substantially interfere with the right of navigation and fishing in the waters involved."

Recently, new legislation, Senate Bill 365 (Ducheny), was signed by the Governor on October 6, 2005. This new piece of legislation repealed former Section 6307 of the Public Resources Code and enacts a new Section 6307. New Section 6307 substantially broadens the Commission's exchange authority, and provides that the Commission may enter into a land exchange for any of the following purposes:

- To improve navigation or waterways
- To aid in reclamation or flood control
- To enhance the physical configuration of the shoreline or trust land ownership
- To enhance public access to or along the water
- To enhance waterfront and nearshore development or redevelopment for public trust purposes
- To preserve, enhance, or create wetlands, riparian or littoral habitat, or open space
- To resolve boundary or title disputes.

In addition to the exchange furthering these purposes, the following additional conditions must be met:

- The lands or interests in lands to be acquired in the exchange will provide a significant benefit to the public trust.
- The exchange does not substantially interfere with public rights of navigation and fishing.
- The monetary value of the lands or interests in lands received by the trust in exchange is equal to or greater than that of the lands or interests in lands given by the trust in exchange.
- The lands or interest in lands given in exchange have been cut off from water access and no longer are in fact tidelands or submerged lands or navigable waterways, by virtue of having been filled or reclaimed, and are relatively useless for public trust purposes.
- The exchange is in the best interests of the state.

In an effort to improve land use compatibility in the Sweetwater District by moving proposed residential uses away from sensitive resources, and to enhance the synergy of proposed uses in the Harbor District, the Proposed Project includes a land exchange between the Port and a private developer, which, if approved by the SLC, would sever the trust restrictions on certain existing Port properties and would enable residential development to occur on existing Port Trust property within the Harbor District. The land exchange would also enable non-trust-related hotel/retail/office uses to be developed on existing Port properties located in the Harbor District. The land exchange would include the transfer of up to 97 acres of land (Parcels S-1, S-3, SP-2, SP-3, and most of SP-1 and S-2) in the Sweetwater District from a private developer to the Port, in

exchange for up to 33 acres of land (Parcels H-13, H-14, H-15, and HP-5) in the Harbor District from the Port to a private developer. The land ~~under option held~~ by a private developer in the City's land use jurisdictional authority would transfer to Port trusteeship and land use jurisdictional authority; likewise, the lands currently under Port trusteeship and land use jurisdiction would transfer to a private developer for development within the City's land use jurisdiction. *Figure 3-5* shows the lands involved in the proposed land exchange.

The proposed land exchange between the Port and a private developer is a major component of the Proposed Project. On March 2, 2010 the Board of Port Commissioners approved the Land Exchange Agreement per CEQA Guidelines 15004(b)(2)(A). Because the ~~Proposed Project, including the anticipated land transfer,~~ would affect the State's lands. ~~Therefore,~~ the SLC is required to approve or disapprove the land exchange between the Port and a private developer, pursuant to Public Resources Code Section 6307.

#### **3.4.1.2 Port Master Plan Amendment**

The PMP primarily governs the lands that the State Legislature has conveyed to the Port to act as trustee for administration, and upon which the Port has regulatory duties and proprietary responsibilities. The State Legislature has granted approximately 33.1 miles of San Diego's shoreline to the Port, which includes approximately 5,483 acres of combined tidelands and submerged lands, which are covered by the PMP. The CCC certified the original PMP on January 21, 1981. Since its inception, there have been periodic amendments to the PMP near or within the Proposed Project site, including a 1985 amendment in the project area to allow for the extension of the Chula Vista Bayside Park; a 1998 amendment to allow for the expansion of the Chula Vista Industrial Business Park land use designation; and most recently, two 2001 amendments—one to allow for mitigation at the D Street Fill area, and one to allow for redevelopment of the South Bay Boatyard site.

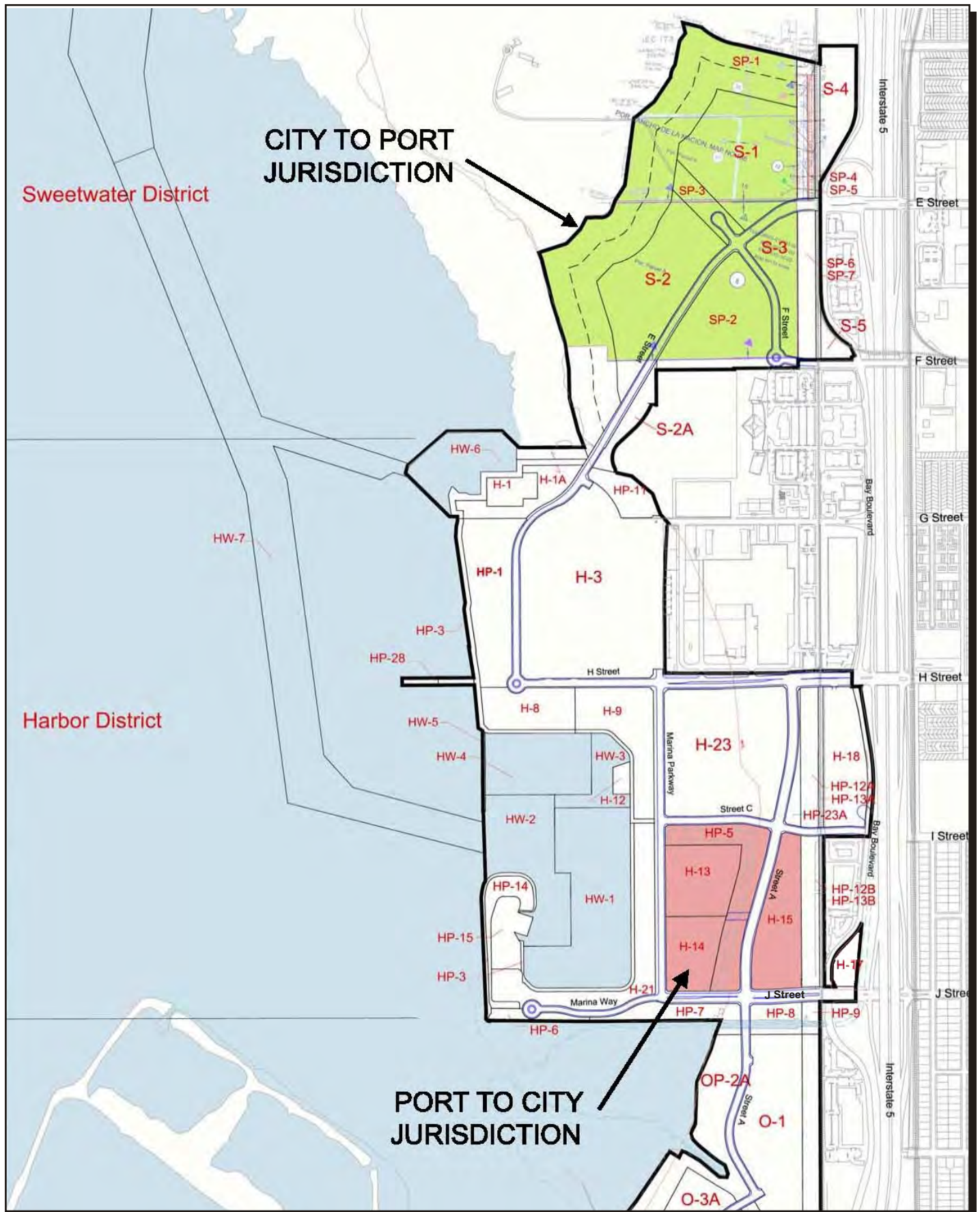
The overall goal of the PMP is to develop, protect, enhance, and restore the quality of the natural coastal zone environment, and to ensure physical and visual access to the shoreline. Port development seeks to minimize substantial adverse environmental impacts, minimize potential traffic conflicts between vessels in the port, give highest priority to the use of existing land space within harbors for port purposes, and provide for a full array of beneficial activities including recreation and wildlife habitat uses. Social and economic needs of the people of the state are taken into account as well.

For planning purposes, the PMP is divided into 10 planning areas, or districts. The Proposed Project site is located in Planning District 7, Chula Vista Bayfront. Planning District 7 includes approximately 4.8 miles of the Chula Vista shoreline, including approximately 1,690 acres of tidelands and submerged lands, only a portion of which is located within the project boundary. Planning District 7 is further subdivided into nine planning subareas.

As part of the Proposed Project, a PMP Amendment has been prepared to update Port and City coastal land use jurisdictional boundaries and to facilitate proposed development. The proposed amendments to the PMP Precise Plan for Planning District 7, Chula Vista Bayfront, are discussed in more detail in *Section 4.1, Land/Water Use Compatibility* of this report.

The Proposed Project includes the following changes to the PMP:

- Incorporating approximately 97 acres of land at the north end of District 7, formerly under the City's land use jurisdiction, within the Port's trusteeship and land use jurisdiction and removing up to 33 acres of land from the PMP that would convert to City land use jurisdiction (and be included in the City's LCP) as a result of the proposed land exchange with a private entity.
- Revising the Precise Plan concept for Chula Vista Bayfront, Planning District 7 to reflect the Proposed Project components, including revising the precise plan text and map, acreage tables, planning subareas map, and project list.
- Revising the allowable uses under certain land use classifications.
- Updating other portions of the PMP as appropriate to reflect the Planning District 7 changes, including incorporating an additional 194 acres of land area previously not included in the PMP, resulting from past land acquisitions.
- Revised the maximum height allowed for the RCC to be 240 feet above ground level.
- **Establishment of a maximum number of hotel rooms allowed to be constructed within the boundary of the Chula Vista Bayfront Master Plan which will be 3,100 rooms with a maximum number of 2,850 hotel rooms within that portion of the CVBMP covered by the PMPA ("PMPA Cap").**



SOURCE: Port of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Proposed Land Exchange and Resulting Port  
 and City of Chula Vista Jurisdictions**

**FIGURE**

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The Proposed Project would result in changes to the broader PMP land and water use categories. These changes are summarized below in *Table 3-2*.

**TABLE 3-2**  
**Proposed Port Master Plan Amendment**  
**Land and Water Use Allocation Summary**

Land and Water Use Category	Existing (acres)	Proposed (acres)	Net Change (acres)
Commercial	756.5	758.2	+1.7
Industrial	1,424.1	1464.0	+39.9
Public Recreation	961.5	<del>1,123.6</del> 1,091.1	<del>+162.1</del> 129.6
Conservation	1,457.8	<del>1,533.5</del> 1,566.0	<del>+75.7</del> 108.2
Public Facilities	617.2	628.7	+11.5
Military	151.5	151.5	N/A
<b>TOTAL</b>	<b>5,368.6</b>	<b>5,659.5</b>	<b>+290.9</b>

As a result of the proposed PMP Amendment, a total of 1,980 acres of Chula Vista Bayfront will be allocated to commercial, industrial, public recreation, conservation and public facilities activities. The changes to the PMP land use and water allocations for the Chula Vista Bayfront as a result of the Proposed Project are summarized below in *Table 3-3*.

**TABLE 3-3**  
**Land and Water Use Allocation Summary**  
**For Chula Vista Bayfront: Planning District 7**

Land and Water Use Category	Existing (acres)	Proposed (acres)	Net Change (acres)
Commercial	82.5	84.2	+1.7
Industrial	93.6	133.5	+39.9
Public Recreation	24.8	<del>186.9</del> 154.4	<del>+162.1</del> 129.6
Conservation	1,268.5	<del>1,344.2</del> 1,376.7	<del>+75.7</del> 108.2
Public Facilities	220.1	231.6	+11.5
<b>TOTAL</b>	<b>1,689.5</b>	<b>1,980.4</b>	<b>+290.9</b>

*Figure 3-6* illustrates the proposed amendments to the PMP Planning District 7 Chula Vista Bayfront Precise Plan map. *Appendix 3.4-1* of this report contains the entire draft PMP Amendment text and graphics for the Proposed Project.

### 3.4.1.3 Chula Vista General Plan Amendment

The Chula Vista General Plan defines the framework by which the City's physical and economic resources are to be managed and used in the future. The General Plan guides future development within the existing City limits, and also addresses areas within the City's Sphere of Influence and other portions of the General Plan area beyond City limits. The General Plan directs all future

development; therefore, any decision by the City affecting land use and development (e.g., zoning) must be consistent with the General Plan as required by State Law. An action, program, or project would be deemed consistent with the General Plan if, considering all of its aspects, it complies with the objectives and policies set forth in the General Plan.

On December 13, 2005, the Chula Vista General Plan was last comprehensively updated to incorporate development into the year 2030. The General Plan Update is organized into four planning areas (Northwest, Southwest, Bayfront, and East) and a number of subareas. Due to ongoing planning efforts, the General Plan Update did not change the land use designation for the Bayfront Planning Area. The Proposed Project addressed in this report will require an amendment to the Chula Vista General Plan's Bayfront Area Plan. Currently, the General Plan land use designation for the Bayfront area includes a large-scale residential and commercial project in the Sweetwater District—formerly referred to as the Midbayfront area—and industrial and commercial uses in the Harbor and Otay District areas.

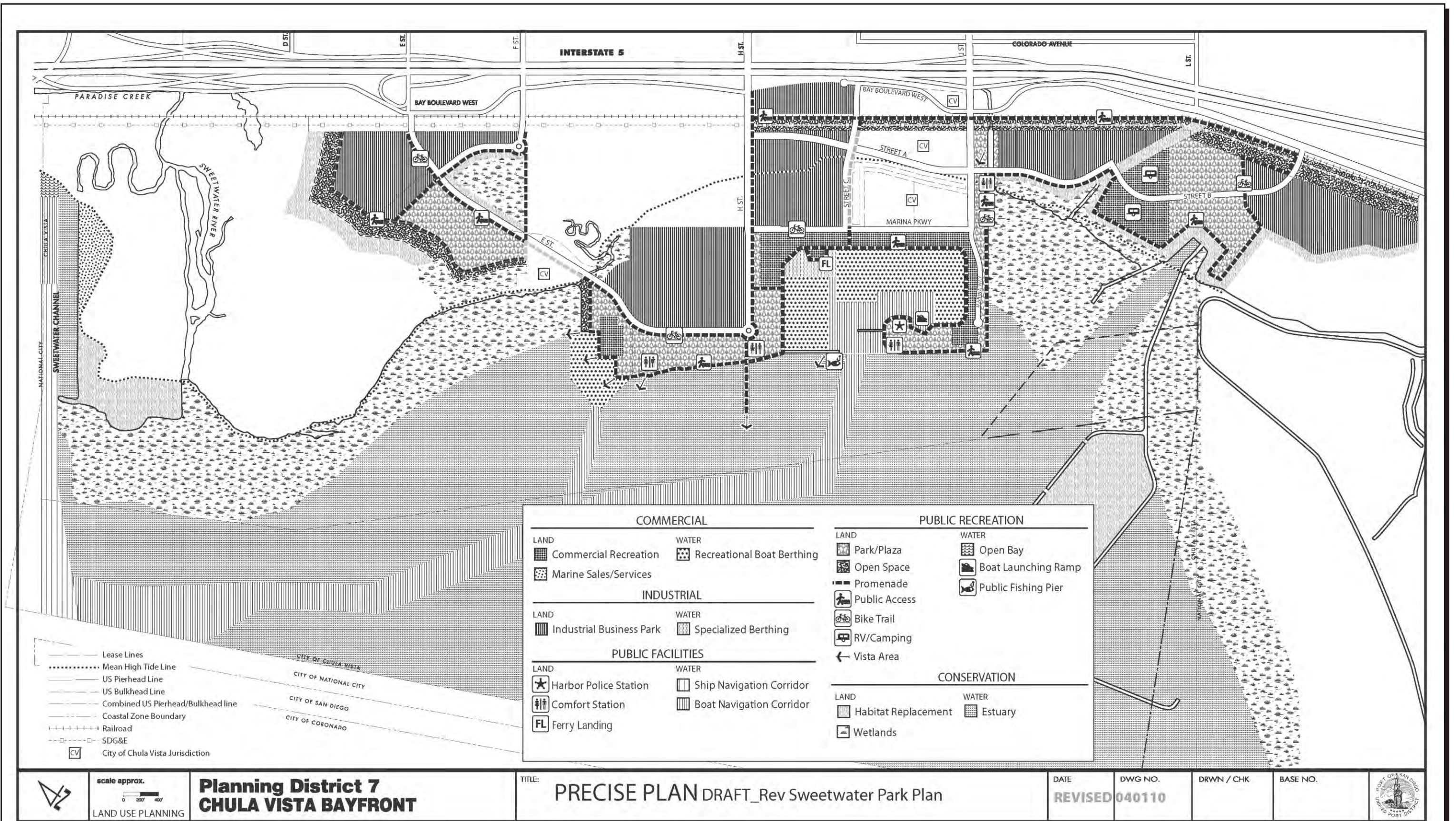
As discussed above in *Section 3.4.1.1* regarding the SLC, the project proposes to move the residential land use designation from the Sweetwater District to the Harbor District on existing State Trust Lands. Since residential development is not allowed on Trust property, a land exchange between a private developer and the Port is required for the project as proposed. If the land exchange is approved, the land use jurisdictional boundary between the Port and the City would shift accordingly. Thereafter, proposed residential uses would be developed by a private developer on those exchanged lands brought within the City of Chula Vista's jurisdiction. The lands adjacent to the wildlife refuge in the Sweetwater District would be transferred from the City to the Port and would be designated for mixed-use office/commercial recreation, hotel, and park and open space use. The proposed land exchange would require amendments to the Chula Vista General Plan and LCP, and the Port's PMP, which would include changes in land use designations.

The Proposed Project includes the acquisition of parcel H-17 by the City. Subject to this acquisition, Phase I development within the Harbor District requires a General Plan Amendment to re-designate the fire station site on parcel H-17 from Commercial Visitor to Public/Quasi-Public (P-Q) zone is proposed to allow for a public use within the Bayfront Master Plan.

The proposed amendments to the City's General Plan are consistent in format and structure to the recently adopted General Plan Update and are limited to the Proposed Project planning area, which covers both Port and City land use jurisdictional boundaries. Adoption of the General Plan amendment will provide the required consistency (as discussed in *Section 4.1 Land/Water Use Compatibility*) between the Proposed Project and the General Plan document that guides the land use development for all properties within the City's planning area.



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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Proposed Amendments to the Planning District 7 Chula Vista Bayfront Precise Plan (Port Master Plan)

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#### 3.4.1.4 City of Chula Vista Local Coastal Program Amendment

The Chula Vista LCP (which includes the LUP and Bayfront Specific Plan) was approved by the City of Chula Vista in 1992 and certified by the CCC in 1993. The LUP guides continuing development within the Bayfront coastal zone area by providing a detailed plan for the orderly growth, development, redevelopment, and conservation of coastal resources. The LUP outlines the specific permitted land use types and intensity of development, as well as objectives and policies related to future development in the Chula Vista Local Coastal Zone. The project site is situated entirely within the Chula Vista Local Coastal Zone (*Figure 3-7*). As currently approved, the LUP anticipates intensive development in the Sweetwater District including hotel, retail, parking, restaurant, and commercial recreation uses, as well as residential use, for which approximately ~~1,100~~ 1,000 residential units could be developed. The Proposed Project area encompasses several Coastal Zone Subareas discussed in greater detail in *Section 4.1, Land/Water Use Compatibility*. Because the project would modify land use designations, intensities and boundaries within the LCP, an amendment to the LCP is required and included as part of this project. Subject to the acquisition of parcel H-17 by the City, an LCP Amendment is also required to change the designation of the fire station site on parcel H-17 to Public/Quasi-Public (P-Q) in the City's LCP. The LCP amendment includes both an LUP and the implementing ordinance or resolution in the form of the Specific Plan. The only change to land uses proposed for the LUP and Specific Plan are within the Proposed Project boundary. No land use changes are proposed for the LCP area that is outside the Proposed Project boundary.

#### 3.4.1.5 Specific Plan/Rezone

Included in this report is an assessment of the proposed amendments to the Chula Vista Bayfront Specific Plan. The City intends to adopt the Specific Plan as the Implementing Program to amend the City's adopted LCP (pursuant to the California Government Code Sections 65450–65457). If approved, the Specific Plan would specify the permitted land uses as well as the standards and criteria for development and conservation of resources within the area covered by the Proposed Project. More precisely, it would describe the proposed distribution, location, extent and intensity of major infrastructure components necessary to support the land uses set forth in the Proposed Project. Such infrastructure components include public and private transportation facilities, sewage, water, drainage, solid waste disposal infrastructure, and energy facilities. In addition, the Specific Plan would include standards and criteria by which development consistent with the Proposed Project would proceed within the City's land use jurisdictional authority, as well as standards for the conservation, development, and utilization of natural resources, when applicable. The Bayfront Specific Plan would apply zoning to properties within the project site's boundary that are under the City's jurisdiction only and would not apply to Port Trust lands. Individual projects under the Proposed Project will require the approval of a tentative map, including the residential development proposed by a private developer.

### 3.4.1.6 City of Chula Vista MSCP Subarea Plan Amendment

With the land exchange, Parcels H-13, H-14, H-15, and HP-5 will be transferred to the land use jurisdictional authority of the City. ~~They~~ Parcels H-13, H-14, and HP-5 are currently mapped in the MSCP Subarea Plan as “Other Agency – Preserve Planning Efforts.” Parcel H-15 is currently mapped as a “Development Area” outside of “Covered Projects” and the Proposed Project does not propose to change that designation. The land exchange would also transfer lands within Parcels S-1, S-2, S-3, SP-1, SP-2, and SP-3 from City land use jurisdiction to Port land use jurisdiction. These lands are currently shown in the Subarea Plan as “Development Area” and are identified as being outside of “Covered Projects.”

The Proposed Project will require an amendment to the MSCP Subarea Plan to adjust the boundaries of the plan to correspond to the change in land use jurisdictional boundaries. The amendment will change the designation of Parcels H-13, H-14, H-15, and HP-5 from “Other Agency – Preserve Planning Efforts” to “Development Area” outside of “Covered Projects,” and will change the designation of lands within Parcels S-1, S-2, S-3, SP-1, SP-2, and SP-3 from “Development Area” to “Other Agency – Preserve Planning Efforts.” The proposed amendment must be approved by the City of Chula Vista, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game.

As a result of the proposed amendment and land use authority change, development within the future City land use jurisdiction on Parcels H-13, H-14, H-15, and HP-5 will be subject to a Habitat Loss and Incidental Take (HLIT) Permit.

### 3.4.2 Project Overview

Prominent characteristics of the Project include the establishment of three districts (Sweetwater, Harbor, and Otay), development of a RCC and other hotels, a signature park and other park and open space areas, a large ecological buffer, up to 1,500 residential units, mixed-use office/commercial recreation, retail, cultural uses, and reconfiguration of the existing Chula Vista Harbor. Several actions, including undergrounding of existing transmission lines, remediation of the former Goodrich South Campus land area, and demolition/relocation of the SDG&E switchyard (subject to the California Energy Commission (CEC) and California Public Utilities Commission (CPUC) actions), are being and/or would be separately addressed by the regulatory agencies responsible for their review and approval. Background information is provided for these related, but separate, projects under *Section 3.4.9*.

For ease in referencing the proposed uses, each development component has been assigned an individual parcel number that corresponds to the project site parcel plan map. These parcel designations are used for convenience and should not be confused with the actual legal parcel

references. *Figure 3-8a* depicts the parcel plan map and development phases for the Proposed Project. Readers may wish to use this figure as a reference while reading this report. As shown on the project site parcel plan map, parcel numbers that begin with “S” are located in the Sweetwater District, with “H” in the Harbor District, and with “O” in the Otay District.

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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Chula Vista Coastal Zone

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### 3.4.2.1 *District Overview*

The 556-acre planning area has been divided into three districts—the Sweetwater District, the Harbor District, and the Otay District. The Sweetwater District (approximately 130 acres) proposes the lowest intensity development of the three districts and focuses on lower scale, environmentally sensitive and environmentally themed uses, including a large ecological buffer, a signature park, bike path, pedestrian trails, other open space areas, uses such as office/retail, hotel, parking for the Chula Vista Nature Center, and roadway and infrastructure improvements.

The Harbor District is most directly accessible to downtown Chula Vista and would be redeveloped to provide a significant link from the City to the Bayfront. It is composed of approximately 223 acres of land and approximately 59 acres of water. The Harbor District proposes the highest intensity development of the Proposed Project and encourages an active, vibrant mix of uses: hotels and conference space; bike path; park and other open space areas; a continuous waterfront promenade; residential uses; mixed-use retail, office, and cultural space; piers; and new roadways and infrastructure. Also proposed is a reconfiguration of the existing harbor to create a new commercial harbor, and realignment of the navigation channel.

The Otay District is composed of approximately 144 acres, and proposes medium intensity development that consists of industrial business park use (relocation of the existing switchyard), low cost visitor-serving recreational uses (such as a recreational vehicle park and a new South Park), other open space areas, an ecological buffer, stormwater retention basins, bike path, pedestrian trails, and new roadways and infrastructure.

The plan proposes to extend Chula Vista's traditional grid of streets to ensure pedestrian, vehicle, bicycle, transit, and water links. The Proposed Project also proposes a continuous open space system, fully accessible to the public, which would seamlessly connect the Sweetwater, Harbor, and Otay Districts through components such as a continuous shoreline promenade or baywalk and a continuous bicycle path linking the parks and ultimately creating greenbelt linkages. Significant park and other open space areas in each of the three districts are proposed along with a defined signature park and the creation of an active commercial harbor with public space at the water's edge. The plan would also enhance existing physical and visual corridors while adding new ones. Approximately 258 acres, or 46%, of the project site is proposed to be developed with hotel, retail, office, and other uses, including public street systems. Approximately 238 acres, or 43%, of the project site is proposed to be open space, either in the form of natural habitat or public passive or active use parks. The remaining 59 acres, or 11%, of the project site is proposed to be water area for the marina basins and new commercial harbor.

The plan also will provide for an increased public participation and community benefits process. The Port will form a Bayfront Cultural and Design Committee (BCDC) to advise the Port in addressing the design of parks, cultural facilities, and development projects. The public participation process for the BCDC will include broad community representation and will be modeled after the Community Advisory Committee (CAC) process. Membership will include at least one member each from the Port, Chula Vista Planning Commission, Design Review Committee, and Resource Conservation Committee. The BCDC will advise the Port in the establishment of CVBMP design guidelines to address cohesive development and streetscape design standards, walkways and bikeways design to promote safe walking and biking, standards for design of park areas, and cultural facilities but will not address NRMP and Wildlife Habitat Areas design guidelines. A minimum of three public meeting/workshops will be held to establish the design guidelines. The BCDC will have an opportunity to provide input on the development of any Port-sponsored Request for Proposals (RFP) or Request for Qualifications (RFQ) for major development projects. The Port will conduct a stakeholder review of major development projects following completion of the RFP/RFQ selection process and the BCDC will be invited to participate in such review. In addition, BCDC will be invited to participate in stakeholder design review of park and/or cultural facilities within the CVBMP prior to Port Staff seeking concept approval from the Board of Port Commissioners. The BCDC will have an opportunity to advise and provide input on District-sponsored public art projects proposed for sites within the Proposed Project area through representation on artist/artwork selection panels convened by the Port. These project-specific, ad hoc panels will make recommendations to the Port's public art committee and staff regarding acquisitions and exhibitions. The BCDC will be notified of the formation of such selection panels and will be afforded an opportunity to nominate one or more of its members, preferably with art related experience or background, to serve thereon.

An additional community benefit shall come in the form of funds from the Pacifica Initial Sale Unit Contribution Funds, which shall be directed to the joint powers authority (JPA) and placed into a Community Benefits Fund that will be non-wasting, with interest revenues committed to the specific broad categories of: Natural Resources; Affordable Housing; Sustainability/Livability; and Community Impacts and Culture. The Community Benefits Fund revenues shall be spent within the Project Area and Western Chula Vista, subject to applicable law.

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### 3.4.3 Project Phasing

The illustrative map for the Proposed Project is shown in *Figure 3-8b*. Proposed development is planned to occur in four phases over an approximate 24-year period (approximately five years for Phases I and II; approximately five years for Phase III, ~~ending in 2017~~; and approximately 14 years for Phase IV, ~~ending in 2031~~). Phases I and II will consist of high-quality development and public improvements concentrated in the Sweetwater and Harbor Districts that will be the catalyst for surrounding public and private development in the Proposed Project. This phasing schedule, however, represents a best-case scenario and will be contingent upon and subject to many factors, such as availability and timing of public financing and construction of public improvements; terms of existing long-term leases; actual market demand for, and private financing of, proposed development; lease negotiations; approvals for, and demolition and/or relocation of, existing uses; approvals for new uses; and other approvals. The Port and City will enter into an agreement for the purpose of financing and development of the Proposed Project.

Phase I components, consisting of development on Parcels H-13, H-14, HP-5, and H-17, as well as proposed roadway and infrastructure improvements in the Sweetwater and Harbor Districts, are analyzed in this report at a project-specific level and identified in *Table 3-4*. ~~The~~ All other proposed Phase I components are analyzed at a programmatic level and identified in Table 3-45. Phases II, III, and IV components are analyzed at a programmatic level. Phases II, III, and IV components are identified in *Table 3-56*. The nature and extent of additional environmental review, which may be required for Phases I, II, III, and IV projects, will be determined pursuant to State CEQA Guidelines Section 15168.

**TABLE 3-4**  
**Phase I Project Level Components**

<u>Parcel</u>	<u>Proposed Use</u>
<u>Harbor District</u>	
<u>H-13, H-14</u>	<u>Residential and Ancillary Retail</u>
<u>H-17</u>	<u>Bayfront Fire Station</u>
<u>HP-5</u>	<u>Wetlands and buffer</u>



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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Proposed Project Illustrative Plan**

**FIGURE**  
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**TABLE 3-45**  
**Phase I Project Program Level Components**

Parcel	Proposed Use
<b>Sweetwater District</b>	
S-2	Signature Park (1 of 4 parcels)
SP-1	Ecological Buffer
SP-3	Nature Center Parking and Access Road
<b>Harbor District</b>	
H-3	Resort Conference Center
H-9	Interim Park/Landscaping
H-13, H-14	Residential and Ancillary Retail
H-8, HP-1	Signature Park (2 and 3 of 4 parcels)
H-17	Bayfront Fire Station
H-18	Interim Surface Parking Lot
HP-3	Shoreline Promenade (the portion abutting HP-1 and H-8)
HP-5	Wetlands and buffer
HP-23A	Industrial Business Park Use

**TABLE 3-56**  
**Phases II, III, and IV Program Level Components**

Parcel	Proposed Use
<b>Phase II Components</b>	
<b>Sweetwater District</b>	
S-2A	Open Space
SP-1	Ecological Buffer
SP-2	Seasonal Wetland
<b>Harbor District</b>	
H-9	Retail/Commercial Recreation and Marina Support
H-15	Mixed Use Office/Commercial Recreation and Hotel
H-23	Resort Hotel and Cultural/Retail
HP-3	Shoreline Promenade (portion abutting H-9)
HP-6, HP-7, HP-8	Marina View Park
HP-11	Existing Wetlands
HP-28	H Street Pier (first half)
<b>Phase III Components</b>	
<b>Harbor District</b>	
H-21	Retail/Commercial Recreation and Marina Support
HP-3	Shoreline Promenade (portions abutting HP-14, HP-15, and H-21)
HP-9, HP-12, HP-13	Open Space
HP-14	Bayfront Park
HP-15	Boat Launch/Harbor Police Building/Parking
<b>Otay District</b>	

**TABLE 3-56 (Cont.)**

Parcel	Proposed Use
O-1, O-4	Industrial Business Park Use
O-3A, O-3B	RV Park
OP-1A, OP-1B	South Park
OP-3	Open Space
OP-2A	Ecological Buffer
OP-2B	Telegraph Creek Channel
<b>Phase IV Components</b>	
<b>Sweetwater District</b>	
S-1	Resort Hotel
S-3	Mixed Use Office/Commercial Recreation
S-4	Office
SP-4, SP-5, SP-6, SP-7	Open Space
<b>Harbor District</b>	
H-1	Community Boating Center
H-1A	Signature Park (4 of 4 parcels)
H-12	Ferry Terminal
H-18	Mixed Use Office/Commercial Recreation and Collector Parking Garage
HP-3	Shoreline Promenade (abutting H-1 and H-1A)
HP-28	H St. Pier (second half)
HW-1	Marina (H-21)
HW-2	Boat Navigation/Open Water Area
HW-3	Commercial Harbor
HW-4	Marina (H-9)
HW-5	Existing Fishing Pier
HW-6	Marina (H-1)
HW-7	Navigation Channel

As described in *Section 4.2, Traffic and Circulation* of this EIR, all of the roadway improvements within the Sweetwater and Harbor Districts (except for the new F Street segment) are evaluated at a project-level. The analysis was structured in this way to provide flexibility to construct identified roadway improvements sooner than required in the traffic analysis, if deemed necessary. The proposed timing of construction for roadway improvements, however, is tied to requirements of proposed adjacent development. For Phase I project-level components, therefore, only those improvements required for access, frontage, and traffic impact mitigation for development on Parcels H-13, H-14, HP-5, and H-17 are proposed for construction prior to or concurrently with development of these Phase I components. Roadway improvements necessary for Phase I program-level components identified in *Table 3-5* and subsequent phase program-level components identified in *Table 3-6* would be required prior to or concurrently with the development of these specific components. All impacts resulting from construction of roadway improvements for subsequent phases of development in the Otay District, and the new F Street

segment in the Sweetwater District, are evaluated in this EIR as part of the program-level analysis.

Mass grading of the site in the Sweetwater and Harbor Districts would be required. Most of the existing streets would be removed to allow for grading of the new parcels and construction of new streets and utilities. The Sweetwater District and the majority of the Harbor District would be graded during Phase I. Those parcels not graded in Phase I would be graded in Phase III. No grading would occur in Phase IV. The resulting volume of import for the Proposed Project would be 681,000 cubic yards. Table 3-67 lists the grading quantities required for the Proposed Project.

**TABLE 3-67**  
**Proposed Project Grading Quantities**  
**(cubic yards)**

District	Cut	Fill	Import/Export
Sweetwater	203,000	115,000	88,000 export
Harbor	73,000	510,000	<437,000> import
Otay	55,000	387,000	<332,000> import
<b>TOTAL</b>	<b>331,000</b>	<b>1,012,000</b>	<b>&lt;681,000&gt; import</b>

#### 3.4.4 Proposed Project Components

The specific components of the Proposed Project, as proposed for each parcel, are described below by district (Sweetwater, Harbor, Otay). Phase I project-level components are listed first, followed by subsequent phase, ~~program-level~~ components. The project description below for each parcel number contains general information such as parcel size and location, existing use(s), whether the parcel is proposed for demolition activities, and whether it is proposed to be part of the land exchange. The project description for each parcel also contains proposed development information such as use, approximate program ranges and heights, number of parking spaces, access, open space, and proposed Port Master Plan or Local Coastal Program designation. The project description for a parcel may also cross-reference other related parcels and development phases as appropriate. The project descriptions for the proposed development on parcels H-13/H-14 ~~and H-3~~ are based on information provided by the developers ~~(Pacifica and Gaylord)~~.

Within the following summary of Proposed Project components, the Final EIR was revised such that the description of development on Parcels H-13, H-14, HP-5, and H-17 in the Harbor District was moved to the beginning of the description of Harbor District Phase I project-level components. The discussion of remaining Phase I development components in the Harbor District was moved under the description of Harbor District Phase I program-level components. In addition, development on Parcel SP-1 in the Sweetwater District was moved from Phase II in

the Revised DEIR to Phase I in the Final EIR; therefore, the description of development on this parcel was moved to the description of Phase I development in the Sweetwater District. Formatting as it relates to simply re-arranging the order of these descriptions was not done in strike-out/underline in this Final EIR; however, any actual revisions to the text since the Revised DEIR are captured below in strike-out/underline for reference.

#### 3.4.4.1 Phase I

##### a. Sweetwater District Summary

The proposed land uses and development program/height ranges for the Sweetwater District are summarized below in *Table 3-78*. A detailed description of the Sweetwater District development per parcel is provided below. Parcels S-1, S-3, SP-2, and SP-3, and most of Parcels S-2 and SP-1, currently within the City's land use jurisdiction, and controlled by a private developer, would be transferred to the Port as part of the proposed land exchange. Upon SLC's approval of the land exchange, these parcels would convert to State Trust Lands under the Port's land use jurisdiction. As part of the Proposed Project, development within the Sweetwater District would occur in Phases I, II and IV. All Sweetwater plan components proposed during Phases II through IV are analyzed in this report at a programmatic level. The nature and extent of additional environmental review that may be required for Phases II ~~and through~~ IV projects will be determined pursuant to State CEQA Guidelines Section 15168.

**TABLE 3-87**  
**Sweetwater District Summary: Proposed Land Uses and**  
**Development Program/Height Ranges**

Parcel Number	Proposed Use	Approximate Program Range	Maximum Stories	Maximum Height (feet)
<b>Public Space</b>				
<b>Phase I</b>				
S-2	Signature Park	18 acres	1	N/A
<u>SP-1</u>	<u>Ecological Buffer</u>	<u>41 acres</u>	<u>N/A</u>	<u>N/A</u>
SP-3	Nature Center Parking and Access Road	3 acres	N/A	N/A
<b>Phase II</b>				
SP-1	<u>Ecological Buffer</u>	41 acres	N/A	N/A
SP-2	Seasonal Wetland	14 acres	N/A	N/A
S-2A	Open Space	3 acres	N/A	N/A
<b>Phase III</b>				
—	Public Infrastructure Only	—	—	—
<b>Phase IV</b>				

TABLE 3-78 (Cont.)

Parcel Number	Proposed Use	Approximate Program Range	Maximum Stories	Maximum Height (feet)
SP-4, SP-5, SP-6, SP-7	Open Space	10 acres	N/A	N/A
<b>Development</b>				
<b>Phase I</b>				
	Public Infrastructure Only			
<b>Phase II</b>				
—	Public Infrastructure Only	—	—	—
<b>Phase III</b>				
—	Public Infrastructure Only	—	—	—
<b>Phase IV</b>				
S-1	Resort Hotel	500–750 rooms	2 to 8	40 to 100
S-3	Mixed Use Office/Commercial Recreation	60,000–120,000 square feet	2 to 3	30 to 45
S-4	Office	120,000 square feet	8	125

\*S-5 Existing 1-acre park will remain.

i. Sweetwater District Project-Program Level (Phase I) Components

**S-2 Signature Park (Phase I).** In Phase I, this approximately 18-acre vacant parcel is proposed to be developed as part of the Signature Park for the Proposed Project, a major open space area that will connect to the Chula Vista Greenbelt. The Signature Park will continue into the Harbor District on Parcels H-1A (to be developed during Phase IV), HP-1, and H-8/H-9, as more fully described below, totaling approximately 40 acres. ~~The proposed Signature Park is envisioned as a passive use, meadow-type park with amenities such as landscaping, lighting, restrooms, drinking fountains, bicycle racks, tot lots, picnic areas, benches, trash bins, interpretive signage, landscaped berms, public art, and decomposed granite paving. The proposed parks in the Harbor District, as described below, are planned to accommodate flexible spaces for more active uses or events.~~

An approximately 12-foot-wide meandering pedestrian trail constructed of natural material that is easily maintained would be interwoven throughout the ~~p~~Signature Park. The park will contain approximately 216 parking spaces within an on-site parking lot, pursuant to Port Parking Guidelines. As part of the E Street Extension, a pedestrian pathway/bridge is proposed that would provide a safe route for pedestrians to walk and to transition from the Sweetwater District to the HP-3 Shoreline Promenade and H-1A park in the Harbor District. ~~The aforementioned park improvements will be phased in as funding becomes available.~~ The majority of this parcel would be a part of the land exchange and would transfer **land use jurisdiction** from City to Port **jurisdiction**, and the PMP land use designations would be “Park” and “Promenade.” The

remainder of this parcel would not be part of the land exchange and would remain in the City's land use jurisdiction, and the LCP designation would be "Open Space."

In addition, the park will meet the following minimum standards in addition to those described above:

- The park will be passive in nature and encourage passive recreation, be low-impact and contain minimal permanent structures. Structures will be limited to single story heights and will be limited in function to restrooms, picnic tables, **tot lots**, shade structures and overlooks. "Passive" will mean that which emphasizes the open-space aspect of a park and which involves a low level of development, including picnic areas and trails. In contrast, active recreation is that which requires intensive development and includes programmable elements that involve cooperative or team activity, including, ball fields and skate parks.
- The park will be constructed using low water-use ground cover alternatives where possible.
- Pedestrian and bike trails will be segregated where feasible. A meandering public trail will be provided along the entire length of the Bayfront. The meandering trail within the Sweetwater Park and adjacent to Buffer Areas, as described in Mitigation Measure 4.8-7, will not be paved.
- The park will not include athletic field amenities.
- No unattended food vending will be allowed.
- The park will include enforcement signage that prohibits tenants, employees, residents, or visitors from feeding or encouraging feral cat colonies and prevents feral cat drop-off or abandonment of pets; and prohibits leash free areas near buffers.
- Due to the immediate adjacency to Wildlife Habitat Areas, as described in Mitigation Measure 4.8-7, the following restrictions will apply:
  - Such park will be designated as Passive use park and use of amplified sound equipment will be prohibited.
  - Reservations for group events and activities will be prohibited.

Phase I Signature Park improvements (including development of Parcel S-2), within the Transition Buffer Areas and Limited Use zones of Parcel SP-1, and the fencing of the No Touch Buffer Area of Parcel SP-1) will be completed prior to the issuance of Certificates of Occupancy for projects developed on either Parcel H-3 or H-23 and after any additional necessary environmental review. The public participation process for the design of the park will be completed prior to Port staff seeking Concept Approval from the Board of Port



Commissioners. The concept approval for the Signature Park will include a refined plan to address the linkage between the parks over the F and G Street Channel. The design will ensure that the linkage between the two parks is easily accessed, obvious, and allows visitors to flow naturally and safely between the two parts of the park. A separate pedestrian bridge will be evaluated and, if necessary, a supplemental environmental review will be performed to address any necessary issues prior to the concept approval being forwarded to the Board of Port Commissioners. The specific placement and design of these improvements will be reviewed and analyzed for conformance with those impacts analyzed in this EIR prior to the issuance of Coastal Development Permits for the park areas.

***SP-1 Ecological Buffer (Phase II).*** A 400-foot-wide ecological buffer is proposed in Phase II on approximately 41 acres of predominantly undeveloped land, ~~that~~ which includes a portion of the existing Chula Vista Nature Center access road to be realigned to connect to the SP-3 parcel parking lot along the northern and western edges of the Sweetwater District, to buffer the adjacent Sweetwater Marsh NWR from Proposed Project development. This carefully designed buffer would lessen the impacts associated with development and create an interface that gradually transitions from undeveloped native landscape to developed areas. To protect the wetlands and resources within the SDBNWR, this buffer would be established in Phase I by land use designation, distance, and fencing.

The 400-foot-wide buffer would consist of, from west to east, a 200-foot-wide No Use or No Touch Zone, then a 100-foot-wide Limited Use Zone, and finally a 100-foot-wide Transitional Use Zone as described below. The western 200-foot-wide No Use Zone would be used for upland and wetland mitigation (see *Section 4.8, Terrestrial Biological Resources*); the portion of this zone that would not be mitigation would be a project feature. A series of staggered berms would serve as a barrier between human activity and the sensitive wildlife in the nearby marsh habitat. The berms within the ecological buffers would also serve to reduce the amount of noise that may be disruptive to the sensitive species within the marshes. A bridge (E Street Bridge) would also be constructed within the buffer in the southernmost portion of this district to allow vehicular, bicycle, and pedestrian traffic to cross over the inlet feeding the F & G Street Marsh along the E Street Extension. District enforcement personnel will patrol these areas and be trained in the importance of preventing human and domestic animal encroachment in these areas.

***No Use or No Touch Zone.*** Within the 400-foot-wide buffer, the first 200-foot-width from the Proposed Project area boundary eastward is proposed as a No Use Zone. The No Use Zone is proposed primarily for wetlands and potential upland habitat mitigation opportunities (see *Section 4.8, Terrestrial Biological Resources*) for the portion that would be under Port **land use** jurisdiction. The portions of the No Touch Zone within the ecological buffer identified for mitigation opportunities may be improved or enhanced at the time specific mitigation is necessary to off-set impacts associated with Phase I through Phase IV development. The portion

of this zone that would not be mitigation would be a project feature. Trails and overlooks will also be prohibited in the No Use Zone. This No Use Zone would be off limits to pedestrians, with signs posted stating that access into the sensitive habitat areas is prohibited and trespassing laws will be strictly enforced. Signs will be posted adjacent to the sensitive areas with contact information for the Harbor Police to report trespassing within the sensitive areas.

**Limited Use Zone.** The next 100-foot-width east of the No Use Zone is proposed as a Limited Use Zone that would include outlook stations, open space, and a meandering foot trail system that would connect to the outlook stations and would be the main access route for recreational users. The open space areas would be revegetated with coastal sage scrub habitat. Several outlook stations would be placed in select locations throughout the length of this zone to provide viewing areas of the Bay and wildlife, and would contain educational elements such as kiosks, sculptures, or interpretive signs. Just beyond each outlook station would be a vegetated, elevated berm and six-foot-high fence (~~wood with steel cable~~) surrounding the western portion of the berm to separate the berm from the habitat areas. The fence will be a minimum 6-foot-high **contiguous** vinyl-coated chain link fence or other suitable barrier (built to the specifications described in this Final EIR). Fence design may include appropriate locked access points for maintenance and other necessary functions. Installation of the fence will include land contouring to minimize visual impacts of the fence. The installation of such fencing must be completed prior to the issuance of Certificates of Occupancy for development on either Parcel H-3 or H-23 and in conjunction with the development or road improvements in the Sweetwater District.

The berms would be of such height to allow the average pedestrian on the adjacent footpath to see over the berm and thereby enjoy the aesthetics of the preserve. The outlook stations would be constructed within mounds with a concrete retaining wall and situated such that the sight lines look over the berms and top of fence to improve sight lines to the Bay. ~~In areas where there are no outlook stations and/or berms and fencing, native cacti would be planted in lieu of fencing to discourage human activity in the sensitive areas.~~ The outlook stations would connect to the trail system within this zone and the Transitional Use Zone. The aforementioned improvements will be completed in Phase II as funding becomes available.

**Transitional Use Zone.** The next 100-foot-width east of the Limited Use Zone is proposed as a Transitional Use Zone that would accommodate increased recreational uses and would include more trails, open space areas, and picnic areas. This area would be composed mostly of recontoured and revegetated open space with several picnic areas and approximately 12-foot-wide trails connecting to those trails in the Limited Use Zone. A series of berms and swales would be placed on either side of the berms to collect seasonal rainfall. These swales serve as aesthetically pleasing deterrents for humans to avoid climbing the berms and entering the preserve, as well as providing seasonal wetland habitat for wildlife. The shallow topography of the mounds and swales would continue throughout this area and be revegetated with a variety of upland habitats including coastal sage scrub, southern maritime chaparral, and native grasslands.

The portion of the Transitional Use Zone adjacent to the S-2 signature park would be designed to ensure a seamless transition between the two uses. The existing wetland located toward the southern half of the buffer within SP-1 would remain. The aforementioned improvements will be phased in as funding becomes available.

Improvements (including development of Parcel S-2), within the Transition Buffer Areas and Limited Use zones of parcel SP-1, and the fencing of the No Touch Buffer Area of Parcel SP-1) will be completed prior to the issuance of Certificates of Occupancy for projects developed on either Parcel H-3 or H-23 and after any additional necessary environmental review. The public participation process for the design of the park will be completed prior to Port staff seeking concept approval from the Board of Port Commissioners.

The majority of this parcel would be a part of the land exchange and would transfer land use jurisdictional authority from City to Port ~~jurisdiction~~, and the PMP land use designations would be “Open Space,” “Promenade,” “Habitat Replacement,” and “Wetlands.” The remainder of this parcel would not be part of the land exchange and would remain in the City’s land use jurisdiction, and the LCP designation would be “Open Space.”

***SP-3 Nature Center Parking and Access Road (Phase I).*** A 100-space asphalt-parking lot and realigned Gunpowder Point Drive access road for the Chula Vista Nature Center are proposed in Phase I on this vacant, approximately three-acre parcel located in the center of the Sweetwater District. This parking lot would permanently replace the existing Chula Vista Nature Center parking lot located off the I-5 off-ramp at E Street (Parcel SP-4). The existing Nature Center shuttle bus would continue to transport visitors between the Chula Vista Nature Center and the parking lot. This parcel would be a part of the land exchange and would transfer land use jurisdictional authority from City to Port ~~jurisdiction~~. The PMP land use designations would be “Industrial Business Park” and “Promenade.”

#### b. Harbor District Summary

The proposed land/water uses and density/height ranges for the Harbor District are summarized in *Table 3-89*. A detailed description of the proposed development of each parcel in the Harbor District is described below. Parcels H-13, H-14, HP-5, and H-15 are currently within the Port’s land use jurisdiction and would be transferred to the City’s jurisdiction as part of the proposed land exchange. Upon the Port and the SLC’s approval of the land exchange, these parcels would convert from State Trust Lands to private property under the City’s land use jurisdiction. As part of the Proposed Project, development of the Harbor District is primarily proposed during Phases I and II, with all of the water improvements proposed in Phase IV. Except for development of Parcels H-13, H-14, and HP-5, All Harbor plan components proposed during Phases I, II, III and IV are analyzed in this report at a programmatic level. The nature and extent of additional environmental review, which may be required for Phases I, II, III, and IV projects will be determined pursuant to State CEQA Guidelines Section 15168.

**TABLE 3-89**  
**Harbor District Summary: Proposed Land/Water Uses and Density/Height Ranges**

Parcel Number	Proposed Use	Approximate Program Range	Maximum Stories	Maximum Height (feet)
<b>Public Space</b>				
<b>Phase I</b>				
HP-1, H-8	Signature Park	17 acres	1	N/A
HP-3	Shoreline Promenade (abutting HP-1 and H-8)	3 acres	N/A	N/A
HP-5	Wetlands and Buffer	9 acres	N/A	N/A
H-9 (Interim Use)	Interim Park/Landscaping	2 acres	N/A	N/A
<b>Phase II</b>				
HP-3	Shoreline Promenade (abutting H-9)	1 acre	N/A	N/A
HP-6, HP-7, HP-8	Parks	8 acres	1	N/A
HP-11	Existing Wetlands	3 acres	N/A	N/A
HP-28	H Street Pier (first half)	0.4 acre	N/A	N/A
<b>Phase III</b>				
HP-9, HP-12, HP-13, HP-14, HP-15	Park/Open Space	18 acres	N/A	N/A
HP-3	Shoreline Promenade (abutting HP-14, HP-15, and H-21)	3 acres	N/A	N/A
<b>Phase IV</b>				
H-1A	Signature Park	5 acres	N/A	N/A
HP-3	Shoreline Promenade (abutting H-1 and H-1A)	2 acres	N/A	N/A
HP-28	H Street Pier (second half)	0.4 acre	N/A	N/A
HW-3	Commercial Harbor	4 acres	N/A	N/A
HW-7	Navigation Channel	60 acres	N/A	N/A
<b>Development</b>				
<b>Phase I</b>				
H-3	Resort Conference Center (RCC)	1,500-2,000 hotel rooms	N/A	300-240
H-3	Conference Space	415,000 square feet (net)	N/A	120
H-3	Restaurant	100,000 square feet	Included in RCC	
H-3	Retail	20,000 square feet		

TABLE 3-82 (Cont.)

Parcel Number	Proposed Use	Approximate Program Range	Maximum Stories	Maximum Height (feet)
H-13, H-14	Residential	1,500 units	19 stories 220 feet	
H-13, H-14	Ancillary Retail	15,000 square feet		
H-17	Bayfront Fire Station	9,500 square feet	2	27
H-18 (Interim Use)	Interim Surface Parking Lot	1,100 parking spaces	N/A	N/A
HP-23A	Industrial Business Park Use	1 acre	N/A	N/A
Phase II				
H-9	Retail/Commercial Recreation and Marina Support	25,000–50,000 square feet	1 to 2	15 to 30
H-15	Mixed Use Office/Commercial Recreation	300,000–420,000 square feet	14 to 17	90 to 130
H-15	Hotel	200–250 rooms	14 to 17	90 to 130
Phase II				
H-23	Resort Hotel	500 rooms	300 feet	
H-23	Cultural/Retail	200,000 square feet	30 to 65 feet	
Phase III				
H-21	Retail/Commercial Recreation and Marina Support	75,000–150,000 square feet	1 to 2	15 to 30
Phase IV				
H-1	Community Boating Center	10,000–20,000 square feet	1 to 2	15 to 30
H-12	Ferry Terminal and Restaurant	10,000–25,000 square feet	2	30 to 40
H-18	Mixed Use Office/Commercial Recreation	100,000 square feet	6 to 10	85 to 155
H-18	Collector Parking Garage	1,100–3,000 parking spaces	6 to 10	85 to 155
HW-1, HW-2, HW-3, HW-4	Marinas (see H-9 and H-21), Boat Navigation/Open Water Area, Commercial Harbor	46 acres, 700 slips	N/A	N/A
HW-6	Marina (see H-1)	200 slips	N/A	N/A

\*HW-5 Existing Fishing Pier will remain.

i. Harbor District Project Level (Phase I) Components

***H-13 and H-14 Residential (Phase I).***

Site

The Pacifica Residential and Retail Project is a proposed development consisting of a combination of mid-rise and high-rise residential with a maximum of 1,500 units and up to 15,000 square feet of supporting ancillary retail uses. The Pacifica development and retail project is proposed in Phase I on approximately 14 acres of primarily undeveloped land and a portion of the existing Marina Parkway.

Project Components

The proposed Pacifica residential and retail development would include three main components: a maximum of 1,500 residential units, up to 15,000 square feet of retail uses, and parking structures both semi-subterranean and above-grade (see the *Site Plan, Figure 3-449a*). The residential buildings would range from 70 to 220 feet high (approximately 4 to 19 stories) maximum, including all roof equipment and podiums. The podiums would be situated beneath the residential towers and would range from 15 to 45 feet high (approximately 1 to 4 stories). *Figures 3-449b and 3-449c* illustrate conceptual plans for the residential development. The retail uses would be included at the street level to create a village atmosphere and pedestrian-friendly area. A minimum building set-back of 50 feet from J Street will be established, which will accommodate viewing opportunities from I-5. Building set-backs and step-backs will provide a 70-foot-wide minimum street section at the podium level and a 95-foot-wide minimum street section at tower level on J Street. Proposed towers will gradually step downward in height from north to south, reflecting the more intensive proposed land uses to the north and the environmental preserve to the south. The required parking would be located in parking structures both below-grade and above-grade, for a total of 2,300 parking spaces. The above-grade structured parking would be located in the center of the residential structures, generally surrounded and enclosed by the residential and ancillary retail uses in order to minimize its visibility.

The statutory requirement for new affordable housing production is fifteen (15) percent, resulting in a Redevelopment Agency requirement for 225 affordable units. As part of the proposed Pacifica project, 225-150 units of the residential development on parcels H-13 and H-14 will be reserved-set aside for affordable housing. Of those 150 affordable housing units on parcels H-13 and H-14, 90-units-half will be set aside for low-income residents and 135-half will be for low to moderate-income residents. The Redevelopment Agency will cause the production of the remaining 75 affordable units. As the 15 percent requirement is not site-specific, the Redevelopment Agency can meet the net requirement in another location. The proposed building

footprint for the Pacifica project on parcels H-13 and H-14 will cover ~~497,900~~ 381,990 square feet of the project site. For views to the northwest and the northeast of the project site, see *Figures 3-449d* and *3-449e*.

Pacifica project components will be integrated with public spaces and visual connections that will relate the new development to the surrounding environment. The project is designed to encourage public access and “feet on the street” with features such as a “woonerf walk,” where pedestrians and cyclists are given priority. This walk connects through the site in an east–west orientation to the marina. The project also includes a north–south garden walk that connects through the site and is intersected by several plazas including a plaza near “J” Street that incorporates ground-level retail such as a cafe and two other large plazas with public art and water features. The garden walk is located so as to connect up with the pedestrian promenade envisioned to extend through the mixed-use development planned to be build north of the site in future phases of the master plan. The woonerf and garden walks are designed to bring the public into the project site to avoid the feeling of a “private” community. On the west side of the project, a “marina walk” also brings the pedestrian into the site and the experience is further enhanced by an interspersing of ground-level retail between residential units and on street corners. Additionally the wetland buffer area surrounding the project on the north and east sides, provides a passive recreational opportunity and nature-based visual experience. Illustrations of these useable open space and visual connections are shown in *Figures 3-449f* and *3-449g*, and *3-449h*.

#### L-Ditch

There are two alternatives for development of parcel HP-5 on the Pacifica site. Under the proposed Pacifica project, the existing L-ditch, to the north and east of parcels H-13 and H-14, would not be developed and would contain an average 50-foot-wide buffer from the delineated wetland edge on either side. The buffer will serve to protect against encroachment into the drainage ditch, other than for proposed bridge crossing to provide access between parcels H-13, H-14, and Street A. The buffer improvements, which would occur on land that was part of the former Goodrich South Campus and land that is currently undeveloped, would be completed in Phase I. This parcel would be part of the land exchange and would transfer land use jurisdictional authority from Port to City ~~jurisdiction~~. For a view of the existing L-ditch and buffer, as well as the proposed plaza on J Street, see *Figure 3-449i*.

An alternate scenario would occur only if the existing L-ditch on parcel HP-5 is to be remediated and filled pursuant to the Cleanup and Abatement Order ((CAO) CAO No. 98-08, revised April 2, 1998) by the RWQCB, a separate action that is unrelated to the proposed Pacifica project: If the L-ditch is filled as part of the ultimate remediation required by the CAO, parcel HP-5 would no longer constitute a wetland and would be developed rather than undeveloped as in the

Proposed Project. This alternative development of parcel HP-5 constitutes the Alternate L-Ditch Remediation Alternative discussed in *Chapter 5, Alternatives* of this report.

### Project Design

The Proposed Pacifica Project would incorporate environmentally sound design features and business practices during both construction and operational phases, which are listed below:

- Site Planning/Building Design/Landscaping/Lighting/Construction:
  - As part of the residential building designs along J Street facing south, and along Marina Parkway facing west, the project would incorporate building design concepts and/or fenestration designs (such as stepped back buildings, protruding balconies, recessed windows, window cut-ups, etc) that obviate significant bird strike potential.
  - The Proposed Pacifica Project would limit exterior lighting by using low pedestal lights for walkway lighting, shielding exterior lighting and eliminating building accent lights, beacon, or flood lighting to reduce interference with migratory bird behavior.
  - The Proposed Pacifica Project would use only non-invasive plant species with an emphasis on native species around the perimeter of the project.
- Energy Efficiency and Sustainability:
  - The Proposed Pacifica Project would be Leadership in Energy and Environmental Design (LEED) certified.
  - The Proposed Pacifica Project would exceed Title 24 requirements by 20%.
  - The Proposed Pacifica Project would participate in SDG&E's Sustainable Communities Program to attain the status of a SDG&E Sustainable Communities Program Demonstration Project through the use of appropriate energy conservation building design and construction standards and renewable energy concepts, in consultation with SDG&E.
  - Energy Star and other environmentally friendly products, materials, and techniques to reduce energy consumption and generate energy on site would be explored and utilized when determined to be economically feasible.

In addition to the features described above, the Pacifica project will include design features to conserve water as described in Section 4.5, Hydrology and Water Quality; features to reduce GHG emissions, as summarized in Table 4.6-31 of Section 4.6, Air Quality; and features to ensure efficient use of energy as outlined in Section 4.16, Energy.

Dewatering Practices: The Proposed Pacifica Project would not result in any permanent dewatering discharges into San Diego Bay or other water courses.

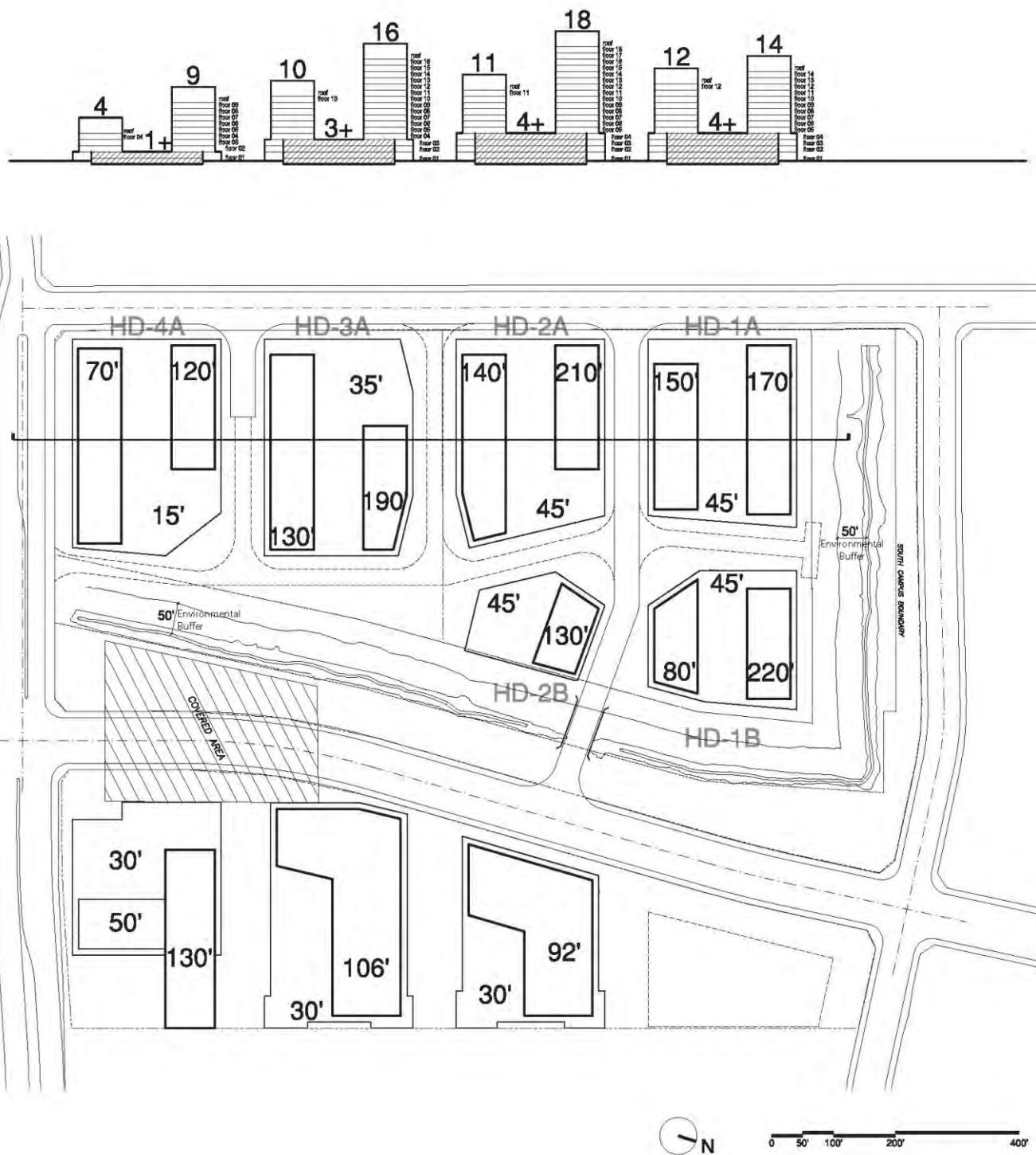




Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Site Plan for Proposed Pacifica Residential and Retail Project**

**FIGURE**  
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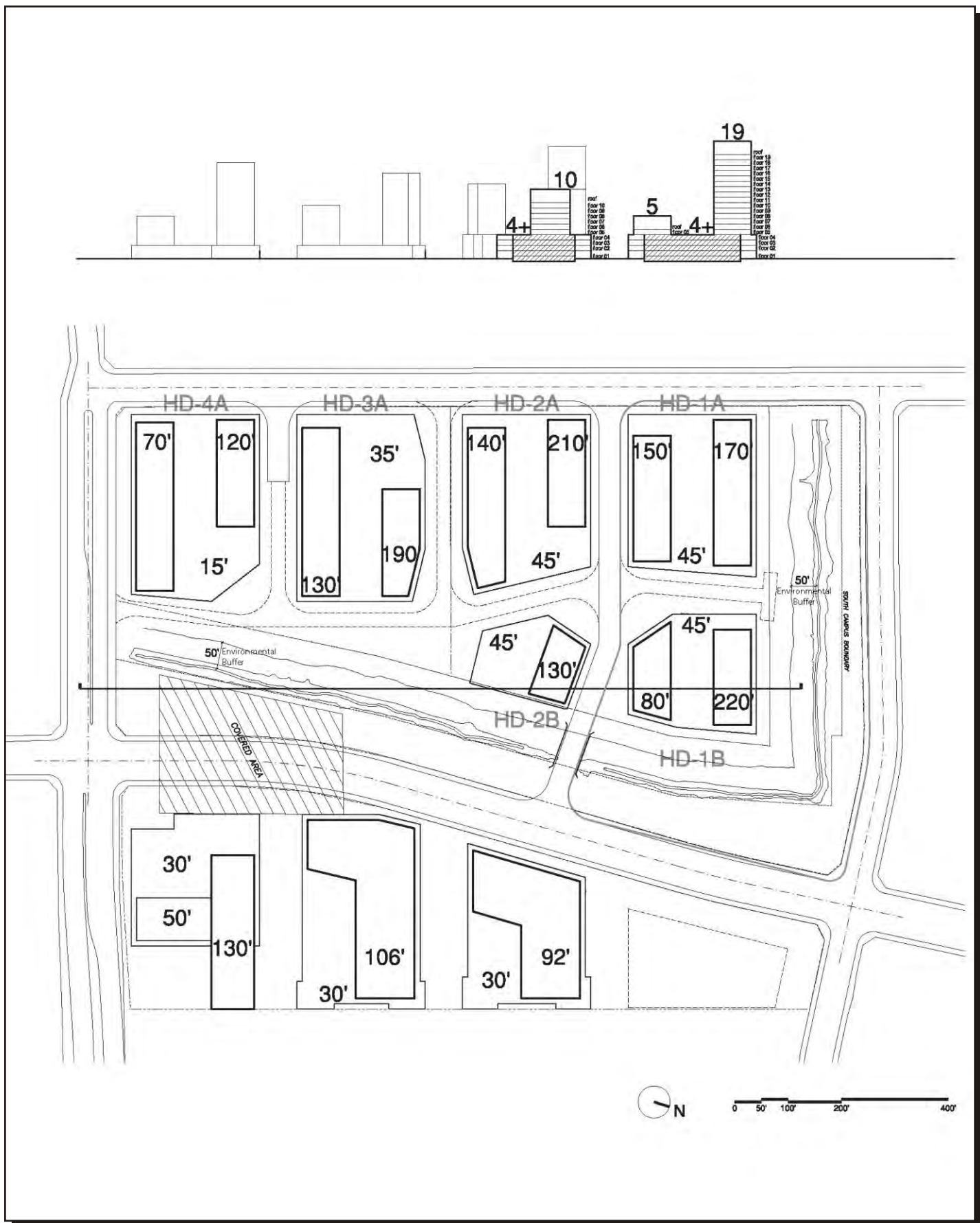
SOURCE: Carrier Johnson

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Conceptual Plan for Pacifica Project (Section 1)**

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SOURCE: Carrier Johnson

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Conceptual Plan for Pacifica Project (Section 2)**

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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica Residential and Retail Project, View to the Northwest**

**FIGURE**  
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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica Residential and Retail Project, View to the Northeast**

**FIGURE**  
**3-9** 56552  
277

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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica Residential and Retail Project, View of J Street Plaza and Gateway Park**

**FIGURE**  
**3-9F**  
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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica Residential and Retail Project, View of Woonerf Walk**

**FIGURE**  
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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica Residential and Retail Project, View of Marina Walk**

**FIGURE**  
**3-9**

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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica Residential and Retail Project, View of L-Ditch and J Street Plaza**

**FIGURE**  
**3-91**  
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**H-17 Bayfront Fire Station (Phase I).** A fire station is proposed in Phase I on a 2 acre lot at the corner of J Street and Bay Boulevard. The proposed 2 story, 9,500 square foot Bayfront Fire Station on parcel H-17 will consist of two apparatus bays and associated work and living areas. An emergency generator enclosed with a masonry structure is proposed along the western property boundary. Access to the fire station will be provided via Bay Boulevard. The living quarters will accommodate seven (7) personnel and staff a three-person engine company and a ladder truck. Approximately 15 on-site parking spaces are proposed, including handicapped spaces. Subject to acquisition of parcel H-17 by the City, a General Plan Amendment and Local Coastal Plan (LCP) Amendment are required as discussed above in *Sections 3.4.1.3 and 3.4.1.4*. Conceptual site plans and exterior elevations for the fire station are shown in *Figures 3-10a and 3-10b*. The LCP designation would be “Public/Quasi-Public.” An interim facility may be utilized until final construction is completed.

**HP-5 Wetlands and Buffer (Phase I).** Parcel HP-5 is composed of an existing L-shaped drainage ditch (L-Ditch), which is an approximately 4.43-acre, 50-foot-wide feature. The feature extends adjacent to Street C from Marina Parkway to Street A, and adjacent to Street A from Street C to Marina Parkway. The L-Ditch is a drainage feature with approximately 1.15 acres of wetland habitat. Contaminant removal from the L-Ditch is a requirement under the CAO issued by the RWQCB for the south campus remediation. A Remedial Action Plan (RAP) is being prepared to determine the most appropriate and effective manner by which remediation of the L-Ditch can be achieved to the satisfaction of the RWQCB.

As part of the Proposed Project, the existing wetlands (southern coastal salt marsh) contained within the existing L-Ditch that borders H-13 and H-14 to the north and the east, totaling approximately 9 acres, would not be developed, and would contain an average 50-foot-wide buffer from the delineated wetland edge on either side to protect against encroachment into the wetlands, other than for the proposed bridge crossing to provide access from parcels H-13 and H-14 to Street A. The buffer improvements, which would occur on land that was part of the former Goodrich South Campus and land that is currently undeveloped, would be completed in Phase I. As part of the H-13/H-14 residential development, a car and pedestrian crossing would be constructed over HP-5 to connect to the new Street A. This parcel would be part of the land exchange and would transfer land use jurisdictional authority from Port to City ~~jurisdiction~~.

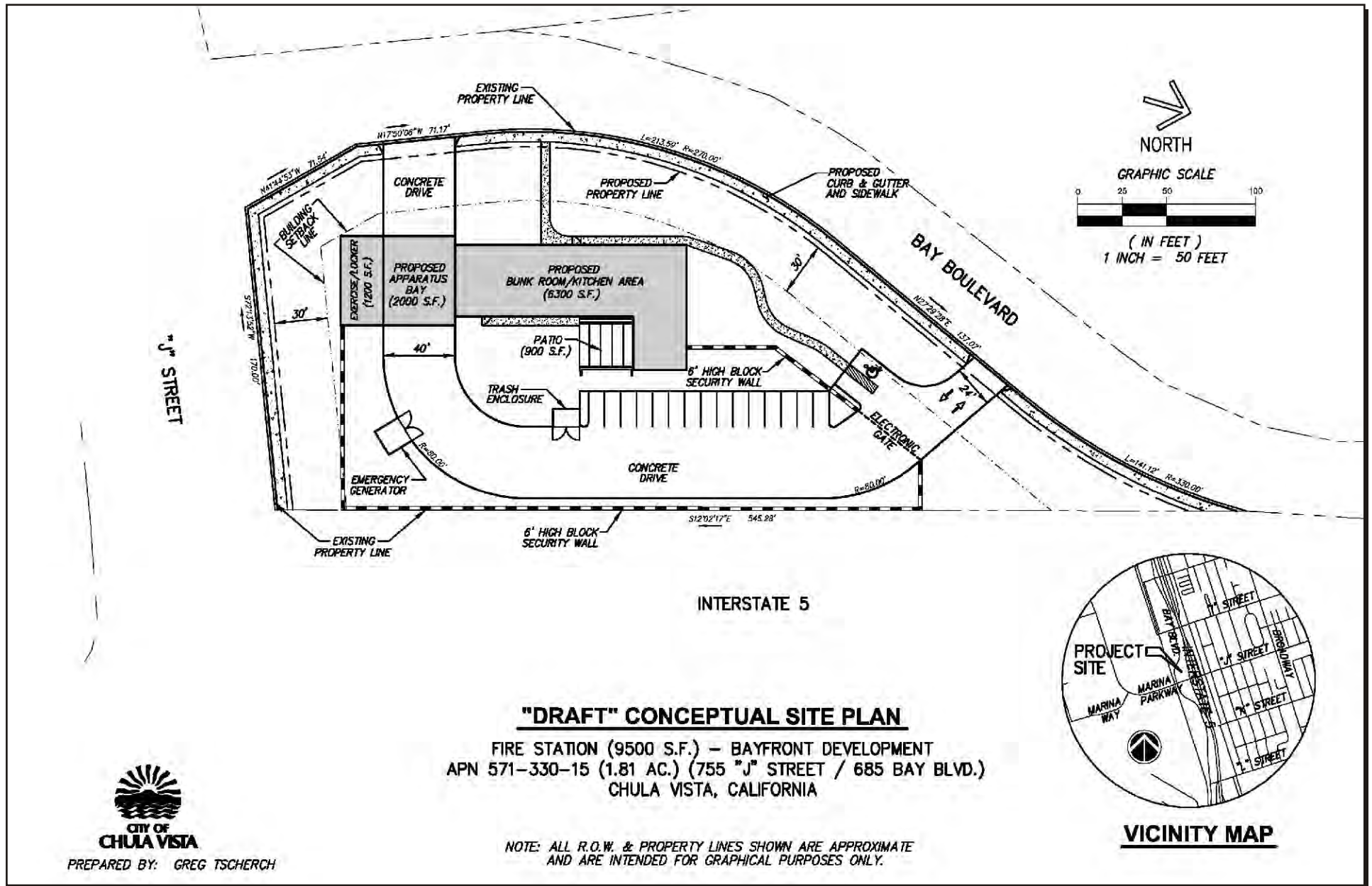
ii. Harbor District Program Level (Phase I) Components

**HP-1 and H-8 Signature Park (Phase I).** These parcels comprising approximately 17 acres are currently part of the RV Park leasehold and the existing Chula Vista Bayside Park and are proposed in Phase I as an extension of the Sweetwater Signature Park, which begins in the Sweetwater District on Parcel S-2 (described earlier) and continues into the Harbor District and wraps around the H-3 RCC onto Parcels H-1A, HP-1, and H-8; parcel H-1A would be developed

during Phase IV after the relocation of the existing South Bay Boatyard (see project description of Parcel H-1A). The H-8 park (approximately six acres) would be developed in Phase I, and would ultimately be incorporated with the Phase II H-9 retail/commercial recreation development (see project description of H-9). Furthermore, a promenade would be constructed along the shoreline to complement the park, as more fully described under HP-3 below. The park would be an extension of the existing Chula Vista Bayside Park.

Similar to S-2, this park is envisioned as a passive use, meadow-type park that could include amenities such as lighting, sculptures, restrooms, interactive fountains, drinking fountains, bicycle racks, tot lots, picnic areas, benches, trash bins, interpretive signage, a sculpture garden, landscaped berms, public art, decomposed granite paving, and open lawn area. The park could also include cultural uses; small food and beverage vending; specialty retail involving gifts, novelties, clothing, and jewelry; group activities of nearby businesses; and other park-activating uses. An approximately 12-foot-wide meandering pedestrian trail constructed of natural material that is easily maintained would be interwoven throughout the park. Approximately 237 on-site surface parking spaces with lighting would be provided, including 216 spaces on HP-1 and HP-8, 10 spaces to serve the HP-28 pier and 11 spaces for the Phase I portion of the HP-3 Shoreline Promenade. ~~The aforementioned park improvements will be phased in as funding becomes available.~~ The HP-1 park would be approximately 350 feet in width between the E Street extension and the existing shoreline. Lateral public access would be provided from the proposed H Street Extension south to the harbor between H-8 and H-9, and from the proposed H Street Extension west to the proposed H Street Pier. The existing uses would be demolished and/or relocated prior to redevelopment of this parcel. The PMP land use designations would be “Park” and “Promenade.”



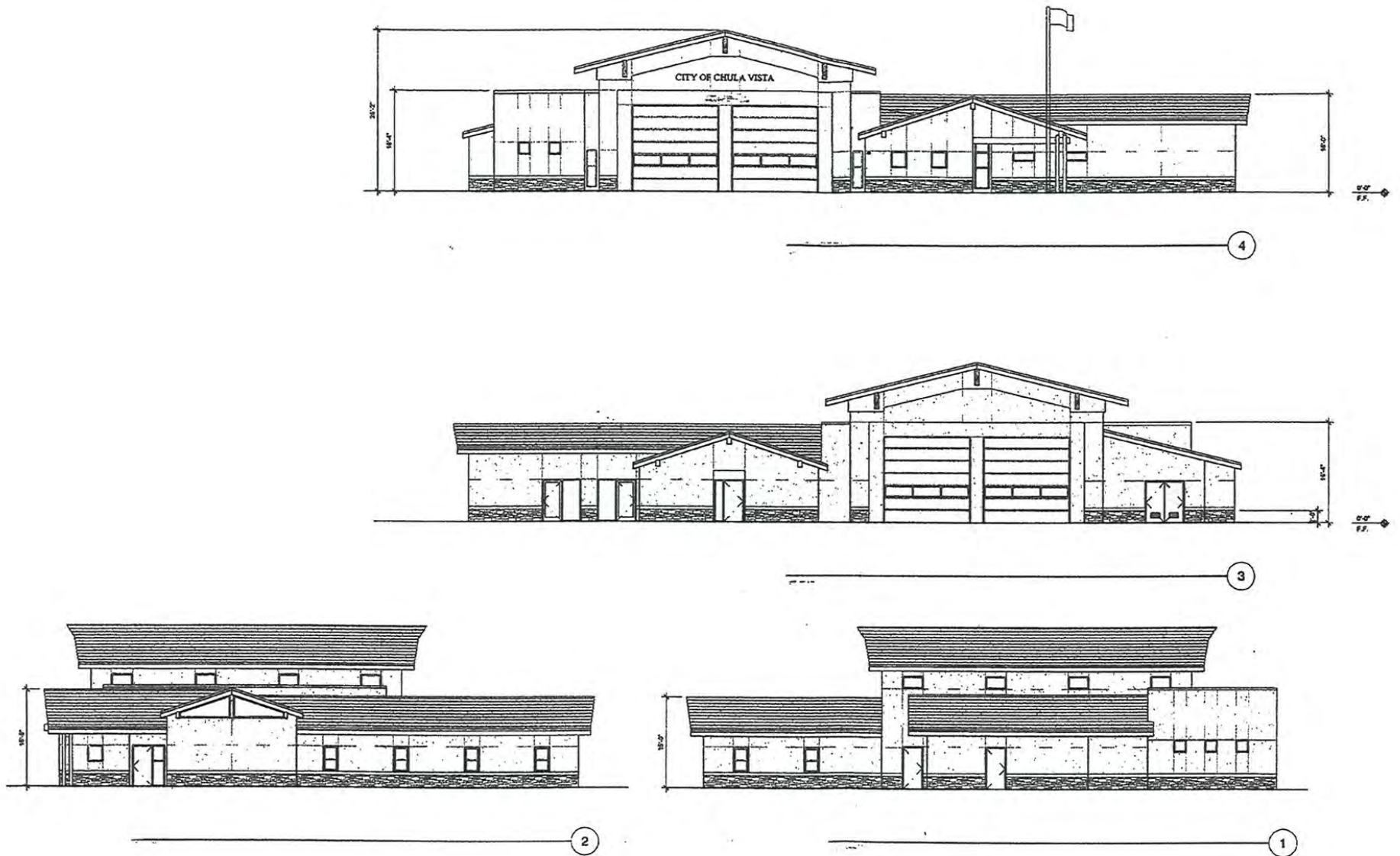


SOURCE: CITY OF CHULA VISTA

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Conceptual Site Plan for Bayfront Fire Station (Parcel H-17)**

**FIGURE**  
**3-10A**

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SOURCE: CITY OF CHULA VISTA

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Conceptual Exterior Elevations for Bayfront Fire Station (Parcel H-17)**

**FIGURE**  
**3-10B**

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### *H-3 Resort Conference Center (Phase I).*

#### Site

The ~~Gaylord Resort and Convention~~ Conference Center (RCC) is a proposed world-class hotel and convention facility that would anchor the proposed Chula Vista Bayfront Master Plan redevelopment and would serve as the catalyst for Phase II construction projects. The facility would be located on a parcel totaling approximately 39 acres, which consists of approximately 35 acres of Port land and approximately 4 acres of land currently owned by Goodrich; the 4-acre parcel currently owned by Goodrich would be acquired and incorporated into the Port's land use jurisdiction. The RCC site contains existing vacant land, streets, an RV Park, a portion of existing Goodrich property, a portion of the existing South Bay Boatyard leasehold, and a portion of the previous AFS Industries leasehold. Subject to pertinent leases and other agreements, the existing uses and streets (Sandpiper Way, Bayside Parkway, Quay Avenue, and G Street) and infrastructure within the H-3 footprint would be demolished in Phase I prior to construction of the RCC.

Public access to the RCC is proposed from the planned H Street and E Street extensions. The primary entry for both the hotel and convention center components of the project is planned for H Street, with the hotel having a grand entry court with a tree-lined boulevard, and a convention center with a covered drop off. A motor lobby inside the parking structure would serve as the other public entrance, connecting the parking to both the hotel and convention center that can be accessed either from the proposed E Street Extension or H Street Extension. Service and loading to the facility is planned to occur on a dedicated dock that faces the Goodrich site, and would have access from both the north and south, via an internal private drive or truck driveway accessible from the existing Marina Parkway and proposed E Street Extension. The truck driveway would be signalized and would allow both entering and exiting movements. To prevent unauthorized access to adjacent sensitive areas, a 6-foot-high vinyl-coated chain link fence will be installed around the north side of parcel H-3.

~~The primary driveway for the RCC would be located along the H Street Extension west of Marina Parkway (see Figure 3.9a), with separate entrance and exit only driveways. The entrance driveway would only allow movements entering the site and the exit driveway would only allow movements exiting the site. Each driveway would contain a one-way stop controlled intersection, and the exit driveway would provide a dedicated left turn and dedicated right turn lane. The secondary driveway for the RCC would be located off the E Street Extension and would contain both entering and exiting movements and a one-way stop controlled intersection.~~

Project Components

The RCC is proposed to contain approximately 3 million square feet of gross building area and would likely be composed of three main components: a 1,500- to 2,000-room hotel, an approximately 1.3 million gross square-foot convention center, consisting of approximately 415,000 net square foot and an integrated 2,900-car parking structure. If 1,500 hotel rooms are constructed in Phase I, a total of 2,400 surface and structure parking spaces will be provided on parcel H-3. These components would be completely integrated and would share many of the back of house functions (hotel support areas such as administration, kitchen, employee, maintenance, etc. that are not accessible to the general public) in an effort to gain efficiency and reduce the overall project footprint. **Any proposal to construct more than 1,600 rooms on Parcel H-3 will require a supplement to the Final EIR (SEIR). The SEIR will evaluate any areas needing additional analysis but, at a minimum, must include biological impacts, massing, visual, noise, shading, water supply, water quality, hazardous materials and environmental remediation, and will include discussion of the need for additional mitigation measures to reduce significant impacts, if any, associated with any increase in rooms proposed for Parcel H-3 (see Table 3-910).**

**TABLE 3-910**  
**RCC Summary**

Description/Function	Area
Land Area	39 acres
Gross Building Area	3 million square feet
Guestroom Space (Guestrooms and Support Space)	1,242,860 square feet
Public Space (Food and Beverage, Function Space, Commercial Space, Indoor Recreation Public Circulation)	1,067,800 square feet
Back of House/Support Space (Administrative Offices, Kitchen, Employee Facilities, Miscellaneous)	701,400 square feet
Hotel Height	Tower: <del>240</del> 300 feet
Total Hotel Room Count	2,000 rooms
Convention Center Height	120 feet
Convention Center Meeting Space (Net)	415,000 square feet
Contiguous Exhibit and Flex Space	200,000 square feet maximum
Atrium Height	140 feet
Total Parking	3,400 spaces
On Site	2,900 spaces (2,400 spaces for 1,500 rooms)
Off Site (H-18)	500 spaces
Restaurants	100,000 square feet
Retail	20,000 square feet

Because the hotel is intended to be a resort, the facility would also offer multiple recreational venues, which may include swimming pools, interactive water features, landscaped plazas, dining terraces, indoor and outdoor gardens, hiking trails, a spa, and a fitness center. ~~(see the Site Plan, Figure 3.9b). All of these project amenities would be accessible from the RCC atrium or would be located directly off H Street. The atrium would be a large enclosed open space area connecting the hotel and convention center main functions, and would feature dramatic views of San Diego Bay and the downtown San Diego skyline.~~

The convention center would likely be made up of several main components: an exhibit hall, a flex hall (which could be used for multiple functions including exhibit and dining), a main ballroom, a grand ballroom, and meeting space. These spaces would be leasable and could be occupied by a single group or multiple groups simultaneously. The convention center would contain a maximum of 200,000 net square feet of contiguous exhibit and flex space in one enclosed room, and ~~would~~ may also contain grand, junior, and hotel ballrooms, and hotel and convention meeting rooms, for a total of 415,000 square feet of net meeting space (not including pre-function space). All of this function space would be connected and supported by public circulation concourses and pre-function areas on the public side and service and support spaces on the back of house side.

Assuming the build-out of approximately 3 million square feet of gross building area, ~~The~~ RCC would provide the minimum amount of 2,840 required parking spaces, which meets the Port Parking Guidelines, and may exceed the number by providing 3,400 parking spaces; approximately 2,900 on site and 500 off site, for appropriate consideration. If 1,500 hotel rooms are constructed in Phase I, a total of 2,400 surface and structure parking spaces will be provided on parcel H-3. The on-site parking requirement will be provided within a parking structure and potential interim surface lot. The parking structure will provide ease of accessibility to both the hotel and convention facilities. Most of the parking would be accessed via the main driveway south of H-3, off the proposed H Street Extension west of Marina Parkway. Additional parking would be accessed from the secondary driveway on the northern tip of H-3, off the proposed E Street Extension. Although not part of the parking requirements, an additional 500 off-site parking spaces may be utilized by the RCC within the H-18 parking facility (H-18 is proposed as an interim surface parking lot in Phases I through III and a parking garage in Phase IV; see discussion of H-18 below under both Phases I and IV). Construction of the RCC ~~is proposed to begin in early 2010 and~~ would take approximately 3-4 years to complete.

The hotel rooms would be located in a single tower with a maximum height of ~~300~~ 240 feet and in guestroom wings a maximum of 110 feet high (11 stories). The maximum height of the atrium would be a maximum of 140 feet and the maximum height of the convention center component would be a maximum of 120 feet. ~~For a view of south and west elevations and cross sections, see Figures 3.9c and 3.9d.~~

### Design

The RCC is intended as an extension of the park, marina, and wetlands refuge. The RCC concept was generated with consideration being given to of the Bayfront site surroundings and with including input from numerous local interest groups. Three architectural vision goals of the design were established early in the process and shaped the proposed concept. These goals were as follows:

- Embrace the project context in order to infuse the project with Southern California culture resulting in a site-specific solution
- Create a sustainable and responsible neighbor for Chula Vista by achieving LEED certification for the project. This may likely could include the incorporation of fuel cells and/or photovoltaics into the project provided that favorable federal tax incentives remain available.
- Enrich the guest experience by immersing them in a natural environment through the use of day lighting, natural ventilation, site views, and spatial connections.

~~These goals have manifested themselves in specific architectural strategies that meet the Gaylord program and address the concerns of the community.~~

~~One main focus of the design effort was site integration. The configuration and orientation of all plan elements are intended to soften the edges of the site and to create connections to the surrounding community (see Figure 3.9e, Concept Design). The RCC proposes to be designed is intended as an extension of the park, marina, and wetlands refuge, with the The RCC's guestroom wings and tower forming exterior courts will be that are influenced by the adjacent natural habitats. The guest rooms would be gathered toward the center of the site in an effort to minimize the scale of the balance of the facility, especially at the periphery of the site. The convention center would anchor the RCC and would provide a buffer between the RCC resort component and the adjacent and more industrial Goodrich site. The orientation of the convention component would allow for a service side adjacent to the Goodrich facility, effectively segregating and concealing those functions from the hotel component of the RCC and community as a whole. In addition to minimizing visibility of the RCC's service and loading functions, the use of pedestrian-friendly architectural features at the edges of the property would further integrate the RCC into the existing context. These features include street retail, dining terraces, accessible restaurants, nature trails, water features, and bird-friendly transparent facades. These features are intended to make the RCC attractive to both hotel guest and local resident alike. **In order to reduce the potential for bird strikes and disorientation, the design of towers on Parcel H-3 should avoid east-west monolith massing and should include architectural articulation. In addition, the tallest buildings on Parcel H-3 will be located generally on the southern portion of the parcel with building heights decreasing towards**~~

the north and west. The foregoing will not be interpreted to preclude incorporating secondary and tertiary setbacks along public streets. Refer to *Figures 3.9f, 3.9g, 3.9h, and 3.9i* for proposed views of the RCC from the north, west, southwest, and west.

The PMP land use designation for H-3 would be “Industrial Business Park.”

#### Grading Diagram

~~The intention of the grading concept is to accomplish three things: (1) To achieve a balance in cut and fill operations on the site where practical, to minimize haul operations to and from the site; (2) To be able to retain all site generated stormwater to keep initial runoff from going directly into the Bay; and (3) To utilize natural filtration systems to clean and process the stormwater.~~

#### Site Bulk Grading

~~The lowest level of parking would be located approximately five feet underground to generate sufficient material for the areas of the site that are being filled as a means to balance the site. As indicated on the diagram (*Figure 3.9k*), approximately 120,000 cubic yards of earth is proposed to be removed for the lowest floor plate and then relocated to create the terraced and elevated arrival and resort courts. A Geotechnical Engineer would assess the soil conditions and determine if there are organics or contaminants unsuitable for use as fill to confirm the actual volumes of useable fill. The final floor elevation of the lowest parking level may be adjusted to get the project in balance after all engineering and testing is complete.~~

***H-9 Interim Park/Landscaping (Phase I).*** An interim park and/or interim landscaping would be constructed in Phase I on approximately 2 acres within the northern boundary of the un-leased portion of H-9 along H Street. Such improvements may be redesigned when the H-9 Retail/Commercial Recreation and Marina Support development is ultimately constructed in Phase II (see H-9 under Phase II).

***H-18 Interim Surface Parking Lot (Phase I).*** An interim surface parking lot with lighting of 1,100 spaces would be constructed by the Port on the 9-acre H-18 parcel in Phase I until construction of the mixed-use office/collector parking garage is complete in Phase IV. Parking on H-18 utilized to satisfy parking requirements for other parcels shall be provided by the Port in accordance with appropriate parking rates, fees, or other considerations. Approximately 500 of those 1,100 parking spaces may be utilized by the Gaylord-RCC on Parcel H-3. Access to H-18 would be provided via Street C. ~~Gaylord will provide a~~ An employee shuttle may be used to transport its employees between H-3 and H-18.

**HP-3 Shoreline Promenade (Phase I).** A continuous shoreline promenade or “baywalk” is proposed along the shoreline in the Harbor District, from the existing boatyard south, around the harbor, and ending along parcel HP-14 just north of the J Street Marsh northern shoreline, in order to maximize public visual and physical access to the water. The promenade would total approximately 8 acres (approximately 12,000 feet long) and would vary in width from 25 to 50 feet, and may be narrower in certain areas for public safety reasons. The portion of the promenade abutting HP-1 and H-8 (approximately 3 acres) would be built in Phase I. It is anticipated that the remainder of the promenade would not be built until the adjacent development occurs. Specifically, the portions of the promenade abutting H-9 (approximately 1 acre) would be built in Phase II, the portions of the promenade abutting HP-14, HP-15, and H-21 (approximately 3 acres) would be built in Phase III, and the portions of the promenade abutting H-1A and H-1 would be built in Phase IV. The existing uses would be demolished and/or relocated as appropriate prior to construction of the promenade. The promenade would contain public amenities such as pedestrian-scale landscaping, lighting, and furniture. This promenade would replace the existing shoreline promenade that is rather narrow, featureless, and lacks public amenities, and would be part of a larger pedestrian circulation system within the Sweetwater, Harbor, and Otay Districts. Parking would be provided for the promenade within the adjacent park or development parcels. Specifically, 11 parking spaces for this Phase I portion of HP-3 would be provided off site at H-8/HP-1. ~~The aforementioned promenade improvements would be phased in as funding becomes available.~~ The PMP land use designation would be “Promenade.”

**HP-23A Industrial Business Park Use (Phase I).** This approximately 1-acre parcel that was a part of the former Goodrich South Campus is proposed in Phase I to include a new sewer lift station, a transit stop, parking, or other use allowed within the Port’s “Industrial Business Park” designation. Any proposed specific uses that would generate traffic would be subject to separate environmental review pursuant to CEQA Guidelines 15168. The PMP land use designations would be “Industrial Business Park” and “Promenade.”

#### 3.4.4.2 Phase II

##### a. Sweetwater District Program Level (Phase II) Components

**S-2A Open Space (Phase II).** A parcel of approximately 3 acres, which is currently an existing street and partially vacant, is proposed in Phase II for open space and/or mitigation opportunities (see Section 4.8, *Terrestrial Biological Resources*) between the new E Street extension and F & G Street Marsh. ~~It is likely that the existing street segment between F and G Streets would be demolished before the proposed E Street Extension is completed.~~ demolished after as This parcel would not be a part of the land exchange and would remain in under the City’s land use jurisdictional authority; the LCP designation would be “Open Space.”

*SP-2 Seasonal Wetland (Phase II).* An existing seasonal wetland would remain and would be surrounded by a ~~50~~100-foot-wide vegetated buffer comprising approximately 14 acres of land. The westerly segment of F Street/Lagoon Drive west of the proposed terminus of F Street would be abandoned after the E Street Extension is completed. The abandoned segment of F Street/Lagoon Drive would remain in place but would be accessible to only pedestrians and bicycles, and would connect F Street at its cul-de-sac west to the E Street extension. Improvements would be completed in Phase II. This parcel would be a part of the land exchange and would transfer land use jurisdictional authority from City to Port ~~jurisdiction~~, and the PMP land use designations would be “Wetlands,” “Promenade,” and “~~Open Space~~Habitat Replacement.”

As a future and separate project, the Port will investigate, in consultation with U.S. Fish and Wildlife Service (USFWS), the feasibility of restoring an ecologically meaningful tidal connection between the F & G Street Marsh and the upland marsh on Parcel SP-2 consistent with USFWS restoration concepts for the area. At a minimum, the investigation will assess the biological value of tidal influence, the presence of hazardous materials, necessary physical improvements to achieve desired results, permitting requirements, and funding opportunities for establishing the tidal connection. This investigation will be completed prior to the initiation of any physical alteration of Parcel SP-2, F Street, and/or the F & G Street Marsh. In addition, once emergency access to the Proposed Project area has been adequately established such that F Street is no longer needed for public right-of-way, the Port and City will abandon/vacate the F Street right-of-way for vehicular use, but may reserve it for pedestrian and bicycle use if ecologically appropriate.

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b. Harbor District Program Level (Phase II) Components

***H-9 Retail/Commercial Recreation and Marina Support (Phase II).*** Approximately 25,000 to 50,000 square feet of visitor-serving retail/commercial recreation space (in Phase II) and a support building (in Phase IV) for the new HW-4 200-slip marina are proposed. This approximately 9-acre parcel is currently part of the existing RV Park, vacant former AFS Industries, and Chula Vista Marina leaseholds.

As described under H-9 in Phase I, an interim park and/or interim landscaping of approximately 2 acres would be constructed in Phase I on the northern portion of the unleased portion of H-9 along H Street. Such improvements may be redesigned when the H-9 Retail/Commercial Recreation and Marina Support development is ultimately constructed in Phases II and IV.

The existing improvements would be demolished prior to redevelopment of parcel H-9. The 200-slip HW-4 marina would not be completed until Phase IV; therefore, the marina support building on H-9 that would support the new HW-4 marina would not be completed until Phase IV. The marina support facilities would include uses such as offices, restrooms, showers, lockers, ship chandlery, boat/bicycle rentals, delicatessens, and snack bars. All new buildings would be approximately 15 to 30 feet high (one to two stories) and would provide parking pursuant to standards outlined in the parking section of this EIR. A total of 423 parking spaces will be provided on H-9, including 200 for the H-9 retail, 140 for the H-9 marina slips, 80 spaces for H-12, and 3 spaces for HP-3, assuming maximum build-out. A shoreline promenade would be constructed on the south end of this parcel (see HP-3). Lateral public access would be provided from the proposed H Street Extension south to the harbor between H-8 and H-9.

It is anticipated that the developer of the H-9 Retail/Commercial Recreation space would be given the opportunity to construct its project using both Parcels H-8 and H-9 to allow for an optimal configuration of the 50,000-square-foot H-9 retail/marina space and the approximately 6-acre H-8 park space, and associated parking. Such a configuration would benefit both the tenant and the public and would maximize open space connections to adjacent parcels and would consider public views into the harbor. The development of H-9 would not result in any diminution of park space; there would be a minimum of 6 acres of park space on H-8/H-9 if these parcels are developed together. The PMP land use designations would be “Commercial Recreation,” “Park,” and “Promenade.”

***H-15 Mixed Use Office/Commercial Recreation and Hotel (Phase II).*** A maximum of 420,000 square feet of mixed-use office and commercial recreation/retail use and a maximum 250-room hotel are proposed in Phase II on approximately 9.4 acres of land that was part of the former Goodrich South Campus.

More specifically, this parcel would contain up to 300,000 square feet of office (Class A and flex space), 120,000 square feet of retail, and a 250-room hotel. This development would also include a comprehensive landscaping plan that would provide visual connections that would relate the new development to the surrounding environment. The maximum heights of the buildings would be 90 to 130 feet. Building set-backs on J Street, between the I-5 Corridor and A Street will be 65 feet, measured from the north curb of J Street. Uses such as a hotel pool will be permitted in the set-back as long as the view of the Bay is not impeded. Building set-backs and step-backs will provide a 70-foot-wide minimum street section at the podium level and a 95-foot-wide minimum street section at tower level on J Street. Proposed towers will gradually step downward in height from north to south, reflecting the more intensive proposed land uses to the north and the environmental preserve to the south. A total of approximately 1,640 on-site parking spaces would be provided in parking structures both above and below grade. The above-grade structured parking would be generally located in the center of the commercial structures, generally surrounded and enclosed by the office, retail, and hotel uses in order to minimize its visibility. The hotel would include up to 25,000 square feet of meeting space and ancillary retail use.

This parcel may be a part of the land exchange. If the land exchange of this parcel is approved by the Port and the SLC, the parcel would transfer land use jurisdictional authority from Port to City ~~jurisdiction~~, and the LCP designations would be “Commercial—Professional and Administrative” and “Commercial—Visitor.” If this parcel is not part of the land exchange, it would remain under the Port’s ~~jurisdiction~~ land use authority with the PMP designation of “Industrial Business Park.”

***H-23 Resort Hotel and Cultural/Retail (Phase II).*** This approximately 24-acre parcel that was a part of the former Goodrich South Campus is proposed for a maximum of 500 hotel rooms and approximately 200,000 square feet of trust-related, stand-alone cultural/retail uses in Phase II. The resort hotel would be a maximum of 300 feet high; the cultural/retail uses would be a maximum of 30 to 65 feet high. The hotel would include up to 50,000 net square feet of conference room space, up to 25,000 square feet of restaurant/retail use, open space, and other ancillary hotel uses. For the hotel, approximately 400 on-site surface and structured parking spaces would be provided, and an additional 100 off-site parking spaces may be provided within the H-18 parking facility. For the cultural/retail uses, approximately 400 on-site surface and structure parking spaces would be provided, and an additional 100 off-site parking spaces may be provided within the H-18 parking facility. Both the hotel and cultural/retail uses will incorporate integrated open space areas that would connect to other open space areas within H-8 and H-9. The PMP land use designations would be “Industrial Business Park” and “Promenade.”

***HP-3 Shoreline Promenade (Phase II).*** As mentioned above under the HP-3 description in Phase I, a continuous shoreline promenade or baywalk is proposed along the shoreline in the Harbor District, from the existing boatyard south, around the harbor, and ending along parcel HP-14 just north of the J Street Marsh northern shoreline, in order to maximize public visual and

physical access to the water. The promenade would total approximately 9 acres (approximately 12,000 feet long) and would vary in width from 25 to 50 feet, and may be narrower in certain areas for public safety reasons. The portion of the shoreline promenade abutting HP-1 and H-8 would be built in Phase I. It is anticipated that the remainder of the promenade would not be built until the adjacent development occurs. Specifically, the portions of the promenade abutting H-9 would be built in Phase II, the portions of the promenade abutting HP-14, HP-15, and H-21 would be built in Phase III, and the portions of the promenade abutting H-1A and H-1 would be built in Phase IV. The existing uses would be demolished and/or relocated as appropriate prior to construction of the promenade. The promenade would contain public amenities such as pedestrian-scale landscaping, lighting, and furniture. This promenade would replace the existing shoreline promenade that is rather narrow, featureless, and lacks public amenities, and would be a part of a larger pedestrian circulation system within the Sweetwater, Harbor, and Otay Districts. Parking would be provided for the promenade within the adjacent park or development parcels. Specifically, three parking spaces would be provided off site at H-9. The aforementioned promenade improvements would be phased in as funding becomes available. The PMP land use designation would be “Promenade.”

***HP-6, HP-7, and HP-8 Parks and Open Space (Phase II).*** The portion of the existing Bayfront Park HP-6, and the existing Marina View Park on HP-7 and HP-8 would remain in their current location on approximately 8 acres. However, some improvements to Marina View Park, including reconfiguration of the existing parking lot, would be needed in Phase II to accommodate the realigned J Street/Marina Parkway and Marina Way, which would be completed in Phase I. Approximately 80 on-site parking spaces would be provided at HP-7. No changes are proposed to the existing 60-space parking lot on HP-6. Along the shoreline of HP-6 and HP-7, north of the J Street Marsh, an approximately 12-foot-wide pedestrian promenade is proposed that would connect to the H-21 and HP-3 promenades. ~~An approximately 4-foot-high railing-mesh fencing~~ with interpretive signage is proposed along the promenade north of the J Street Marsh to deter intrusion and prevent easy access for humans and domestic animals into the Marsh. The aforementioned park improvements would be phased in as funding becomes available. The PMP land use designations would be “Park” and “Promenade.”

***HP-11 Existing Wetlands (Phase II).*** No changes to the existing wetlands (southern coastal salt marsh) contained within this approximately 3-acre parcel are proposed. The PMP designation would be “Wetlands and Open Space.”

***HP-28 H Street Pier—First Half (Phase II).*** Construction of a new, approximately 60-foot-wide, 36,000-square-foot pier is proposed at the terminus of the newly extended H Street corridor above existing open water area. The 600-linear-foot pier would connect downtown Chula Vista to the Bay via H Street, and would enhance pedestrian and visual access to the water and offer picturesque views of San Diego Bay. Approximately half (300 linear feet) of the H

Street Pier would be developed in Phase II at a length just short of the existing navigation channel. The remainder of the H Street Pier would be constructed in Phase IV, following realignment of the existing navigation channel. Ten parking spaces will be provided off site at parcels H-8/HP-1. The PMP land use designation would be “Promenade.” The aforementioned improvements would be phased in as funding becomes available.

#### 3.4.4.3 Phase III

##### a. Harbor District Program Level (Phase III) Components

**H-21 Retail/Commercial Recreation and Marina Support (Phase III).** This approximately 10-acre parcel is on land that is currently vacant, part of the existing Marina Way; part of the existing Chula Vista Marina and California Yacht Marina leaseholds (with leases that expire in 2021 and 2029, respectively); and part of the existing boat launch parking. H-21 is proposed in Phase III for approximately 75,000 to 150,000 square feet of trust-related retail and marina support uses with approximately 600 on-site surface parking spaces. An additional 350 off-site parking spaces for this parcel may be provided at the H-18 parking facility (see H-18). The 500-slip HW-1 marina would not be completed until Phase IV; therefore, the marina support building on H-21 that would support the new HW-1 marina would not be completed until Phase IV. The marina support facilities would include uses such as offices, restrooms, showers, lockers, ship chandlery, boat/bicycle rentals, delicatessens, and snack bars. The structures would be a maximum of 15 to 30 feet high (one to two stories). The existing uses would be demolished and/or relocated, and the Marina Way intersection with Marina Parkway would be realigned prior to full redevelopment of this parcel.

Along the shoreline of H-21, north of the J Street Marsh, an approximately 12-foot-wide pedestrian promenade is proposed that would connect to the HP-7 and HP-3 promenades. The promenade would contain ~~an~~ approximately four-foot-high railing-mesh fencing to minimize impacts to the sensitive resources within the adjacent J Street Marsh. The PMP land use designation would be “Commercial Recreation.”

**HP-3 Shoreline Promenade (Phase III).** As mentioned above under the HP-3 description in Phases I and II, a continuous shoreline promenade or baywalk is proposed along the shoreline in the Harbor District, from the existing boatyard south, around the harbor, and ending along parcel HP-14 just north of the J Street Marsh northern shoreline, in order to maximize public visual and physical access to the water. The promenade would total approximately 9 acres (approximately 12,000 feet long) and would vary in width from 25 to 50 feet, and may be narrower in certain areas for public safety reasons. The portion of the promenade abutting HP-1 and H-8 would be built in Phase I. It is anticipated that the remainder of the promenade would not be built until the adjacent development occurs. Specifically, the portions of the promenade abutting H-9 would be built in Phase II, the portions of the promenade abutting HP-14, HP-15, and H-21 would be built

in Phase III, and the portions of the promenade abutting H-1A and H-1 would be built in Phase IV. The existing uses would be demolished and/or relocated as appropriate prior to construction of the promenade. The promenade would contain public amenities such as pedestrian-scale landscaping, lighting, and furniture. This promenade would replace the existing shoreline promenade that is rather narrow, featureless, and lacks public amenities, and would be a part of a larger pedestrian circulation system within the Sweetwater, Harbor, and Otay Districts. Parking would be provided for the promenade within the adjacent park or development parcels. The aforementioned promenade improvements would be phased in as funding becomes available. The PMP land use designation would be “Promenade.”

***HP-9 Open Space (Phase III).*** Similar to parcels SP-4, SP-6, and HP-12, the existing approximately 1-acre SDG&E transmission corridor easement is proposed in Phase III as a greenbelt strip along the Harbor District’s eastern boundary, containing landscaping and a decomposed granite trail for pedestrians and bicycles, consistent with the Port/SDG&E “Quitclaim Deed, Easement Reservation, and Covenant Agreement” concerning improvements within the easement. The PMP land use designations would be “Open Space” and “Promenade.”

***HP-12 Open Space (Phase III).*** Similar to parcels SP-4 and SP-6 in the Sweetwater District, the existing 150-foot-wide, approximately 8-acre SDG&E transmission corridor easement is proposed in Phase III as a greenbelt strip along the Harbor District’s eastern boundary, south of the existing Goodrich facility, and would contain landscaping (not to exceed 15 feet in height) and a decomposed granite trail for bicycles and pedestrians, consistent with SDG&E’s guidelines for installation of landscaping within their easements, for which approvals will be subject to SDG&E Land Management. The PMP land use designation would be “Open Space.”

***HP-13 Open Space (Phase III).*** Similar to parcels SP-5 and SP-7 in the Sweetwater District, the existing 40-foot-wide, approximately 2-acre Coronado Railroad ROW located parallel to the I-5 freeway is proposed in Phase III as a linear greenbelt strip. In addition, the roadway improvements to H and J Streets, and the construction of a new Street C, would require improvements to the road crossings over the railroad tracks. The PMP land use designations would be “Open Space” and “Promenade.”

***HP-14 and HP-15 Boat Launch/Bayfront Park/Harbor Police Building/Parking (Phase III).*** This approximately 6-acre parcel that currently contains Chula Vista Bayfront Park (HP-14), the boat launch ramp and trailer/car parking, restrooms, and Port Harbor Police Bay Control Office (all on HP-15) will remain. The existing 125 boat trailer parking lot spaces would be located on HP-15 and would be ~~reduced in size from approximately 125 boat trailer spaces to approximately 100 boat trailer spaces~~preserved. The PMP land use designations would be “Park” and “Promenade.”

b. Otay District Program Level (Phase III) Components

The potential future land uses and development program for the Otay District are summarized below in *Table 3-8II*. No residential development or new power plant is proposed for the Otay District. No parcels in the Otay District will be included in the proposed land exchange and all parcels in the Otay District will remain within the land use jurisdiction of the Port. There will be no development in the Otay District during Phases I, II, and IV. As discussed below, future development in the Otay District is uncertain because it would require termination of operations and decommission, demolition, and removal of the existing SBPP and demolition and relocation of the existing SDG&E electrical switchyard, which depend on factors beyond the land use jurisdiction of the Port. All plan components in the Otay District are proposed for Phase III and are analyzed in this report at a programmatic level. The nature and extent of additional environmental review will be determined pursuant to State CEQA Guidelines section 15168.

The Port presently leases all or portions of Parcels O-3A, O-4, OP-1A, OP-1B, OP-2A, and OP-3 to Dynegy, Inc. for operation of the SBPP. However, termination of the SBPP operations is not within the land use jurisdiction of the Port and depends on factors beyond the Port's control. The SBPP Units 1 and 2 ~~are~~ is designated as Reliability Must-Run (RMR) by the California Independent Systems Operator (Cal-ISO), which is charged with operating the majority of California's high-voltage wholesale power grid and strategically plans for the transmission needs of this vital infrastructure. On October 2009, Cal-ISO terminated the RMR contract for Units 3 and 4 as of 2010. As an RMR facility, the SBPP is essential to the supply of adequate power to the region and must continue in operation until Cal-ISO removes the RMR status. At this time, it appears unlikely that the Cal-ISO would approve decommissioning of the SBPP without a replacement plant(s) in the region with equal or greater generating capacity. Accordingly, while the Port has identified potential land uses for Parcels O-3A, O-4, OP-1A, OP-1B, OP-2A, and OP-3, their availability for future development depends on removal of the SBPP's RMR status by Cal-ISO and termination of the SBPP's operations.

At the time the Port acquired the SBPP, SDG&E reserved for itself an easement in perpetuity for operation and maintenance of the SDG&E electrical switchyard and associated facilities (underground transmission lines and vaults, overhead electric towers, electric distribution poles, and gas lines and access roads), that include portions of Parcels O-1, O-3A, O-3B, OP-1B, OP-2A, and OP-3. Pursuant to an agreement between SDG&E and the City of Chula Vista, the existing switchyard is proposed to be relocated to Parcel O-4. However, Parcel O-4 is within the land use jurisdiction of the Port ~~and not the City. A land exchange between the Port and SDG&E was approved in January 2010 by the Board of Port Commissioners and in February 2010 by the SLC for the proposed relocation of the switchyard.~~ Details regarding the proposed switchyard relocation are unknown at this time, and would require SDG&E coordination with the City, City coordination with the Port, and approval by the

~~CPUC~~Accordingly, while the Port has identified potential land uses that are on the site of the existing switchyard and associated facilities (Parcels O-1, O-3A, O-3B, OP-1B, OP-2A, and OP-3), the availability for future development depends on approval by the CPUC and demolition and relocation of the existing switchyard.

Despite the SBPP's RMR status for Units 1 and 2 and lack of details concerning the switchyard relocation, subsequent to public circulation of the previous Draft EIR, public comments inquired about potential use of the SBPP site for a new football stadium. The City and the San Diego Chargers (Chargers) have had discussions concerning a new football stadium in which the Chargers have identified two potential locations, including the site of the existing SBPP and switchyard. The Port is informed that no site has been agreed upon, no application or plan has been submitted, and no agreement has been reached between the City and the Chargers concerning a stadium project. Furthermore, the SBPP and switchyard site is~~are~~ subject to the CEC and CPUC, respectively, and within the **land use** jurisdiction of the Port, not the City, ~~and~~ ~~‡The Port is not a party to the discussions between the City and the Chargers. The description of future uses in the Otay District does not include a football stadium because the Port has ~~neither initiated nor received any plan or proposal~~ not received any application for such use. The proposed land uses summarized in *Table 3-811*, and described in more detail below, are subject to removal of the SBPP's RMR status, and demolition and relocation of the switchyard, and do not include use of the SBPP and switchyard site for a football stadium.~~

The proposed land uses and development program/height ranges for the Otay District are summarized below in *Table 3-101*. A more detailed description of development per parcel in the Otay District is provided below. No residential development is proposed. None of the Otay development would occur in Phases I, II, or IV. All Otay plan components are proposed during Phase III and are analyzed in this report at a programmatic level. The nature and extent of additional environmental review will be determined pursuant to State CEQA Guidelines Section 15168.

**TABLE 3-101**  
**Otay District Summary:**  
**Proposed Land Uses and Development Program/Height Ranges**

Parcel Number	Proposed Use	Program Range	Maximum Stories	Maximum Height (feet)
<b>Public Space</b>				
Phase I				
—	Public Infrastructure Only	—	—	—
Phase II				
—	Public Infrastructure Only	—	—	—
Phase III				
OP-1A, OP-1B	South Park	24 acres	1	N/A
OP-3	Open Space	27 acres	N/A	N/A

TABLE 3-101 (Cont.)

Parcel Number	Proposed Use	Program Range	Maximum Stories	Maximum Height (feet)
OP-2A, OP-2B	Ecological Buffer/Telegraph Creek Channel	27 acres	N/A	N/A
Phase IV				
—	Public Infrastructure Only	—	—	—
<b>Development</b>				
Phase I				
—	Public Infrastructure Only	—	—	—
Phase II				
—	Public Infrastructure Only	—	—	—
Phase III				
O-1	Industrial Business Park Use	18 acres	N/A	N/A
O-3A, O-3B	RV Park	175 to 236 RV spaces	1 to 2	15 to 35
O-4	Industrial Business Park Use	28 acres	N/A	N/A
Phase IV				
—	Public Infrastructure Only	—	—	—

***O-1 Industrial Business Park Use (Phase III).*** Industrial business park use is proposed in Phase III on approximately 18 acres of vacant land that once served as the North Tank Farm for the SBPP and includes a portion of the existing SDG&E electrical switchyard easement. The SBPP is under the jurisdiction of the CEC and the SDG&E switchyard is under the jurisdiction of the CPUC. The existing switchyard would be demolished and relocated as a separate project subject to the exclusive jurisdiction and proceedings of the CPUC and the existing switchyard easement removed, prior to redevelopment of the portion of this parcel that currently contains the switchyard easement. No development projects are proposed or reasonably foreseeable on this parcel, which would remain in Port ownership and land use jurisdiction and would not be part of the land exchange; furthermore, no residential units would be constructed in the Otay District. This parcel would remain in Port land use jurisdiction with the PMP land use designation of “Industrial Business Park.”

***O-3A and O-3B RV Park (Phase III).*** An RV Park containing between 175 and 236 RV parking spaces is proposed in Phase III on an approximately 14-acre parcel currently occupied by the SDG&E electrical switchyard (under the jurisdiction of the CPUC) and most of the SBPP (under the jurisdiction of the CEC). The switchyard would be demolished and relocated and the power plant would be demolished, subject to the exclusive jurisdiction and proceedings of the CEC, prior to redevelopment of this parcel. This low cost, visitor and recreational use RV Park would contain ancillary facilities such as offices, pool/spa, snack bar, general store, meeting space, game room, laundry room, approximately 20 visitor parking spaces, and playground equipment. Structures would be a maximum of 15 to 35 feet high (one to two stories). A wall would be



constructed along its western edge to separate the RV Park from the OP-2A pedestrian trail and No Use Zone. An approximately 10-foot-wide pedestrian trail is proposed around the RV Park that would connect to the rest of the trail system in the Otay District. The bicycle path and Street B would bisect the RV Park. Parcels O-3A and O-3B could be combined with the adjacent OP-1A and OP-1B South Park, and could include camping uses. The PMP land use designation would be “Commercial Recreation.”

***O-4 Industrial Business Park Use (Phase III).*** An Industrial Business Park land use designation is proposed in Phase III on an approximately 28-acre parcel that is currently predominantly vacant and includes the former LNG site and a portion of the existing power plant leasehold. A portion of the parcel contains aboveground tanks that previously supported the existing power plant and would be demolished prior to redevelopment of this parcel. This parcel would be redeveloped with uses allowable under the proposed PMP Industrial Business Park land use classification: industrial activities associated with the manufacture, assembling, processing, testing, servicing, repairing, storing or distribution of products; wholesale sales; retail sales that are incidental to permitted uses; transportation and communication uses; parking; industrial, construction, government and business services; and research and development.

No new power plant is proposed for this parcel but the existing SDG&E switchyard may potentially be relocated to this parcel. A land exchange between the Port and SDG&E was approved in January 2010 by the Board of Port Commissioners and in February 2010 by the SLC for the proposed relocation of the switchyard. The specific switchyard relocation project is not part of the Proposed Project since it is subject to the exclusive jurisdiction and proceedings of the CEC (see *Section 3.4.9, Related Projects Undergoing Separate Environmental Review* below). This report analyzes only the PMP land use designation of Industrial Business Park. Under this designation, relocation of the switchyard would be allowed. For purposes of the environmental analyses in this report, switchyard relocation was assumed for this parcel. The PMP land use designation would be “Industrial Business Park.”

***OP-1A and OP-1B South Park (Phase III).*** A new approximately 24-acre passive use park is proposed in Phase III on land currently within the SBPP leasehold. The existing power plant and ancillary uses would be demolished prior to redevelopment of this parcel. The park may also contain other amenities such as landscaping, berms, lighting, restrooms, drinking fountains, benches, picnic areas, outlook areas, trash receptacles, public art, filtration basins, and approximately 100 on-site parking spaces. A 12-foot-wide pedestrian trail would be interwoven throughout the park and would connect to the trail system in the Otay District. The bike path and Street B would bisect the park. An approximately 50-foot-wide boardwalk/observation area is proposed at the mouth of the existing intake/discharge channels. The park would be designed to allow for restricted vehicle access for authorized personnel to the existing Chula Vista Wildlife Reserve. The park could be combined with the adjacent O-3A/O-3B RV Park and could allow

for camping activities. The aforementioned park improvements would be phased in as funding becomes available. The PMP land use designations would be “Park” and “Promenade.”

In addition, the park will meet the following minimum standards in addition to those described above:

- The park will be passive in nature and encourage passive recreation, be low-impact and contain minimal permanent structures. Structures will be limited to single story heights and will be limited in function to restrooms, picnic tables, **tot lots**, shade structures and overlooks. “Passive” will mean that which emphasizes the open-space aspect of a park and which involves a low level of development, including picnic areas and trails. In contrast, active recreation is that which requires intensive development and includes programmable elements that involve cooperative or team activity, including, ball fields and skate parks.
- The park will be constructed using low water-use ground cover alternatives where possible.
- Pedestrian and bike trails will be segregated where feasible. A meandering public trail will be provided along the entire length of the Bayfront. The meandering trail within the Sweetwater Park and adjacent to Buffer Areas will not be paved.
- The park will not include athletic field amenities.
- No unattended food vending will be allowed.
- The park will include enforcement signage that prohibits tenants, employees, residents, or visitors from feeding or encouraging feral cat colonies and prevents feral cat drop-off or abandonment of pets; and prohibits leash free areas near buffers.
- Due to the immediate adjacency to Wildlife Habitat Areas, the following restrictions will apply:
  - Such park will be designated as Passive use park and use of amplified sound equipment will be prohibited.
  - Reservations for group events and activities will be prohibited.

***OP-2A Ecological Buffer (Phase III).*** A 170- to 200-foot-wide No Use or No Touch ecological buffer with habitat mitigation opportunities is proposed in Phase III on approximately 24 acres of undeveloped land on the western edge of the Otay District to buffer the adjacent J Street Marsh from Proposed Project development. This buffer would run adjacent to parcels O-1, O-3A, and O-3B on land that was part of the former North Tank Farm and currently contains the switchyard and SBPP. Permanent fencing, consisting of a 6-foot-high vinyl-coated chain link fence, would be installed between OP-2A and Street A adjacent to the J Street Marsh to deter intrusion and prevent easy access for humans and domestic animals into the marsh.

The portion of the No Use Zone that lies north of the existing intake/discharge channel is proposed for wetlands and upland habitat mitigation (see *Section 4-8, Terrestrial Biological Resources*). This would require pulling back the steep slope east of the J Street Marsh. The buffer would narrow to 100 feet wide south of the existing intake/discharge channel and southward, on land that is part of the power plant and former LNG site. The No Use Zone would be off-limits to pedestrians. A **permanent and contiguous** 6-foot-high **vinyl-coated chain link** fence would be constructed along the east side of the No Use Zone **within OP-2A** west of O-1, O-3A, **OP-1A** and **O-4 O-3B**. The placement of the fence would be situated in a depression such that sight lines would look over the fence and into the J Street Marsh.

A pedestrian pathway would be located just east of the mitigation area along Street A and along the perimeter of O-3A and O-3B and continue within the OP-1A and OP-1B South Park. No changes are proposed for the existing intake and discharge channel area. However, as part of OP-1A and OP-1B, an approximately 50-foot-wide public boardwalk/observation area is proposed at the mouth of the existing intake/discharge channels. The existing power plant would be demolished, and the existing switchyard would be demolished and relocated (subject to the exclusive jurisdiction and proceedings of the CEC) prior to redevelopment of this parcel. The PMP land use designations would be “~~Open Space~~Habitat Replacement,” “Wetlands,” and “Promenade.” The aforementioned improvements would be phased in as funding becomes available.

***OP-2B Telegraph Creek Channel (Phase III)***. The existing concrete trapezoidal Telegraph Canyon Creek Channel is proposed to be widened in Phase III to accommodate projected 100-year storm flows and possibly replaced with a more natural vegetated channel on approximately 3 acres. The existing channel easement may potentially be increased to 130 to 140 feet from 100 feet wide. The channel bottom would be approximately 110 feet wide, of which a 20-foot-wide low flow vegetated channel would be constructed; the remaining 90 foot width of the channel would be concrete. The channel would have approximately 10-foot-high vertical walls. The easement would include a 20-foot-wide access road on one side for maintenance. Naturalizing of the channel is not required for the Proposed Project. The PMP land use designation would be “~~Open Space~~Habitat Replacement.”

***OP-3 Open Space (Phase III)***. Similar to parcels SP-4, SP-6, and HP-12, the existing approximately 27-acre SDG&E transmission corridor easement, which varies from 150 feet wide north of L Street and 300 feet wide south of L Street, is proposed in Phase III as a greenbelt strip along the Otay District’s eastern boundary, containing landscaping and a decomposed granite trail for pedestrians and bicycles, subject to the terms of the SDG&E easement agreement. In addition, approximately 100 parking spaces would be developed. The PMP land use designations would be “Open Space” and “Promenade.”

#### 3.4.4.4 Phase IV

##### a. Sweetwater District Program Level (Phase IV) Components

***S-1 Resort Hotel (Phase IV).*** A resort hotel of approximately 500 to 750 rooms is proposed in Phase IV on an approximately 19-acre, predominantly vacant, parcel that includes a portion of the existing Chula Vista Nature Center access road. The hotel would be a maximum of 40- to 100-feet-high (two to eight stories with the taller structures stepped away from the Bay), and would include 50,000 to 75,000 square feet of conference space, retail/restaurant use totaling up to 40,000 square feet, ancillary uses, open space, and approximately 750 on-site parking spaces. This parcel would be a part of the land exchange and would transfer land use jurisdictional authority from City to Port ~~jurisdiction~~, and the PMP land use designation would be “Industrial Business Park.” At the time project specific development is proposed for S-1, shading impacts, as well as appropriate setbacks, step backs, and/or height reductions, will be analyzed as part of the necessary subsequent environmental review for this parcel.

***S-3 Mixed Use Office/Commercial Recreation (Phase IV).*** This approximately 6-acre vacant parcel is proposed for 60,000 to 120,000 square feet of mixed-use office and commercial recreation space in Phase IV. As defined in the PMP, the commercial recreation land use designation allows for such uses as hotels, restaurant, convention center, recreational vehicle parks, specialty shopping, pleasure craft marinas, and sportfishing. The building height would range from 30 to 45 feet (two to three stories) and would provide approximately 480 parking spaces. This parcel would be a part of the land exchange and would transfer land use jurisdictional authority from City to Port ~~jurisdiction~~, and the PMP land use designation would be “Industrial Business Park.”

***S-4 Office (Phase IV).*** This approximately 6-acre vacant parcel is proposed for approximately 120,000 square feet of general office use in Phase IV, with a maximum building height of 125 feet (approximately eight stories) with approximately 360 parking spaces provided within a surface parking lot and a parking structure. A 100-foot-wide fenced No Use or No Touch habitat buffer will be included on the north end of the parcel to buffer the sensitive habitat to the north from development. The CPUC will need to approve a rail crossing to provide access to this land-locked parcel. At the time project specific development is proposed for S-4, shading impacts, as well as appropriate setbacks, step backs, and/or height reductions will be analyzed as part of the necessary subsequent environmental review for this parcel. This parcel would not be a part of the land exchange and would remain in the City’s land use jurisdiction, and the LCP land use designation would be “Commercial—Professional and Administrative.”

***SP-4 and SP-6 Open Space (Phase IV).*** The existing 150-foot-wide, approximately 8-acre SDG&E transmission corridor is proposed in Phase IV as a greenbelt strip along the Sweetwater District’s eastern boundary, and would contain landscaping (not to exceed 15 feet in height) and

a decomposed granite trail for pedestrians and bicycles consistent with SDG&E's guidelines for installation of landscaping within their easements, for which approvals will be subject to SDG&E Land Management. The existing Chula Vista Nature Center parking lot/Park & Ride on the southern portion of Parcel SP-4 will be permanently replaced at SP-3 during Phase I. Parcels SP-4 and SP-6 would remain under the City's land use jurisdiction with the LCP designation of "Public/Quasi-Public."

***SP-5 and SP-7 Open Space (Phase IV).*** The existing 40-foot-wide, approximately 2-acre Coronado Railroad ROW located parallel to the I-5 freeway is proposed in Phase IV as a linear greenbelt strip. In addition, the construction of the E Street Extension would require improvements to the existing E Street road crossing over the railroad tracks. This parcel would remain under the City's land use jurisdiction with the LCP designation of "Railroad Easement."

***S-5 Park (Phase IV).*** This approximately 1-acre parcel will remain in its current City park use with grassy landscaped areas, benches/seating areas, and parking. No improvements are proposed. This parcel will remain under the City's ownership and jurisdiction with the LCP designation of "Parks and Recreation."

b. Harbor District Program Level (Phase IV) Components

***H-1 Community Boating Center (Phase IV).*** A community boating center or recreational marina of approximately 10,000 to 20,000 square feet is proposed in Phase IV on an approximately 2-acre parcel on the central portion of the existing South Bay Boatyard leasehold. Redevelopment of this parcel is subject to relocation of the boatyard or termination of its existing lease, which expires in 2020. As of this writing, a replacement boatyard site has not yet been identified. The boating center building could include an aquatic center, low-cost visitor serving boating opportunities, and dock and dine facilities. If this parcel is developed as a recreational marina, it would contain a marina support building that would include uses such as offices, restrooms, showers, lockers, ship chandlery, boat/bicycle rentals, delicatessens, and snack bars. Structures would be a maximum of 30-feet-high (one to two stories). Jet-ski rentals within the Chula Vista Bayfront Master Plan area would be prohibited. In addition, approximately 180 on-site surface parking spaces would be provided for the boating center (or marina) and boat slips. The facility would have approximately 200 boat slips, and possible water transportation dock and boat launch as more fully described under Parcel HW-6. The PMP land use designation would be "Commercial Recreation."

***H-1A Signature Park (Phase IV).*** This approximately 5-acre parcel, part of the existing South Bay Boatyard leasehold and an existing vacant asphalt lot, is proposed in Phase IV as an extension of the Sweetwater Signature Park, which begins in the Sweetwater District on Parcel S-2 (described earlier) and continues into the Harbor District wrapping around the H-3 RCC onto Parcels H-1A, HP-1, and H-8. The H-1A portion of the signature park would be developed

during Phase IV after the relocation of the existing boatyard or termination of its existing lease, which expires in 2020. As of this writing, replacement boatyard capacity has not yet been identified. Approximately 70 on-site surface parking spaces would be provided.

In addition, as part of the previous South Bay Boatyard PMP Amendment for this site certified by the CCC in 2001, an approximately 100-foot-wide section of the northern shoreline of this parcel would be designated “Open Space” to serve as a buffer between development and the adjacent sensitive shoreline resources to the north. The actual extent of buffer coverage will depend upon future resource conditions and would be re-evaluated when specific development proposals are submitted. ~~and~~ In addition, the Port would enter into a cooperative agreement with the appropriate agencies to protect and/or enhance, where appropriate, this the sensitive biological habitat running north from the South Bay Boatyard to the Sweetwater River Channel (known as the Sweetwater Tidal Flats). Subject to the cooperation of the applicable Resource Agency, such cooperative agreement will be executed prior to the Development Commencement of any projects subject to District’s land use jurisdiction within the Sweetwater or Harbor Districts.

The promenade on this parcel that would begin just south of the 100-foot-wide buffer described above and would run westward toward the Bay, follow the shoreline along H-1 and connect to the HP-3 Shoreline Promenade. The PMP land use designations would be “Open Space,” “Park,” and “Promenade.”

***H-18 Mixed Use Office/Commercial Recreation and Collector Parking Garage (Phase IV).***

This approximately 9-acre parcel, which was previously a surface parking lot for Goodrich, is proposed in Phase IV for approximately 100,000 square feet of trust-related mixed-use office and commercial recreation use wrapped around a 1,100 to 3,000 parking space, approximately five- to seven-story, collector parking garage that is intended to be shared with other parcels. Approximately 300 spaces within the parking garage would be provided for the H-18 mixed-use office/commercial recreation use. Employee and visitor and/or off-site or remote parking for the H-3 RCC and other Bayfront businesses, such as for H-12, H-21, and H-23, may be provided within this parking garage to supplement on-site parking for these businesses, in order to maximize on-site parking for visitors and marina users. Maximum building heights would be between 85 and 155 feet (six to 10 stories). Parking on H-18 used to satisfy parking requirements for other parcels, shall be provided by the Port in accordance with appropriate parking rates, fees, or other considerations.

As described under H-18 in Phase I, an interim surface parking lot of approximately 1,100 spaces would be constructed on H-18 in Phase I until construction of the mixed-use office/collector parking garage is complete in Phase IV. Although not part of the parking requirement, approximately 500 of those 1,100 parking spaces may be used by the H-3 RCC.

~~Gaylord will provide a~~ private shuttle system may be used to transport its employees between the H-18 parking structure and the H-3 parcel in the Harbor District. Parcel H-18 would not be

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part of the land exchange and the PMP land use designations would be “Industrial Business Park” and “Promenade.”

***HP-3 Shoreline Promenade (Phase IV).*** As mentioned above under the HP-3 description in Phases I, II, and III, a continuous shoreline promenade or baywalk is proposed along the shoreline in the Harbor District, from the existing boatyard south, around the harbor, and ending along parcel HP-14 just north of the J Street Marsh northern shoreline, in order to maximize public visual and physical access to the water. The promenade would total approximately 9 acres (approximately 12,000-feet-long) and would vary in width from 25 to 50 feet, and may be narrower in certain areas for public safety reasons. The portion of the promenade abutting HP-1 and H-8 would be built in Phase I. It is anticipated that the remainder of the promenade would not be built until the adjacent development occurs. Specifically, the portions of the promenade abutting H-9 would be built in Phase II, the portions of the promenade abutting HP-14, HP-15, and H-21 would be built in Phase III, and the portions of the promenade abutting H-1A and H-1 would be built in Phase IV. The existing uses would be demolished and/or relocated as appropriate prior to construction of the promenade. The promenade would contain public amenities such as pedestrian-scale landscaping, lighting, and furniture. This promenade would replace the existing shoreline promenade that is rather narrow, featureless, and lacks public amenities, and would be a part of a larger pedestrian circulation system within the Sweetwater, Harbor, and Otay Districts. Parking would be provided for the promenade within the adjacent park or development parcels. The aforementioned promenade improvements would be phased in as funding becomes available. The PMP land use designation would be “Promenade.”

***Reconfiguration of the Existing Harbor (HW-1, HW-2, HW-3, HW-4, HW-5, HW-6, HW-7, H-12, HP-28).*** Currently the Chula Vista Harbor consists of two marinas totaling approximately 900 boat slips. However, the Chula Vista Harbor currently lacks an active commercial harbor that encourages public access to the water and activity on the water. To facilitate the creation of a new, approximately 4-acre active commercial harbor, the harbor basin would be reconfigured during Phase IV, which would require the reconfiguration of the existing 900 marina boat slips. The number of slips in the harbor basin within the two marinas would be decreased from 900 to 700. However, the remaining 200 slips would move to HW-6 as described below, which would free up water area for the new commercial harbor. Specific plans for implementation of the marina reconfiguration have not yet been developed, but will include a construction phasing plan to address the ultimate relocation of 200 slips to the boatyard site. The construction phasing plan will require that the 200 slips at HW-6 are constructed prior to the removal of the 200 slips from the marina. No excavation of surrounding land area to create the new commercial harbor is proposed; however, some dredging and pile-driving and installation of wave attenuators will occur as part of the harbor reconfiguration. The new commercial harbor, reconfiguration of the slips, and other associated harbor and in-water improvements are more fully described below.

**HW-1 Marina, Boat Navigation/Open Water Area (Phase IV).** To accommodate the new commercial harbor at HW-3, approximately 150 new boat slips would be added in Phase IV to the northern end of the existing southern marina, currently leased to California Yacht Marina, increasing the slips from 350 to 500 within an increased water lease area of approximately 22 acres. This would require the removal of the existing dock located at the north end of the current leasehold. No other changes to the existing southern marina slips or riprap shoreline (surrounding this marina) are proposed. Landside support for this marina including parking would be provided on H-21. The PMP water use designation would be “Recreational Boat Berthing.”

**HW-2 Marina, Boat Navigation/Open Water Area (Phase IV).** The existing boat navigation/open water area would be decreased and modified in Phase IV from approximately 17 acres to approximately 14 acres to accommodate the reconfiguration of boat slips at HW-1 and HW-4 and new commercial harbor at HW-3. The PMP water use designation would be “Boat Navigation Corridor.”

**HW-3 Commercial Harbor (Phase IV).** An approximately 4-acre new commercial harbor is proposed in Phase IV on water area that is currently within the Chula Vista Marina leasehold. The new open water area within this new commercial harbor would require the reconfiguration of the existing 900 marina slips; 700 slips would be reconfigured within the existing harbor at HW-1 and HW-4, and 200 slips would be located at HW-6. The new commercial harbor is intended to enhance public access to the Bayfront and to the water, and enhance boating activity on the water. Envisioned for this commercial harbor are water taxis, dinner boats, harbor cruises, visiting historic vessels, and boat rentals. Jet-ski/personal watercraft (PWC) rentals within the Chula Vista Bayfront Master Plan area will be prohibited. The commercial harbor would include a ferry terminal and second story restaurant (see H-12). The new commercial harbor would also require the replacement of approximately 800 linear feet of riprap with a new, concrete sheetpile bulkhead, and possible installation of wave attenuators. The PMP water use designations would be “Specialized Berthing” and “Boat Navigation Corridor.”

**HW-4 Marina (Phase IV).** To accommodate the new commercial harbor at HW-3, the existing slips within the existing northern marina, currently leased to Chula Vista Marina, would be reconfigured and decreased in Phase IV from approximately 550 to 200 slips within a decreased leased water area of approximately 10 acres. The remaining 350 slips would be relocated; 150 slips at HW-1 and 200 slips at HW-6. No changes to the existing riprap shoreline surrounding this marina are proposed. Landside support for this marina including parking would be provided on H-9. The PMP water use designation would be “Recreational Boat Berthing.”

**HW-5 Fishing Pier.** No changes to the existing, approximately 0.3-acre fishing pier are proposed.

**HW-6 Marina (Phase IV).** Approximately 200 slips for the H-1 Community Boating Center (or recreational marina) are proposed in Phase IV at the existing South Bay Boatyard leasehold on approximately 9 acres of water area. As described above, the construction phasing plan developed for the marina reconfiguration will require that the 200 slips at HW-6 are constructed prior to the removal of the 200 slips from the marina. The existing boatyard boat basin uses would be relocated as part of the boatyard relocation effort, prior to redevelopment of this parcel. The PMP water use designation would be “Recreational Boat Berthing.”

**HW-7 Navigation Channel (Phase IV).** The existing approximately 84-acre navigation channel to the Chula Vista Harbor would be realigned and straightened westward in Phase IV within a new approximately 60-acre, 350-foot-wide channel, utilizing an existing abandoned access channel. The “dogleg” within the existing channel would be removed, thereby enhancing boat access to and from the Chula Vista Harbor and the Bay. Furthermore, the new channel would be located further away from sensitive resources located along the shoreline north of the existing boatyard. The channel realignment would consist of dredging approximately 1,346,000 cubic yards of Bay bottom to elevation -15 Mean Lower Low Water for the new channel and the fill of approximately 1,035,000 cubic yards to elevation -5 Mean Lower Low Water within the existing channel. The navigation channel realignment would occur following the water improvements within the harbor basin, and construction of the H Street Pier. The PMP water use designation would be “Boat Navigation Corridor.” *Figure 3-121* depicts the proposed navigation channel improvements.

**H-12 Ferry Terminal and Restaurant (Phase IV).** As a component of the new HW-3 commercial harbor, a ferry terminal of approximately 10,000 to 25,000 square feet is proposed in Phase IV on approximately 0.8 acre of marina water area currently leased to Chula Vista Marina. The existing marina slips would be relocated within the Harbor District prior to redevelopment of this parcel. The new ferry terminal would encourage alternative transportation usage to the Chula Vista Bayfront and would provide a loading and unloading pier on the ground floor for water taxis and Bay ferries. Atop the ferry terminal, a second story restaurant of approximately 10,000 to 25,000 square feet is proposed. The ferry landing and restaurant structure would be approximately 30 to 40 feet high (two stories). Approximately 80 parking spaces would be provided at nearby H-9 (20 for the ferry terminal and 60 for the restaurant), and an additional 175 parking spaces for this parcel may be provided off site at the H-18 parking structure (see detailed discussion under H-18). The PMP land use designations would be “Commercial Recreation,” “Ferry Landing,” and “Promenade.”

**HP-28 H Street Pier—Second Half (Phase IV).** Construction of the second half (approximately 300 linear feet) of the approximately 36,000-square-foot H Street Pier is proposed in Phase IV, following completion of the HW-7 navigation channel realignment. The first half of the pier would be completed in Phase II, as described above. The aforementioned improvements would be phased in as funding becomes available. The PMP land use designation would be “Promenade.”

### 3.4.5 Roadway System and Infrastructure

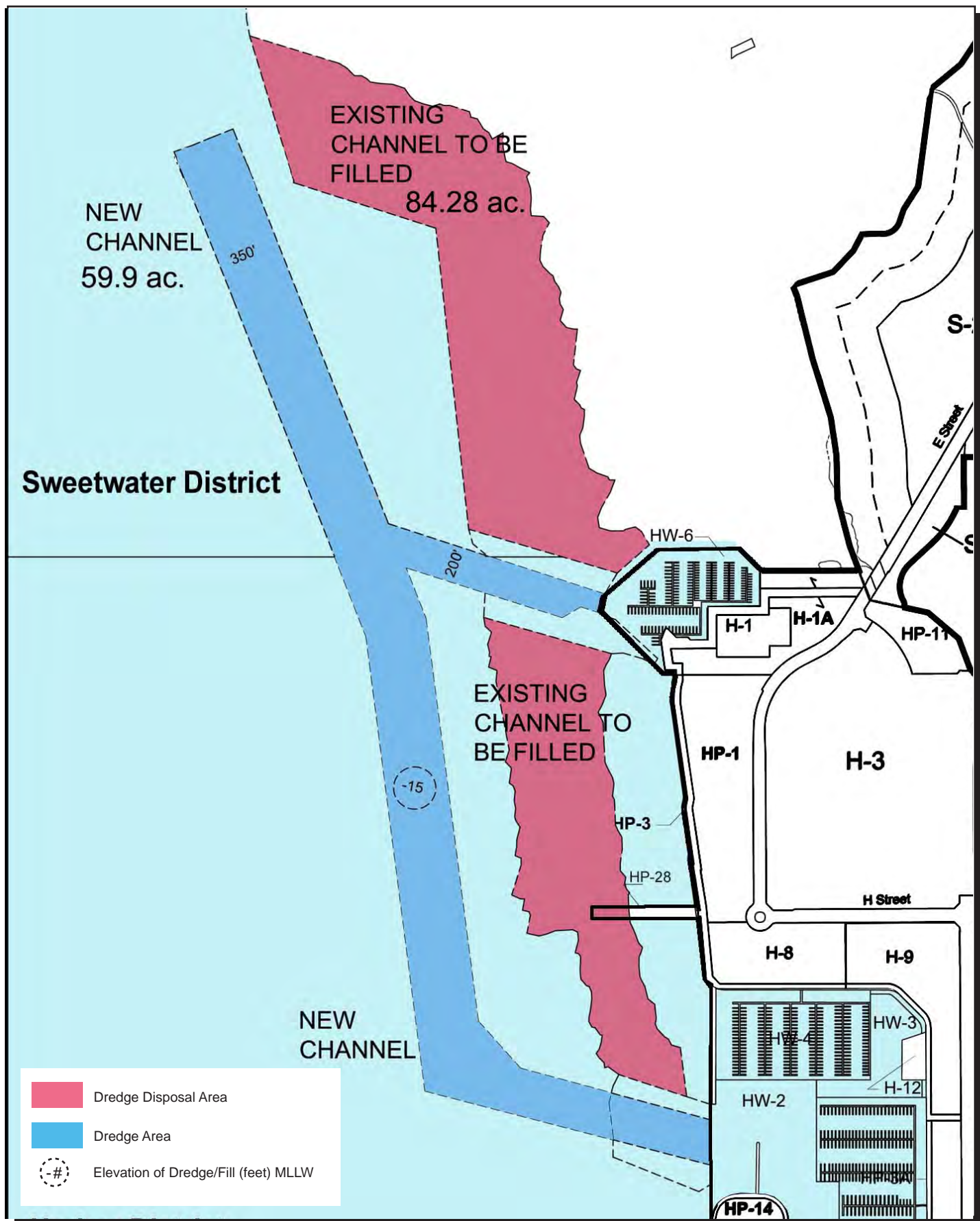
Roadway demolition, road improvements, roadway realignments, and construction of new roads, as well as utility infrastructure improvements, transit, as well as pedestrian walkways, and bike paths, would be implemented throughout the Proposed Project area over the course of approximately 24 years to support the intensity of Proposed Project development and to connect the uses within the Bayfront, as well as to connect the City to the Bayfront. The plan proposes to extend the traditional grid of streets to ensure vehicular, pedestrian, bicycle, and transit links. The site's transportation system was developed to focus vehicular activity on the eastern edges of the property, near I-5 and its interchanges, by placing a majority of the common parking areas on the eastern properties, while designing for pedestrian connections and transit service. This would result in narrower, more pedestrian-friendly streets along the waterfront. Major roadways are planned to be heavily landscaped, and contain pedestrian and bicycle access amenities.

Furthermore, the following roadway segments are proposed to allow on-street parking: E Street between the new F Street and the H Street Extension, J Street between Marina Parkway and Street A, and H Street between Marina Parkway and E Street.

The proposed roadway improvements for the Proposed Project are described below. For purposes of this Draft EIR, all of the roadway improvements within the Sweetwater and Harbor Districts (except for the new F Street segment) are evaluated at a project level, and subsequent phase roadway improvements are analyzed at a program level. *Section 4.2, Traffic and Circulation*, specifically analyzes the timing of the construction of the roadway improvements based on access and frontage of proposed adjacent development, and identifies all roadway improvements as mitigation measures. For Phase I, therefore, only those improvements required for access, frontage, and traffic impact mitigation for development on Parcels H-14, H-15, HP-5, and H-17 are proposed for construction prior to development of these Phase I project-level components. Roadway improvements required for program-level components proposed in Phases I, II, III, and IV would be constructed prior to or concurrently with development of these specific components. Although the traffic analysis identifies which roadways are required for each phase based on proposed adjacent development, the Draft EIR analysis has been structured to provide flexibility in the ability to construct identified roadway improvements sooner than mandated in the traffic analysis. Associated intersection improvements are described in *Section 4.2*. Detailed proposed roadway cross sections are illustrated in *Figures 3-132a through 3-132d*.

It should be noted that the Bay Boulevard segment east of H-18 between Street C and H Street is proposed to remain, and would not be removed as was proposed in the previous Draft EIR. Furthermore, all proposed on-site roadways within the Proposed Project area are proposed to be within the Port's ownership and land use jurisdiction, and would be designated as "Street" in the PMP.

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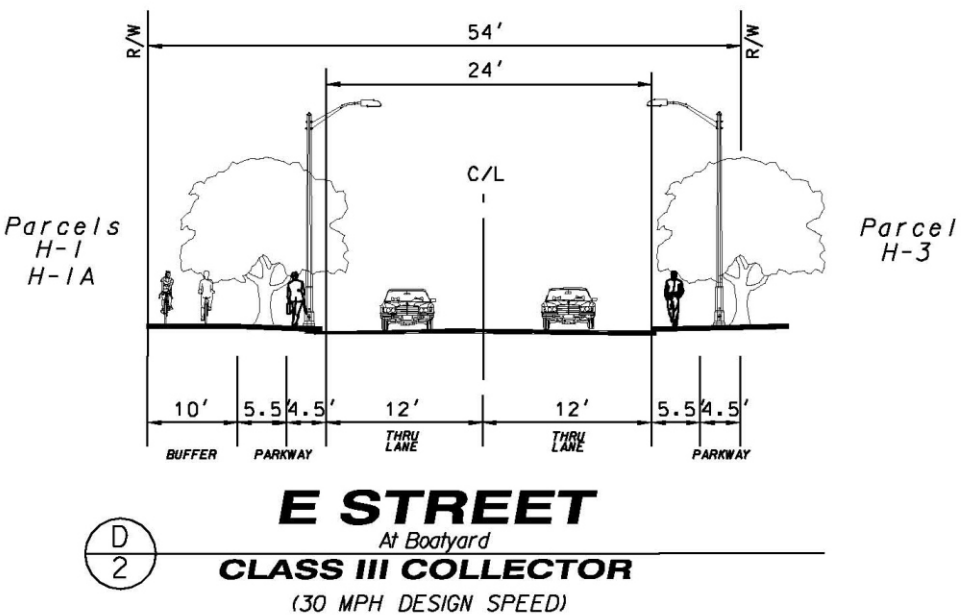
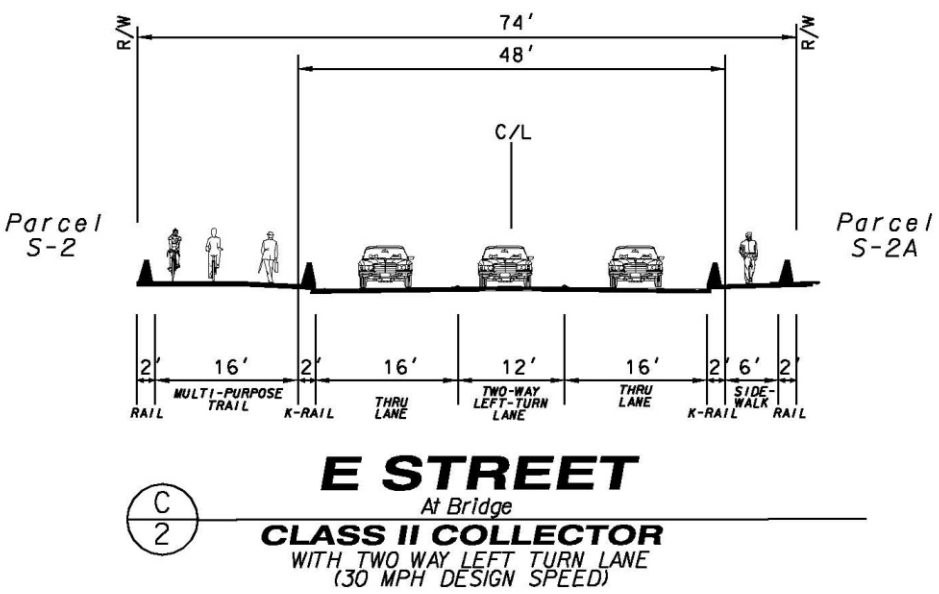
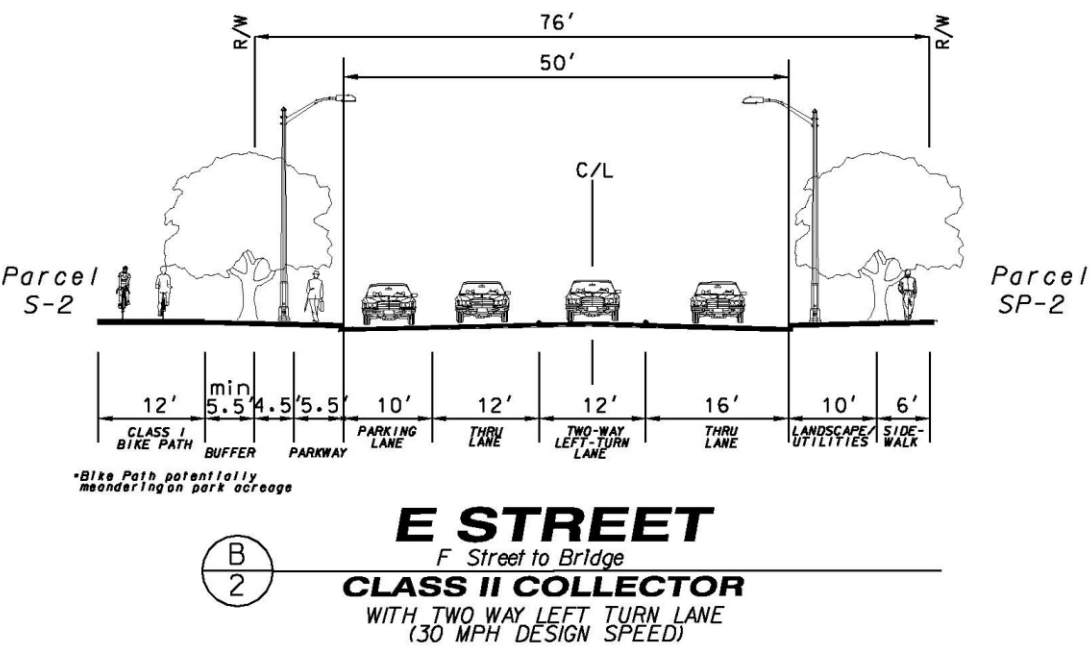
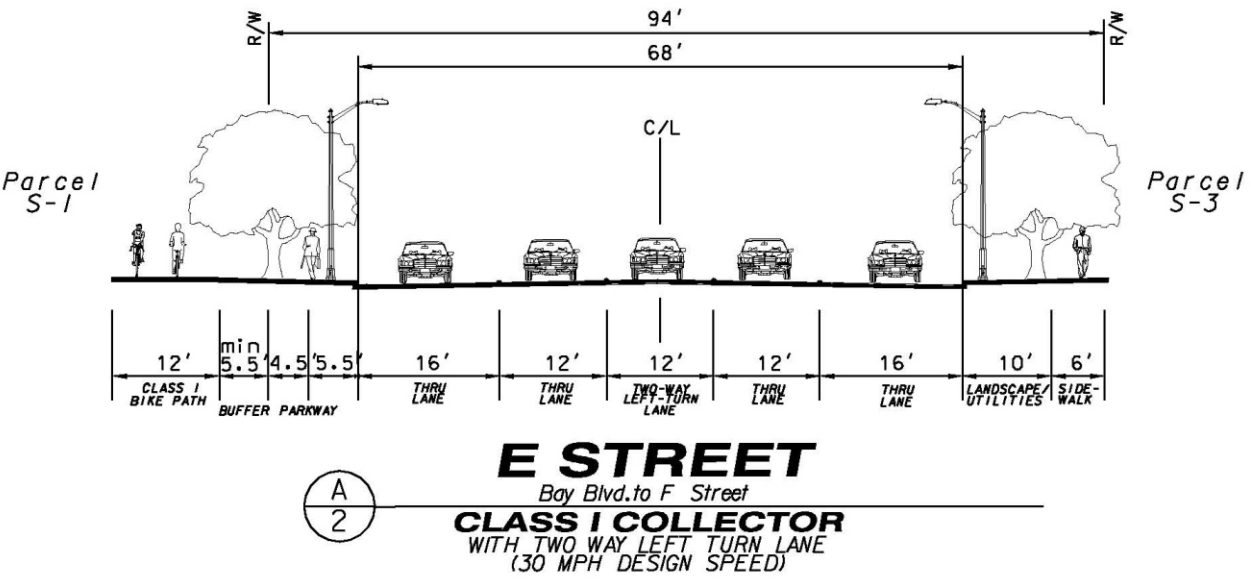


Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Proposed Navigation Channel Realignment

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3-11

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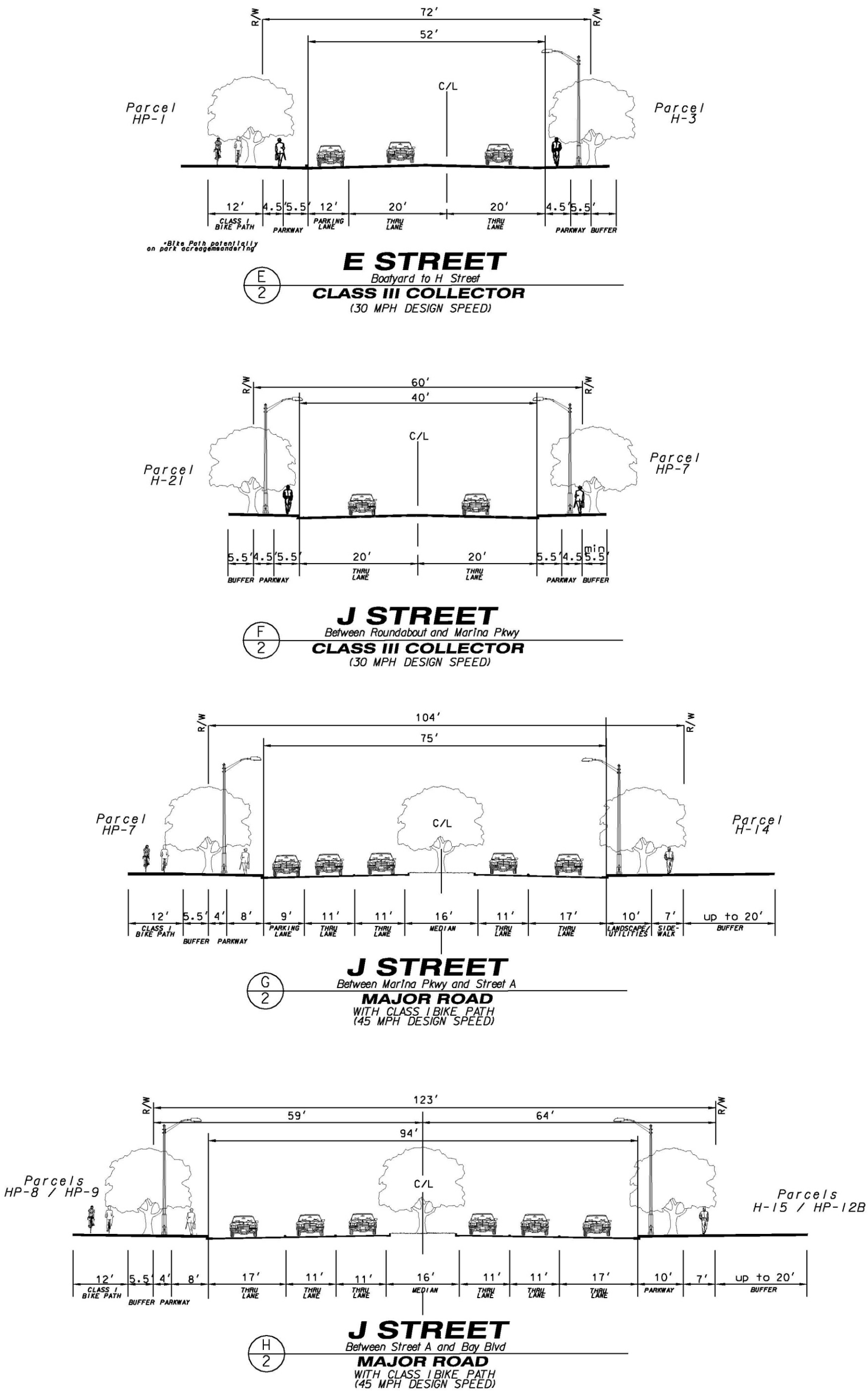


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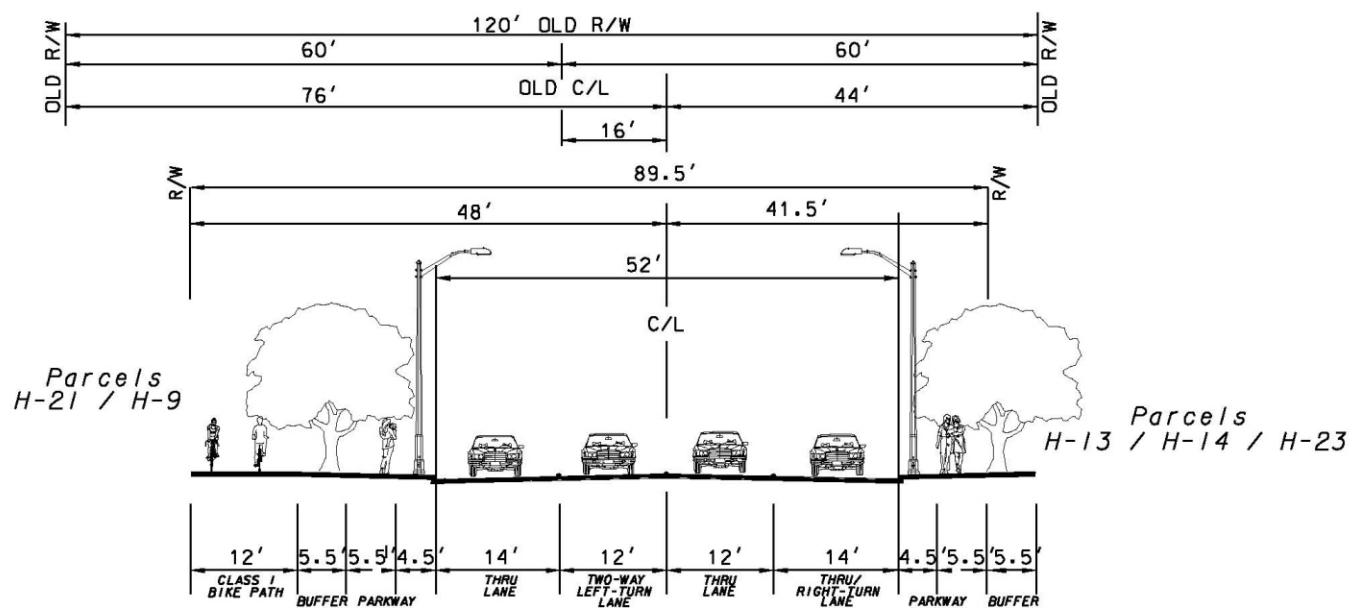


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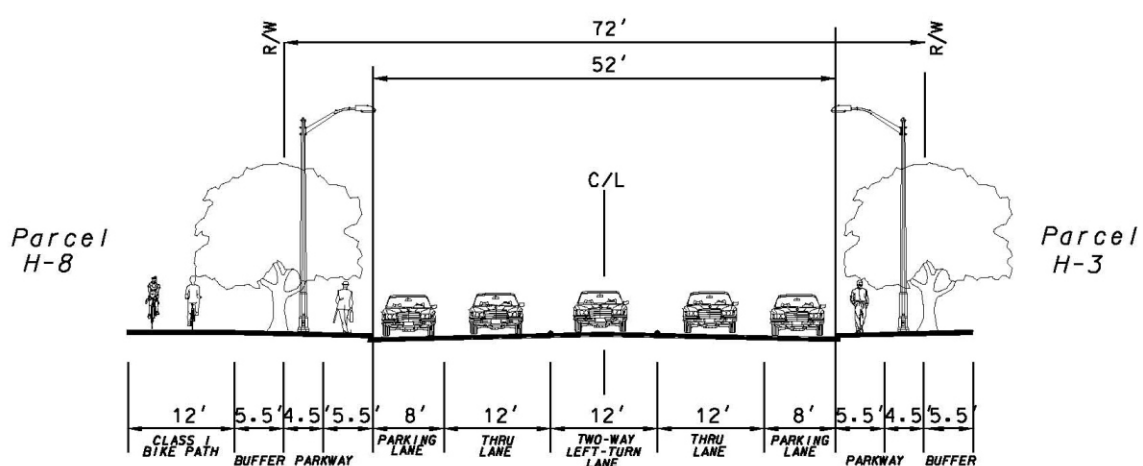


## MARINA PKWY

Looking North

1  
2

**CLASS II COLLECTOR**  
WITH TWO WAY LEFT TURN LANE  
AND CLASS I BIKE PATH  
(30 MPH DESIGN SPEED)

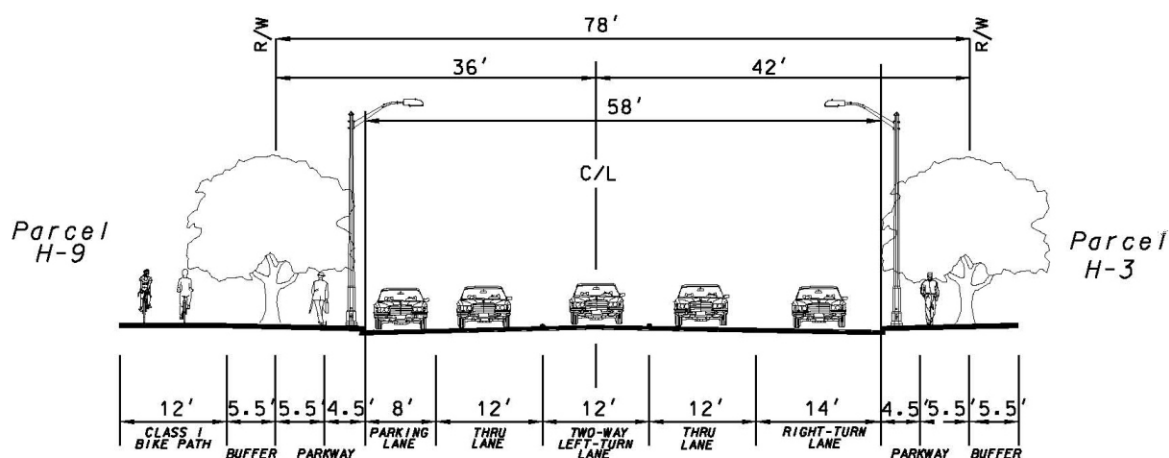


## H STREET

West of Gaylord Driveway

J  
2

**CLASS II COLLECTOR**  
WITH TWO WAY LEFT TURN LANE  
AND CLASS I BIKE PATH  
(45 MPH DESIGN SPEED)

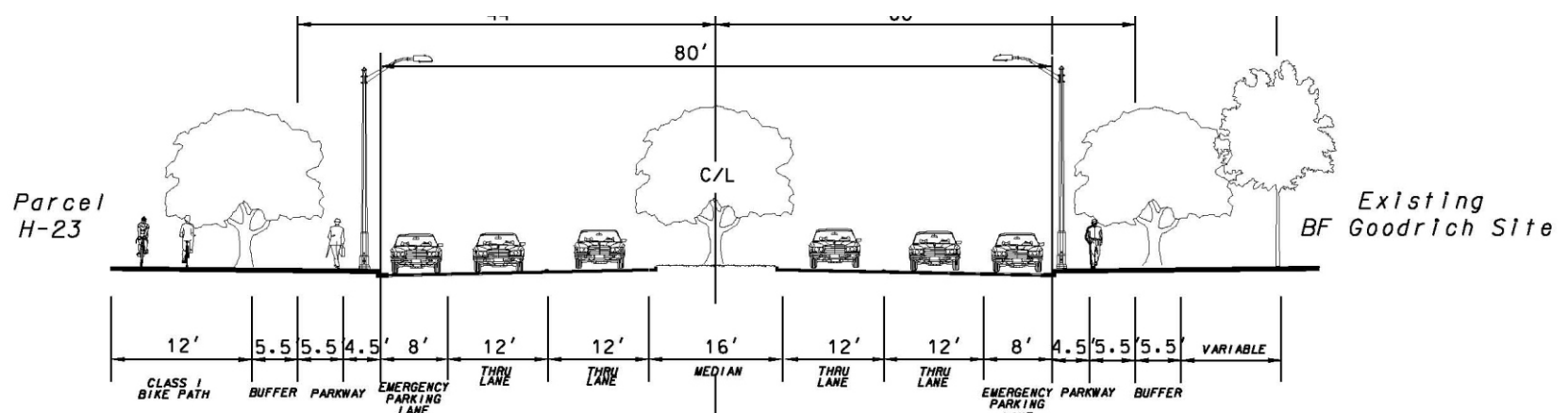


## H STREET

Marina Pkwy to Gaylord Driveway

K  
2

**CLASS II COLLECTOR**  
WITH TWO WAY LEFT TURN LANE  
AND CLASS I BIKE PATH  
(45 MPH DESIGN SPEED)



## H STREET

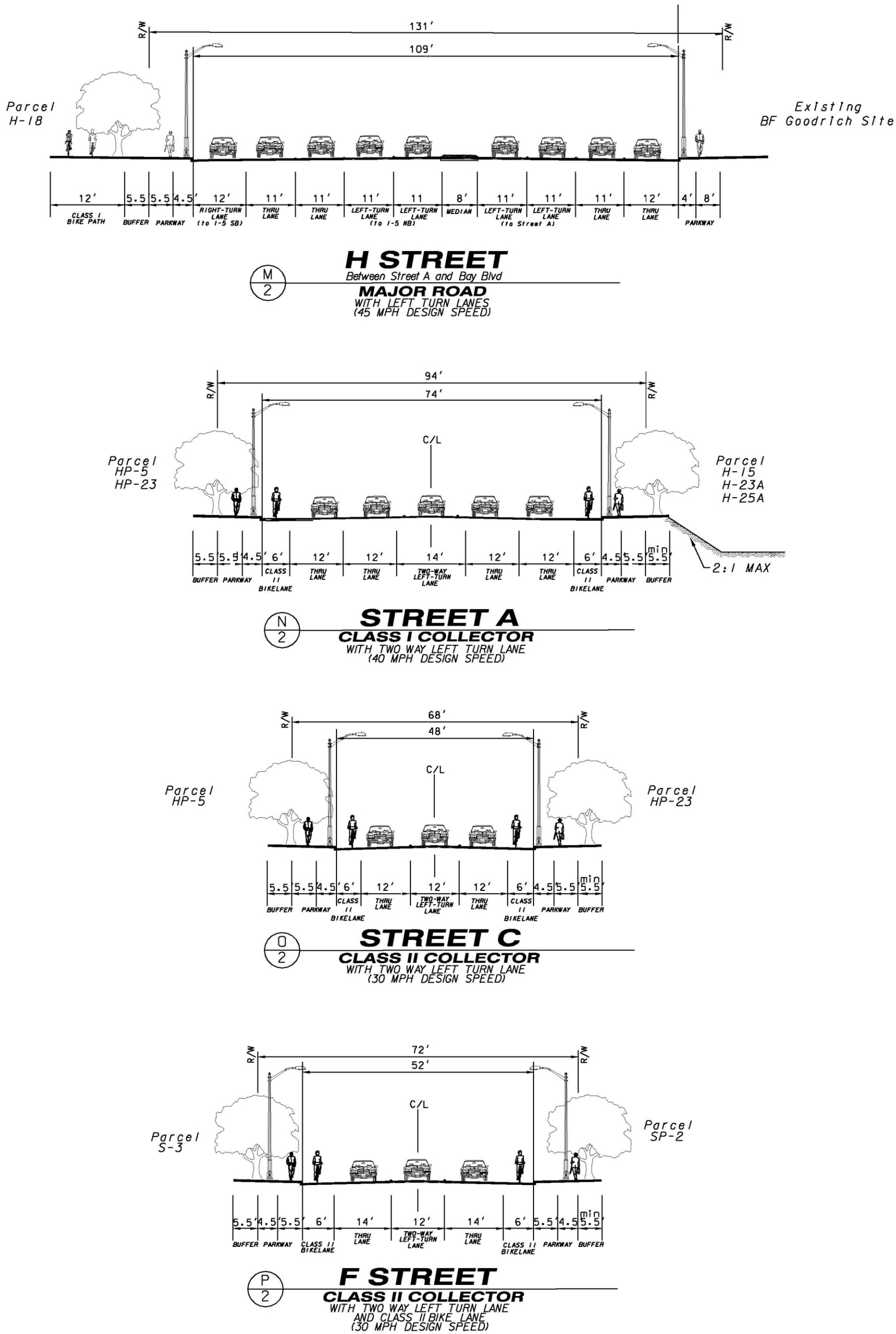
Between Marina Pkwy and Street A

L  
2

**MAJOR ROAD**  
(45 MPH DESIGN SPEED)

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### 3.4.5.1 Phase I (~~Project~~) Roadway System Components

The Phase I components of the Proposed Project roadway system would occur only in the Sweetwater and Harbor Districts. The proposed timing of construction for roadway improvements is tied to requirements of proposed adjacent development. For Phase I, therefore, only those improvements required for access, frontage, and traffic impact mitigation for development on Parcels H-13, H-14, HP-5, and H-17 are proposed for construction prior to or concurrently with development of these Phase I project-level components. Roadway improvements necessary for access, frontage, and traffic impact mitigation for development of Phase I program-level components and subsequent phase program-level components would be required prior to or concurrently with the development of these specific components.

Most of the roads in the Sweetwater District (except for the new F Street segment) and all of the roads in the Harbor District are proposed in Phase I. As mentioned above, these improvements may not be required until a later phase, but are proposed in Phase I.

#### a. Sweetwater District Roadway System

A new roadway system is proposed to accommodate the new park, hotel, office, and public access features of this district.

***E Street Extension (Phase I).*** E Street is proposed in Phase I to be extended west and constructed as a four-lane Class I collector street between Bay Boulevard and the new F Street segment within the Sweetwater District. E Street is currently scheduled to be constructed in Phase I; however, the traffic analysis has demonstrated that it is not necessary to complete the E Street extension until Phase III as a mitigation measure. This would provide additional capacity to maintain adequate traffic flow at the major project entry. E Street would be constructed as a two-lane Class II collector street between the new F Street segment in the Sweetwater District to the northerly driveway of H-3 in the Harbor District. E Street is intended as one of the main public access roads for the H-3 RCC. The construction of the E Street Extension in the Sweetwater District would require improvements to the existing E Street road crossing over the railroad tracks. ~~It is likely that the existing street segment between the existing F and G Streets would be demolished—vacated after~~ demolished as the E Street Extension is completed (see Parcel S-2A discussion above).

Furthermore, as part of the E Street Extension, the project proposes construction of a bridge over the inlet that feeds the F & G Street Marsh, where E Street between the Sweetwater and Harbor Districts intersect (*Figure 3-143*). The bridge crossing would allow cars and pedestrians to transition from the Sweetwater District to the Harbor District. Access would be limited to the roadway, bike path, and sidewalks within the bridge, to keep people from entering the adjacent No Use buffer zone within SP-1. The proposed bridge would span approximately 10 feet above

the bottom of the existing channel. The bridge would consist of a 74-foot-wide ROW, consisting of two travel lanes and a 16-foot-wide multipurpose lane that would allow pedestrians and bicyclists to safely transition between the Sweetwater District and the Harbor District, and between the signature park parcels S-2 and H-1A.

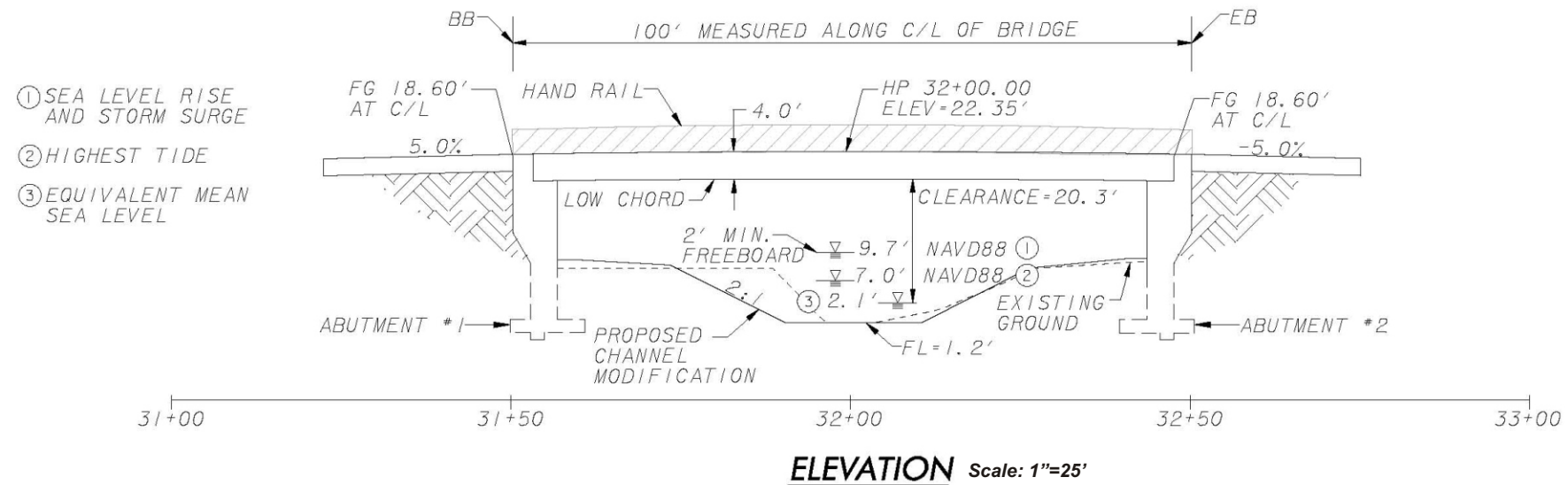
***F Street/Lagoon Drive Termination (Phase I).*** F Street/Lagoon Drive would be abandoned for vehicular use after the E Street Extension is provided, and H Street is connected from the northwest end of the Goodrich property westward, north of the F & G Street Marsh, and emergency access has been established so that F Street is not needed for public right of way. As mentioned under SP-2, the abandoned segment of F Street would remain in place but would prohibit vehicular access and would be accessible to only ~~emergency vehicles and~~ pedestrian and bicycles if ecologically appropriate.

***Chula Vista Nature Center Access Road (Phase I).*** As discussed under SP-3 above, the realignment of the Gunpowder Point Drive access road and new parking lot for the Chula Vista Nature Center is proposed in Phase I on a vacant three-acre parcel located in the center of the Sweetwater District. Parcel SP-3 would have access from the proposed E Street extension and new F Street segment (as described above). From Parcel SP-3, the new access road would connect to the existing Gunpowder Point Drive after it crosses Parcel SP-1.

b. Harbor District Roadway System

***E Street Extension (Phase I).*** E Street would be extended in Phase I from the Sweetwater District to the newly extended H Street in the Harbor District. The existing portions of G Street, Quay Avenue, Sandpiper Way, and Bayside Parkway would be demolished prior to construction of this roadway segment in the Harbor District. This segment of E Street would be constructed as a two-lane Class III collector street. The construction of the E Street Extension segment adjacent to H-1A would require construction of a 4-foot-high berm on H-1A. E Street is intended as one of two main public access roads for the RCC on parcel H-3.





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**H Street Extension (Phase I).** The H Street extension is envisioned as a significant physical and visual corridor, ultimately connecting the City to the waterfront, ending at the proposed HP-28 H Street Pier. Furthermore, the primary entry to the H3 RCC is proposed on H Street. The westerly extension of H Street west of Marina Parkway is proposed in Phase I on land that was occupied by the former AFS Industries, and a portion of the Chula Vista RV Resort leasehold. These uses would be demolished prior to construction of this new street. The extension would span from its existing terminus near Bay Boulevard bayward, ending in a cul-de-sac that would connect to the extended E Street. H Street would be constructed as: a five-lane major street between I-5 and Street A, a four-lane major street between Street A and Marina Parkway, and a three-lane Class II collector street between Marina Parkway and the extended E Street. The construction of H Street would also require improvements to the at-grade railroad crossing, which would require approval of the CPUC.

The following roadway system improvements would be constructed prior to or concurrently with development of Parcels H-13, H-14, HP-5, and H-17.

**Street A (Phase I).** A new Street A is proposed in Phase I that would run north–south between. H Street and J Street/Marina Parkway in order to provide vehicular access to the nearby proposed residential, office, retail, and hotel uses. Street A would be constructed on land that was part of the former Goodrich South Campus, and would be constructed as a four-lane Class I collector street.

**Street C (Phase I).** A new Street C is proposed in Phase I that would run east–west between the existing Bay Boulevard just south of H-18 and Marina Parkway. Street C would be constructed as a two-lane Class III collector street. Street C would be constructed on land that was part of the former Goodrich South Campus. The construction of Street C would also require improvements to the road crossing over the railroad tracks.

**J Street/Marina Parkway Realignment (Phase I).** Marina Parkway is envisioned to be a pedestrian and bicycle friendly corridor, as it is proposed to be narrowed from its existing configuration to allow for a Class I bike path within the right-of-way. Furthermore, Marina Parkway, as envisioned during the master planning process, would be reconfigured from its current J figure to a perpendicular configuration at its intersection on the southwest corner of parcel H-14. These improvements to Marina Parkway would occur on land that is currently part of the existing Marina View Park and Marina Way. The reconfiguration of Marina Parkway would need to be realigned prior to completion of the H-13/H-14 residential development.

J Street would be constructed as a six-lane major street between I-5 and Street A, and as a four-lane major street between Street A and Marina Parkway. Between Marina Way and H Street, the north–south segment of Marina Parkway would be rebuilt and narrowed as a three-lane Class II



collector street by using excess ROW for pedestrian facilities. The portion of the existing Marina Parkway between G and H Streets is proposed to become part of the RCC leasehold.

***Marina Way Realignment (Phase I).*** The intersection of Marina Way and Marina Parkway would be reconfigured so that J Street/Marina Parkway would meet almost at a right angle; this would require modifications to the entrance to Marina Way as it transitions from the new intersection, as well as modifications to the existing Marina View Park. From this intersection, Marina Way would be realigned as a two-lane Class III collector street and would terminate in a new cul-de-sac.

#### ***3.4.5.2 Program Level Roadway System Components (Phases II, III, and IV)***

The program level components of the Proposed Project roadway system would occur only in the Sweetwater and Otay Districts. No roadway improvements are proposed in Phase II. All of the roadway improvements in the Otay District are proposed in Phase III. In Phase IV, only one roadway improvement (Street F) is proposed in the Sweetwater District.

##### **a. Sweetwater District Roadway System**

***F Street (Phase IV).*** A new F Street segment would be constructed in Phase IV on existing vacant land between the proposed terminus of the existing F Street and the proposed E Street extension, ending at the SP-3 Chula Vista Nature Center parking lot. This new F Street segment would be constructed as a two-lane Class III collector street and would also contain a Class II bike lane on both sides of the street.

##### **b. Harbor District Roadway System**

Although not required for mitigation of Phase I impacts, all of the roadways in the Harbor District are proposed to be constructed in Phase I; therefore, no new roads are proposed to be constructed in the Harbor District in Phases II, III, or IV.

##### **c. Otay District Roadway System**

A reorganized roadway system would be implemented throughout the Otay District to accommodate new traffic patterns resulting from the park, Industrial Business Park, and RV Park uses (see *Figure 3-8a*).

***Street A (Phase III).*** A new Street A is proposed in the Otay District in Phase III predominantly on vacant land that was once part of the North Tank Farm for the SBPP. This segment of Street A would continue from the Harbor District, connecting to the proposed Street B in the Otay District, and would be constructed as a two-lane Class III collector street. Construction of this street would require crossing through the existing Marina View Park at HP-8, which would

require modifications to Marina View Park, as well as a bridge crossing over the existing J Street Channel. Street A in the Otay District would include a bike path and pedestrian access. The existing switchyard easement would be relocated prior to completion of Street A.

**Street B (Phase III).** A new Street B is proposed in Phase III on land that is currently occupied by the switchyard and power plant. Street B would connect to the proposed Street A, bridge over the Telegraph Canyon Creek Channel, and would continue south as a public road through, and provide access to, parcels O-3A/O-3B, OP-1A/OP-1B, and O-4, terminating at Bay Boulevard. Street B would be constructed as a two-lane Class III collector street. The existing switchyard would be demolished and relocated and the existing power plant would be demolished prior to construction of Street B.

### 3.4.5.3 *Infrastructure Improvements*

The proposed timing of construction for other infrastructure improvements is tied to requirements of proposed adjacent development. For Phase I project-level components, therefore, only those improvements required for development on Parcels H-13, H-14, HP-5, and H-17 are proposed for construction prior to or concurrently with development of these Phase I components. Infrastructure improvements necessary for program-level components would be required prior to or concurrently with development of these specific components.

#### a. Storm Drains

The majority of the storm drain system required for the Harbor District would be constructed during Phase I, with the exception of Parcels H-21 and HP-7, which would be completed during Phase II concurrent with the storm drain system required for the Otay District (see *Section 4.5, Hydrology/Water Quality* for figures depicting the existing and proposed storm drain system). There would be approximately 20 storm drain outfalls that connect to the Bay including the existing connections that would remain for the project. The storm drain outfalls would consist of a headwall and would include riprap to dissipate (reduce the velocity to reduce erosion potential) the energy of the conveyed stormwater as it discharges into the Bay, minimizing sediment disturbance. The storm drain system would be designed to function in a free outfall condition. Details of the storm drain outfalls such as exact size and location (alignment and elevation) would be determined during final design. The Goodrich North Campus storm drain connection requirements will continue to be met. The storm drain systems required for each district are described in more detail in *Section 4.5*.

#### b. Water

Because the existing infrastructure cannot accommodate the Proposed Project, on-site and off-site water facility improvements are required. The required improvements for the Sweetwater

and Harbor Districts are required during Phase I and the improvements for the Otay District are required during Phase III.

The only water main in the vicinity of the project that would remain is a 12-inch main that runs in Bay Boulevard that serves several existing businesses. The Proposed Project would replace all of the existing on-site water mains, except for a 16-inch water main located in Lagoon Drive. The new on-site water facilities would consist of water mains ranging in size from 8 to 16 inches and would extend in the proposed streets with metered connections and fire services for each parcel within each district.

A total of nine connections are proposed to the existing Sweetwater Authority system at the following locations: E Street and Bay Boulevard, Lagoon Drive and F Street, G Street west of Goodrich campus, H Street and Bay Boulevard, Street C and Bay Boulevard, J Street and Bay Boulevard, J Street and Broadway, J Street and 2nd Avenue, and Moss Street and Bay Boulevard. The water system requirements, including the on-site and off-site segments, for each district are described in more detail in *Section 4.14, Public Utilities*. For the construction of all off-site pipeline segments, a trench and/or micro-tunneling would be excavated in the existing streets to allow installation of the new water mains. After completion of the installation, the trench would be backfilled and resurfaced to match the existing pavement.

#### c. Sewer

The Proposed Project would contain a significantly different parcel layout compared to the existing development. Because most of the existing streets throughout the project site would be removed to allow for construction of the new streets and grading of the new parcels, the Proposed Project would require construction of new sewer facilities in addition to replacement of existing sewer facilities on the project site. The only sewer mains in the project vicinity that would remain in the project vicinity are the existing 24-inch sewer main in G Street located adjacent to the Metropolitan Wastewater Department (MWWD) interceptor (CV-3), the existing 30-inch sewer main in J Street adjacent to the MWWD interceptor (CV-2), and the existing eight-inch sewer main in Bay Boulevard that serves the existing businesses on this street.

The Proposed Project would require gravity sewer mains in the streets ranging in size from 8 to 18 inches and sewer force mains ranging in size from 6 to 12 inches. The gravity sewer generally flows in the direction of the street grade to minimize depth. The gravity sewer mains would convey flow to up to three proposed sewer lift stations; one would potentially be constructed in each district.

There are at least two connections proposed to the existing City sewer system. The proposed sewer system would connect to the MWWD interceptor. The existing and proposed sewer system for Phase I development is presented in *Section 4.14, Public Utilities*.

Temporary dewatering during construction would be required during the excavation of the wet wells and emergency storage vaults for the sewer lift stations due to the close proximity to the Bay and high groundwater. All of the off-site sewer mains would be constructed within existing street ROWs. No easements for the new facilities would be required.

### 3.4.6 Pedestrian Circulation Plan

The project proposes to enhance pedestrian access within its developed and open space areas, and to enhance pedestrian visual and physical access to the waterfront, through a comprehensive, continuous pedestrian circulation plan (*Figure 3-154*) totaling approximately 54,000 linear feet. Pedestrian access would be limited or prohibited where public safety issues and proximity to sensitive resource issues may arise. The pedestrian access plan includes an approximately 8-acre shoreline promenade or baywalk (see HP-3 above), trails, and sidewalks with appropriate pedestrian-scale landscaping, lighting, and furniture. The pedestrian pathways would be constructed concurrently with adjoining or adjacent development within the districts with the ultimate goal of continuous pedestrian access and linkages within the Proposed Project area.

Specific pedestrian circulation areas would also allow for bicycles, as described and depicted below under *Sections 3.4.7.2-3* (Bayshore Bikeway) and *3.4.7.3-2* (Bayfront Bikeway Loop Alignment). The specific design of the pedestrian pathways would depend on public safety issues, land use adjacency issues, and other factors. These factors, in turn, would determine the appropriate materials (i.e., pavement, decomposed granite, etc.) to be used for the pathways, and whether bicycles and other wheeled items, such as skateboards, would be allowed.

#### 3.4.6.1 Sweetwater District

A pedestrian pathway is proposed along the proposed extension of E Street into the Harbor District. Pedestrian access is also proposed west of F Street, within the proposed abandoned segment of F Street/Lagoon Drive. An approximately 12-foot-wide pedestrian trail is proposed along the western edge of the Sweetwater District within the buffer as described in SP-1, and within the S-2 signature park. Other pedestrian paths would be located along the SDG&E transmission corridor, and along a proposed F Street that would link pedestrians at F Street to the signature park and pedestrian trail within the SP-1 buffer. Design of the pedestrian paths in the Sweetwater District would be sensitive to the paths' adjacency to sensitive resources at the F & G Street Marsh and the Sweetwater Marsh NWR.

#### 3.4.6.2 Harbor District

An approximately 12,000-linear-foot, 25- to 50-foot-wide shoreline promenade or baywalk is proposed along the entire shoreline in the Harbor District, from the existing boatyard site south to the shoreline north of the J Street Marsh. The proposed extension of H Street is viewed as a significant physical and visual corridor for pedestrians, ultimately connecting the city to the

waterfront, ending in a 60-foot-wide, 600-foot-long pier. Additional pedestrian paths would be located on E Street, J Street/Marina Parkway, proposed Street A, proposed Street C, and a pedestrian trail along the SDG&E transmission corridor on HP-12. Pedestrian linkages to the waterfront would be provided within the proposed residential development on H-13/H-14, between the H-8 park and H-9 retail development, and between the H-21 retail development.

#### **3.4.6.3 Otay District**

Pedestrian paths are proposed along Street A as it transitions from the Harbor District to the Otay District, and along the western perimeter of the proposed O-3A/O-3B recreational vehicle (RV) park and the OP-1A/OP-1B South Park. A pedestrian trail is proposed along the SDG&E transmission corridor on OP-3 that would continue from the Harbor District through the Otay District. As in the Sweetwater District, design of the pedestrian paths within the Otay District would be sensitive to the paths' adjacency to sensitive resources at the J Street Marsh.

### **3.4.7 Transit Plan**

#### **3.4.7.1 Bayfront Shuttle**

The City of Chula Vista's Urban Core Specific Plan identifies the potential for a shuttle service that would link various destinations within the western portions of Chula Vista, including the Proposed Project area. The Green Car Line (also called the West Side Shuttle) would stop frequently along its entire route to provide a fast and convenient link between the high-density redevelopment areas in the Urban Core and Bayfront and the regional light rail trolley system. The shuttle would have fewer stops than a conventional bus, located as close as possible to the major traffic generators. Implementation of the Green Car Line is unknown at this time, and this feature of the Proposed Project will not occur until operational and funding responsibilities are established.

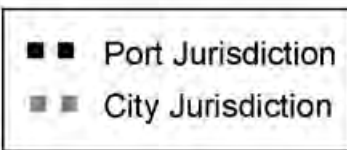
The general route of the transit shuttle would be along Third Avenue between F Street and H Street, along F Street between Woodlawn Avenue and Third Avenue, along Woodlawn Avenue between E Street and F Street, along E Street, Marina Parkway, Street C, and Street A within the Bayfront development area, and along H Street between the Bayfront and Third Avenue. Variations in the route near the E Street Trolley Station are also considered. The route would operate as a two-way loop with stops in both directions.

Shuttles would typically run every 15 to 30 minutes depending upon ridership and funding availability. It may be prudent to start the shuttle operation with 30-minute service and evaluate the ridership that is achieved after it has been established to determine changes in headways from 30 minutes to 25, 20, or 15. The frequency of shuttle buses would affect the number of shuttle buses required for purchase for the service.





CHULA VISTA BAYFRONT MASTER PLAN  
SWEETWATER PARK OPTION (FORMERLY PLAN A2)



SOURCE: Port of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Proposed Pedestrian Circulation Plan

FIGURE  
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*Figure 3-165* shows a potential shuttle route. As shown in *Figure 3-165*, there may be four shuttle stops within the Proposed Project area, which are described below:

- Stop #1 (S-1): This stop is near the north end of the Master Plan area. Although development densities here are not especially high, this location is directly on the shuttle route, not otherwise served by transit, and would benefit from a direct, non-stop connection to the E Street Trolley Station.
- Stop #2 (RCC): This stop is located along E Street adjacent to the proposed RCC.
- Stop #3 (Marina): This stop is located near the Marina Parkway/Street C intersection and near the various uses in the marina. This station will be within a quarter-mile walking distance of the high-density residential component of the Master Plan.
- Stop #4 (Street A): This stop is located along Street A and will serve the hotel, retail, and cultural uses on site. This stop would also provide access to Parcel H-18, which will have excess parking available for remote parking.

In the Urban Core area, the stops are focused on the major transit connection points and the most important commercial sites and high-density residential redevelopment areas. Beginning at the H Street Trolley Station, stops would be located at the redeveloped shopping mall along H Street at Fifth Avenue (Chula Vista Center), at the intersection of H Street and Third Avenue (primarily a transit hub), and in the downtown Chula Vista business district along Third Avenue near F Street. Two additional stops along F Street would primarily serve the proposed high-density residential areas and City Hall.

Two shuttle stops would serve the two Trolley stations at H Street and E Street. Both stations are slated for grade separation treatment and will be modified in the future. At that time stops could be located adjacent to the trolley tracks on H Street and F Street for an easy transition between grades for trolley passengers. In the interim, a stop could be located in the bus plaza adjacent to the station on H Street for westbound shuttles. Eastbound buses could turn onto Woodlawn Avenue to provide a stop inside the station and then re-route back to Woodlawn to H Street. A second option could provide a stop at the southwest corner of H Street and Woodlawn Avenue in order to reduce shuttle running time and eliminate the entering and exiting of the station in this very congested area.

When the E Street Station is modified, it will be relocated toward the south and will be approximately equidistant between E Street and F Street. At that time, shuttle stops would be located adjacent to the tracks on both sides of the street. A new pedestrian crossing could be provided adjacent to the tracks so that passengers boarding and alighting the eastbound shuttles could be provided a safe crossing of F Street to the station. F Street is planned to be redesigned to include one through lane in each direction with a center turn lane and bike lanes. A new refuge

median could be installed in the crosswalk for trolley passengers transferring to and from the shuttle.

In the interim, westbound shuttles would enter the station from Woodlawn Avenue and utilize the bus plaza at the station. These shuttles would exit the station to Woodlawn where they would continue north to E Street and continue on E Street to the west. The intersection of E Street and Woodlawn Avenue is signalized. Eastbound shuttles could enter the station from E Street via the east station driveway and proceed to the bus plaza. Eastbound shuttles could then exit to Woodlawn Avenue and continue toward F Street to continue the route eastbound on F Street.

In addition to the Green Car Line, ~~Gaylord will provide a private shuttle system~~ may be used to transport its employees between the H-18 parking structure and the H-3 parcel in the Harbor District.

#### **3.4.7.2 Bayfront Bikeway Loop Alignment**





In concert with planning efforts to provide a continuous bikeway system between National City and Imperial Beach as part of the San Diego Association of Governments (SANDAG) Bayshore Bikeway, the project proposes a bikeway loop connecting the Bayshore Bikeway with the various activity centers and elements of the Proposed Project. As part of the Proposed Project, a continuous Class I bike path, or Bayfront Loop, is proposed. The Bayfront Loop would begin at the E Street/Bayshore Bikeway intersection, traverse through the Proposed Project development, and re-join the Bayshore Bikeway at Bay Boulevard south of L Street (see *Figure 3-176*).

This Class I bike path is proposed along: the western edge of E Street in the Sweetwater and Harbor Districts within parcels S-1, S-2, and HP-1, along the south side of H Street east to Marina Parkway within parcels H-8 and H-9, along the west side of Marina Parkway south to J Street, along the south side of J Street east to Bay Boulevard within parcels HP-7 and HP-8, and along the west side of Street A and Street B in the Otay District southeast to Bay Boulevard. Due to ROW constraints within the transition from the Sweetwater to the Harbor districts, bicycle access along the E Street bridge would be provided within a 16-foot-wide multipurpose trail that would be shared with pedestrians, and bicycle access along the portion of the E Street extension adjacent to H-1A (adjacent to the existing boatyard site) would be provided within a 10-foot-wide buffer.





**Legend:**

-  San Diego Trolley
-  Proposed Shuttle Route
-  San Diego Trolley Stop
-  Proposed Shuttle Stop

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Green Car Line (West Side Shuttle) Route

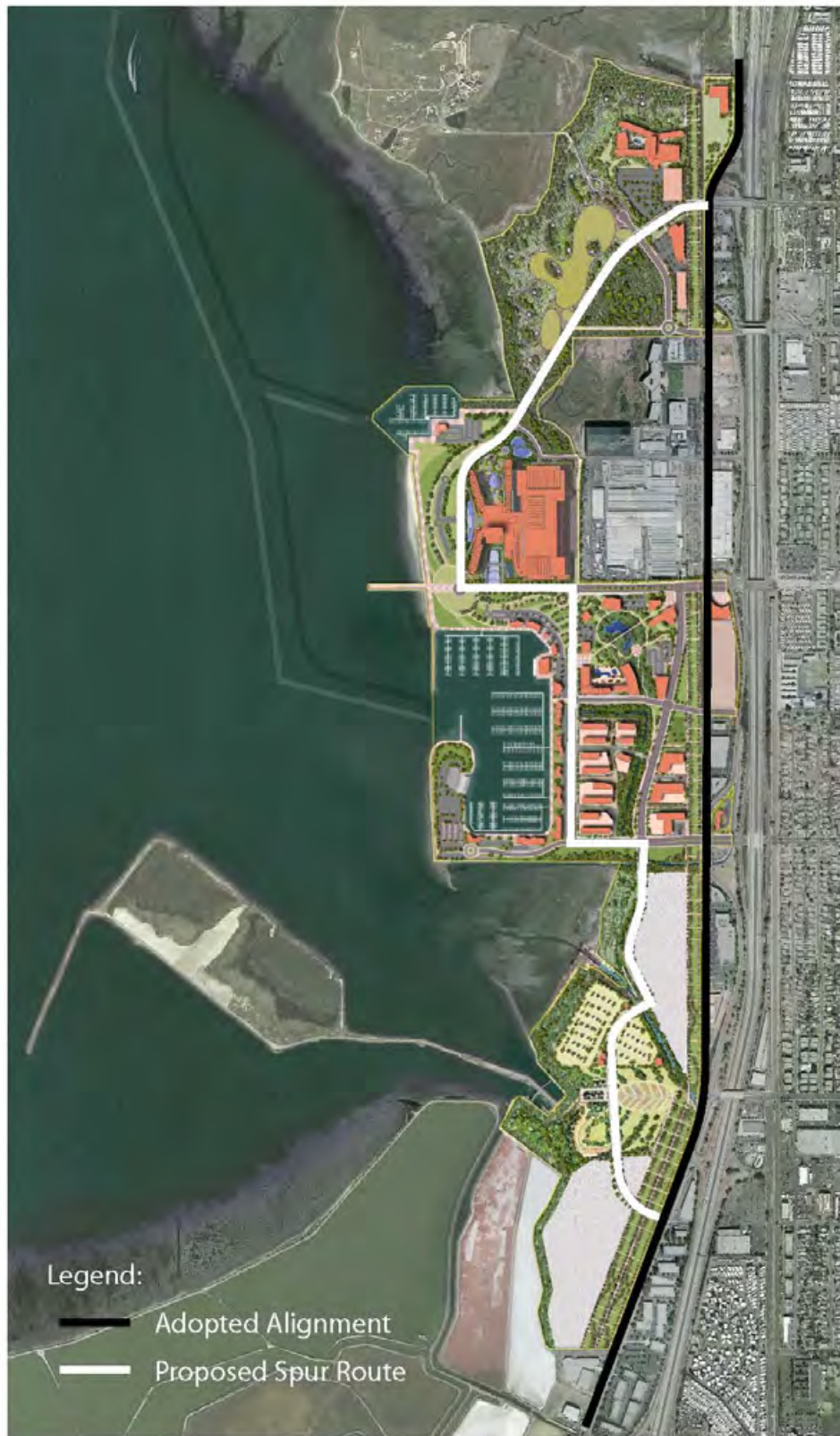
FIGURE

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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Proposed Bayfront Loop Alignment/Adopted Bayshore Bikeway Alignment**

FIGURE  
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The proposed Bayfront Loop would be an off-street Class I bike path and have a paved width of approximately 12 feet, and would allow for two-way bicycle travel, with minimal crossings of vehicular roadways. The alignment of the path would be routed to serve the proposed RCC, new commercial harbor/marinas, and the commercial/residential areas. The specific alignment of the loop would be determined at the time that the project and roadways are designed. The proposed Bayfront Loop is proposed to be constructed as the CVBMP roadway improvements are constructed. The Bayfront Bikeway Loop will also connect to downtown Chula Vista via Class II bike lanes along the new F Street to the existing F street overcrossing of I-5.

### 3.4.8 Construction Characteristics

Construction for the Proposed Project would occur over the next 24 years. Construction of Phase I projects would be incremental and could occur at any time in the first five years. Phases I, II, III, and IV projects would be constructed on a project-by-project basis. The nature and extent of additional environmental review, which may be required for Phase I, II, III, and IV projects, will be determined pursuant to State CEQA Guidelines Section 15168.

As mentioned previously, the Proposed Project construction phasing schedule represents a best case scenario and will be contingent upon and subject to many factors, such as availability and timing of public financing and construction of public improvements, terms of existing long-term leases, actual market demand for and private financing of proposed development, lease negotiations, approvals for and demolition and/or relocation of existing uses, approvals for new uses, and other approvals.

In general, construction would require excavation for footings, utilities, and below-grade ancillary spaces. Temporary site dewatering would be necessary during construction. Remediation of contaminated soils and groundwater would be completed under the oversight of the RWQCB. Contaminated soils would be removed or treated on site and groundwater would be treated prior to discharge. See also *Section 4.12, Hazards and Hazardous Materials/Public Safety*, of this report.

Phase I site preparation would include the grading of the Proposed Project area, the construction of the major access roads, and sewer and water infrastructure. Grading in subsequent phases would be limited to modifying the rough grading that occurred during Phase I. While it is anticipated that the development of all four phases will take 24 years, it is anticipated that site preparation in any given phase would take one year or less to complete. After site preparation, it is anticipated that individual development/construction would take between approximately one and four years to complete.

### 3.4.9 Related Projects Undergoing Separate Environmental Review

Described below are three projects that, while not a part of the Proposed Project, will take place within the Proposed Project planning area. Each of these three projects has independent utility and is undergoing separate environmental review by the regulatory agency responsible for it. For this reason, they are not analyzed in this report, except to the extent they contribute to the cumulative impacts of the Proposed Project. They are discussed here only to provide additional information on anticipated future conditions at the project site.

#### 3.4.9.1 *Undergrounding of Transmission Lines*

The City and SDG&E have signed a Memorandum of Understanding (MOU), the intent of which is to underground SDG&E transmission and distribution lines throughout the City over time. An approximately 150-foot-wide SDG&E easement runs the entire length of the project site (on site) along its eastern boundary to approximately L Street, parallel to I-5. Currently, In December 2009, SDG&E completed the undergrounding of three 138-kV circuits, which resulted in the removal of (including steel lattice bridge structures-towers) exist within the ROW between J Street and the Sweetwater River, as part of the Silvergate Transmission Substation Project, one of which will be undergrounded, while the other two will be removed. The timing of these projects is subject to several conditions, including funding of the undergrounding by the City pursuant to the MOU. In addition, a 230-kV line proposed for within this easement will be has been placed underground as part of the Otay Mesa Power Purchase Agreement Project. Undergrounding of this line has already been approved. Figure 3-178 shows the location of the SDG&E transmission ROW and location of existing steel lattice structures on the project site. A cross section of the ROW through the project site and its associated future recent improvements are shown on Figure 3-198. The undergrounding of any additional transmission lines is not part of the Proposed Project because it is an independent project, subject to the jurisdiction of the CEC and the CPUC, which will be implemented whether or not the Proposed Project is approved. The potential environmental impacts of the undergrounding of transmission lines were analyzed in the Final EIR prepared by CPUC in May 2006.

#### 3.4.9.2 *Goodrich South Campus Remediation*

The 1999 Port/City/Redevelopment Agency/Goodrich Relocation Agreement provided for consolidation of the Goodrich campus north of H Street and the Port's acquisition of the former Goodrich South Campus parcels (Parcels H-15, H-18, H-23, HP-23A, and a portion of HP-5). The Port has ~~begun demolition~~demolished of the buildings on this site, which will be completed prior to commencement of any construction of the Proposed Project.

Z:\Projects\570301\Figs\EIR Figs 2010\Section 3\Fig3-17\_sdge\_structures.mxd



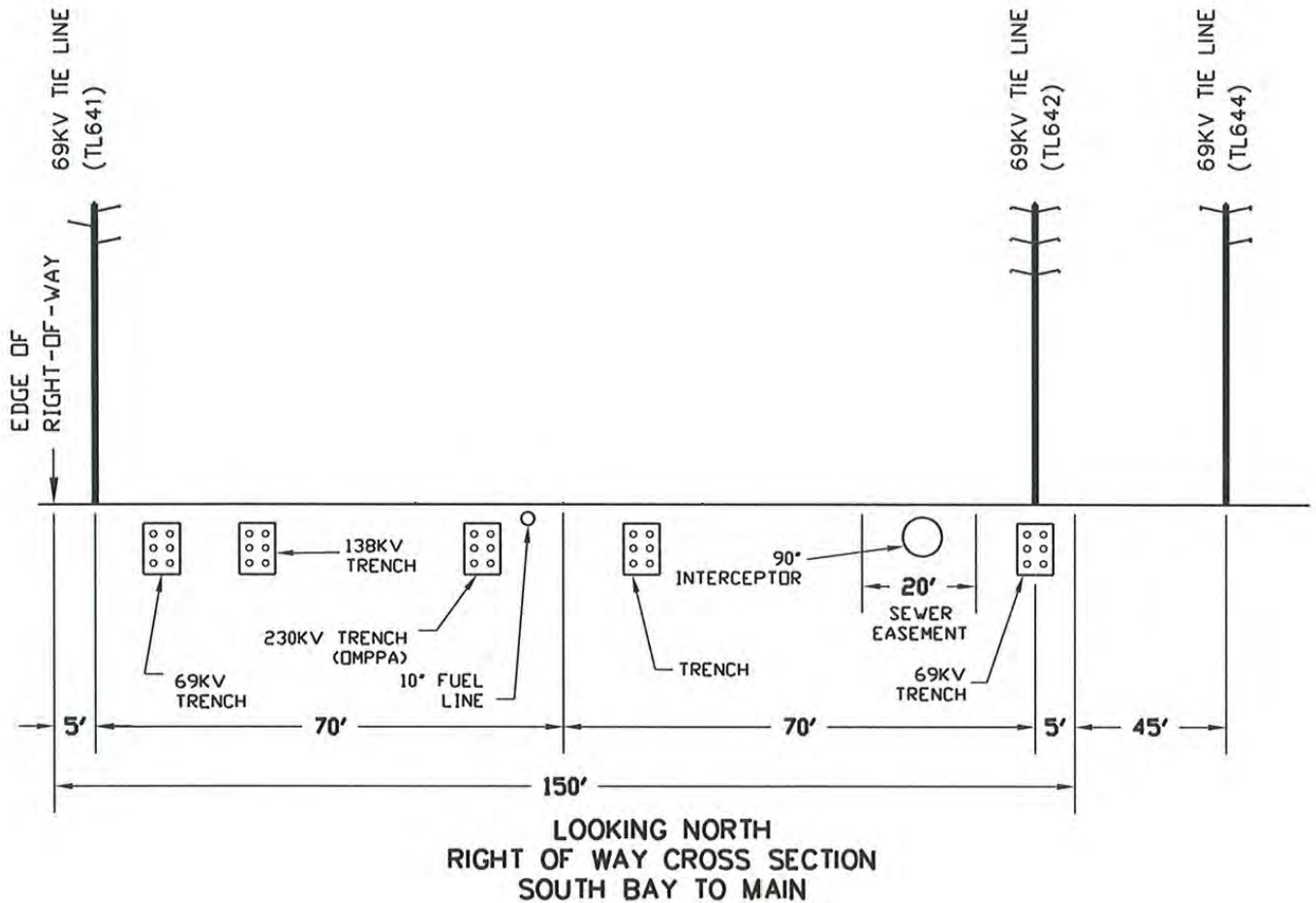
AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
SDG&E Existing Steel and Lattice Structures

**FIGURE**  
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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**SDG&E ROW Cross Section (between G and H Streets)**

FIGURE

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In addition, in March 1998, the California RWQCB issued CAO No. 98-08 to Goodrich. The CAO ordered Goodrich to conduct a site-wide Environmental Site Assessment, conduct comprehensive stormwater runoff sampling, conduct a comprehensive stormwater conveyance system investigation, compile and evaluate site-wide data, and perform interim remedial actions necessary to abate or correct the effects of illicit discharges and/or mitigate emergency situations.

The CAO addresses all current and former property used, leased, or otherwise controlled by Goodrich since its inception on the Chula Vista waterfront as Rohr Aircraft Company. This includes contaminant releases within the former Goodrich South Campus, and the Goodrich North Campus, as well as discharges within adjacent Proposed Project Parcels such as H-3, HP-1, HP-5, H-8, H-9, H-13/H-14, and H-21. All remediation work associated with the Goodrich CAO will be completed under the oversight of the RWQCB. In addition, remediation of a given parcel will proceed in accordance with an agency approved clean-up plan. This EIR assumes the former Goodrich South Campus buildings have been demolished, and that remediation of the contamination on the affected parcels has been completed ~~or is in progress~~ pursuant to the requirements of the RWQCB.

#### 3.4.9.3 *The Bayshore Bikeway*

Planning efforts are currently underway by SANDAG to relocate the Bayshore Bikeway to a new Class I bike path facility along the existing SDG&E utility corridor located approximately a quarter-mile west of I-5. The SDG&E ROW corridor between E Street and Main Street, which extends through the Proposed Project area, is proposed for a segment of the future new Class I bike path facility. Construction would occur following the undergrounding of the existing overhead transmission lines, which is anticipated to occur by 2009 (see *Section 3.4.9.1* of this chapter for details on the undergrounding of the transmission lines). This segment through Chula Vista would provide a continuous bikeway system between National City and Imperial Beach.

*Figure 3-176* depicts the alignment of the proposed Bayshore Bikeway along the SDG&E ROW. The new Class I bikeway would cross E Street, F Street, H Street, and J Street. The bicycle route would cross the F Street extension to the west of the F Street/Bay Boulevard intersection. This intersection would be signalized to ensure maximum safety.

The Proposed Project proposes a continuous Class I bikeway loop that would connect the Bayshore Bikeway with the various activity centers and elements of the Proposed Project (see *Section 3.4.7.2* above).

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## CHAPTER 4 ENVIRONMENTAL ANALYSIS

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### 4.1 Land/Water Use Compatibility

This section analyzes whether the Proposed Project is compatible with existing land and water uses. The analysis is based on a review of the California Coastal Act and Public Trust Doctrine as administered by the State Lands Commission (SLC) as well as Port and City planning documents.

The following documents are referenced within this section and attached to the EIR as appendices:

- Draft Port Master Plan Amendment, Text and Graphics (~~March 2008~~ May 2010) (*Appendix 3.4-1*)
- City of Chula Vista General Plan Amendment, Text and Graphics (~~March 2008~~ May 2010) (*Appendix 4.1-1*)
- City of Chula Vista Bayfront Local Coastal Plan Amendment, Land Use Plan (~~March 2008~~ April 2010) (*Appendix 4.1-2*)
- City of Chula Vista Bayfront Local Coastal Plan Amendment, Bayfront Specific Plan (~~March 2008~~ April 2010) (*Appendix 4.1-3*)
- Traffic Impact Analysis (February 2008), prepared by Kimley-Horn and Associates, Inc. (*Appendix 4.2-1*).

#### 4.1.1 Existing Conditions

The section discusses existing uses and applicable land use plans and policies for the Proposed Project area.

##### 4.1.1.1 Land Use Plans and Policies

A majority of the Proposed Project area is currently designated as State Trust Lands, which generally comprise tidelands and submerged lands seaward of the mean high tide line and other upland properties within the jurisdiction of the Port. Development of State Trust Lands must be consistent with provisions of the Public Trust Doctrine as administered by the SLC and with provisions of the California Coastal Act. The manner in which the Proposed Project process relates to the SLC and California Coastal Act is discussed below.

The Proposed Project area consists of lands currently under the jurisdiction of the Port and lands currently under the jurisdiction of the City. Planned development is subject to the adopted land use plans for each jurisdiction and state law. Development of Port lands must conform to the Port

Master Plan (PMP) and the applicable PMP Precise Plan. Development of project area lands within the jurisdiction of the City of Chula Vista is governed by the City's adopted City of Chula Vista General Plan and Local Coastal Plan (LCP) (which includes the Land Use Plan (LUP) and Bayfront Specific Plan) and the City of Chula Vista Redevelopment and Housing Authority.

a. Public Trust Doctrine/Public Res. Code Section 6307 (California State Lands Commission)

The Public Trust Doctrine governs allowed uses of "Sovereign Lands" held in trust by the SLC for purposes of water-related commerce, navigation, fisheries, recreation, and ecological preservation. Additionally, the California Supreme Court has determined that the public trust includes (1) the right of the public to use the navigable waters of the state for bathing, swimming, boating, and general recreational purposes and (2) the preservation of the lands in their natural state for scientific study, as open space, and as wildlife habitat. The State Legislature, as the administrator of the tidelands trust, is responsible for implementing the Public Trust Doctrine and ensuring that public trust lands are used to promote public rather than exclusively private purposes. The Legislature cannot commit trust lands irretrievably to private development because it would be abdicating the public trust.

The SLC is the Responsible and/or Trustee Agency for all projects that could directly or indirectly affect sovereign lands, their accompanying public trust resources or uses, and the public easement in navigable waters. The SLC has the authority to approve or disapprove the proposed land trade and nonconformity trust uses on Port property and is required to do so for this Proposed Project.

Recent changes to Public Resources Code Section 6307 expanded the SLC's authority to approve land exchanges which, among other things, enhance the physical configuration of the shoreline or trust land ownership; enhance public access along or to the water; enhance waterfront and near-shore development or redevelopment for public trust purposes; or to preserve, enhance, or create wetlands, riparian, or littoral habitat or open space. In order to approve such an action, the SLC must make the following findings (SLC 2002):

- The lands or interests in lands to be acquired in the exchange would provide a significant benefit to the public trust.
- The exchange does not substantially interfere with public rights of navigation and fishing.
- The monetary value of the lands or interests in lands received by the trust in exchange is equal to or greater than that of the lands or interests in lands given by the trust in exchange.

- The lands or interest in lands given in exchange have been cut off from water access and no longer are in fact tidelands or submerged lands or navigable waterways, by virtue of having been filled or reclaimed, and are relatively useless for public trust purposes.
- The exchange is in the best interests of the state.

b. California Coastal Act

The California Coastal Act went into effect on January 1, 1977, and granted the California Coastal Commission (CCC) authority to review and approve plans and projects located within the coastal zone. Under the California Coastal Act, cities and counties are encouraged to prepare LCPs that guide implementation of conservation, development, and regulatory policies required by the California Coastal Act within the local coastal zone. Within port districts, PMPs serve this same function under the Act. The draft LCP or PMP is then submitted to the CCC for certification, which ensures that the plan complies with the California Coastal Act. Once the LCP or PMP is certified, the local agency (e.g., City or Port District) is then authorized to issue Coastal Development Permits as prescribed by the adopted LCP or PMP for coastal zone projects within its jurisdiction. In compliance with the California Coastal Act, the City previously prepared an LCP and the Port previously prepared the PMP, both of which address coastal land use issues as required by the Act. These plans were previously certified by the CCC (1981).

The CCC reviews PMP Amendments for conformance with Chapter 8 of the California Coastal Act, which governs all ports in California and contains policies and requirements for implementing master plans. In addition, some elements of the PMP must comply with Chapter 3 of the California Coastal Act, which governs coastal resources planning and management and protects public access and recreation within the coastal zone. As noted above, once the CCC certifies a PMP Amendment, the Port then has the exclusive authority to issue Coastal Development Permits for projects within its jurisdiction. However, some developments are considered “appealable” under the California Coastal Act and may be appealed to the CCC for review. According to the Port’s Coastal Development Permit regulations, the following are considered “appealable” developments:

- Developments for the storage, transmission, and processing of liquefied natural gas and crude oil in such quantities as would have a significant impact upon the oil and gas supply of the state or nation or both the state and nation
- Wastewater treatment facilities, except such facilities which process wastewater discharged incidental to normal Port activities
- Roads or highways that are not principally for internal circulation within the Port boundaries

- Office and residential buildings not principally devoted to administration of activities within the Port; hotels, motels, and shopping facilities not principally devoted to the sale of commercial goods utilized for water-oriented purposes; commercial fishing facilities; and recreational small craft marine-related facilities
- Oil refineries
- Petrochemical production plants.

The Proposed Project area is part of the Chula Vista Bayfront Plan, identified as Planning District 7 of the PMP. The project site is also located totally within the Chula Vista Coastal Zone and LCP boundary. Because the Proposed Project is located within the jurisdiction of the Port and the City, the Proposed Project must be consistent with both the PMP and City of Chula Vista LCP, as amended. The LCP boundary includes all non-Port parcels under the jurisdiction of the City, including privately owned lands and City-owned lands.

The Proposed Project would amend Planning District 7 of the PMP and includes most of the 562-acre project area within the existing 1,700-acre PMP area. The Proposed Project also amends the City of Chula Vista's General Plan and LCP (which includes the LUP and Bayfront Specific Plan). The Proposed Project amendments to both the PMP and LCP must be reviewed and approved by the CCC.

Having two jurisdictions within the Proposed Project area requires a joint planning process. The adopted land use plans and policies that are associated with each jurisdiction currently apply to various parcels throughout the plan area. However, as a result of the Proposed Project, the jurisdictional boundaries would change upon approval of the land exchange.

#### c. San Diego Unified Port District PMP

The Port's jurisdiction includes the public trust lands (i.e., tidelands) bayward of the mean high-tide line and the submerged lands generally to the U.S. Pierhead Line, and other upland properties as acquired by the Port. The Port manages these lands in trust for the people of the State of California and has the authority to approve or disapprove the proposed land exchange. The PMP guides the physical development of these lands and also serves as the Port's coastal program for purposes of the California Coastal Act.

Amendments to the PMP require a two-thirds vote of the Board of Port Commissioners. The PMP prepared by the Port and adopted by the Board of Port Commissioners in 1980 was originally certified by the CCC in 1981 and last amended in 2009<sup>24</sup>.

As indicated in the PMP, the tidelands under the Port's jurisdiction are divided into separate planning districts. The Proposed Project is located within "Planning District 7: The Chula Vista

Bayfront,” which includes all Port lands within the City of Chula Vista. These Port lands extend beyond the U.S. Pierhead Line (the usual Port boundary) to the City limits. The PMP includes Precise Plans that guide development in each planning district and in each district’s subareas. The Precise Plan for Planning District 7 is called the Chula Vista Bayfront Precise Plan.

The Chula Vista Bayfront Precise Plan proposes a multifaceted land use allocation, which designates specific parcels for environmental conservation and public park uses, as well as commercial recreational uses that focus on waterfront amenities designed to attract visitors to the Bay. The Port’s planning policy encourages marine-related industrial uses. However, the Port realizes it must be flexible to attract new industrial and business/commercial development to this planning district, and for this reason has allocated a large amount of land in District 7 for Industrial Business Park use (*Figure 4.1-1*). Approximately 1,690 acres of District 7 land and water areas are designated for public facilities, commercial and industrial uses, public recreation, and conservation uses. However, the majority of Planning District 7 is designated for conservation use, which includes wetlands and habitat replacement, as seen in *Table 4.1-1*.

Planning District 7 is further divided into nine subareas. These subareas, followed by their corresponding Planning Subarea number in the PMP, are D Street Area (Planning Subarea 71), Gunpowder Point Shoreline (Planning Subarea 72), G Street Corridor (Planning Subarea 73), Marina Parkway Corridor (Planning Subarea 74), Bayside Parkway Area (Planning Subarea 75), Chula Vista Harbor (Planning Subarea 76), Boat Channel (Planning Subarea 77), Wildlife Reserve (Planning Subarea 78), and Outer South Bay (Planning Subarea 79) (*Figure 4.1-2*). The Precise Plan describes in detail the allocated uses and development plans for each of these subareas. These permitted plans are listed in *Table 4.1-2*.

**TABLE 4.1-1**  
**Existing Chula Vista Bayfront Precise Plan Land and Water Use Allocation**

Chula Vista Bayfront: Planning District 7					
Land Use		Water Use		Total	Percent of
Use	Acres	Use	Acres	Acres	Total
<b>Commercial</b>					
Marine Sales and Service	9.7	—	—	—	—
Commercial Recreation	38.8	Recreational Boat Berthing	34.0	—	—
<b>Total Commercial</b>	<b>48.5</b>	—	<b>34.0</b>	<b>82.5</b>	<b>5</b>
<b>Industrial</b>					
Industrial Business Park	80.6	—	—	—	—
Marine Related Industrial	3.5	Specialized Berthing	9.5	—	—
<b>Total Industrial</b>	<b>84.1</b>	—	<b>9.5</b>	<b>93.6</b>	<b>6</b>
<b>Public Recreation</b>					
Park/Plaza	21.3	Open Bay/Water	0.9	—	—
Promenade	2.6	—	—	—	—
<b>Total Public Recreation</b>	<b>23.9</b>	—	<b>0.9</b>	<b>24.8</b>	<b>1</b>
<b>Conservation</b>					
Wetlands	233.0	Estuary	941.2	—	—

TABLE 4.1-1 (Continued)

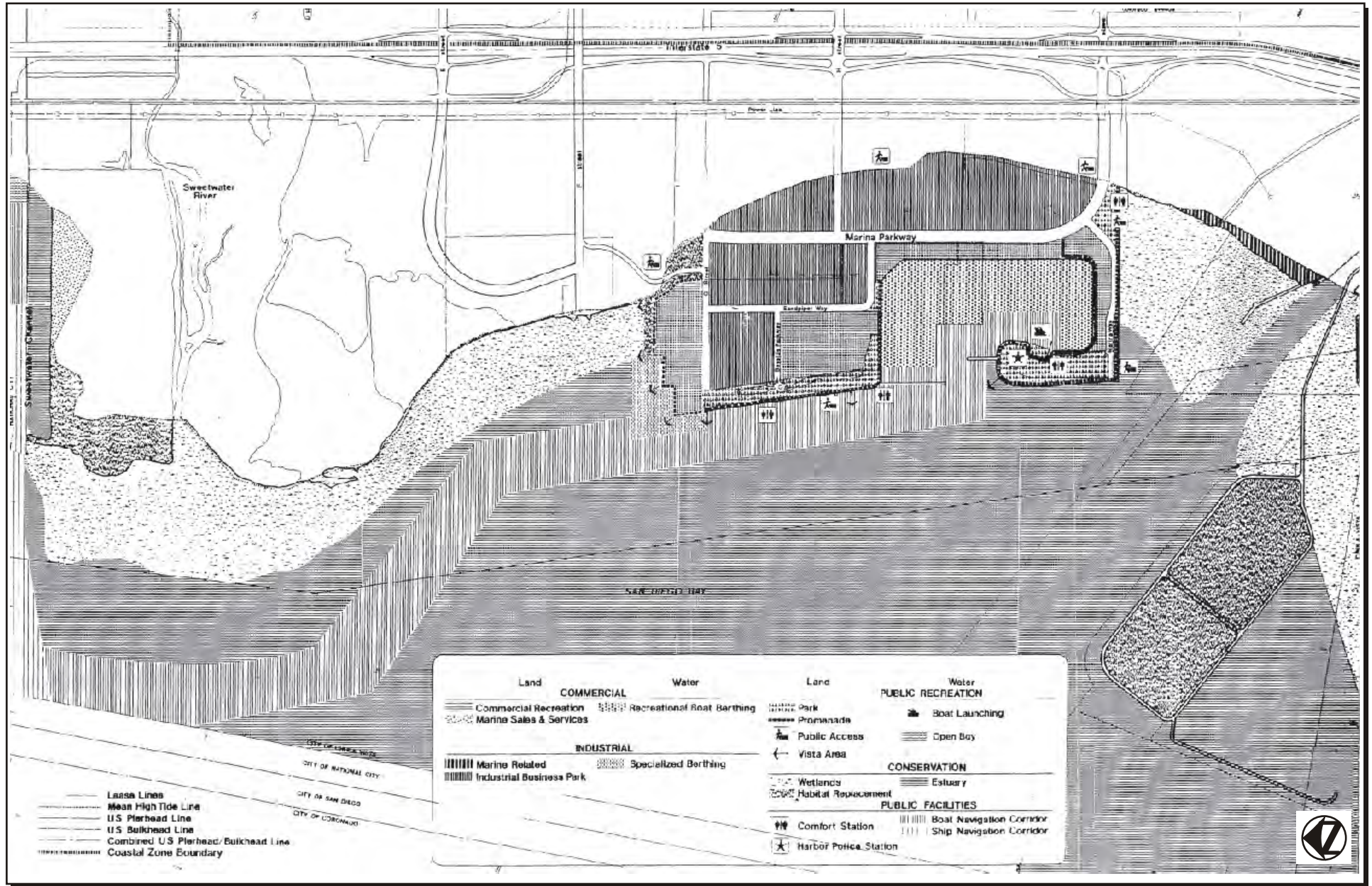
Chula Vista Bayfront: Planning District 7					
Land Use		Water Use		Total Acres	Percent of Total
Use	Acres	Use	Acres		
Habitat Replacement	94.3	—	—	—	—
<i>Total Conservation</i>	<i>327.3</i>	—	<i>941.2</i>	<i>1,268.5</i>	<i>75</i>
<b>Public Facilities</b>					
Harbor Services	0.1	Boat Navigation Corridor	166.8	—	—
Streets	23.2	Ship Navigation Corridor	30.0	—	—
<i>Total Public Facilities</i>	<i>23.3</i>	—	<i>196.8</i>	<i>220.1</i>	<i>13</i>
<b>TOTALS</b>	<b>507.1</b>	—	<b>1,182.4</b>	<b>1,689.5</b>	<b>100</b>

SOURCE: Port 2004.

**TABLE 4.1-2**  
**Existing Subareas—Allocated Uses and Development Plans**

Current Planning District 7 Subarea	Allocated Use and Development Plan
71 – D Street Area	<ul style="list-style-type: none"> <li>Designated Industrial use; tidelands reserved for marine uses</li> <li>Designated Conservation use; estuary (D Street Fill area adjacent to the Sweetwater Flood Control Channel)</li> <li>Planned for Public Recreation use and buffer zone between the National City Marine Terminal</li> </ul>
72 – Gunpowder Point Shoreline	<ul style="list-style-type: none"> <li>Designated and planned for Conservation use; wetlands (land and mudflat preserve)</li> </ul>
73 – G Street Corridor	<ul style="list-style-type: none"> <li>Designated Commercial Recreation use; boat yard use and specialized berthing</li> <li>Designated Industrial use; industrial business park and specialized berthing</li> <li>Planned for Commercial Recreation use; parks, promenade, and boatyard</li> </ul>
74 – Marina Parkway Corridor	<ul style="list-style-type: none"> <li>Designated Industrial use; north of H Street</li> <li>Designated and planned for Industrial Business Park use</li> </ul>
75 – Bayside Parkway Area	<ul style="list-style-type: none"> <li>Designated and planned for Commercial Recreation use and recreational vehicle park use</li> <li>Designated and planned for Park use; shoreline recreation park and promenade</li> </ul>
76 – Chula Vista Harbor	<ul style="list-style-type: none"> <li>Designated Commercial use; recreational boat berthing (two marinas combined—890 slips), commercial recreation, marine sales and services</li> <li>Designated Public Recreation Use; park</li> <li>Planned for Commercial Recreation uses</li> </ul>
77 – Boat Channel	<ul style="list-style-type: none"> <li>Conservation; estuary</li> <li>Planned for Boat Navigation Corridor and Conservation – estuary category</li> </ul>
78 – Wildlife Reserve	<ul style="list-style-type: none"> <li>Designated Wetlands, Estuary, Habitat Replacement, and Marine Related Industrial uses</li> </ul>
79 – Outer South Bay	<ul style="list-style-type: none"> <li>Designated and planned for Conservation use; estuary (limited surface water use for boating and fishing).</li> </ul>





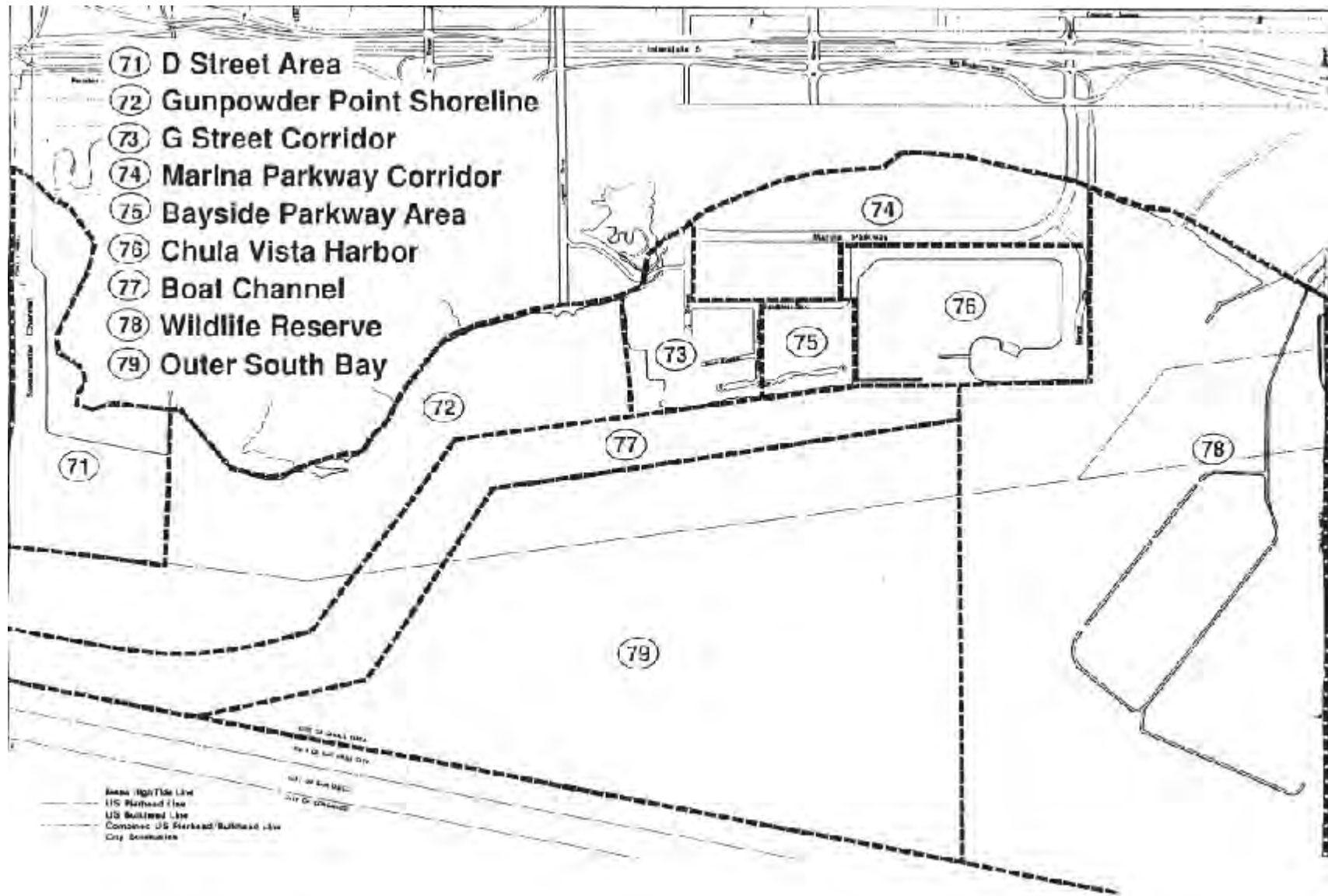
SOURCE: Port Master Plan, San Diego Unified Port District 2004

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Existing Port Master Plan - Chula Vista Bayfront Precise Plan Map**

**FIGURE**  
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SOURCE: Port Master Plan, San Diego Unified Port District 2004

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Existing Port Master Plan - Planning District 7: Planning Subareas**

**FIGURE**  
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The PMP distinguishes between water-dependent, water-linked, and water enhancing uses. Water-dependent uses require direct access to the water to function (e.g., boat and ship building and repair, marinas, fishing piers), while water-linked uses require proximity but not direct access to the water (e.g., boat sales, sailmaking, fish markets, canneries). Water enhancing uses do not require proximity to the Bay because they are not dependent or linked to the water but can lend enhancement to the waterfront (e.g., hotels, public recreation areas, field sports). These categorical uses frame the planning policy for site selection and help assess a potential user's need for a waterfront location.

The PMP details goals and policies that guide future development within the Port's jurisdiction. Section II of the PMP provides the goals of the Master Plan. The most relevant goals for the Proposed Project and PMP Amendment include the following:

- 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.
- II. The Port, 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.
  - Consider the entire Bay as a complete system when promoting the multipurpose development of the Port.
- III. The Port will ensure physical access to the Bay, except as necessary to provide for safety and security or to avoid interference with waterfront activities.
  - Provide "windows to the water" at frequent and convenient locations around the entire periphery of the Bay with public right-of-way (ROW), automobile parking, and other appropriate facilities.
  - Provide access along the waterfront wherever possible, with promenades and paths where appropriate and with elimination of unnecessary barricades that extend into the water.
- IV. 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 apprised of the growing body of knowledge on ecological balance and interrelationships.
  - Encourage research, pilot programs, and development in aquaculture, as long as it is consistent with this goal.

- Administer the natural resources so that impacts upon natural resource values remain compatible with the preservation requirements of the public trust.

One of the Port's primary goals is to provide access to the Bay. To ensure maximum public access without compromising security, public safety, or resource protection, the PMP identifies four classes of physical and visual access to the Bayfront, from least to most restrictive:

- **Class I:** Public use in this category occurs on unleased property proposed for development or developed by the Port. No user fees are charged, and the planning policies call for maximum direct physical access to and along the shoreline and to public recreational areas. Class I areas generally include public parks, promenades, boat launching ramps, fishing piers, and bicycle corridors.
- **Class II:** This class typically includes irregularly shaped parcels that are difficult to develop. Planning policies encourage limited use, provided resource values are not compromised. User fees are usually not imposed. Class II areas include habitat replacement, wetlands, salt ponds, and occasionally open space.
- **Class III:** This class typically involves leased, developed shoreline areas where the lessee promotes recreational uses to the paying public. Class III areas include sportfishing, recreational boat berthing, specialty shopping, golf course, and commercial recreation.
- **Class IV:** This class typically applies to non-recreational areas developed with public or private funds. General public access is prohibitive due to security and public safety reasons, but visual access is encouraged. Class IV areas include marine terminal, marine-related industrial, aviation-related industrial, and Navy Fleet School designations.

Other permitted use designations include industrial business park, which covers marine- and coastal-dependent industrial uses related to manufacturing, assembling, processing, testing, servicing, repairing, storing, and distributing products. Industrial business park uses aim to integrate these business types with other uses and to facilitate access to other professional, commercial, and recreational uses.

#### d. City of Chula Vista General Plan

The City of Chula Vista General Plan was originally adopted by the City Council on December 15, 1970, and was comprehensively updated on July 11, 1989. It was again comprehensively updated on December 13, 2005. The City of Chula Vista General Plan outlines the City's objectives and guidelines for all phases of future development within its incorporated area and sphere of influence and other lands within the planning area through the Year 2030. The City of Chula Vista General Plan is supplemented by community, specific, precise, and other types of long range plans that focus City of Chula Vista General Plan goals and policies for particular

geographic areas. All specific plans and development decisions are made within the framework of general plan goals, objectives, and policies. The City of Chula Vista General Plan divides the City into four planning areas, one of which is the Bayfront Planning Area.

e. City of Chula Vista Local Coastal Program (which includes the Land Use Plan and Bayfront Specific Plan)

With the exception of one parcel located east of the freeway, the Chula Vista Coastal Zone is generally located immediately west of Interstate 5 (I-5) and continues north and south to the City boundaries. The City's LCP consists of seven Subareas shown on *Figure 4.1-3*. The Bayfront Planning Area is composed of LCP Subareas 1, 2, and a portion of 3. The City has coastal permit jurisdiction over the Subareas.

The Coastal Zone also includes coastal areas within the Port's jurisdiction and an area annexed from the City of San Diego over which the CCC retained coastal authority. Within the Bayfront Planning Area, the provisions contained in the LCP only apply to the properties within the Bayfront Planning Area that are under the City's jurisdiction.

The Chula Vista LCP carries out the dual mandates of protecting coastal resources and regulating land use through the City of Chula Vista General Plan. The LCP provides a detailed plan for the orderly growth, development, redevelopment, and conservation of resources. It includes a land use plan with land use classifications, types, and densities of allowable development plus goals, objectives, and policies for development and use of coastal resources.

The LCP creates a water-oriented focal point for the entire city in compliance with the California Coastal Act. It emphasizes public recreation activities, tourism, and conservation but also promotes preservation and enhancement of visual resources. Specifically, the LCP calls for the removal of visual blight and provides that public access improvements be constructed to allow the public to view the Bay from the perimeter of the shore outward. The LCP also seeks to preserve wetlands; to upgrade the area's existing substandard industrial image; to improve the quality of the shoreline, public parkland, and open space; to remove (or mitigate through the use of landscaping) structures or conditions that have a blighting influence on the area; and to develop an improved relationship between the Bayfront, freeway, and arterial approaches. The CCC certified the LCP and zoning in 1985. A subsequent amendment was approved in 1993, which included expansion of the Sweetwater Marsh National Wildlife Refuge (NWR) and revisions to the Midbayfront Subarea.

The adopted LCP planning area currently encompasses approximately 1,013 acres, of which 748 acres are uplands or filled areas above mean to high tide and 265 acres are in marsh or wetlands. In order to facilitate the planning and development of the Bayfront, the overall area was divided into seven "subareas" (see *Figure 4.1-3*).

The LCP LUP map is shown on *Figure 4.1-4*. The existing land uses permitted by the LCP LUP are listed in *Table 4.1-3*. *Tables 4.1-4* and *4.1-5* list the permitted development intensity for the land use plan area. *Table 4.1-5* shows the permitted development intensity specifically for an area identified in the plan as the Central Resort District (labeled CRD) on *Figure 4.1-4*.

**TABLE 4.1-3**  
**Existing Permitted Land Uses by Subarea (acres)**

Land Use	Subareas							Total
	1	2	3	4	5	6	7	
Residential								
High	18	—	—	—	—	—	—	18
Commercial								
Visitor	11	—	—	—	—	—	—	11
Thoroughfare	8	4	—	—	—	—	—	12
Professional & Administrative	*	12	—	—	—	—	—	12
Industrial								
Research & Limited	—	10	—	—	8	63	—	81
General	—	155	98	36	—	—	—	289
Public & Open Space								
Public & Quasi-Public	6	12	—	—	—	—	—	18
Parks & Recreation	34	3	—	—	—	—	—	37
Water	8	—	—	—	—	—	—	8
Open Space	22	11	—	—	—	—	268	301
Circulation	14	8	3	—	—	—	2	27
Special Plan Area								
Central Resort District	40	—	—	—	—	—	—	40
Major Circulation	—	—	—	—	—	—	—	159
<b>TOTALS</b>	<b>161</b>	<b>215</b>	<b>101</b>	<b>36</b>	<b>8</b>	<b>63</b>	<b>270</b>	<b>1,013</b>

SOURCE: City of Chula Vista 1993.

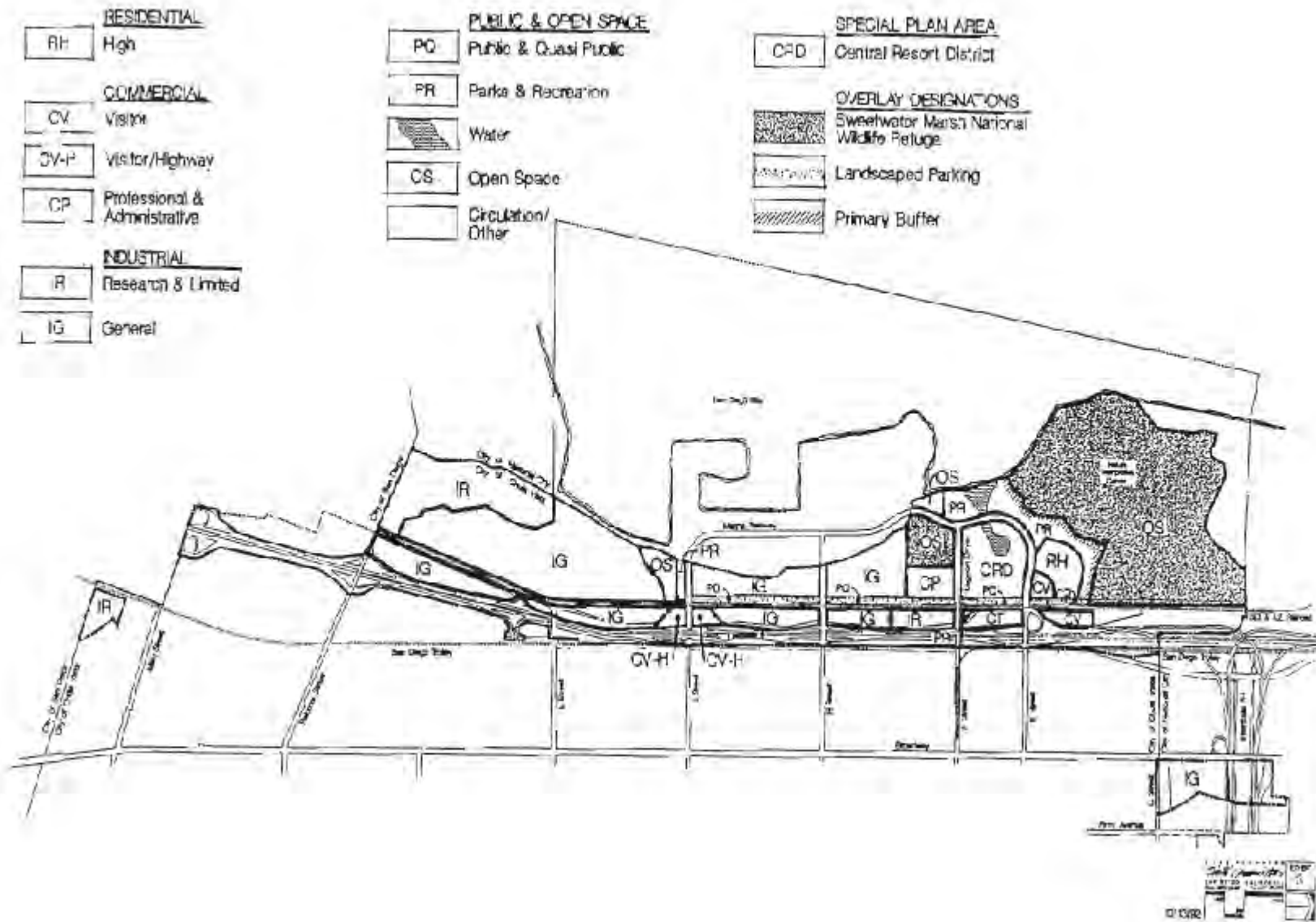
\*Allocated within Central Resort District as a permitted use.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Existing Local Coastal Program Land Use Plan - Coastal Zone with Subareas**

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SOURCE: Chula Vista Local Coastal Program, Land Use Plan, 1993

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**City of Chula Vista Existing Local Coastal Program Land Use Plan Map**

**FIGURE**  
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**TABLE 4.1-4**  
**Existing Permitted Development Intensity**

Subarea/Land Use	Development Intensity
<b>Subarea 1 – Midbayfront</b>	
Central Resort District	See Table 4.1-5.
Residential – High	Residential: 949,000 square feet / 700 units
Visitor Commercial	Western Parcel: 204,000 square feet / 250 hotel rooms; Eastern Parcel: 200,000 square feet / 250 hotel rooms
Public & Open Space Uses	Intensity limited by minimal permitted uses except Cultural Arts Facility 75,000 square feet (2,000 seats)
<b>Subarea 2 – Industrial</b>	
Industrial (IR & IG)	FAR 0.5 except Special Condition “C” (see notes below this table)
Commercial – Visitor/Highway	FAR 0.25 except Special Condition “F” (see notes below this table)
Commercial – Prof. & Admin.	Special Condition “C” (see notes below this table)
Landscaped Parking	May be included in adjacent parcel for FAR calculation with required improvements and use agreement
Parks and Recreation	Intensity limited by minimal permitted uses
<b>Subarea 3 – Southern Parcel</b>	
Industrial	FAR 0.5
<b>Subareas 4, 5, and 6</b>	
Industrial	Existing Zoning
<b>Subarea 7 – Sweetwater Marsh</b>	
National Wildlife Refuge	—
Open Space	Determined by USFWS.

SOURCE: City of Chula Vista LCP 1993.

**NOTES:**

FAR = Floor Area ratio or ratio of gross building area to net developable land area.

Special Condition “C”: FAR of 0.75 permitted subject to special conditions – See Special Condition “C” (Bayfront Specific Plan Sec. V.D.) and Subarea 2 Standards of the Bayfront Specific Plan, provided that the corresponding demolition/removal of existing structures elsewhere on the Rohr campus commensurate with the allowed bonus will occur in a timely fashion and associated traffic impacts will be mitigated to LOS “D” or better at the Bay Boulevard/E Street/I-5 interchange.

Special Condition “F”: In the event additional land area is gained for development of properties located at the northeast and southeast corners of Bay Boulevard and J Street by covering adjacent drainage channels, the on-site FAR and setbacks may vary in accordance with Special Condition “F” (Bayfront Specific Plan Sec. V.D.) and Subarea 2 Standards of the Bayfront Specific Plan.

**TABLE 4.1-5**  
**Existing Permitted Development Intensity for the Central Resort District**

Land Use Category	Minimum Building Square Feet Required	Target Building Square Feet *	Maximum Dwelling Units/Hotel Rooms
<b>Central Resort District Building Allowance</b>			
Residential – Mixed Use	100,000	406,000	300 dwelling units
Commercial – Visitor	1,000,000	1,503,000	1,360 rooms
Commercial – Prof. & Admin.	20,000	60,000	N/A
Public and Open Space		†	
Maximum Building Area Permitted		1,969,000 square feet	

SOURCE: City of Chula Vista LCP 1993.

\*The target building square feet in any category may be exceeded by up to 20 percent, provided that the increase is offset by a corresponding reduction in other categories and provided that the increase will not produce additional unmitigable environmental impacts. The maximum building square feet for the entire Central Resort District shall not be exceeded. Changes in building square footage from one category to another that decreases the level of service below the Traffic Service Threshold shall not be permitted.

†Limited by limited permitted uses.

Chapter 19 of the City of Chula Vista Municipal Code describes allowable uses for each of the City's zone classifications. Zone classifications provide for residential, commercial, industrial, and open space uses in conformance with the City of Chula Vista General Plan land use designations as required by law. Zoning regulations establish the minimum lot size, floor area ratio, building heights, setbacks, parking requirements, and permitted and conditional uses within the zone.

Chapters 19.81–19.87 of the City of Chula Vista Municipal Code constitute the Bayfront Specific Plan, which serves as the Implementing Program for the LCP, pursuant to California Government Code Sections 65450–65457 et seq. The plan also implements the Bayfront Redevelopment Plan that has been prepared by the Redevelopment Agency of the City of Chula Vista. It specifies, in detail, the land uses permitted in this area and sets the standards and criteria for development and conservation of resources. It applies only to land under the City's jurisdiction.

The Bayfront Specific Plan, which is currently being amended pursuant to Title 19 of the Chula Vista Municipal Code (Zoning Ordinance), meets the Implementing Ordinance requirements of the California Coastal Act.

f. Multiple Species Conservation Plan

The Multiple Species Conservation Program (MSCP) is a comprehensive, long-term habitat conservation plan developed to address the needs of multiple species and the preservation of natural vegetation communities in 12 jurisdictions within San Diego County. The MSCP is the subregional plan prepared under the California Natural Communities Conservation Planning Act (NCCP) Act (1991). The MSCP is intended to protect species against the potential impacts of habitat loss associated with development of both public and private lands.

The Subarea Plan for the City of Chula Vista MSCP (Subarea Plan) implements the MSCP subregional plan. It provides comprehensive long-term habitat conservation to address the needs of multiple species and the preservation of natural vegetation communities for lands within the City and sphere of influence boundaries. Any project subject to City approval must conform to the Subarea Plan. Note, however, that the plan does not apply to lands under the jurisdiction of the Port. The Subarea Plan area is composed of lands within the incorporated City limits for which Take Authorizations have been granted.

The goals of the Chula Vista MSCP Subarea Plan include (Chula Vista 2003a, pages 1–2):

- To conserve Covered Species and their habitats through the conservation of interconnected significant habitat cores and linkages

- To delineate and assemble a natural habitat preserve system (Preserve) using a variety of techniques including public acquisition, on- and off-site mitigation, and land use regulations
- To provide a Preserve Management Program that, together with the federal and state management activities, will be carried out over the long term, further ensuring the conservation of Covered Species
- To provide necessary funding for a Preserve management program and biological monitoring of the Preserve
- To reduce or eliminate redundant federal, state, and local natural resource regulatory and environmental review of individual projects by obtaining federal and state take authorizations for 86 species.

The Chula Vista MSCP Subarea Plan (Subarea Plan) identifies lands that would conserve habitat for covered federal and state endangered, threatened, or sensitive species. The Subarea Plan also designates a Preserve and provides a regulatory framework for determining impacts to the Preserve and sensitive habitat throughout the City and identifies mitigation to reduce those impacts. *Figure 4.1-5* shows the location of the MSCP Preserve Lands in relation to the subject property. The Subarea Plan also provides a process that allows the City to issue permits under the federal and state Endangered Species Acts for the incidental take of threatened and endangered species. The Subarea Plan authorizes take in two ways: (1) it establishes “Covered Projects” for which take is authorized and, (2) for projects located within mapped Development Areas that are outside of Covered Projects, take of covered species requires the issuance of a Habitat Loss Incidental Take (HLIT) Permit. In addition, the Subarea Plan requires issuance of an HLIT permit for “...all development within the City’s jurisdiction which is not located within the Development Areas of Covered Projects prior to issuance of any land development permit.” As stated in Section 17.35 of the Chula Vista Municipal Code:

Prior to obtaining a Clearing or Grubbing permit, the applicant shall obtain an HLIT Permit in the following mapped areas identified in the Chula Vista MSCP Subarea Plan unless exempt pursuant to Section 17.35.050 of this chapter.

1. 100 percent Conservation Areas
2. 75–100 percent Conservation Areas
3. Development Areas outside of Covered Projects.

Incorporated in the Chula Vista Subarea Plan is the Wetlands Protection Program, which provides wetlands protection through project entitlement reviews and the CEQA process. This process provides an evaluation of wetlands avoidance and minimization and ensures

compensatory mitigation for unavoidable impacts to wetlands in order to achieve a no-net-loss of wetland functions or values. Impacts to wetlands must be avoided or minimized to the maximum extent practicable pursuant to the City's MSCP Wetlands Protection Program, Section 5.2.4 of the Subarea Plan.

The following MSCP development regulations would apply to the portion of the Proposed Project within the City and would be subject to City approvals (Section 17.35.090):

All development proposals shall be consistent with the Chula Vista MSCP Subarea Plan and the MSCP Implementation Guidelines. These guidelines include the following:

1. Overall development within the Project Area, including public facilities and circulation, shall be located to minimize impacts to Sensitive Biological Resources in accordance with this chapter the Chula Vista MSCP Subarea Plan and the MSCP Implementation Guidelines.
2. Pursuant to Chapter 15.04 of the Chula Vista Municipal Code, no Land Development or Clearing and Grubbing Permit that allows clearing, grubbing, or grading of Natural Vegetation shall be issued for any portion of a Project Area where impacts are proposed to Wetlands or Listed Non covered Species until all applicable federal and state permits have been issued.
3. Impacts to Wetlands shall be avoided to the maximum extent practicable. Where impacts to Wetlands are not avoided, impacts shall be minimized and mitigated pursuant to Section 17.35.110 of the Municipal Code.
4. No temporary disturbance or storage of material or equipment is permitted in Sensitive Biological Resources unless the disturbance or storage occurs within an area approved by the City for development or unless it can be demonstrated that the disturbance or storage will not cause permanent habitat loss and the land will be revegetated and restored in accordance with the MSCP Implementation Guidelines.
5. Grading during wildlife breeding seasons shall be avoided or modified consistent with the requirements of the Chula Vista MSCP Subarea Plan and in accordance with the MSCP Implementation Guidelines.
6. All fuel modification brush management zones required as a result of new development and as required by the City Fire Marshal shall be located outside the Preserve.



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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
City of Chula Vista MSCP Subarea Plan

**FIGURE**  
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The City's Subarea Plan and the HLIT Ordinance establish the requirements for evaluating compliance for those projects which are not exempt from the plan. Those aspects of the Proposed Project that would lie within the City's jurisdiction are not "covered projects" as defined by the MSCP Subarea Plan and the HLIT Ordinance, and therefore are not exempt.

The purpose of the HLIT Ordinance is to protect and conserve native habitat within the City and the viability of the species supported by those habitats. The HLIT provisions are intended to implement the Subarea Plan by placing priority on the preservation of biological resources within the planned and protected preserve.

In order to approve an HLIT Permit, the City must make the following findings (Section 17.35.080):

1. The proposed development in the Project Area and associated mitigation is consistent with the Chula Vista MSCP Subarea Plan as adopted on May 13, 2003, and as may be amended from time to time; the MSCP Implementation Guidelines; and the development standards set forth in Section 17.35.100 of the Municipal Code.
2. The Project Area is physically suitable for the design and siting of the proposed development, and the development results in minimum disturbance to Sensitive Biological Resources except impacts to Natural Vegetation in mapped Development Areas.
3. The nature and extent of mitigation required as a condition of the permit is reasonably related to and calculated to alleviate negative impacts created in the Project Area.

In order to approve an HLIT Permit in a project area where wetlands occur, the following additional findings must be made:

1. Prior to the issuance of a Land Development Permit or Clearing and Grubbing Permit, the project proponent will be required to obtain any applicable state and federal permits, with copies provided to the Director of Planning and Building or his/her designee.
2. Where impacts are proposed to wetlands the following findings shall be made:
  - a. Impacts to wetlands have been avoided and/or minimized to the maximum extent practicable, consistent with the City of Chula Vista MSCP Subarea Plan Section 5.2.4.
  - b. Unavoidable impacts to wetlands have been mitigated pursuant to Section 17.35.110.

These findings and their applicability to the current Proposed Project are discussed in the impact analysis of this section below (*Section 4.1.3*).

The Subarea Plan also provides guidelines to address Adjacency Management Issues in order to address indirect impacts associated with development adjacent to the Preserve areas. All new development must adhere to these guidelines, which address potential drainage issues, overspill of lighting and noise into the Preserve, use of non-invasive plant species, and limiting of public access in sensitive preserve areas.

**g. Greenbelt Master Plan**

The City's Greenbelt Master Plan, which was adopted in 2003, guides development of a continuous 28-mile open space, park, and trail system that encircles the City and unifies its eastern and western sectors. The Plan sets goals and policies, provides trail design standards, and identifies tools to implement the Greenbelt system.

The promenade, or "baywalk," and Signature Park of the Proposed Project would be compatible with the Greenbelt system. Major components of the Chula Vista Greenbelt include Chula Vista Bayfront Park and lands extending to the Otay River; lands within the Otay River Valley, including areas within the proposed Otay Valley Regional Park, a concept plan which was adopted in 2001; lands northerly to Mother Miguel Mountain and the Sweetwater Reservoir; and lands from the Sweetwater Reservoir, Sweetwater Valley, and Sweetwater Regional Park west to Interstate 805 (I-805) and to Bayfront Park.

**h. Growth Management Ordinance**

The City of Chula Vista has adopted a Growth Management Ordinance (Chapter 19.09 of the Municipal Code) in an effort to preserve the City's quality of life and to ensure that public facilities and services are adequate to meet present and future needs of the City. This ordinance contains Quality of Life Threshold Standards, which set levels of service for maintenance-required facilities. These standards also help the City to determine whether new or upgraded facilities are necessary to mitigate for impacts of a new development. These thresholds must be addressed and met for each component of the Proposed Project. The threshold standard for each of the facilities addressed in the Growth Management Ordinance, as well as the impacts associated with the Chula Vista Bayfront Development projects, are reviewed in a process conducted by the City's Growth Management Oversight Commission.

**i. Redevelopment Planning/Chula Vista Bayfront/Midbayfront Redevelopment Area**

The City of Chula Vista has established the Chula Vista Bayfront as a redevelopment area. Approximately 500 acres of property is within the Bayfront or Southwest Redevelopment Areas. City redevelopment plans address the need to enhance the Bayfront's appearance and access. E and J Streets, Marina Parkway, and I-5 generally form the boundary for the Bayfront area, which is a designated candidate area for a limited amount of mid- and high-rise development. The City

is actively involved in attracting new development to this area and is working cooperatively with the Port, which shares jurisdiction for some portions of the Bayfront.

j. San Diego Bay NWR Comprehensive Conservation Plan

The U.S. Fish and Wildlife Service recently completed a Comprehensive Conservation Plan (CCP) for the San Diego Bay National Wildlife Refuge (SDBNWR) (USFWS 2006b). The CCP, which provides a 15-year strategy for achieving refuge purposes and contributing towards the mission of the National Wildlife Refuge System, describes why this SDBNWR was established and outlines the SDBNWR purposes, vision, goals, and objectives.

The SDBNWR includes the 316-acre Sweetwater Marsh Unit located to the north of the Proposed Project and the South San Diego Bay Unit, which currently includes 2,300 acres of land and water to the south and west of the Proposed Project. The SDBNWR was established to project, manage, and restore habitats for federally listed species and migratory birds and to maintain and enhance the biological diversity of native plants and animals. The SDBNWR includes most of what remains of San Diego Bay's historic coastal salt marsh and intertidal mudflat habitat. SDBNWR goals include protecting, managing, enhancing, and restoring the coastal wetlands and upland habitats on the SDBNWR to benefit native fish, wildlife, and plant species; protecting state and federally listed species and migratory birds supported on the SDBNWR; protecting foraging and nesting habitat for colonial nesting seabirds in the South San Diego Bay Unit; and providing opportunities for public uses that are compatible with SDBNWR purposes.

**4.1.1.2 Existing Land Uses**

The Proposed Project area is approximately 560 acres in size and comprises approximately 500 acres of land area and 60 acres of water area. Current land and water uses include former industrial use buildings, undeveloped/open space land, the Chula Vista Marina, the California Yacht Marina, the existing South Bay Boatyard, Chula Vista RV Resort, the South Bay Power Plant (SBPP), the San Diego Gas & Electric (SDG&E) switchyard, two restaurants, four parks, a boat launch ramp, and public art.

For planning/redevelopment and discussion purposes, the Proposed Project area has been divided into three districts: the Sweetwater District, the Harbor District, and the Otay District (see *Figure 3-3*). The existing uses within each district are described below. Most of the Bayfront is developed except for the Sweetwater District, large portions of which remain undeveloped.

The intensity of development consists essentially of low-rise buildings and open parking areas. Existing building heights vary throughout the Proposed Project area but are primarily one to two

stories tall. The tallest structures within the Bayfront are the stacks for the SBPP, which are 187 feet high.

a. Sweetwater District

The Sweetwater District is the northernmost planning area of the Proposed Project. It is mainly composed of fallow fields south of the Sweetwater Marsh NWR (wildlife habitat and wetland reserve served by the Chula Vista Nature Center) and approximately 97 acres owned by a private entity, Chula Vista Investors, north of F Street/Lagoon Drive and west of the SDG&E ROW. The entrance and parking for the NWR is also on this portion of the project site.

b. Harbor District

The Harbor District extends from G Street south to J Street and Marina View Park. The area south of H Street and east of Marina Parkway is developed land previously owned by Rohr Aircraft Corp., which is now owned by the Port. The existing South Bay Boatyard and an RV Park occupy areas west of Marina Parkway. Marine-related services located in the Harbor District include two marinas, various businesses offering boating equipment, and recreation-related services (e.g., boat-launching ramp and the visitor-serving and retail businesses of the Chula Vista Harbor). There are also three public parks: Chula Vista Bayside Park, Bayfront Park, and Marina View Park. Just outside the Proposed Project area, highway and visitor commercial uses exist along Bay Boulevard, between Marina Parkway and Lagoon Drive.

Buildings associated with the former Goodrich South Campus facility currently exist on Parcels H-15, H-18, and H-23. The Goodrich Relocation Agreement provided for consolidation of the Goodrich campus north of H Street and the Port's acquisition of Parcels H-15, H-18, and a portion of H-23. The Port has begun demolition of the buildings on this site, which will be completed prior to commencement of any construction of the Proposed Project. The demolition of these buildings is addressed in two separate environmental documents (Goodrich Relocation Agreement Mitigated Negative Declaration, prepared and approved by the City Redevelopment Agency, Case No: IS-99-21 and Chula Vista Business Park Expansion and PMP Amendment Final Environmental Impact Report, certified by the Port in 1997).

In 2001, a PMP Amendment changed the land use designation of the existing South Bay Boatyard site to "commercial recreation" and provided for its future relocation (Board Resolution No. 2001-190). The "commercial recreation" land use designation and potential relocation allows for redevelopment of the site in a manner consistent with the Proposed Project. In 2005, an amendment to the South Bay Boatyard lease was approved, to allow the Port to terminate the lease earlier under certain circumstances in order to allow redevelopment of the site and, in the meantime, allow for modifications to the existing South Bay Boatyard to include a 660-ton boat hoist, to facilitate removal of boats from the water.

### c. Otay District

A portion of the Otay District is currently leased by Dynegy and is occupied by the SBPP. Only about half of the SBPP site is currently occupied by structures. The Otay District also contains the SDG&E electrical switchyard. Outside of the Proposed Project area, located near the vacated land that formerly supported a Liquefied Natural Gas (LNG) plant, are smaller industrial uses.

#### **4.1.1.3 Coastal Access**

The Port's PMP, City's LCP, and the California Coastal Act encourage public access to the shore and coastal waters. Currently, however, the public's physical access to Chula Vista's shoreline is limited. The waterfront can be accessed at the end of G Street through the existing Bayside Park. Additional access is provided near the boat launch, marina, and park located off the westerly extension of J Street. Public access is also provided via a shuttle bus that serves the Chula Vista Nature Center, located on Gunpowder Point, which is within the boundaries of the NWR but located north of the Proposed Project site.

The lack of adequate public access is due, in part, to the types of land uses that currently occur along the shoreline. The Goodrich facility, the boatyard, the RV Park, SBPP, SDG&E switchyard, the NWR, and undeveloped property all limit direct public-access opportunities. The environmental sensitivity of the shoreline within the planning area also constrains public access. I-5 separates the downtown Chula Vista Urban Core from the Bayfront, although through streets provide access at E, F, H, and J Streets.

#### **4.1.1.4 Water Use and Navigation**

Like land areas, water areas are set aside for commercial, open space and recreation, and navigational purposes. Recreational vessels utilize the Chula Vista Harbor. Two marinas exist within the harbor: the Chula Vista Marina and the California Yacht Marina. Approximately 900 boat slips exist between these two marinas. Approximately 50 boat slips are within the existing South Bay Boatyard's boat basin at the northwest corner of the Harbor District.

#### **4.1.1.5 Adjacent Land Uses**

The Sweetwater Marsh NWR (under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS)) and National City border the Proposed Project site to the north. The Chula Vista Urban Core, which includes neighborhood and community-oriented commercial uses, borders the project site to the east. The Goodrich Corporation also has facilities south of Lagoon Drive and north of H Street. In addition, there are a number of motels and boating-related businesses along Bay Boulevard on the project site's eastern boundary. Abutting the site's southern boundary is the Western Salt Works, a portion of open space preserve that is a unit of the larger

San Diego Bay National Wildlife Refuge (SDBNWR). To the west of the project site lies the Chula Vista Wildlife Reserve, San Diego Bay, the J Street Marsh, and a portion of SDBNWR. The I-5 corridor is immediately east of the project site.

#### 4.1.2 Impact Significance Criteria

According to Appendix G of the CEQA Guidelines and the Port's guidelines, the Proposed Project would have a significant impact on land/water use if:

1. It conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, master plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
2. It conflicts with any applicable habitat conservation plan or natural community conservation plan.
3. It creates a substantial land/water use incompatibility with adjacent or nearby existing and proposed land uses, resulting in significant incompatibility or nuisance impacts.
4. It is inconsistent with or conflicts with an adopted PMP water use designation where substantial indirect or secondary environmental impact would occur.

#### 4.1.3 Impact Analysis

- 1. The Proposed Project would have a significant impact if it conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, master plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.**

The land/water uses proposed for redevelopment of the Proposed Project site may result in significant environmental impacts. Although some of the proposed uses are not consistent with existing land/water use plans applicable to the project site, the Proposed Project includes amendments to the PMP, the City of Chula Vista General Plan, Chula Vista LCP (which includes the LUP and the Bayfront Specific Plan), which, if adopted, would eliminate the inconsistency and would allow the land/water uses proposed for the project site. *Table 4.1-6* is a comprehensive table that shows the existing and proposed land/water use designations for the Proposed Project area, which include both the PMP and City LCP. The approval of the land exchange and the adoption of the amendments to the PMP and LCP would make the Proposed Project consistent with these plans.

**TABLE 4.1-6**  
**Existing and Proposed Port Master Plan and Local Coastal Program Land**  
**and Water Use Designations for the Proposed Project**

Parcel	Existing Designation	Proposed Designation
<b>Sweetwater District</b>		
S-1	LCP: Residential – High Rise, Commercial – Visitor, Circulation and Other	PMP: Industrial Business Park
S-2	LCP: Central Resort District, Parks and Recreation, Water, Circulation and Other	PMP: Park/Plaza, Promenade LCP: Open Space
S-2A	LCP: Open Space, Sweetwater Marsh NWR Overlay, Circulation and Other	LCP: Open Space
SP-1	LCP: Parks and Recreation, Primary Buffer, Water, Open Space	PMP: Wetlands, Open Space, Promenade <u>Habitat Replacement</u> LCP: Open Space
SP-2	LCP: Central Resort District, Water	PMP: Wetlands, <del>Open Space</del> <u>Habitat Replacement</u> , Promenade
S-3	LCP: Central Resort District	PMP: Industrial Business Park
S-4	LCP: Commercial – Visitor	LCP: Commercial – Professional & Administrative
SP-3	LCP: Parks and Recreation, Circulation and Other	PMP: Industrial Business Park, Promenade
SP-4 / 6	LCP: Public – Quasi-Public, Landscaped Parking	LCP: Public – Quasi-Public
SP-5 / 7	LCP: Rail Road Easement	LCP: Rail Road Easement
S-5	LCP: Parks and Recreation	LCP: Parks and Recreation
E Street and F & G Street Bridge	LCP: Central Resort District, Water, Open Space, Circulation and Other	PMP: Street
F Street (west of terminus)	LCP: Circulation and Other	PMP: Promenade
F Street Extension	LCP: Central Resort District	PMP: Street
<b>Harbor District</b>		
HP-1	PMP: Commercial Recreation, Industrial Business Park, Park/Plaza, Promenade, Street	PMP: Park/Plaza, Promenade
H-8	PMP: Commercial Recreation, Park/Plaza, Promenade	PMP: Park/Plaza, Promenade
H-3	PMP: Industrial Business Park, Commercial Recreation, Habitat Replacement, Promenade,	PMP: Industrial Business Park

TABLE 4.1-6 (Cont.)

Parcel	Existing Designation	Proposed Designation
	Street	
H-9	PMP: Industrial Business Park, Commercial Recreation, Park/Plaza	PMP: Commercial Recreation, Park/Plaza, Promenade
H-13	PMP: Industrial Business Park	LCP: Residential in Harbor
H-14	PMP: Industrial Business Park, Street	LCP: Residential in Harbor
H-15	LCP: Industrial – General	LCP: Commercial – Professional & Administrative, Commercial – Visitor
H-18	LCP: Industrial – General	PMP: Industrial Business Park, Promenade
H-23	PMP: Industrial Business Park, LCP: Industrial – General	PMP: Industrial Business Park, Promenade
HP-3	PMP: Habitat Replacement, Promenade	PMP: Promenade
HP-5	PMP: Industrial Business Park	LCP: N/A
HP-28	PMP: Boat Navigation Corridor	PMP: Promenade
H-1	PMP: Commercial Recreation	PMP: Commercial Recreation
H-1A	PMP: Habitat Replacement, Commercial Recreation, Promenade	PMP: Open Space, Park/Plaza
H-12	PMP: Recreational Boat Berthing	PMP: Commercial Recreation, Ferry Landing, Promenade
H-17	LCP: Commercial – Visitor/Highway	LCP: Public/Quasi-Public
H-21	PMP: Commercial Recreation, Promenade, Street	PMP: Commercial Recreation
HP-23A	LCP: Industrial – General	PMP: Industrial Business Park, Promenade
HP-7	PMP: Park/Plaza, Promenade, Street	PMP: Park/Plaza, Open Space, Promenade
HP-8	LCP: Parks & Recreation, Open Space	PMP: Park/Plaza
HP-9	LCP: Rail Road Easement	PMP: Open Space, Promenade
HP-11	PMP: Habitat Replacement, Street	PMP: Wetlands
HP-12	LCP: Public – Quasi-Public, Landscaped Parking	PMP: Open Space
HP-13	LCP: Rail Road Easement	PMP: Open Space, Promenade
HP-6	PMP: Park/Plaza, Promenade, Street	PMP: Park/Plaza, Promenade
HP-14	PMP: Park/Plaza	PMP: Park/Plaza
HP-15	PMP: Park/Plaza, Promenade	PMP: Park/Plaza



TABLE 4.1-6 (Cont.)

Parcel	Existing Designation	Proposed Designation
HW-6	PMP: Specialized Berthing	PMP: Recreational Boat Berthing
HW-1	PMP: Recreational Boat Berthing	PMP: Recreational Boat Berthing
HW-2	PMP: Boat Navigation Corridor, Estuary	PMP: Boat Navigation Corridor
HW-3	PMP: Recreational Boat Berthing	PMP: Specialized Berthing, Boat Navigation Corridor
HW-4	PMP: Recreational Boat Berthing	PMP: Recreational Boat Berthing
HW-5	PMP: Fishing Pier	PMP: Fishing Pier
HW-7	PMP: Estuary	PMP: Boat Navigation Corridor
E Street	PMP: Commercial Recreation, Industrial Business Park, Habitat Replacement, Promenade, Street	PMP: Street
H Street	PMP: Commercial Recreation, Industrial Business Park, Street	PMP: Street
Street A	LCP: Industrial – General	PMP: Street
Street C	LCP: Industrial – General PMP: Industrial Business Park	PMP: Street
Bay Boulevard	LCP: Circulation and Other	LCP: Circulation and Other
J Street/ Marina Parkway	PMP: Industrial Business Park, Commercial Recreation, Park/Plaza, Street LCP: Circulation and Other	PMP: Street
Marina Way	PMP: Park/Plaza, Commercial Recreation	PMP: Street
<b>Otay District</b>		
O-1	LCP: Open Space, Industrial – General	PMP: Industrial Business Park
O-3A/B	LCP: Industrial – General	PMP: Commercial Recreation
O-4	LCP: Industrial – General	PMP: Industrial Business Park
OP-1A/B	LCP: Industrial – General	PMP: Park/Plaza, Promenade
OP-2A	LCP: Open Space, Industrial – General PMP: Marine Related Industrial	PMP: Wetlands, <del>Open Space</del> Habitat Replacement, Promenade
OP-2B	LCP: Industrial – General	PMP: <del>Open Space</del> Habitat Replacement
OP-3	LCP: Industrial – General, Rail Road Easement	PMP: Open Space, Promenade
Street A	LCP: Industrial – General	PMP: Street
Street B	LCP: Industrial – General	PMP: Street

LCP = Local Coastal Program, City of Chula Vista

PMP = Port Master Plan, San Diego Unified Port District

### a. Public Trust Doctrine

The public trust is an affirmation of the duty of the state to protect the people's common heritage of tide and submerged lands for their common use. The California Supreme Court has said that the public trust embraces the right of the public to use the navigable waters of the state for bathing, swimming, boating, and general recreational purposes, and it is sufficiently flexible to encompass changing public needs, such as the preservation of the lands in their natural state for scientific study, as open space and as wildlife habitat.

Tidelands granted in trust to local entities may also be leased and improved if the leases and improvements promote uses authorized by the statutory trust grant and the public trust. Access to the tidelands, therefore, enhances the public's enjoyment of these lands historically set apart for their benefit. The appropriateness of the use of public trust lands can be guided by the following (SLC 2001):

1. The structure must directly promote uses authorized by the statutory trust grant and trust law generally.
2. The structure must be incidental to the promotion of such uses.
3. The structure must accommodate or enhance the public's enjoyment of the trust lands.

The Public Trust Doctrine permits a private party to acquire the right to use trust property only when the grant serves the purpose of the trust. Public Resources Code Section 6307 authorizes the SLC to approve an exchange of trust property for one or more of the following purposes: to improve navigation or waterways; to aid in reclamation or flood control; to enhance the physical configuration of the shoreline or trust land ownership; to enhance public access to or along the water; to enhance waterfront and nearshore development or redevelopment for public trust purposes; to preserve, enhance, or create wetlands, riparian or littoral habitat, or open space; or to resolve boundary or title disputes.

The land exchange component of the Proposed Project would enhance the physical configuration of trust land ownership, enhance public access to or along the water, enhance waterfront and nearshore development or redevelopment for public trust purposes, and preserve or enhance wetlands, riparian or littoral habitat, or open space by moving proposed residential uses away from sensitive resources in the Sweetwater District and by relocating them to the Harbor District where they would enhance the synergy of other proposed uses.

The land exchange would include the transfer of up to 97 acres of land (Parcels S-1, S-3, SP-2, SP-3, and most of SP-1 and S-2) in the Sweetwater District from a private developer to the Port, in exchange for up to 33 acres of land (Parcels H-13, H-14, H-15, and HP-5) in the Harbor from the Port to a private developer. The land under option by a private developer in the City's

jurisdiction would transfer to Port trusteeship and jurisdiction; likewise, the lands currently under Port trusteeship and jurisdiction would transfer to a private developer for development within the City's jurisdiction. *Figure 3-5* shows the lands involved in the proposed land exchange. The SLC may approve the proposed land exchange upon determining that it meets the conditions set forth in Public Resources Code Section 6307.

b. California Coastal Act

The proposed plan conforms to the California Coastal Act. Chapter 8 of the California Coastal Act identifies the Port's responsibilities to the public, and Chapter 3 of the California Coastal Act provides the basis for analyzing the Proposed Project's consistency to the California Coastal Act. The analysis of the Proposed Project's consistency with the California Coastal Act is contained in *Table 4.1-7*.

**TABLE 4.1-7**  
**California Coastal Act (Public Resources Code Section 30000, Et Seq.) Consistency**

		<b>Analysis</b>	<b>Consistency</b>
<b>Article 2</b>	<b>Public Access</b>		
30210	Maximum access and recreational opportunities shall be provided for all people, consistent with public safety needs and the need to protect public rights, private property owner rights, and natural resource areas from overuse.	<p>The Proposed Project would maximize access and recreational opportunities by creating new public parks that would provide space for passive and active public recreation. Significant park and other open space areas in each of the three districts are proposed, along with a defined Signature Park and the creation of an active commercial harbor with public space at the water's edge. The plan would also enhance existing physical and visual corridors while adding new ones.</p> <p>Approximately 238 acres, or 43 percent, of the project site is proposed to be open space, either in the form of natural habitat or public passive or active use parks. The City's LUP designates approximately 28 acres of public and quasi-public areas and parks and recreation adjacent to the Bay and nature preserve, thereby enhancing public access to the coastal resources. All of the public, park, and open space lands would be permanently dedicated and maintained to assure future access.</p> <p>The PMP stresses public access through a series of public shoreline parks and open space areas adjacent to the NWR, which offers both pedestrian and bicycle paths. Development on parcels within the LCP Planning Area would ensure continuity with such access defined in the PMP. The Proposed Project parcel plan proposes to extend Chula Vista's traditional grid of streets to ensure pedestrian, vehicle, bicycle, transit, and water links. The Proposed Project also proposes a continuous open space system, fully accessible to the public, that would seamlessly connect the Sweetwater, Harbor, and Otay Districts through components such as a continuous shoreline promenade or baywalk and a continuous bicycle path linking the parks and ultimately creating greenbelt linkages.</p>	Consistent
30211	Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization.	<p>The Proposed Project would not interfere with the public's right of access to the sea. The Proposed Project would instead improve the public's right to access the Bay by improving the link between western Chula Vista along H Street, E Street, and J Street. Uses proposed along the waterfront would be reserved for public access. Public access to the shoreline consistent with habitat preservation would be a key provision of this Proposed Project.</p>	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30212	Public access to the shoreline from the nearest public roadway shall be provided in new development projects, except where it is inconsistent with public safety, where there is adequate access nearby, or where it would adversely affect agriculture.	The nearest public roadways to the shoreline are E Street, H Street, J Street, and Marina Parkway. The Proposed Project facilitates direct public access to the shoreline by these roadways and provides for parks and public uses between these roads and the Bay. In addition, planned promenades, bicycle corridors, and trails through the Signature Park would be provided. A continuous shoreline promenade or baywalk is proposed along the shoreline in the Harbor District, from the existing boatyard south, around the harbor, and ending along Parcel HP-14 just north of the J Street Marsh northern shoreline, in order to maximize public visual and physical access to the water.	Consistent
30212.5	Public facilities, including parking facilities, shall be distributed to mitigate the impacts of overcrowding or overuse of any single area by the public.	The Proposed Project was designed to provide enough parking to meet the parking demand of the planned uses on or near the affected parcels, as well as availability of excess parking for major events within the Chula Vista Bayfront area. Parking is distributed throughout the Proposed Project area as more fully described in <i>Section 4.3, Parking</i> , of this report.	Consistent
30213	Lower-cost visitor and recreational facilities shall be protected, encouraged, and provided where feasible, and public recreational opportunities are proposed.	<p>In addition to the existing facilities provided within the Bayfront, the Proposed Project designates new low-cost visitor and recreational facilities in all three of the districts.</p> <p>A Signature Park is proposed within both the Sweetwater District and Harbor District, totaling approximately 40 acres. The park is envisioned as a passive use, meadow-type park with amenities, such as landscaping, lighting, restrooms, drinking fountains, bicycle racks, tot lots, picnic areas, benches, trash bins, interpretive signage, landscaped berms, public art, decomposed granite paving, and open-law areas. <del>The park could also include cultural uses; small food and beverage vending; specialty retail involving gifts, novelties, clothing, and jewelry; group activities of nearby businesses; and other minor park-activating uses.</del> A pedestrian trail would be interwoven throughout the park, and a promenade would be constructed along the shoreline to complement the park. This promenade would replace the existing shoreline promenade and would be part of a larger pedestrian circulation system within the Sweetwater, Harbor, and Otay Districts.</p> <p>Within the Harbor District on Parcel H-1, a community boating center or recreational marina of approximately 10,000 to 20,000 square feet is proposed in Phase IV. The boating center building could include an aquatic center, low-cost visitor-serving boating opportunities, and dock and dine facilities. If this parcel is developed as a recreational marina, it would contain a marina support building to include uses such</p>	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
		<p>as offices, restrooms, showers, lockers, ship chandlery, boat/bicycle rentals, delicatessens, and snack bars. The facility would have approximately 200 boat slips and possible water transportation dock and boat launch as more fully described under Parcel HW-6. Additional visitor-serving and recreation facilities within the Harbor District include approximately 25,000 to 50,000 square feet of retail/commercial and recreation space on Parcels H-8 and H-9.</p> <p>Within the Otay District, an RV Park containing between 175 and 236 RV parking spaces is proposed in Phase III on an approximately 14-acre parcel. This low-cost, visitor and recreational use RV Park would contain ancillary facilities, such as offices, pool/spa, snack bar, general store, meeting space, game room, laundry room, approximately 20 visitor parking spaces, and playground equipment.</p> <p>In addition to the above-referenced facilities in the Sweetwater, Harbor, and Otay Districts, new facilities in the Proposed Project include ancillary retail establishments, such as restaurants, shops, and shared public plazas.</p>	
<b>Article 3</b>	<b>Recreation</b>		
30220	Coastal areas suited for water-oriented recreational activities shall be protected for those uses.	<p>The proposed amendment to the City of Chula Vista LCP includes an objective to create a water-oriented focal point for the entire city in compliance with the California Coastal Act. The Proposed Project activates the Bayfront to better serve water-oriented activities.</p> <p>The Harbor District is most directly accessible to downtown Chula Vista and would be redeveloped to provide a significant link from the City to the Bayfront. Within the Harbor District on Parcel H-1, a community boating center or recreational marina is proposed in Phase IV, enhancing water-oriented recreational activities. The boating center building could include an aquatic center, boating opportunities, and dock and dine facilities. If this parcel is developed as a recreational marina, it would contain a marina support building that would include recreational activities such as boat and bicycle rentals, among other amenities. The facility would have approximately 200 boat slips and possible water transportation dock and boat launch. To further accommodate boating activities, an existing boat launch ramp and boat trailer/car parking area will remain on Parcels H-14 and H-15. Lastly, by improving the navigation channel and a ferry terminal and providing a new pier, the Proposed Project provides enhanced facilities for the boating community.</p>	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30221	Oceanfront land suitable for recreational use and development shall be protected for that use unless present and future demand is already provided for in the area.	The Proposed Project is not situated on oceanfront land. The Chula Vista Bayfront project is located along the coast, adjacent to the San Diego Bay. The Proposed Project protects and enhances recreational uses along the Bay.	N/A
30222	Private lands suitable for visitor-serving commercial recreational facilities designed to enhance public coastal recreation shall have priority over all other development, except agriculture and coastal-dependent development or uses.	<p>The Proposed Project designates new visitor-serving facilities within all three districts, as described above in Article 2, Section 30213 of this <i>Table 4.1-7</i>. A key objective of the Proposed Project is to develop both public and private lands in the project area to enhance public recreation and visitor-related activities. The proposed land trade would facilitate this goal by converting significant private land to public visitor-serving uses.</p> <p>Commercial uses designed to enhance public coastal recreation are proposed in both the Sweetwater and Harbor districts. As defined in the PMP, the commercial recreation land use designation allows for such uses as hotels, restaurants, convention centers, recreational vehicle parks, specialty shopping, pleasure craft marinas, and sportfishing.</p> <p>Within the Harbor District, approximately 25,000 to 50,000 square feet of visitor-serving retail/commercial recreation space is proposed on Parcels H-8 and H-9 in Phase II. In addition, approximately 300,000 to 420,000 square feet of mixed-use office and commercial recreation/retail use is proposed in Phase II on Parcel H-15 and approximately 75,000 to 150,000 square feet of trust-related retail/commercial recreation and marina support uses are proposed on Parcel H-21. Also within the Harbor District, the <del>Gaylord</del> Resort and Convention Center (RCC) is proposed for Phase I on Parcel H-3 as a world-class hotel and convention facility. The RCC is proposed to contain approximately 3 million square feet gross building area composed of a 2,000-room hotel, an approximately 1.3 million gross square-foot convention center, and an integrated 2,900-car parking structure.</p> <p>Additional commercial recreation uses are proposed on Parcel S-3 in the Sweetwater District, to include approximately 60,000 to 120,000 square feet of mixed-use office and commercial recreation space in Phase IV.</p>	Consistent
30222.5	Protects oceanfront land suitable for coastal-dependent aquaculture, and gives priority to such uses, except over other coastal-dependent development or uses.	The Proposed Project is not situated on oceanfront land. Furthermore, none of the project site has been used for coastal-dependent aquaculture activities. The proposed land uses do not include aquaculture. Based on the existing and proposed designations for the project site, this section does not apply.	N/A

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30223	Provides that upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.	Over 73 acres of parkland with trails and other amenities are proposed for upland areas.	Consistent
30224	Encourages the increased recreational boating use of coastal waters and specifies methods to increase such usage.	Access for fishing or boating is limited to areas within the Port's jurisdiction and not currently permitted or proposed in the LCP Planning Area. The Proposed Project and associated PMP Amendment will provide for increased recreational boating use at the Chula Vista Marina and at the site of the existing South Bay Boatyard, however. Within the Harbor District, for example, the project proposes development of a new community boating center or recreational marina on Parcel H-1. The boating center building could include an aquatic center, boating opportunities, and dock and dine facilities. An existing boat launch ramp and boat trailer/car parking area will remain on Parcels H-14 and H-15 to accommodate boating activities. Furthermore, by improving the navigation channel and a ferry terminal and providing a new pier, the Proposed Project provides enhanced facilities for the boating community.	Consistent
<b>Article 4</b>	<b>Marine Environment</b>		
30230	Provides that marine resources shall be maintained, enhanced, and, where feasible, restored.	<p>A major component of the project mitigation is the protection and enhancement of on-site sensitive resources, including marine resources. Impacts to marine biological resources, including eelgrass and shallow-water habitat, intertidal mudflat, pickleweed, and green sea turtle, are expected due to construction-related activities, changes in land use, and lighting during construction and operation. As described in <i>Section 4.9, Marine Biological Resources</i>, of this report, all project-related impacts on marine biological resources would be mitigated to below a level of significance.</p> <p>Marine water quality would also be adequately protected by the design features and mitigation measures set forth in <i>Section 4.5, Hydrology/Water Quality</i>, of this report, implemented to address temporary direct impacts to water quality resulting from the construction of phased improvements for the H Street Pier, the South Bay Boatyard Marina, Chula Vista Marina, and the realignment of the navigation channel.</p>	Consistent with mitigation
30231	Specifies that biological productivity and the quality of coastal marine and wetland habitat needed to sustain optimum populations of marine organisms, and to protect human health, shall be maintained and, where feasible, restored.	Impacts to marine resources are described in <i>Section 4.9, Marine Biological Resources</i> , of this report. Temporary direct impacts on water quality and marine resources could occur through the unintentional release of excavated sediments and water into the local environment during construction of phased improvements for the H Street Pier, the South Bay Boatyard Marina, Chula Vista Marina, and the	Consistent with mitigation



TABLE 4.1-7 (Cont.)

		Analysis	Consistency
		<p>realignment of the navigation channel. The process of driving in the piles during Phase II construction of the H Street Pier could cause temporary direct impacts on water quality and marine resources. Other impacts would result from construction-related activities, changes in land use, and lighting during construction and operation.</p> <p>The implementation of required BMPs, stringent source control measures, and project mitigation measures would minimize such impacts to below a level of significance. These measures are discussed in <i>Section 4.5, Hydrology/Water Quality</i>, and <i>Section 4.9, Marine Biological Resources</i>.</p>	
30232	Protects the coastal environment against the spillage of hazardous materials and requires containment and clean-up procedures in the event that a spill does occur.	<p>As discussed in <i>Section 4.12, Hazards and Hazardous Materials/Public Safety</i>, of this report, the Proposed Project provides mitigation measures to reduce significant hazardous materials impacts to below a level of significance.</p> <p>Mitigation measures proposed to address potential impacts from spillage of hazardous materials include the training of all contractor and subcontractor personnel to the appropriate practices necessary to prevent hazardous material spills and response measures in the event that a spill occurs. All construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a permitted hazardous waste facility to treat, store, or dispose of such materials. Containment is required for all trash to prevent unnecessary spillage. Furthermore, pursuant to the Port of San Diego Business Emergency Plan (BEP) and Stormwater Pollution Prevention Plan (SWPPP) prepared for the project, all hazardous materials that would be present on any portion of the construction area and site shall be identified. Potential spill or accident situations shall also be identified, along with appropriate spill response measures. Spill response materials and spill kits will be kept at the construction site.</p>	Consistent with mitigation
30233	Allows the dredging of open coastal waters and wetlands for specific developments, provided that no feasible, less environmentally damaging alternative exists and, if feasible, mitigation measures have been provided to minimize adverse environmental impacts such that activities shall be planned and implemented to avoid significant disruption to marine and wildlife habitats and water circulation. Section 30233 (c) provides that “development in already developed	Impacts to CCC jurisdictional wetlands would result from infrastructure development projects proposed for various phases of the Proposed Project. These projects include the E Street Extension, the F & G Street Marsh Bridge, the bridge over the HP-5 drainage ditch, and the Telegraph Canyon Channel. In all cases where it is determined that CCC jurisdictional impacts occur, mitigation requires that impacts to CCC jurisdictional resources be limited to those uses allowable under Section 30233 of the California Coastal Act.	Consistent with mitigation

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
	parts of south San Diego Bay, if otherwise in accordance with this division" is allowed.	<p>Each of these projects will fit into the overall circulation and public access system in the area, both existing and proposed. In addition, several of the projects are necessary to provide public access to existing coastal resources and proposed recreational facilities. Analysis of the specific projects is included below.</p> <p>The E Street Extension would result in removal of mulefat scrub at the existing terminus of E Street and would also indirectly impact the inlet channel to the F &amp; G Street Marsh through shading caused by a proposed bridge crossing. These impacts are not feasibly avoided, due to the location and configuration of the tie-in location to the existing E Street and the fact that a crossing of the inlet channel is necessary to connect E Street to the Marina area. The California Coastal Act provides for balancing of potentially conflicting policy provisions. In this case, although the E Street Extension results in impacts on CCC jurisdictional wetlands, the extension of the road provides for improved public access and pedestrian facilities to the shoreline.</p> <p>Currently, access to the Marina and its associated parks and shoreline access, from F Street, is constrained by an existing two-lane road with no curb, gutter, sidewalk, or bike lane. The E Street Extension will serve to maintain existing road capacity as well as to serve the Proposed Project. E Street is a key component of the existing circulation system in the Bayfront and is necessary to provide access to recreational facilities and coastal resources. In addition to maintaining road capacity and expanding roadway access, the E Street Extension would also enhance the public access system by including pedestrian access on the west side and a Class I bike path, which would allow for two-way bicycle traffic.</p> <p>As part of the E Street Extension, a pedestrian pathway/bridge is proposed over the inlet that feeds the F &amp; G Street Marsh, where E Street intersects between the Sweetwater and Harbor Districts. The bridge crossing would allow cars and pedestrians to transition between the Sweetwater and Harbor Districts. Access would be limited to the roadway, bike path, and sidewalks under the bridge to keep people from entering the adjacent No Use Zone within SP-1. This pedestrian pathway/bridge would provide a safe route for pedestrians to walk and transition from the Sweetwater District to the HP-3 Shoreline Promenade and between the Signature Park Parcels S-2 and H-1A in the Harbor District. In addition, the proposed bridge over the F &amp; G Street Marsh inlet would remove an existing culvert crossing and would widen and restore the inlet such that improved tidal flushing</p>	

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
		<p>would be provided to F &amp; G Street Marsh. Therefore, while the improvement impacts CCC wetlands, mitigation measures and additional public and environmental benefits are proposed that provide support for balancing of California Coastal Act policies.</p> <p>Similar to the E Street Extension, proposed roadway extensions in the Otay District would impact coastal wetlands from bridges crossing over the Telegraph Canyon Channel and the J Street channel. These roadways would provide access to the relocated RV Park in the Otay District and would facilitate overall access to coastal resources, where no public roads currently exist.</p> <p>A bridge would also be constructed over an existing drainage ditch on Parcel HP-5 to provide vehicular and pedestrian access over the ditch. This improvement would expand the existing circulation system and maintain existing roadway capacity. Moreover, the bridge would allow for relocation of high-intensity residential and commercial land uses away from the Sweetwater Marsh NWR, implementing one of the primary objectives of the project to avoid direct and indirect impacts to sensitive coastal wetlands that support sensitive, threatened, and endangered species.</p> <p>Telegraph Canyon Channel: Phase III development contemplates some dredging of open coastal waters to improve the navigation channel leading into and out of the new marina complex proposed in the Harbor District. The existing trapezoidal Telegraph Canyon Channel is proposed to be widened to accommodate projected 100-year storm flows and possibly replaced with a more natural vegetated channel on approximately 3 acres. No feasible, less environmentally damaging alternative exists. The impacts from dredging would be sufficiently reduced with implementation of the mitigation measures described in <i>Section 4.9, Marine Biological Resources</i>, of this report.</p> <p>Indirect impacts to CCC jurisdictional resources would result from the shading of constructed bridges over the mouth of the F &amp; G Street Marsh and the HP-5 drainage ditch. Phase II development in the Harbor District (on Parcel HP-7) has the potential to directly impact CCC jurisdictional resources, but mitigation requires that the final design shall avoid impacts.</p>	

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30234	Provides for the protection and enhancement of commercial fishing and recreational boating industries.	The project proposes the continuation of recreational boating at the Chula Vista Marina as well as enhanced recreational boating opportunities described above in Article 3, Section 30224 of this <i>Table 4.1-7</i> . Additional recreational boating facilities are proposed at the Chula Vista Marina and the site of the existing South Bay Boatyard. Commercial fishing does not occur at this location, and there are no proposals to include it in the current project.	Consistent
30235	Allows the erection and maintenance of structures that alter the natural shoreline processes when needed to serve coastal-dependent uses or to protect existing structures or public beaches in danger of erosion, or when designed to eliminate or mitigate adverse impacts on the local shoreline sand supply.	Phases II through IV of the Proposed Project would involve improvements to the marina and development of a new marina and community boating center to serve coastal-dependent uses. Additional modification to the shoreline of the Bay would result from construction of a pier at the end of H Street and construction of a continuous shoreline promenade or baywalk along the shoreline in the Harbor District. The natural shoreline has been previously altered in these locations and the Proposed Project would not further affect it. All construction would occur in areas where the shoreline is not natural. Impacts to biological resources from construction along the shoreline would be mitigated as described in <i>Section 4.9, Marine Biological Resources</i> , of this report.	Consistent with mitigation
<b>Article 5</b>	<b>Land Resources</b>		
30240	Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values.	<p>As described in <i>Section 4.8, Terrestrial Biological Resources</i>, of this report, environmentally sensitive habitat areas occur along the northern and western boundaries of the Sweetwater District and along the western boundary of the Otay District. In addition, sensitive habitat areas occur in the F &amp; G Street Marsh (owned by USFWS) along the southern edge of the Sweetwater District and outside of the Proposed Project area.</p> <p>More intense development has been focused on the Harbor District, away from the Sweetwater District, the Sweetwater NWR, and the F &amp; G Street Marsh, in order to protect environmentally sensitive habitat areas from disruption. In addition, 400-foot buffers and setbacks have been designed into the plan for the Sweetwater District, and 200-foot buffers have been designed adjacent to the J Street Marsh in the Otay District. The Proposed Project may cause indirect impacts on these marsh areas, however, including sensitive habitats and wetlands within the City and Port's jurisdictions. In <i>Section 4.8</i>, this report identifies these impacts as potentially significant and recommends measures to mitigate them to below the level of significance including the creation and implementation of a Natural Resources Management Plan (NRMP).</p>	Consistent with mitigation

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30241	Maximum amounts of prime agricultural land shall be maintained.	There is no prime agricultural land on the subject property.	N/A
30242	This section provides that all land suitable for agricultural use shall not be converted to non-agricultural uses, with certain exceptions.	The Proposed Project would not convert agricultural lands to non-agricultural uses. The only areas that have been used for agriculture are portions of the Sweetwater District. The project site is not currently designated for agriculture, is not prime agriculture land, and has not been used for agricultural purposes recently.	N/A
30244	Requires that reasonable mitigation be provided for development that would adversely impact archaeological or paleontological resources identified by the State Historic Preservation Office (SHPO).	As discussed in <i>Section 4.10, Cultural Resources</i> , of this report, the Proposed Project would not adversely impact any archaeological resource. <i>Section 4.11, Paleontological Resources</i> , describes the potential for paleontological resources to be encountered during construction and provides mitigation measures needed to avoid potential adverse effects.	Consistent with mitigation
<b>Article 6</b>	<b>Development</b>		
30250	New residential, commercial, or industrial development shall be located in close proximity to an area with adequate public services that will not significantly affect coastal resources.	The Proposed Project is located in a previously developed area. Past activities in the Harbor and Otay Districts were primarily industrial, with limited recreational uses. The project would require expansion of public services to support the increased demand. The availability of these services and needed expansions are discussed in <i>Sections 4.13, Public Services</i> , and <i>4.14, Public Utilities</i> , of this report. In all cases, project impacts on public services and public utilities would be mitigated to below a level of significance.	Consistent with mitigation
30251	Scenic and visual qualities of coastal areas shall be considered and protected. To protect such resources, development shall minimize the alteration of natural landforms, be visually compatible with the character of surrounding areas, and, where feasible, restore and enhance visual quality in visually degraded areas.	<i>Section 4.4, Aesthetics/Visual Quality</i> , of this report describes the scenic and visual effects of the Proposed Project. While the Proposed Project does not represent a significant alteration of a natural landform, it would result in significant impacts to the existing view of the area. As required by this section of the California Coastal Act, mitigation measures that would reduce these impacts to the greatest extent possible have been recommended for adoption.  The project affects two regionally important public viewing scenes: the view of the tideland's/water's edge from the Sweetwater Marsh NWR and background views of the Bay from the Silver Strand. The project also alters views of the San Diego Bay, a locally and regionally significant public resource, from within the project boundary. However, the Proposed Project seeks to minimize its visual impacts with design and architectural features. In addition, the Proposed Project would improve the visual quality of those portions of the site that are currently blighted. For these reasons, the Proposed Project complies with Section 30251 of the California Coastal Act.	Consistent with mitigation

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30252	Provides that the location and amount of new development should maintain and enhance public access to the coast by: <ol style="list-style-type: none"> <li>1) Facilitating public access to the coast by the provision or extension of transit</li> <li>2) Minimizing the use of coastal access roads for commercial facilities</li> <li>3) Providing non-automobile circulation</li> <li>4) Providing adequate parking or alternative public transportation; auto internal circulation</li> <li>5) Ensuring the potential for public transit for high-intensity uses</li> <li>6) Ensuring that new development will not overload nearby coastal recreation areas.</li> </ol>	Public access is enhanced through a series of public shoreline parks and open space areas adjacent to the NWR, which offers both pedestrian and bicycle paths. Development on parcels within the LCP Planning Area would ensure continuity with such access defined in the PMP. Shuttle bus operations to the Chula Vista Nature Center would continue to provide public access to a unique educational and wildlife resource. Although coastal access roads would be used to serve commercial facilities, the majority of these facilities would be water-dependent or water-oriented. Further, nearly all of the facilities are visitor serving and enable residents and tourists to engage the waterfront. The Proposed Project would improve the existing circulation system by proposing new streets to serve planned uses. In addition, the project includes new parking facilities sufficient to meet anticipated demand. The project's development components would not overload nearby coastal recreation areas. Instead, the project would enhance these areas to both create and satisfy demand for coastal recreation. Finally, the project would be connected to, and served by, public transportation, including alternative modes of transport such as the existing water taxi and proposed harbor ferry.	Consistent
30253	New development shall: <ol style="list-style-type: none"> <li>1) Minimize flood hazards, fire, and seismic hazards</li> </ol>	Geologic and seismic issues are described in <i>Section 4.15, Seismic/Geologic Hazards</i> , of this report. Although the soils on site may be subject to liquefaction and expansion, these impacts would be mitigated by implementing the measures identified in <i>Section 4.15</i> . In addition, all project structures would be built in conformance with existing building and fire codes to minimize damage from seismic events or fire.	Consistent with mitigation
	<ol style="list-style-type: none"> <li>2) Ensure structural stability and not create or significantly contribute to erosion</li> </ol>	The site is relatively flat, but the Proposed Project has been designed with a positive-gravity drainage system. Moreover, the project proposes improvements to the existing Telegraph Canyon drainage channel. Appropriate BMPs would be installed to prevent erosion.	Consistent with mitigation
	<ol style="list-style-type: none"> <li>3) Be consistent with San Diego Air Pollution Control District (APCD) requirements</li> </ol>	Air quality issues are described in <i>Section 4.6, Air Quality</i> , of this report. The Proposed Project conforms to all requirements of the San Diego APCD.	Consistent with mitigation
	<ol style="list-style-type: none"> <li>4) Minimize energy consumption and vehicle miles traveled</li> </ol>	Implementation of the proposed land uses would not increase the demand for energy beyond the City's available supply. <del>Both project-level</del> The Pacifica development projects have committed to LEED certification as a means of demonstrating commitment to energy conservation. A complete inventory of energy conservation measures is identified in <i>Section 4.16, Energy</i> , of this EIR. Shuttle bus	Consistent with mitigation

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
		operations to the Chula Vista Nature Center would continue to provide public access to a unique educational and wildlife resource, and the Proposed Project would be connected to, and served by, public transportation, including alternative modes of transport such as the existing water taxi and proposed harbor ferry. These are some of the vehicle miles traveled (VMT) reduction features included in the project, as further outlined in <i>Section 4.16</i> .	
	5) Protect special communities and neighborhoods that are popular visitor destination points for recreational users.	The Proposed Project does not alter established communities and neighborhoods that are popular visitor destination points for recreational uses.	Consistent with mitigation
30254	New or expanded public works shall be designed and limited to accommodating needs generated by development that is consistent with the division.	As discussed in <i>Sections 4.14, Public Utilities</i> , of this report, the size and extent of needed utilities have been determined based on the need of the Proposed Project.	Consistent
30255	Coastal-dependent development shall have priority over other development on or near the coastline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland.	The Proposed Project places coastal-dependent development nearest the Bay and places support uses, such as parking structures and residences, further east. Coastal-dependent developments will not be sited in a wetland. The project includes a land exchange between the Port and a private developer. The land transfer would remove residential uses from the coastline and allow residential uses to be developed on parcels located east of the first public road. The residential uses proposed for the land transfer parcel is removed from the immediate coastline and lies east of the first public road in the project site. The proposed land exchange requires approval by the SLC.	Consistent
<b>Article 7</b>	<b>Industrial Development</b>		
30260	Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division.	The Proposed Project permits the continued, interim operation of the SBPP and SDG&E switchyard within the Otay District. Without the use of the Bay as cooling waters, the SBPP and switchyard would not be considered coastal-dependent uses.	Consistent
30261	Multicompany use of existing and new tanker facilities shall be encouraged.	The Proposed Project does not propose or affect tanker facilities.	Consistent
30262	Oil and gas development shall be permitted in accordance with Section 30260 under specified conditions.	The Proposed Project does not include oil and gas development.	Consistent
30263	New or expanded refineries or petrochemical facilities not consistent with the division shall be permitted if certain location, environmental, and public welfare criteria are met.	The Proposed Project does not include new or expanded refineries or petrochemical facilities.	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30264	Notwithstanding any other provision of this division, except subdivisions (b) and (c) or Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area, which have been determined to be acceptable pursuant to the provisions of Section 25516.	As noted above, the Proposed Project permits the continued, interim operation of the SBPP and SDG&E switchyard within the Otay District. This project does not include the expansion of the existing facility or the construction of a new facility within the energy utility zone.	Consistent
30700	Identifies which areas within the California Coastal Zone are governed by Chapter 8 policies of the Act.	The Proposed Project site is located within the geographical boundaries of the Port District, and is therefore generally governed by California Coastal Act, Chapter 8. The Proposed Project site was utilized for industrial and commercial land uses in 1975–1976 and, therefore, was not designated in the 1976 California Coastal Act as a “wetland estuary or existing recreational area.”	Consistent
30700.5	Specifies that Chapter 2 definitions and Chapter 9 provisions shall apply to Chapter 8.	The proposed PMP Amendment does not conflict with this requirement.	Consistent
30701	Declares that ports within California are a primary economic and coastal resource and an essential element of the national maritime industry. In addition, this section discusses policies for modernization and redevelopment of existing ports to avoid the need to create additional ports.	The Proposed Project is located along the waterfront, yet can be accessed easily from the San Diego Convention Center and downtown areas as well as the major residential and commercial sectors of the City of Chula Vista. For this reason, among others, the project constitutes a major economic and coastal resource. The proposed redesignation of portions of the project site from Commercial Recreation to other uses does not constitute a loss of essential commercial recreation port lands that are suitable for, and may be required for, modernization and expansion of port-related commercial facilities, during either the short term or foreseeable long term. In addition, the redesignation of such land would not conflict with the Port District's effort to modernize and construct necessary facilities within its boundaries and thereby minimize the need for future dredging and filling. In short, the Proposed Project enables the Port District to better serve the public and would not create the need for new ports in this area of the state.	Consistent



TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30702	Indicates that, except as provided in Section 30715, projects in the Port covered by a Port Master Plan are not appealable.	This table addresses the consistency of the Proposed Project with each policy contained in Chapter 8 of the California Coastal Act. The discussion relative to Section 30715 identifies which aspects of the Proposed Project may be appealed to the CCC.	Consistent
30703	The California commercial fishing industry is important to the State of California; therefore, ports shall not eliminate or reduce existing commercial fishing harbor space unless the demand for commercial fishing facilities no longer exists or adequate alternative space has been provided.	Consistent with this policy, the Proposed Project does not reduce existing commercial fishing harbor space.	Consistent
30704	Left blank in the statute.	No analysis necessary.	N/A
30705(a)	<p>Specifies the conditions under which diking, filling, and dredging may occur with a certified PMP:</p> <ol style="list-style-type: none"> <li>1) Construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities that are required for the safety and the accommodation of commerce and vessels to be served by port facilities</li> <li>2) New or expanded facilities or waterfront land for port-related facilities</li> <li>3) New or expanded commercial fishing facilities or recreational boating facilities</li> <li>4) Incidental public service purposes, including, but not limited to, burying cables or pipes or inspection of piers and maintenance of existing intake and outfall lines</li> <li>5) Mineral extraction, including sand for restoring beaches, except in biologically sensitive areas</li> <li>6) Restoration purposes or creation of new habitat areas</li> <li>7) Nature study, mariculture, or similar resource-dependent activities</li> <li>8) Minor fill for improving shoreline appearance or public access to the water.</li> </ol>	<p>In Phase IV of the Proposed Project, the Port intends to deepen the existing navigation channel to improve access to the marina and the South Bay Boatyard. The existing approximately 84-acre navigation channel to the Chula Vista Harbor would be realigned and straightened westward within an approximately 60-acre, 350-foot-wide channel, utilizing an existing abandoned access channel. The “dog leg” within the existing channel would be removed, thereby enhancing boat access between the Chula Vista Harbor and the Bay. Consistent with this policy, the purpose of this effort is to improve vessel ingress and egress to the marinas.</p> <p>The new channel would be located further away from sensitive resources located along the shoreline north of the existing boatyard. As part of this effort, dredge material would be placed in the existing channel to create soft-bottom eelgrass habitat. Note also that the mitigation measures recommended for this aspect of the project would comply with this section of the CCA.</p>	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30705(b)	The design and location of new or expanded facilities shall, to the extent practicable, take advantage of existing water depths, water circulation, siltation patterns, and means available to reduce controllable sedimentation so as to diminish the need for future dredging.	In order to diminish the need for dredging, the Proposed Project would utilize an existing abandoned access channel.	Consistent
30705(c)	Dredging shall be planned, scheduled, and carried out to minimize disruption to fish and bird breeding and migrations, marine habitats, and water circulation. Bottom sediments or sediment elutriate shall be analyzed for toxicants prior to dredging or mining, and where water quality standards are met, dredge spoils may be deposited in open coastal water sites designated to minimize potential adverse impacts on marine organisms, or in confined coastal waters designated as fill sites by the master plan where the spoil can be isolated and contained, or in fill basins on upland sites. Dredge material shall not be transported from coastal waters into estuarine or fresh water areas for disposal.	As discussed in <i>Section 4.9</i> of this report, a restoration program would be initiated in accordance with Mitigation Measures 4.9-1, 4.9-2, and 4.9-3. This program includes the filling of 83 acres of the existing navigation channel to -3 to -5.5 feet MLLW. The fill would modify deep and moderately deep open-water habitat to create approximately 83 acres of shallow-water habitat. This area would provide enough transplantable habitat at a depth ideal for eelgrass in this section of the Bay to mitigate for the loss of eelgrass from the channel realignment and completion of the H Street Pier.  Prior to the commencement of in-water work on the channel realignment, a pre-construction eelgrass survey shall be conducted to confirm the exact area of impact at the time of dredging and filling operations. The pre-construction survey shall be conducted during the period of March through October and would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1. In addition, sediments to be dredged and used as fill elsewhere in the Bay would first be analyzed to ensure they meet applicable water quality standards.	Consistent with mitigation
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: <ul style="list-style-type: none"> <li>a) The water area to be filled shall be the minimum necessary to achieve the purpose of the fill.</li> <li>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.</li> </ul>	That portion of the existing channel to be filled is located seaward of the mean high tide line. The size of the proposed fill area shall correspond to the eelgrass mitigation acreage specified in <i>Section 4.9, Marine Biological Resources</i> , of this report. It would be created with dredge material obtained from the channel realignment. Appropriate measures would be taken to ensure that the use of these dredge materials would have minimal negative effects on water quality and marine life.	Consistent with mitigation

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
	<p>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 water or stormwater.</p> <p>d) The fill is consistent with navigational safety.</p>	Likewise, measures would be taken to ensure that all dredge and fill activities are conducted safely and that persons and property would be adequately protected against geologic, flood, and storm conditions. Finally, the fill area, while making the former channel more shallow, would not impede navigational safety, as the entire boat channel is being realigned and deepened where necessary.	Consistent with mitigation
30707	Provides design and construction policies for new or expanded tanker terminals with Port jurisdictions.	The Proposed Project does not propose tanker terminals.	N/A
30708	<p>Provides environmental standards for the siting, design, and construction criteria of all port-related developments. Requires that all port-related developments be located, designed, and constructed so as to:</p> <p>a) Minimize substantial adverse environmental impacts.</p>	<p><i>Chapter 4, Environmental Analysis</i>, of this report addresses potential impacts on the environment from the siting, design, and construction of the Proposed Project. The manner in which each of the Section 30708 subdivisions are addressed is discussed further below:</p> <p>a) For each issue analyzed in <i>Chapter 4</i> of this report, potential substantial adverse environmental impacts are identified. For each identified significant impact, mitigation measures are provided to minimize these impacts to the maximum extent feasible.</p>	Consistent with mitigation
	<p>b) Minimize potential traffic conflicts between vessels.</p> <p>c) Give 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.</p> <p>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.</p> <p>e) Encourage rail service to port areas and multicompany use of facilities.</p>	<p>b) The Proposed Project would not result in changes to vessel circulation.</p> <p>c) On a regional basis, the PMP indicates that the project site is not necessary to meet short-, mid-, or long-term port commercial-related needs. Therefore, the Proposed Project does not impact the priority of port commercial-related uses such as navigational facilities, shipping industries, and necessary support and access facilities. In addition, the project would markedly improve maritime navigation near the Chula Vista Marina.</p> <p>d) The Proposed Project provides for the use of the subject site for commercial uses, recreational uses, and enhanced public access. In addition, the proposed land exchange places more intensive uses in the Harbor District, further away from the Sweetwater Marsh NWR, while providing permanent buffers and limited access zones between development and the refuge.</p> <p>e) The Proposed Project does not include rail service.</p>	N/A

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30710	Within 90 days after January 1, 1977, the commission shall, after public hearing, adopt, certify, and file with each port governing body a map delineating the present legal geographical boundaries of each port's jurisdiction within the coastal zone. The commission shall, within such 90-day period, adopt and certify after public hearing, a map delineating boundaries of any wetland, estuary, or existing recreation area indicated in Part IV of the coastal plan within the geographical boundaries of each port.	A boundary map modification request reflecting the lands acquired by the Port will be submitted to the Commission as part of the PMP Amendment.	Consistent
30711(a)	<p>Identifies that the following content must be included in each PMP:</p> <ol style="list-style-type: none"> <li>1) The proposed uses of land and water areas, where known.</li> <li>2) The projected design and location of port land areas, water areas, berthing, and navigation ways and systems intended to serve commercial traffic within the area of jurisdiction of the port governing body.</li> <li>3) An estimate of the effect of development on habitat areas and the marine environment, a review of existing water quality, habitat areas, and quantitative and qualitative biological inventories, and proposals to minimize and mitigate any substantial adverse impact.</li> <li>4) Proposed projects listed as appealable in Section 30715 in sufficient detail to be able to determine their consistency with the policies of Chapter 3 (commencing with Section 30200) of this division.</li> <li>5) Provisions for adequate public hearings and public participation in port planning and development decisions.</li> </ol>	<p>The Proposed Project consists of an amendment to the PMP. Therefore, the following content is already included in the existing PMP. The Proposed Project does not eliminate any of the following:</p> <ol style="list-style-type: none"> <li>1) The Proposed Project and PMP Amendment described and analyzed in this report include the proposed land and water uses relating to the project site.</li> <li>2) The PMP identifies the design and location of all Port land areas, water areas, berthing, and navigation ways within the Proposed Project area. It also describes the circulation system for commercial traffic within the area surrounding the project site. The Proposed Project would result in changes to vehicle circulation on the project site. Impacts to traffic associated with the Proposed Project are addressed in <i>Section 4.2</i> of this report.</li> <li>3) This report analyzes the Proposed Project's impacts on the environment, including coastal resources. The report also recommends measures to avoid or mitigate, to the extent feasible, any identified significant effects, including impacts to habitat areas, the aquatic environment, and other coastal resources, that would occur with implementation of the Proposed Project.</li> <li>4) The Proposed Project consists of both appealable and non-appealable developments. The appealable developments are described in sufficient detail to be able to determine its consistency with the policies of Chapter 3. Consistency with Chapter 3 is addressed in <i>Table 4.1-7</i> of this report. Section 303715 addresses those components of the project that (1) require a CDP and (2) can be appealed to the CCC following approval by the Port.</li> </ol>	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
		<p>Such project components include wastewater treatment plants, hotels, and shopping facilities not principally devoted to water-oriented purposes, oil refineries, and a few other, expressly articulated uses. These are the kinds of project components that must be identified in the PMP Amendment and this report.</p> <p>5) The Proposed Project would be noticed and made available for public review, participation, and hearing consistent with Section 30712 and 14 CCR 13627.</p>	
30711(b)	A PMP shall contain information in sufficient detail to allow the commission to determine its adequacy and conformity with the applicable policies of the California Coastal Act.	As summarized in this table, and as detailed in the remainder of this report and the PMP Amendment, there is sufficient detail to allow the Commission to determine its adequacy and conformity with all applicable provisions of the California Coastal Act.	Consistent
30712	Discusses Coastal Commission policies for approving PMPs, including public testimony, notification procedures, and hearing requirements.	The Proposed Project was developed through an extensive public participation program. The public outreach and participation program occurred in two phases: an initial phase from January 2003 to May of 2004 and a second phase that occurred between June 2004 and August 2005. The first phase developed initial land use plans, while the second phase refined those plans and established plans to take forward for the possible plan amendment. The participants in this program are detailed in <i>Chapter 2</i> of this report.	Consistent
30713	Provides policies for initial PMP processing, adoption, and filing prior to January 1, 1977.	Not applicable; no analysis necessary.	N/A
30714	Identifies CCC PMP review, certification, and notification procedures for PMPs, or portions thereof.	Once the PMP Amendment is approved and adopted by the Port Board of Commissioners, it would be submitted to the Coastal Commission for certification in accordance with this chapter.	Consistent
30715	Provides that Coastal Commission permit authority within port jurisdiction terminates when a Port Master Plan is certified, and also specifies which types of development under a certified Master Plan may be appealed to the Coastal Commission.	The Coastal Commission certified the PMP in 1981, giving coastal development permit authority to the Port. The PMP Amendment for the Proposed Project lists the project components and whether they would be considered "appealable" to the Coastal Commission.	Consistent
30715.5	No development within the area covered by the certified Port Master Plan shall be approved by the port governing body, unless it finds that the proposed development conforms with such certified plan.	The Proposed Project includes a PMP Amendment which must be approved by the Port and Coastal Commission before the development is authorized. Once the PMP is approved by both the Port and the Commission, individual project components would be assessed for their conformance with the certified plan	Consistent

TABLE 4.1-7 (Cont.)

		Analysis	Consistency
30716	Provides policies for the processing of Port Master Plan amendments, and provides criteria to determine when an amendment may be considered minor in nature, or de minimis, and therefore need not comply with Section 30714 of this chapter.	The Port District's preparation and processing of the draft PMP Amendment will follow all the procedural steps provided for in this section.	Consistent.
30717	Specifies policies for notification to the Coastal Commission and other interested persons, organizations, and governmental agencies, when an appealable development is proposed and/or approved by the governing bodies of ports and prior to commencement of any appealable development. In addition, this section identifies when the approval of the appealable development by the port governing body pursuant to a certified port master become effective.	The Port has followed and would follow the noticing requirements of this section while processing the appealable project components.	Consistent
30718	Provides policies for the forwarding of environmental documents under the CEQA and the National Environmental Policy Act for developments approved by the commission under a certified Master Plan, but not appealable under the provisions of this chapter.	The Coastal Commission would receive this report prepared pursuant to CEQA.	Consistent
30719	Requires that any development project or activity that is certified by the Coastal Commission pursuant to this chapter shall be certified as consistent with the federal coastal zone management program when such a finding is requested by any federal agency.	Certification by the Coastal Commission would occur when the Proposed Project is reviewed by the Commission for approval.	Consistent
30720	Directs that if any Port Master Plan or part thereof is prohibited or stayed by any court, including specific developments, the permit authority granted to the Coastal Commission under Chapter 7 of the Act shall be reinstated.	Not applicable, no analysis necessary.	N/A
30721	Provides policies for the reimbursement of costs incurred by Port Hueneme in Ventura County for the preparation and certification of a Port Master Plan.	Not applicable, no analysis necessary.	N/A

CCC wetlands, areas that are potential CCC jurisdiction, and former industrial areas in the process of remediation, have been mapped on site. CCC wetlands occur primarily within salt marsh and coastal brackish marsh habitats. Four areas in the Sweetwater District, one drainage area known as the HP-5 drainage ditch (Parcel HP-5), two areas in the Chula Vista Marina in the Harbor District, and four small seasonal ponds in the Otay District have been identified as CCC wetlands, as identified in *Section 4.8, Terrestrial Biological Resources*. Two waterways in the Otay District have been mapped as potential CCC wetlands. Identification of these areas as CCC wetlands requires documentation of ponding for a minimum of 7 consecutive days, and there is currently no indication that ponding of that duration occurs; therefore, identification of CCC jurisdiction has not been made. In addition, the Otay District contains areas formerly occupied by an industrial facility that may not be subject to CCC jurisdiction. These areas are discussed in more detail below. The CCC will need to make a jurisdictional determination of these areas to resolve any questions regarding project impacts.

The CCC administers the California Coastal Act of 1976 (California Public Resources Code 30000 et seq.), which defines wetlands as "...lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens" (California Public Resources Code Division 20, Section 30121).

Among other requirements, Section 30233 of the California Coastal Act identifies eight situations where coastal zone wetlands may be disturbed. This section also recommends that the Proposed Project be the least environmentally damaging feasible alternative, and that feasible and appropriate mitigation measures be imposed to minimize adverse environmental effects, and shall be limited to the following:

1. New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
2. Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
3. In wetland areas only, entrance channels for new or expanded boating facilities; and in degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland.
4. In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreation piers that provide public access and recreational opportunities.

5. Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
6. Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
7. Nature study, aquaculture, or similar resource-dependent activities.

There are four broad types of project activities that have the potential to affect wetland sites. These activities are associated with the construction of proposed bridges, roadways, marina improvements, and buildings. These activities and the compliance of the Proposed Project with the California Coastal Act are discussed below.

The E Street road improvements proposed in the Sweetwater District during Phases I and II of the project would impact CCC wetland composed of mulefat scrub located adjacent to the roadway at Bay Boulevard and E Street along the road easement and Parcel SP-4 (near Soil Test Pits 22 and 23). The E Street Extension will maintain existing road capacity and will serve the Proposed Project. E Street is a key component of the existing circulation system and is necessary to provide access to recreational facilities and coastal resources. In addition to maintaining road capacity and expanding roadway access, the E Street Extension would also enhance the public access system by including pedestrian access on the west side and a Class I bike path, which would allow for two-way bicycle traffic. As part of the E Street Extension, a pedestrian pathway/bridge is proposed over the inlet that feeds the F & G Street Marsh, where E Street intersects between the Sweetwater and Harbor Districts. The bridge crossing would allow cars and pedestrians to transition between the Sweetwater and Harbor Districts. Currently, access to the Marina and its associated parks and shoreline access, from F Street, is constrained by an existing two-lane road with no curb, gutter, sidewalk, or bike lane. Access would be limited to the roadway, bike path, and sidewalks under the bridge to keep people from entering the adjacent No Use Zone within Parcel SP-1. This pedestrian pathway/bridge would provide a safe route for pedestrians to walk and transition from the Sweetwater District to the HP-3 Shoreline Promenade and between the Signature Park Parcels S-2 and H-1A in the Harbor District. This impact is unavoidable because the alignment of E Street is controlled by the current interchange at I-5 and minimum City of Chula Vista design standards. From that interchange, E Street must meet the minimum design requirements collector roadway in order to safely convey traffic. The horizontal curvature of the roadway has been designed at the minimum requirements in order to reduce the impacts to the maximum extent possible.

Four bridges are proposed, three of which are associated with the circulation element roadways, and one of which is planned for access to residential uses proposed on Parcels H-13 and H-14 under the City's jurisdiction. The proposed bridge locations include the mouth/inlet of the F & G Street Marsh, the HP-5 drainage ditch, the J Street Channel, and the Telegraph Canyon Channel.



The bridges would span the wetland areas and avoid any direct impacts to the resources below. Indirect impacts from shading, however, would result. Proposed roadway extensions in the Otay District would require bridges crossing the J Street Channel and the Telegraph Canyon Channel, and would cause indirect impacts as noted. Similar to the E Street Extension, the Otay roadways would enhance public access. Specifically, the roads would provide access to the relocated RV park in the Otay District and would facilitate overall access to coastal resources, where no public roads currently exist. The roadway requiring a bridge over the HP-5 drainage would allow for relocation of currently allowable high-intensity residential and commercial land uses away from the Sweetwater Marsh NWR, implementing one of the primary objectives of the project to avoid direct and indirect impacts to sensitive coastal wetlands that support sensitive, threatened, and endangered species. Therefore, minor indirect impacts to this drainage feature would support the overall project, which would avoid much greater impacts to coastal wetlands.

Therefore, construction of roadways and bridges as part of the Proposed Project would be consistent with the provisions of Section 30233 of the California Coastal Act allowing impacts to CCC wetlands. Mitigation for all impacts to CCC wetlands is identified in *Section 4.8, Terrestrial Biological Resources*.

During Phase III, the Proposed Project could impact CCC wetlands on Parcel HP-13B, through development within the Coronado Railroad ROW, and on HP-7 during Phase II. These impacts would be significant (**Significant Impact 4.1-1**).

The Telegraph Canyon Channel, located on Parcel OP-2B in the Otay District, would be re-channelized as part of Phase III. This would temporarily impact CCC wetlands. This temporary impact to re-contour a pre-existing channelized drainage would be allowed under Section 30233 of the California Coastal Act.

The riprap removal and bulkhead placement during Phase IV, proposed as a component to the Chula Vista Marina improvements, would impact CCC wetlands on Parcels HW-1, HW-3, and H-12 within the Harbor District. Impacting CCC wetlands for the purpose of maintaining or restoring existing navigation channels would be consistent with Section 30233(a) of the California Coastal Act; therefore, no impact would result.

There is a small seasonal pond located on Parcels O-1 and OP-3 in the Otay District near Soil Test Pits 9 and 10 that are considered CCC wetlands. These areas are designated for Industrial Park Use and Open Space, respectively, during Phase III of the Proposed Project. Phase III development at Parcel O-1 could result in a significant impact. Development of an industrial business park that impacts these wetlands would be considered significant (**Significant Impact 4.1-2**).

The other two seasonal ponds identified as CCC wetlands occur on Parcel O-4, proposed as an Industrial Business Park use. This parcel would be redeveloped with uses allowable under the proposed PMP Industrial Business Park land use classification.

The northern area of the Otay District, including proposed Parcels O-1, OP2-A, and Streets A and B, is the location of a former industrial facility that was part of the SBPP site. Tanks 4, 5, and 6 as identified on the site plan for the SDG&E and SBPP facilities (Haley & Aldrich, Inc. 2005) existed at this location. A depressed area exists that acted as an overflow detention basin for the adjacent tanks. The tanks have been removed, but the overflow detention basin remains. Prior to removal of the tanks, each of the three fuel oil tanks held a capacity of 375,000 barrels of stored No. 6 fuel oil. The facilities were entirely within a bermed area. Approximately 21,000 cubic yards of soil has been excavated and removed since removal of the tanks and piping as part of a decommissioning and remediation process (see *Section 4.12, Hazards and Hazardous Materials/Public Safety*).

The detention basin is an artificial basin with little wildlife value; however, during the extreme rainy season of 2005 (which received 12 inches more than average), large ponded areas were observed. The area supports small patches of hydrophytic vegetation, mainly grass poly. These seasonally ponded areas exist on fill soil.

There are pipes leading from each of the tank sites to the detention basin. The detention basin outlet works on a valve system and must be opened and closed manually. Unless opened, this detention basin is not connected hydrologically to the adjacent waters. Moreover, contamination is present on site and remediation actions will occur.

In addition to the work conducted by RECON, CH2M Hill evaluated the biological resources in the same areas within the Otay District for a CEC Application prepared by LS Power (the CEC application has since been withdrawn). CH2M Hill identified the same areas in the Otay District as poorly drained depressions not subject to U.S. Army Corps of Engineers (USACE) jurisdiction. CH2M Hill noted that the soils typically contained small gravel, rocks, and marine snail shells (indicating fill material from the Bay). CH2M Hill concluded that although the depressions pond water in some years and contain marginal wetland plant species, they do not have distinct boundaries (except the depression outlined by dirt roads) or an ordinary high water mark, and do not connect to natural water bodies (bay or creeks) through swales or sheet flow. Furthermore, CH2M Hill noted that the 2004–2005 wet season was extraordinarily high with approximately 22 inches, and although standing water was observed during extremely high rainfall in 2004–2005, CH2M Hill observed little in November 2005 and only for a short period.

The work of RECON and the work of CH2M Hill both reflect similar observations. The differences in observation stem, in part, from the fact that RECON's investigation was

completed during one of the wettest years on record, while CH2M Hill's analysis was done during a dry year.

As noted above, because the former tank sites and detention basin are not connected hydrologically to the adjacent waters and it is a previously developed site, the detention basin and associated tank sites are considered exempt from USACE jurisdiction. For these reasons, the former industrial facility site is also considered not to be subject to California Coastal Commission jurisdiction.

The former industrial facility sites occupy approximately 8.82 acres on Parcels O-1, OP2-A, O-4, and proposed Streets A and B. Should these former industrial facility sites not be subject to California Coastal Commission jurisdiction, no impact would result from Phase III development in these areas. If it is determined that these areas are subject to Coastal Commission jurisdiction, the development proposed at these locations on Parcel O-1 and Streets A and B would be significant (**Significant Impact 4.1-3**), but the proposed restoration on Parcel OP-2A would not result in significant impacts because temporary impacts to CCC jurisdictional resources for restoration is allowed under Section 30233 of the California Coastal Act.

There is also a previously developed area located on Parcel O-4, the proposed industrial business park site. This depressed area exists where the LNG plant was formerly located. This area experiences the ponding of water during periods of heavy rainfall. Like the former tank sites and detention basin located in the northern area of the Otay District, the site is not connected hydrologically to the adjacent waters and it is a previously developed site. For these same reasons, this area may also not be subject to California Coastal Commission jurisdiction. Development may affect these locations; however, development of this site would be subject to separate environmental review.

#### c. Port Master Plan

The Proposed Project provides a range of land uses, including parks, cultural resources, and commercial/recreational uses, intended to stimulate economic development in western Chula Vista and to enhance the Bayfront to better serve the community. The project design includes Bayfront park uses and large expanses of open area with views of the water. It also provides "windows" between proposed new structures. The Bayshore baywalk and promenade, as well as the proposed trails through the Signature Park, offer excellent views to the Bay and will improve public access along the waterfront.

By improving the navigation channel and a ferry terminal and providing a new pier, the Proposed Project provides enhanced facilities for the boating community. Sensitive resources are protected and enhanced wherever possible. The project design calls for open space and natural buffer areas to protect sensitive habitat areas, including the tidelands and upland areas. The protection of

natural resources ensures that future generations would have the opportunity to view and enjoy the adjacent natural areas.

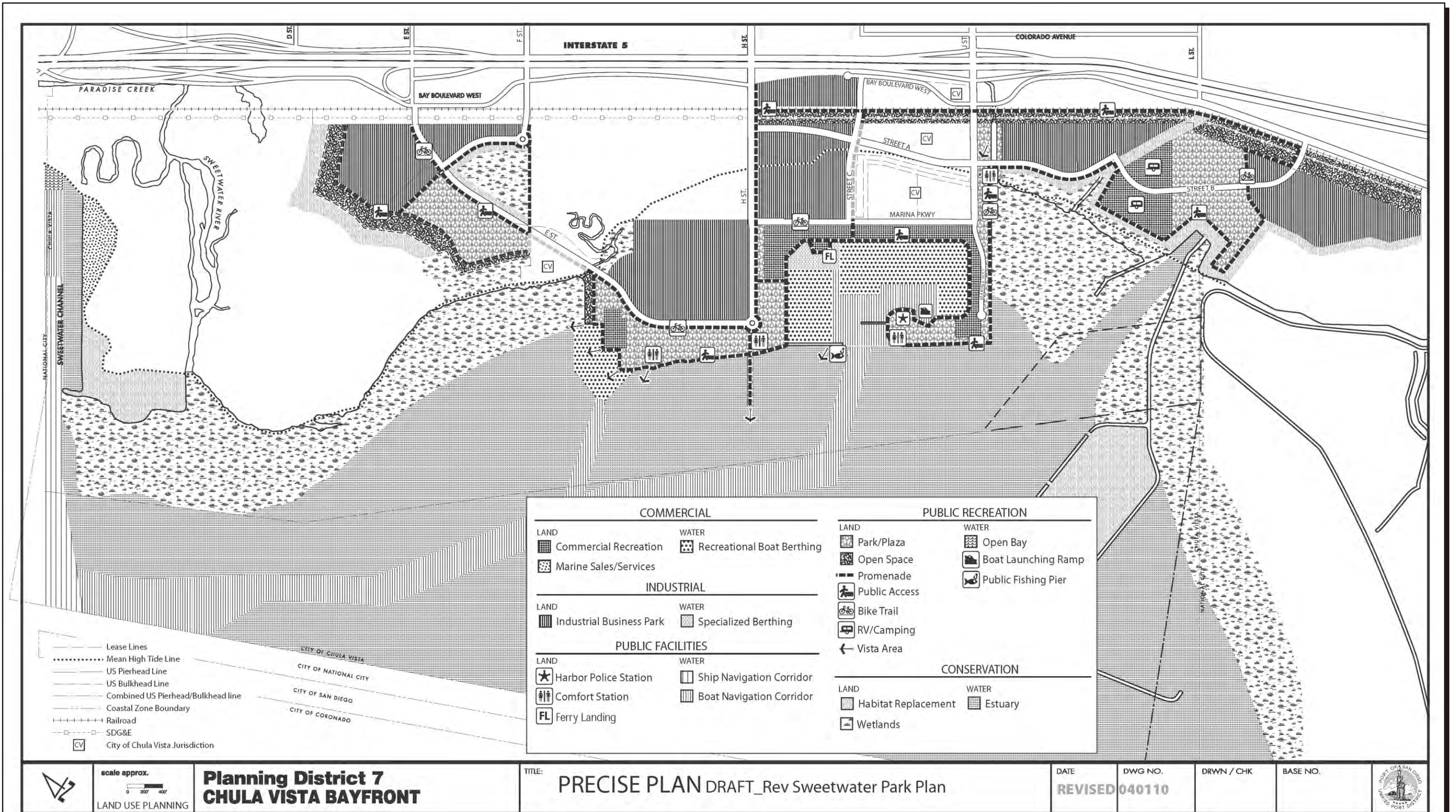
The development proposed in each district is designed to facilitate a particular function relating to the site and surroundings. The Sweetwater District proposes environmentally themed uses, which include an interpretive nature path adjacent to the Sweetwater Marsh NWR and buildings of limited height to preserve the site's existing views and expansiveness. The most intense development is proposed in the Harbor District, because it is already developed with marine-related, industrial, commercial, and visitor-serving retail; it is also located farthest away from natural areas. Redevelopment of the Harbor District aims to replace the existing industrial uses, reinvigorate the waterfront, and integrate new uses with the existing marina.

A continuous promenade along the waterfront throughout the entire Harbor District would improve the public's waterfront access. The RV Park and South Park proposed for Otay District would shift the industrial character of the District to the south, connecting the northern portion of the Otay District with the central Harbor District near the transit center proposed on H Street. Siting development by function as appropriate to the site's natural landscape and existing amenities is consistent with the existing PMP's design objective to integrate development and activities "with and related to the site and surroundings of that activity."

The current PMP identifies uses in Figure 19 entitled "Planning District 7 Chula Vista Bayfront Precise Plan." *Figure 4.1-6* illustrates the land uses and public amenities proposed by amendments to this plan, and *Table 4.1-8* lists the proposed land and water use allocations for this plan. The entire plan amendment text and graphics for the Proposed Project are contained in *Appendix 3.4-1* of this report.



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SOURCE: Port Of San Diego

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Proposed Amendments to the Planning District 7 Chula Vista Bayfront Precise Plan (Port Master Plan)

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4.1-6

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**TABLE 4.1-8**  
**Proposed Precise Plan Land and Water Use**  
**Allocation Chula Vista Bayfront: Planning District 7**

Land Area		Water Area		TOTAL	
Use	Acres	Use	Acres	Acres	Percent
<b>Commercial</b>					
Marine Sales and Service	7.5				
Commercial Recreation	35.7	Recreational Boat Berthing	41.0		
<b>Subtotal</b>	<b>43.2</b>		<b>41.0</b>	<b>84.2</b>	<b>4</b>
<b>Industrial</b>					
Industrial Business Park	129.5				
		Specialized Berthing	4.0		
<b>Subtotal</b>	<b>129.5</b>		<b>4.0</b>	<b>133.5</b>	<b>7</b>
<b>Public Recreation</b>					
Open Space	<del>86.9</del> 54.4				
Park/Plaza	81.5	Open Bay/Water	1.2		
Promenade	17.3				
<b>Subtotal</b>	<del>185.7</del> 153.2		<b>1.2</b>	<del>186.9</del> 154.4	<b>98</b>
<b>Conservation</b>					
Wetlands	305.7	Estuary	967.2		
Habitat Replacement	<del>71.3</del> 103.8				
<b>Subtotal</b>	<del>377.0</del> 409.5		<b>967.2</b>	<del>1,344.2</del> 1,376.7	<del>68</del> 69
<b>Public Facilities</b>					
Streets	41.2	Boat Navigation Corridor	156.5		
		Ship Navigation Corridor	33.9		
<b>Subtotal</b>	<b>41.2</b>		<b>190.4</b>	<b>231.6</b>	<b>12</b>
<b>TOTAL</b>	<b>776.6</b>		<b>1,203.8</b>	<b>1,980.4</b>	<b>100</b>

The Proposed Project conforms to the proposed plan concept by (1) providing for increased access to public parks and commercial recreation and (2) improving conservation by decreasing development intensity in the Sweetwater District.

The proposed amendment to the PMP would reduce industrial uses in the majority of the planning areas. As such, it would change the current plan concept to one that emphasizes commercial/recreational uses over industrial uses.

The Proposed Project is consistent with the current precise plan recommendation to extend H Street at its present terminus to Bayside Parkway. It also stresses the importance of public access ways, landscaping, and park/open space areas. The project would also enhance public access to the Bayfront from H Street (as extended), G Street, and Bayside Parkway.

The Proposed Project is consistent with the Port's public amenities objectives in that it provides additional park land. The project also accomplishes the additional PMP goals of extending the public promenade along the entire water frontage and expanding the park and Bayside Park shoreline promenade.

Because the Proposed Project achieves the goals of the current PMP, and since the adoption of the PMP proposed amendment is a proposed action covered by this report, the Proposed Project would be consistent with the Master Plan if the PMP is adopted.

d. City of Chula Vista General Plan

As discussed in the Project Description (*Section 3*) of this document, the Proposed Project would amend the City of Chula Vista General Plan. In addition to the minor changes throughout the plan that bring graphics and tables into conformance with the Proposed Project (see *Table 3-3*), Section 11 of Chapter 5 of the City of Chula Vista General Plan is being substantially modified.

The proposed changes to Section 11 include the amendment of Section 11.1, the deletion of Sections 11.2 and 11.3, and the adoption of Sections 11.2, 11.3, and 11.4. These sections address the following:

- Subareas
- Area-wide planning factors, objectives and policies
- Subarea planning factors, objectives and policies.

Although this report identifies three distinct Districts used in the planning and design for the Proposed Project, the City of Chula Vista General Plan refers to the Sweetwater, Harbor, and Otay Districts as Subareas, and the Bayfront Specific Plan, LUP, and PMP refer to them as Planning Subareas (the Chula Vista General Plan refers to these as Planning Subareas also; see LUT-285 of the General Plan Amendment). Sections 11.3 and 11.4 of the proposed amendments to the City of Chula Vista General Plan establish a series of Objectives and Policies for the Bayfront Planning Area. The General Plan Amendment text and graphics are included as an appendix to this report (*Appendix 4.1-1*). The objectives to be added to the City of Chula Vista General Plan in these sections include:

- LUT 98** Create a water-oriented focal point for the entire City which includes uses which are attractive to visitors and residents alike.
- LUT 99** Establish linkages between the Bayfront Planning Area and the Northwest Planning Area for pedestrians, bicycles, and transit.
- LUT 100** Establish roadways in the Bayfront Planning Area that respond to the special operating characteristics of roadways within a more urbanized environment, accommodate slower speeds in pedestrian-oriented areas, and facilitate multimodal design elements and amenities.
- LUT 101** Increase mobility for residents and visitors in the Bayfront Planning Area.



- LUT 102** Create park and recreational opportunities in the Bayfront Planning Area that protect the natural beauty of the Bay and improve access and usage by area residents and visitors.
- LUT 103** Provide for natural open space conservation in the Bayfront Planning Area.
- LUT 104** Encourage redevelopment and new development activities within the Sweetwater Subarea that will minimize impacts to environmentally sensitive lands adjacent to the Sweetwater Marsh NWR.
- LUT 105** Provide for the redevelopment and new development of the Harbor Subarea that will reinforce its identity as the City's Bayfront focal point.
- LUT 106** Encourage redevelopment and new development activities within the Otay Subarea that will provide recreational and visitor-serving opportunities.

This impact analysis includes an evaluation of the Proposed Project's consistency with the objectives in the adopted General Plan. *Table 4.1-9* presents the results of this analysis and demonstrates that the Proposed Project is consistent with all but two objectives. The Proposed Project would be inconsistent with Land Use and Transportation objective LUT 11 in regard to aesthetics and visual resources (**Significant Impact 4.1-4**) and Public Facilities and Services objective PFS 11 in regard to library services and facilities (**Significant Impact 4.1-5**).

In addition, subject to the acquisition of Parcel H-17 by the City, Phase I development within the Harbor District requires a General Plan Amendment to re-designate the fire station site on Parcel H-17 from Commercial Visitor to Public-Quasi-Public (P-Q) zone, which is proposed to allow for a public use within the Bayfront Master Plan.

**TABLE 4.1-9  
Chula Vista General Plan Consistency**

Objective	Policy	Text	Consistent?	Consistency Analysis
<b>Economic Development</b>				
ED 7	ED 7.1	Improve traffic flow and transportation linkages between the downtown, Bayfront, southwestern, and eastern areas of the City. Add additional travel lanes where warranted, revise signal timing to improve traffic flow, and consider additional freeway crossovers, where necessary.	Yes	The Proposed Project would result in the development of planned circulation element roadways that would help provide for easier access and connectivity of the downtown to the Bayfront area. The project would involve transportation planning mitigation measures such as addition of lanes and signals to existing roadway facilities.
ED 8	ED 7.2	Link activity centers through strong public transportation and combined land uses that encourage multipurpose trips.	Yes	The project proposes a mixture of commercial/retail, office, residential, and tourist commercial uses interconnected by an extensive park and open space network. It is conceivable that an individual could live, work, recreate, and participate in cultural/civic activities within the Bayfront area so as to promote multipurpose trips or eliminate trips all together.
ED 9	ED 7.3	Improve existing districts and uses in western Chula Vista that will attract residents citywide.	Yes	The Proposed Project would result in improvements to the Bayfront, located in western Chula Vista. Because of the multiple scales on which this development is planned (state/national = RCC, regional = office uses, local = corner retail market), visitors would be attracted from all over the City and surrounding County.
ED 10	ED 10.1	Provide sufficient telecommunication, water, sewer, and other infrastructure capacity to support new business development, including technology and science based industries, while continuing to support the existing business base.	Yes	The Proposed Project would result in enhanced infrastructure facilities to allow for build-out of the master plan. The connection between the proposed Bayfront area and the Chula Vista Urban Core would be strengthened by possible future transit support services such as vanpools and connection by non-roadway corridors, which would also provide for enhanced public open space and recreation opportunities for the entire south county area.
ED 10	ED 10.2	Work with regional agencies to develop and implement strategies for public improvements that benefit Chula Vista and all of south county, including, but not limited to road, transit, energy, water, wastewater, and telecommunications infrastructure improvements.	Yes	The City, Port, MTS, and private land owners including Pacifica and Gaylor have participated in multi-year discussions regarding strategies for implementing infrastructure within the Bayfront area, therefore the Proposed Project is consistent with this policy geared at supporting collaborative regional planning endeavors.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
ED 10	ED 10.3	Identify ways to obtain timely funding for public facility and service needs.	Yes	The Proposed Project would not preclude the City's program development to address public facility and service needs throughout the City. That said, the project phasing includes development of public facilities in general step with development of commercial, retail, residential, and commercial tourist uses. Any public facility upgrades which appear as mitigation measures in the EIR include timing triggers to ensure that facilities are in place prior to future demand. These project features would ensure consistency with this policy.
<b>Environment</b>				
E 2	E 2.1	Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.	Yes	The proposed master plan for land uses within the Bayfront would provide specific areas for water-based recreation including fishing, swimming, and boating. The Bayfront Master Plan is designed so that boats would remain in segmented areas so as to avoid potential conflicts with swimmers and anglers. As currently required, all boating, fishing, and swimming must occur in compliance with the City of Chula Vista Municipal Code once the project has been implemented. This would provide for consistency with this policy.
E 2	E 2.2	Pursue safe alternatives to traditional pest management methods in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, and agricultural lands).	Yes	All parks planned within the City would be subject to the City's Design Review process in addition to review by a variety of City departments including stormwater management, environmental safety, parks and recreation, planning, and public works. Final specifications on park management, including application of pest control measures, would be coordinated with the appropriate department and ultimate management entity. This process would ensure that operation of parks is consistent with this policy.
E 2	E 2.4	Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.	Yes	The Proposed Project has been thoroughly reviewed to ensure consistency with City Stormwater, Pollution Prevention, and NPDES policies aimed at protecting water quality (see <i>Section 4.5, Hydrology /Water Quality</i> ). Several mitigation measures are included that would reduce potential water quality impacts to a level below significant. Therefore, the project is consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 2	E 2.5	Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.	Yes	See above under E 2.4. Further, Mitigation Measure 4.5-2 outlines requirements to avoid stormwater contamination during construction activities.
E 2	E 2.6	Maximize the protection of potable water supply resources from pollutants.	Yes	See above under E 2.4.
E 3	E 3.1	Promote state-of-the-art water conservation practices in existing and new development, where proven to be safe and environmentally sound.	Yes	MWD, SDCWA, and the Sweetwater Authority (agencies involved in provision of potable water to the Proposed Project site) are engaged in substantial efforts to improve the reliability of their water supplies, including conservation and recycled water. As these programs and incentives are developed, they would be incorporated into the project planning process as each specific project is pursued. Further, the project would not preclude the City from establishing and carrying out water conservation education efforts, incentive programs (i.e., low-flush toilet change out or rebate programs). The Proposed Project would be consistent with this policy.
E 3	E 3.2	Promote the use of low water demand landscaping and drought tolerant plant materials in both existing and new development.	Yes	The Proposed Project would utilize a drought-tolerant and native plant landscape palette. Further, only non-invasive plants would be utilized around the perimeter of the project. These project features would reduce water-intense landscape components and help in the Citywide effort of promoting and use of low water demand landscaping.
E 3	E 3.3	Where safe and feasible, promote and facilitate the continued use of recycled water in new developments, and explore opportunities for the use of recycled water in redevelopment projects.	Yes	The Proposed Project would not preclude the use of localized recycled water to enhance water conservation. Provisions of the project have been included to ensure the reuse of localized grey water sources; therefore, the project would not be inconsistent with this policy.
E 3	E 3.5	Require the preparation and implementation of Water Conservation Plans for large development and redevelopment projects in accordance with the City's Water Conservation Plan Guidelines or its equivalent, pursuant to the City's Growth Management Program.	Yes	The Proposed Project is being designed to be within the assumptions of the City's Urban Water Master Plan, which would result in consistency with this policy aimed at water conservation.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 6	E 6.1	Encourage compact development featuring a mix of uses that locate residential areas within reasonable walking distance to jobs, services, and transit.	Yes	The Proposed Project utilizes several key components of smart growth/transit-oriented development. The project would consist of a mixture of residential, commercial/retail, office, commercial tourist, civic/cultural, and open space uses within the same area. These areas are connected by vehicular roadways as well as paseos and pathways which provide multiple connections to existing regional transit facilities. Further, design guidelines would require stepped-back building levels, minimum pedestrian/sidewalk areas, and retail/commercial uses below residential to promote walking rather than driving. The Proposed Project would therefore be consistent with this policy.
E 6	E 6.2	Promote and facilitate transit system improvements in order to increase transit use and reduce dependency on the automobile.	Yes	See below under all LUT 17 policies.
E 6	E 6.4	Avoid siting new or re-powered energy generation facilities and other major toxic air emitters within 1,000 feet of a sensitive receiver, or the placement of a sensitive receiver within 1,000 feet of a major toxic emitter.	Yes	Because proposed residential uses for the Proposed Project are further than 1,000 feet from the existing Goodrich facility (a source of air pollutants), there would not be a significant effect caused by permitting sensitive receivers within 1,000 feet of a toxic emitter. Because there are no residential receivers proposed within 1,000 feet of the existing Goodrich facility, no significant air quality impacts would occur. The Proposed Project would be consistent with this policy.
E 6	E 6.7	Encourage innovative energy conservation practices and air quality improvements in new development and redevelopment projects consistent with the City's Air Quality Improvement Plan Guidelines or its equivalent, pursuant to the City's Growth Management Program.	Yes	Several energy conservation parameters and features are outlined in <i>Section 4.6</i> and specifically within <i>Table 4.6-28</i> , which outlines project components included to reduce greenhouse gas emissions. The Proposed Project would therefore be consistent with this policy.
E 6	E 6.10	The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks identified in the Health Risk Assessment (HRA) shall be feasibly mitigated to the maximum extent practicable, in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.	Yes	All sensitive receptors located within the portions of the project overseen by the directives and policies of the General Plan would not be within 500 feet of a freeway. The RV park, which is located within 500 feet of I-5, is regulated by the Port; therefore, this Chula Vista General Plan requirement is not applicable. The Proposed Project would be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 6	E 6.11	Develop strategies to minimize carbon monoxide (CO) hot spots that address all modes of transportation.	Yes	The Proposed Project incorporates a variety of components and characteristics that are aimed at reducing vehicle uses including mixed use, transit-oriented development and a pedestrian/bicycle-friendly corridor system connecting activity centers. The Proposed Project would therefore be consistent with this policy.
E 6	E 6.12	Promote clean fuel sources that help reduce the exposure of sensitive uses to pollutants.	Yes	The Proposed Project would not preclude the City's promotion of clean fuel sources. Further, the project's integration of transit-oriented development, transit support systems, and pedestrian/bicycle linkages would further assist with reduction of pollutant emissions. The Proposed Project would be consistent with this policy.
E 6	E 6.13	Encourage programs and infrastructure to increase the availability and usage of energy-efficient vehicles, such as hybrid electric vehicles, electric vehicles, or those that run on alternative fuels.	Yes	The Proposed Project would not preclude the City's promotion of clean fuel sources and energy-efficient vehicles. Further, the project's integration of transit-oriented development, transit support systems, and pedestrian/bicycle linkages would further assist with reduction of pollutant emissions. The Proposed Project would be consistent with this policy.
E 7	E 7.1	Promote development of regulations and building design standards that maximize energy efficiency through appropriate site and building design and through the use of energy-efficient materials, equipment, and appliances.	Yes	The Proposed Project includes a number of measures which demonstrate consistency with this policy, including achieving LEED certification, identifying energy efficiency measures, and significant tree planting. The Pacifica project will strive for a 50 percent reduction in residential water use through features such as low-flow appliances (including toilets, shower heads, washing machines), a drought-tolerant landscape palette, weather-based irrigation controllers, and other water conservation measures. The Proposed Project would therefore be consistent with this policy.
E 7	E 7.7	Support tree planting programs that will be implemented to reduce energy needs.	Yes	The Proposed Project would utilize a variety of energy efficiency programs, one of which is tree planting. The Proposed Project would therefore help the City achieve this policy.
E 8	E 8.1	Promote efforts to reduce waste, minimize the need for additional landfills, and provide economically and environmentally sound resource recovery, management, and disposal facilities.	Yes	It should be noted that all projects in the City of Chula Vista would be subject to the City's design review process which would provide a process within which to outline a project's specific waste reduction measures. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 8	E 8.2	Support the development of composting programs for commercial and residential development.	Yes	It should be noted that all projects in the City of Chula Vista would be subject to the City's design review process which would provide a process within which to outline a project's specific waste reduction measures, including communal composting facilities. The Proposed Project would therefore be consistent with this policy.
E 8	E 8.3	Implement source reduction strategies, including curbside recycling, use of small collection facilities for recycling, and composting.	Yes	It should be noted that all projects in the City of Chula Vista would be subject to the City's design review process which would provide a process within which to outline a project's specific waste reduction measures, including communal composting facilities. The Proposed Project would therefore be consistent with this policy.
E 8	E 8.5	Encourage the reduction of household hazardous waste generation and disposal by promoting the use of safe substitutes, and by promoting and facilitating recycling of household hazardous waste.	Yes	The Proposed Project would not preclude the City from reducing household hazardous waste generation and promoting safe disposal. It is assumed that all operations of commercial, residential, and other land uses within the Bayfront would occur in accordance with Chula Vista Municipal Code, which regulates the disposal of hazardous substances. The Proposed Project would assist the City with achievement of this policy.
E 9	E 9.1	Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to cultural resources, in accordance with the California Environmental Quality Act.	Yes	A full evaluation of cultural resource presence and potential impacts was prepared for this project (see <i>Section 4.10</i> ). All impacts were mitigated to a level below significance. Further the historic rail line would be incorporated into open space design, thereby eliminating any impacts to this historic facility. Therefore, the Proposed Project would be consistent with this policy.
E 9	E 9.2	Support and encourage the accessibility of Chula Vista's important cultural resources to the public for educational; religious; cultural; scientific; and other purposes, including the establishment of museums and facilities accessible to the public, where such resources can be appropriately studied, exhibited, curated, etc.	Yes	The Proposed Project includes a number of cultural and civic uses and activity centers including integration of the natural resource areas within the Bayfront area. This incorporation would assist the City with providing access to cultural educational opportunities.
E 9	E 9.3	Discourage disruption, demolition, and other negative impacts to historic cultural resources.	Yes	See above E 9.1.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 10	E 10.1	Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to paleontological resources in accordance with the California Environmental Quality Act.	Yes	The Proposed Project was subject to a full evaluation of potential impacts to sensitive paleontological resources (see <i>Section 4.11</i> ). Mitigation Measure 4.11-1, in the form of monitoring during construction, provides a road map for the City to ensure that construction activities do not impact unknown paleontological resources. The Proposed Project would therefore be consistent with this policy.
E 11	E 11.1	Provide an integrated network of open space areas, as needed, throughout the City to serve residents, as well as to serve as a regional asset and attractor of visitors (e.g., on the Bayfront and within the Otay River Valley).	Yes	The LUP provides a continuous open space network which links the Bayfront to the planned "Chula Vista Greenbelt" incorporating the Sweetwater River Valley to the north and the Otay River Valley further south. Further, smaller pedestrian corridors and pathways connecting a variety of park and open space uses would promote neighborhood-scale open space assets for the enjoyment of future Bayfront residents, visitors, and shoppers. The Proposed Project would be consistent with this policy.
E 11	E 11.2	Plan for the long-term preservation and enhancement of open space within the Chula Vista Greenbelt.	Yes	See above E 11.1.
E 11	E 11.3	Conserve open space within the Chula Vista Greenbelt through public acquisition of private property and other acceptable conservation methods.	Yes	See above E 11.1.
E 11	E 11.7	Expand upon and encourage urban community-based "green" infrastructure that is distinct from habitat conservation (e.g., community, neighborhood, and pocket parks, disturbed canyons, community and roof gardens, and vegetated drainages) and ensure that such facilities are integrated into new development and redevelopment in western Chula Vista.	Yes	See above E 11.1.
E 11	E 11.8	Develop a greenbelt park and/or open space system across the Bayfront to link the Sweetwater and Otay rivers and to buffer sensitive natural resources from development.	Yes	See above E 11.1. Further, buffers and avoidance and minimization measures shall be implemented at all stages of development to protect sensitive biological resources within the Bayfront area.
E 11	E 11.10	Encourage the retention of open space areas, including undeveloped natural areas and utility corridors, wildlife corridors, and key scenic corridors	Yes	A significant portion of the Bayfront area will be preserved as open space or wildlife corridors/refuges which both help provide scenic corridors. The Proposed Project would therefore be consistent with this policy.



TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 12	E 12.1	Collaborate with San Diego County, the City of San Diego, and other applicable agencies to provide connections between Chula Vista's open space and trails network and the regional network, in accordance with the Chula Vista MSCP Subarea Plan and Otay Valley Regional Park Concept Plan.	Yes	See above E 11.1. Further, the project would not preclude the City from collaborating with other jurisdictions to promote a more coordinated open space network.
E 12	E 12.2	Explore opportunities for connections to the regional open space and trails network through developments within the City adjacent to the network as development proposals are reviewed and processed, and work with project proponents and applicable agencies to plan, develop, and manage such connections.	Yes	See above E 11.1.
E 14	E 14.1	To the maximum extent practicable, protect against injury, loss of life, and major property damage through engineering analyses of potential seismic hazards, appropriate engineering design, and the stringent enforcement of all applicable regulations and standards.	Yes	A full geotechnical evaluation was prepared for the proposed project (see <i>Section 4.15</i> ). Implementation of Mitigation Measures 4.15-1 through 4.15-4 would reduce significant impacts associated with seismic strong ground motion and surface rupture, soils, liquefaction and seismically induced settlement, and geologic hazards to below a level of significance. The Proposed Project would therefore be consistent with this policy.
E 14	E 14.2	Prohibit the subdivision, grading, or development of lands subject to potential geologic hazards in the absence of adequate evidence demonstrating that such development would not be adversely affected by such hazards and would not adversely affect surrounding properties.	Yes	See above E 14.1.
E 14	E 14.3	Require site-specific geotechnical investigations for proposals within areas subject to potential geologic hazards and ensure implementation of all measures deemed necessary by the City Engineer and/or Building Official to avoid or adequately mitigate such hazards.	Yes	See above E 14.2.
E 14	E 14.5	Wherever feasible, land uses, buildings, and other structures determined to be unsafe from geologic hazards shall be discontinued, removed, or relocated.	Yes	See above E 14.2.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 15	E 15.1	Prohibit proposals to subdivide, grade, or develop lands that are subject to potential flood hazards, unless adequate evidence is provided that demonstrates that such proposals would not be adversely affected by potential flood hazards and that such proposals would not adversely affect surrounding properties. Require site-specific hydrologic investigations for proposals within areas subject to potential flood hazards; and implement all measures deemed necessary by the City Engineer to avoid or adequately mitigate potential flood hazards.	Yes	Potential flood hazards in the project vicinity are the low-lying portions and tributary areas of the Sweetwater and Otay River valleys, located just north and south of the project site. The 100-year flood plain occurs on Parcel SP-1 in the Sweetwater District and Parcel OP-2A in the Otay District. These areas are protected by the Sweetwater Dam and channel system in the event of a 100-year flood. Furthermore, no buildings are proposed at either of these locations. Accordingly, the Proposed Project would not have a significant impact with respect to an existing 100-year floodplain or flood hazard area.
E 15	E 15.2	Wherever feasible, land uses, buildings, and other structures determined to be unsafe from flood hazards shall be discontinued, removed, or relocated.	Yes	See above E 15.1. It should be noted that the lands within the existing floodplain do not contain existing buildings or structures that could pose a risk to inhabiting individuals or businesses. The project would therefore be consistent with this policy.
E 17	E 17.1	Clean contaminated sites to protective limits to ensure that planned future uses of such sites and public health and safety are not compromised.	Yes	Mitigation Measure 4.12-2 has been provided to ensure that proper handling and removal of any contaminated sites occur throughout the project planning process. The project would therefore be consistent with this policy.
E 17	E 17.2	Prior to the redevelopment of contaminated sites, ensure adequate remediation in accordance with the recommendations of appropriate environmental assessments and consistent with all applicable regulations and standards.	Yes	See above E 17.1.
E 18	E 18.1	Provide convenient and affordable household hazardous waste collection facilities and services for residents and small businesses, including City facilities, community collection events, and curbside collection.	Yes	All projects within the City of Chula Vista would be subject to the City's design review guidelines, which would provide the opportunity to evaluate hazardous waste disposal facilities throughout proposed residential and other ancillary uses. Reliance on this existing city design review process would result in consistency with this policy.
E 20	E 20.2	Through the environmental review of proposed developments, in accordance with the California Environmental Quality Act, the City shall ensure that significant and potentially significant adverse effects from facilities using, storing, and handling hazardous materials and waste to existing and planned surrounding land uses will be avoided.	Yes	Mitigation Measure 4.12-3 has been incorporated into the Proposed Project to avoid potential hazardous chemical spills during construction. Further, Mitigation Measure 4.12-6 has been incorporated into the project to remove underground storage tanks (USTs). Prior to site disturbance, the soil and groundwater within the vicinity of the USTs shall be adequately characterized and remediated, if necessary, to a standard that would be protective of

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
				water quality and human health, based on future site use. The Proposed Project would therefore be consistent with this policy.
E 20	E 20.3	Prior to the issuance or renewal of business licenses for businesses involving hazardous materials and/or generating hazardous waste, the City shall continue to require licensees to prepare and submit an acceptable Business Plan and Risk Management Prevention Program to the County Department of Environmental Health, as applicable, and to obtain all other necessary licenses and permits.	Yes	All businesses that seek a license to operate in future Bayfront office, retail, or commercial spaces shall require a license from the City. Should the business necessitate hazardous materials, the City would require a Business Plan and Risk Management Prevention Program prior to issuance of licenses and permits. The Proposed Project would therefore be consistent with this policy.
E 21	E 21.1	Apply the exterior land use-noise compatibility guidelines listed in <i>Table 9-2</i> of this Environmental Element to new development, where applicable, and in light of project-specific considerations.	Yes	A noise analysis was prepared for the Proposed Project (see <i>Section 4.7, Noise</i> ). This analysis was conducted in accordance with City of Chula Vista guidelines applicable at the time of preparation. The noise analysis determined that all noise impacts would be reduced to a level below significance with incorporation of mitigation measures. The Proposed Project would therefore be considered consistent with this policy.
E 21	E 21.2	Where applicable, the assessment and mitigation of interior noise levels shall adhere to the applicable requirements of the California Building Code with local amendments and other applicable established City standards.	Yes	The noise assessments that have been prepared have followed, and successive assessments that will analyze project-specific building plans as they are proposed would follow, all California Building Code, local amendments, and other city criteria, such as the noise ordinance. The Proposed Project would therefore be consistent with this policy.
E 21	E 21.3	Promote the use of available technologies in building construction to improve noise attenuation capacities.	Yes	While specific construction techniques and materials are not known at this point in the planning process, it is assumed that the developers and builders would attempt to attenuate as much noise as possible (in addition to what is required by City and Building Code guidelines) to have as marketable a building/dwelling unit as possible. The Proposed Project would therefore be consistent with this policy.
E 21	E 21.4	Continue to implement and enforce the City's noise control ordinance.	Yes	The noise analysis utilized guidance provided by the City's noise ordinance. Project construction times and techniques would adhere to the City's noise ordinance parameters as spelled out in Mitigation Measure 4.7-8. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 22	E 22.1	Work to stabilize traffic volumes in residential neighborhoods by limiting throughways and by facilitating the use of alternative routes around, rather than through, neighborhoods.	Yes	The Proposed Project has been designed to encourage non-motorized transportation modes. Further, residential components of the project would be located adjacent to roadways that are adequately sized to support such residential and other mixed-use land uses nearby, rather than along major thoroughfares. Residential land uses within the City would be located more than 1,000 feet from I-5. The Proposed Project would therefore be consistent with this policy.
E 22	E 22.2	Explore the feasibility of using new technologies to minimize traffic noise, such as use of rubberized asphalt in road surface materials.	Yes	All projects within the City of Chula Vista would be subject to the City's design review process. This process entails review by a variety of city departments, including traffic and transportation. During review and coordination with the City's traffic/transportation staff, the applicability and feasibility of implementing alternative technologies to reduce noise would be evaluated. Reliance on the City's existing design review process would ensure consistency with this policy to the extent feasible.
E 22	E 22.3	Employ traffic calming measures, where appropriate, such as narrow roadways and on-street parking, in commercial and mixed-use districts.	Yes	Although not technically within the City, the Proposed Project would include reduction of a lane on Marina Drive in an effort to "calm" traffic in this area that is intended for extensive pedestrian use. The Proposed Project would therefore be consistent with this policy.
E 22	E 22.4	Encourage walking, biking, carpooling, use of public transit, and other alternative modes of transportation to minimize vehicular use and associated traffic noise.	Yes	See LUT 17 and LUT 18, below.
E 22	E 22.5	Require projects to construct appropriate mitigation measures in order to attenuate existing and projected traffic noise levels, in accordance with applicable standards, including the exterior land use/noise compatibility guidelines listed in <i>Table 9-2</i> of this Environmental Element.	Yes	Mitigation Measure 4.7-2 would require noise mitigation measures to attenuate noise levels to a level below 65 dB(A) CNEL for all outdoor living areas of the Pacifica Development. Further, Mitigation Measure 4.7-3 would require that an architectural noise evaluation be performed to ensure that all indoor living spaces would not be subjected to noise above 45 dB(A) CNEL. All building plans for residential land uses adjacent to circulation element roadways would be reviewed by the City to ensure that proper attenuation devices/features are shown on plans consistent with building-specific noise analyses. The Proposed Project would therefore be consistent with the policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
E 23	E 23.2	Plan for the equitable distribution of public facilities and services.	Yes	The Proposed Project would result in provision of a variety of public services and facilities to both future residents and visitors of the Bayfront as well as existing City residents and visitors who will have enhanced access to Bay resources, open space resources, and new civic/cultural gathering spots. The project would therefore help the City achieve this policy of extending public facilities and services into an area not well served by such.
E 23	E 23.3	Avoid siting industrial facilities and uses that pose a significant hazard to human health and safety in proximity to schools or residential dwellings.	Yes	The proposed location of industrial land uses within the Otay District would not be located in close proximity to existing or proposed residents or schools. The Proposed Project would therefore be consistent with this policy.
E 23	E 23.4	Build new schools and residential dwellings with sufficient separation and buffering from industrial facilities and uses that pose a significant hazard to human health and safety.	Yes	See above E 23.3.
E 23	E 23.5	Promote more livable communities by expanding opportunities for transit-oriented development.	Yes	See LUT 18, below.
<b>Growth Management</b>				
GM 2	GM 2.1	Achieve and maintain a balance of land uses within the City that assures residential development is complemented by expanded local employment opportunities, retail and commercial services, and recreation and entertainment venues; and that the City-wide mix of land uses provides fiscal balance between those that produce revenues and those that require public expenditures.	Yes	See LUT 1, below.
GM 3	GM 3.3	Ensure that all new and infill development within existing urban areas pays its proportional share of the cost for urban infrastructure and public facilities required to maintain the Threshold Standards, as adopted for its area of impact.	Yes	The Proposed Project would be subject to a variety of development impact fees to pay its fair share of the cost for roadway, regional transportation, sewer, water, and other public facilities. The Proposed Project would therefore be consistent with this policy.
GM 4	GM 4.1	Where project entitlements or planning activities may affect traffic, water supply, air quality, or public facilities outside of City boundaries, work cooperatively with neighboring jurisdictions in responding to such problems and actively consult and cooperate with neighboring	Yes	The Proposed Project includes land governed by the State Lands Commission, Port of San Diego and other local, state, and federal agencies. These agencies have participated in the planning of the Bayfront project. Further, agencies may be involved with the long-term management of proposed facilities. The evaluation of

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
		jurisdictions and SANDAG regarding subregional or project-specific land use planning concerns including: wherever possible, minimizing impacts upon regional transportation facilities; water supply; energy supply; air quality; sewage disposal; and economic balance.		environmental impacts (such as air quality, public facilities) and development of appropriate mitigation measures has occurred within this collaborative planning process. The Proposed Project would therefore consistent with this policy.
GM 7	GM 7.4	Coordinate residential, commercial, and industrial development timing and phasing with construction in adjacent jurisdictions so as to coordinate the facilitation of appropriate traffic flow, water supply, air quality, sewage disposal, and regional economic balance.	Yes	The Proposed Project involves extensive coordination for development timing across jurisdictional boundaries to ensure that the Bayfront Master Plan area functions efficiently and effectively from a public facilities and services perspective, despite the multi-agency jurisdictional and regulatory agency setting. The mitigation triggers outlined in this EIR attempt to time the need for mitigation in a manner that provides needed facilities before development arrives but also provides an equitable allocation of infrastructure construction with other jurisdictions and private parties. The Proposed Project is therefore consistent with this policy.
<b>Housing</b>				
H 2	H 2.1	Encourage the efficient use and conservation of water by residents, specifically: 2.1.1) Promote the inclusion of state-of-the art water conservation practices in existing and new development projects where proven to be safe and environmentally sound; 2.1.2) Promote the use of water demand (xeriscape) landscaping and drought tolerant plant materials in existing and new development; 2.1.3) Pursuant to the City's Growth Management Program, continue to require the preparation and implementation of Water Conservation Plans for large development and redevelopment projects in accordance with the City's Water Conservation Plan Guidelines or its equivalent; 2.1.4) Public education for water conservation, promote water conservation by residents through appropriately targeted education and community programs.	Yes	The Metropolitan Water District of Southern California (MWD), the San Diego County Water Authority (SDCWA), and Sweetwater Authority have a variety of water conservation programs that would conceivably be available for implementation during project implementation. Further, any city-sponsored efforts to educate residents about water conservation would help achieve this goal.
H 2	H 2.2	Promote the efficient use of energy, specifically: 2.2.1) Building energy efficiency into housing: Encourage residential developers/builders to maximize energy efficiency through appropriate site and building design an	Yes	The Proposed Project would incorporate a number of design principles that contribute to energy efficiency, including mixed-use development, encouragement of transit use, and ample non-roadway connections between land uses so as to promote walking

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
		through the use of energy efficient materials, equipment and appliances; 2.2.2) Public education for energy conservation, develop and distribute pertinent information about the benefits of energy conservation and available energy conservation incentive programs to residents and developers and builders of housing; 2.2.3) Residential Title 24: continue to perform a Residential Title 24 Energy Analysis and enforce these requirements as part of the building plan check procedures; and 2.2.4) Green Building, Promote the development of high-performance, sustainable buildings throughout the City that meet LEED (Leadership in Energy and Environmental Design) certification requirements through land use development standard incentives as may be adopted in the update of Chula Vista Municipal Code Title 19 (Zoning), Specific Plans for the Northwest, Southwest, and Bayfront planning areas and General Development Plans and Sectional Planning Area Plans for the East planning area.		and bicycle uses. Further, the project would incorporate green building techniques, including LEED certification and requirements. The Proposed Project would therefore be consistent with this directive to promote energy efficiency in proposed housing.
<b>Land Use And Transportation</b>				
LUT 11	LUT 11.1	Promote development that creates and enhances positive spatial attributes of major public streets, open spaces, cityscape, mountain and bay sight lines, and important gateways into the City.	No	Development within the Proposed Project area would be subject to design review conducted by the City of Chula Vista, which would be responsible for the review of specific building design and compatibility. Review of specific building design within the jurisdiction of the Port would be completed by the Port. The aesthetic assessment of the development as currently envisioned is described in Section 4.4, <i>Aesthetics/Visual Quality</i> , of this EIR. The project would be inconsistent with this policy because the project would result in significant, unmitigable impacts related to height and scale of the major components of the project and significant changes to the skyline and mountain views available west and north of the site. Impacts to visual character and quality and viewing scenes would be significant and unmitigable, therefore the Proposed Project would be inconsistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 1	LUT 1.4	Seek to achieve an improved balance between jobs and housing in Chula Vista.	Yes	The mixture of residential and commercial/office use would provide a mixture of jobs and housing within a distinct district within the City. It is reasonable to assume that many residents would work in the proposed 760,000 square feet of mixed use or 225,000 square feet of retail use space planned as a result of the Proposed Project.
LUT 2	LUT 2.1	Locate Mixed-Use Transit Focus Areas where major transit stations exist or are planned.	Yes	The Proposed Project would result in a mixture of commercial, residential, office, civic/cultural, and open space uses being located nearby existing San Diego Trolley and City of Chula Vista Transit System stops.
LUT 2	LUT 2.2	Locate the highest development intensities and residential densities within Mixed-Use Transit Focus Areas where strong City Gateway elements exist or key urban activity areas occur.	Yes	The Proposed Project would result in high-density development and commercial, office, and entertainment uses being located in a Mixed-Use Transit Focus Area.
LUT 2	LUT 2.3	Limit the location of high-rise structures to within the E Street and H Street Transit Focus Areas at I-5, and the Eastern Urban Center area of Otay Ranch.	Yes	The Harbor District would be the primary urban activity area in the Bayfront Planning Area. The high-rise and high-density residential and hotel developments are limited to the Harbor District. A discussion of the scale and massing of the Proposed Project is discussed in the <i>Aesthetics/Visual Quality</i> chapter of this report. While the project would result in high-rise development outside of the areas outlined in this policy, high-rise and high-density development within the Harbor District would be consistent with the higher intensity land uses envisioned for that portion of the Bayfront.
LUT 2	LUT 2.4	High-rise buildings will be subject to discretionary review in order to ensure they are a positive addition to the City, in accordance with the following provisions: 1) the building must reflect unique, signature architecture that symbolizes the City and can be immediately recognized as a positive Chula Vista landmark; 2) the building must be accompanied by clear public benefits in acceptance of the height, such as increased public areas, plazas, fountains, parks or paseos, extensive streetscape improvements, or other public venues or amenities, 3) The overall building height and massing must reflect appropriate transitions to surrounding areas, in accordance with the future vision for those areas, or if the building is on the periphery of an	Yes	A discussion of the scale and massing of the Proposed Project is discussed in the <i>Land Form and Aesthetics/Visual Quality</i> chapter of this report. Further, the specific building designs would be subject to the City's design review process which would provide for opportunity to ensure consistency with City design goals. This existing process would allow for consistency with this policy.



TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
		area of change, to the adjoining neighborhood. Specific Plans, General Development Plans/Sectional Planning Area Plans or other zoning regulations will provide the basis for defining such transitions.		
LUT 3	LUT 3.3	Buildings within the Transit Focus Areas (TFAs) should not adversely affect public views or view corridors, and should be designed to be sensitive to adjacent buildings and areas.	Yes	The project is located within a TFA, and was analyzed from a visual and view corridor perspective. Although the proposed structures within the City of Chula Vista would block some views of the Bay, the ample provision of open space and pedestrian walkways would provide opportunities to preserve scenic views available within and adjacent to the master plan area. The Proposed Project would be consistent with this policy.
LUT 4	LUT 4.6	Minimize through circulation design and/or traffic-calming features (to the maximum extent practicable) the use of neighborhood streets in stable residential neighborhoods for regional or cut-through traffic, to protect those neighborhoods from adverse traffic effects. This would include access to and from side streets and alleys.	Yes	In an effort to be more pedestrian-friendly and to "calm" traffic, Marina Parkway is planned for four lanes but is being designed for three lanes in order to enhance pedestrian usership. The Proposed Project would be consistent with this policy.
LUT 5	LUT 5.1	Promote mixed-use development, where appropriate, to ensure a pedestrian-friendly environment that has opportunities for housing, jobs, childcare, shopping, entertainment, parks, and recreation in close proximity to one another.	Yes	The Proposed Project would result in high-rise residential use near shopping, jobs, open/civic spaces and transit. Retail uses would be included at the street level to create a village atmosphere and pedestrian-friendly area. Therefore, the Proposed Project would be consistent with this policy.
LUT 5	LUT 5.2	Encourage new development that is organized around compact, walkable, mixed-use neighborhoods and districts in order to conserve open space resources, minimize infrastructure costs, and reduce reliance on the automobile.	Yes	The Proposed Project would result in high-rise residential use near shopping, jobs, open/civic spaces and transit. Retail uses would be included at the street level to create a village atmosphere and pedestrian-friendly area. Therefore, the Proposed Project would be consistent with this policy.
LUT 5	LUT 5.11	Endeavor to reduce the number of peak hour automobile trips by supporting increased services near workplaces.	Yes	The Proposed Project would entail a strong mixed-use concept throughout—multifamily housing would be located within commercial, retail, and office areas. Further, the presence of retail and commercial land uses in close proximity to office and other commercial/retail land uses would provide a pedestrian-friendly environment that would facilitate walking to purchase lunch, taking an afternoon break without driving a car, etc. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 5	LUT 5.12	Minimize local and regional traffic by concentrating higher-density employment near major transit services.	Yes	The Proposed Project is located in close proximity to two San Diego Trolley stops as well as Chula Vista Transit System stops. The project site design provides for integration of proposed land uses (entertainment, commercial, retail, residential) into the local transit system. Providing convenient access to transit will discourage the use of local and regional traffic.
LUT 6	LUT 6.2	Require that proposed development plans and projects consider and minimize project impacts upon surrounding neighborhoods.	Yes	The Proposed Project eliminates the intensive development in the Sweetwater District that is currently permitted under the adopted General Plan. The reduction of this development intensity and the provision of <u>fenced</u> , no-build buffers reduce conflicts between development and the Sweetwater Marsh NWR, J Street Marsh and South San Diego Bay Units of the SDBNWR. These project features also reduce land use conflicts between development and the F & G Street Marsh that is owned by the USFWS.
LUT 6	LUT 6.8	Require that any land use that handles, generates, and/or transports hazardous substances will not negatively impact existing or future sensitive receptors/land uses, as defined by state and federal regulations.	Yes	The Proposed Project may result in business or individual use of chemicals. It is assumed that all chemicals would be transported, stored, used, and disposed of in accordance with manufacturer's recommendations. It should be noted that specific hazardous material use may necessitate a permit from the City at which time risk assessment plans would be reviewed and verified for adequacy. The Proposed Project would generally be consistent with the City's goal of protecting land uses from the environmental dangers of hazardous material use.
LUT 6	LUT 6.9	Coordinate with adjacent landowners, cities, and San Diego County in establishing compatible land uses for areas adjacent to the City's boundaries.	Yes	The project planning process has involved adjacent land use agencies and landowners, including the Port of San Diego and other natural resource management entities working within the Bayfront area. These adjacent entities have had extensive input into the initial site design process and have confirmed that proposed land uses would be consistent with those existing and/or proposed within their jurisdiction.
LUT 7	LUT 7.1	Protect adjacent, stable residential neighborhoods by establishing guidelines that reduce the potential impacts of higher intensity mixed use, commercial, and urban residential developments (i.e., transitional areas).	Yes	Compatible adjacent land uses are proposed. The Proposed Project provides buffers and transition zones between sensitive adjacent development. Therefore, the Proposed Project would be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 7	LUT 7.2	Require new or expanded uses to provide mitigation or buffers between existing uses where significant adverse impacts could occur.	Yes	The Proposed Project would include incorporation of transitional buffer areas between residential and public utility (SDG&E easement) and commercial uses. These buffers consist of greenbelts, sidewalks, and pedestrian corridors or landscaping treatment. The project would result in consistency with this policy. Further, see <i>Table 4.1-10</i> , which outlines the project's relationship to sensitive biological resources and describes the buffering treatments incorporated into the project to reduce environmental affects to sensitive biological resources.
LUT 7	LUT 7.3	Require that commercial and industrial development adjacent to residential or educational uses be adequately screened and buffered to minimize noise, light, glare, and any other adverse impacts upon these uses.	Yes	Compatible adjacent land uses are proposed. The Proposed Project provides buffers and transition zones between sensitive adjacent development so as to screen noise, light, glare, and other adverse impacts. Therefore, the Proposed Project would be consistent with this policy.
LUT 7	LUT 7.4	Require landscape and/or open space buffers to maintain a naturalized or softer edge for proposed private development directly adjacent to natural and public open space areas.	Yes	The Proposed Project would include biological resource buffers to ensure that proposed urban land uses do not adversely affect sensitive biological resources (see also discussion regarding MSCP consistency in <i>Table 4.1-10</i> ). The Proposed Project would therefore be consistent with this policy.
LUT 7	LUT 7.5	Projects within TFAs shall provide appropriate and sufficient features to soften the transition to adjacent buildings and properties, through the following techniques. 1) Project landscape plans should include shade tree and screening plantings to reduce heat gain upon, and visually soften building edges; 2) Exterior lighting designs shall focus internally in order to reduce light pollution on neighboring properties; 3) Fencing and/or buffers shall be required to screen features such as dumpsters, rear entrances, utility and maintenance structures and loading facilities; 4) Walls or fencing along project edges shall be articulated and incorporate features to avoid presenting a monotonous or blank wall to the street or adjacent property.	Yes	All projects within the City of Chula Vista would be subject to the City's design review process where specific setbacks, street tree placement or wall or fence specifications could be determined to most appropriately encourage pedestrian-friendly, transit-oriented environments.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 10	LUT 10.3	Provide well-designed, comfortable bus stops throughout the City.	Yes	The Proposed Project would include bus stops throughout the City to facilitate bus/transit use. All projects within the City would be subject to the City's design review process, which is the appropriate setting to determine the design of bus stops. Reliance on this existing established process in the City would ensure compliance with this policy.
LUT 11	LUT 11.1	Promote development that creates and enhances positive spatial attributes of major public streets, open spaces, cityscape, mountain and bay sight lines, and important gateways into the City.	No	Development within the Proposed Project area would be subject to design review conducted by the City of Chula Vista, which would be responsible for the review of specific building design and compatibility. Review of specific building design within the jurisdiction of the Port would be completed by the Port. The aesthetic assessment of the development as currently envisioned is described in <i>Section 4.4, Aesthetics/Visual Quality</i> , of this EIR. The project would be inconsistent with this policy because the project would result in significant, unmitigable impacts related to height and scale of the major components of the project and significant changes to the skyline and mountain views available west and north of the site. Impacts to visual character and quality and viewing scenes would be significant and unmitigable, therefore the Proposed Project would be inconsistent with this policy.
LUT 12	LUT 12.7	Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to historic resources in accordance with the California Environmental Quality Act.	Yes	Project implementation would not result in a significant impact to any historic resources. The location of the existing on-site historic rail line would not be changed. Further, open space and landscaping for the rail corridor would be proposed within the existing easement. The inclusion of this historic rail line into the overall land use plan/open space component of the project would encourage the preservation of unique cultural resources.
LUT 13	LUT 13.1	Identify and protect important public viewpoints and viewsheds throughout the Planning Area, including features within and outside the planning area, such as mountain, native habitat areas, San Diego Bay, and historic resources.	Yes	The Proposed Project provides for the removal of the existing blighted condition from the Bayfront area. The project would provide for the removal of unused buildings and foundations and the reuse of previously graded and developed areas. The removal of this blight would enhance the visual appearance of the site and allow more opportunities for the public to enjoy the views of San Diego Bay, historic resources such as the rail line, and native habitat areas associated with the Chula Vista Wildlife Reserve, Sweetwater Marsh NWR, and other sensitive terrestrial and marine biological resources throughout the project planning area.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 13	LUT 13.2	Continue to implement the City's planned open space network.	Yes	The Proposed Project would provide a continuation of the City's planned open space network because it would link the Bayfront area to the Sweetwater River Valley to the north and other Bayshore resources and ultimately the Otay River Valley to the south, thereby serving as an important connection in the "Chula Vista Greenbelt." The Proposed Project would therefore be consistent with this policy.
LUT 14	LUT 14.3	Plan for high-capacity regional freeway and Transit First! facilities to adequately serve the regional travel demand resulting from the land uses associated with adjacent areas.	Yes	The Proposed Project's nature as a mixed-use development would provide the densities and mixture of uses that would prompt transit use. Should enhanced transit services, such as vanpools or ride shares, be instigated, the critical mass from a land use perspective would be present <del>within</del> within the Bayfront area. The Proposed Project would therefore be consistent with this policy.
LUT 15	LUT 15.3	Support the implementation of enhanced transit service concepts (such as Transit First!) on H Street and other major east/west arterials. Enhance east/west accessibility with use of Bus Rapid Transit (BRT).	Yes	The two major public transit objectives for the Bayfront include: (1) maximizing use of the two trolley stops adjacent to the Bayfront and (2) providing future shuttle bus service to interconnect the Bayfront with the trolley stations and the adjacent community. Therefore, the project supports enhanced transit service concepts. The project also proposes enhanced transit services, such as transit vehicles or private jitneys, and accessible, safe pedestrian connections, which would facilitate transit use between the Bayfront and central portion of the City east of I-5.
LUT 15	LUT 15.5	Develop a convenient, destination-oriented shuttle system within the City that links activity centers, recreation opportunities, and other appropriate important destinations. Ensure that such a system is environmentally friendly, affordable, and accessible and connects Downtown Third Avenue, the Civic Center, H Street, and the Bayfront.	Yes	The City of Chula Vista's Urban Core Specific Plan identifies the potential for a shuttle service that would link various destinations within the western portions of Chula Vista, including the Bayfront. The Green Car Line (also called the West Side Shuttle) would stop frequently along its entire route to provide a fast and convenient link between the high-density redevelopment areas in the Chula Vista Urban Core and Bayfront and the regional light rail trolley system. The shuttle would have fewer stops than a conventional bus and be located as close as possible to the major traffic generators to encourage use. It should be noted that implementation of the Green Line depends on operational and funding responsibilities. That said, the project is incorporating the underlying design parameters (mixed-use land uses, incorporation of existing trolley stops into urban design as much as possible, etc.) that would encourage use of such a shuttle system should it become operational.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 16	LUT 16.1	Promote the development of well-planned communities that will tend to be self supportive and, thus, reduce the length of vehicular trips, reduce dependency on the automobile, and encourage the use of other modes of travel.	Yes	The Proposed Project would provide employment, residential, cultural/civic, and tourist commercial/retail opportunities connected by an extensive open space, pedestrian walkway and bikepath system, thereby encouraging non-vehicular travel. Further, the two major public transit objectives for the Bayfront project include utilization of the two existing trolley stops as much as possible and provision of future shuttle bus service to interconnect the Bayfront with the trolley stops. Shuttle bus stops are planned for location along major travel loops within the Bayfront and at key activity centers.
LUT 16	LUT 16.2	Ensure that new development and community activity centers have adequate transportation and pedestrian facilities.	Yes	A central concept of the Proposed Project is linkage of community activity centers (commercial/retail, civic/cultural attractions, commercial tourist uses, such as the planned hotel/convention center, etc.) by an extensive network of non-motorized transportation facilities including the regional bicycle path (Bayshore Bikeway and other bicycle facilities), pedestrian-friendly sidewalks and public promenades. These pedestrian facilities would be complemented by an adequate roadway network which would be required to provide adequate levels of service per City standards. The Proposed Project would therefore be consistent with these policies.
LUT 16	LUT 16.3	Provide direct and convenient access to public transit stops within residential, commercial, and industrial areas.	Yes	The proposed land uses would facilitate use of the existing San Diego Trolley due to its orientation/integration of these existing facilities. Further, a shuttle service is envisioned that would provide additional incentives to use non-vehicular modes of travel to connect to other City and regional destinations.
LUT 17	LUT 17.1	Designate sufficient land at appropriate densities to support planned transit and require that development be transit-oriented, as appropriate to its proximity to transit facilities.	Yes	The Proposed Project includes a mixture of residential, commercial/retail, commercial tourist, and civic/cultural uses, which, by nature, encourage non-vehicular travel. Further, mini-transit vehicles or private jitneys and convenient pedestrian, bicycle, and vehicular access to the Bayfront from community areas east of I-5 and outside of the City and support for the Green Line Shuttle service would result in consistency with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 17	LUT 17.2	Direct higher-intensity and mixed-use developments to areas within walking distance of transit, including San Diego Trolley stations along E, H, and Palomar Streets, and new stations along future transit lines, including Bus Rapid Transit (BRT).	Yes	The Proposed Project would result in high-intensity land uses including multifamily residential, commercial tourist, civic and cultural uses within walking distance of two San Diego Trolley stops. Further, additional Bus Rapid Transit services and Green Line Shuttle services are envisioned to further connect future visitors, shops, and residents of the Bayfront with outside land uses through transit connections. Therefore, the Proposed Project would be consistent with this policy.
LUT 17	LUT 17.4	Require developers to consult and coordinate with SANDAG and the City to ensure that development is compatible with and supports the planned implementation of public transit.	Yes	The City of Chula Vista, the Port, and private land owners have worked with SANDAG to implement urban design parameters and incentive programs that could be implemented in the future to encourage transit use. The Proposed Project would therefore be consistent with this policy.
LUT 18	LUT 18.1	Support and encourage the use of public transit.	Yes	The LUP mandates that auto-free zones would be created along the shoreline and in other areas that have unique environmental conditions or potential, and make provision for pedestrians and bicyclists. The mix of commercial/retail, commercial tourist, visitor, civic and cultural, and open space uses (smart growth principles) support the use of non-vehicular transportation. Further, shuttle services envisioned by both the Green Line and private shuttle services would help provide quick and frequent connections to regional transit facilities such as the San Diego Trolley. Urban design coupled by project policies, objectives, and future requirements would ensure consistency with this policy.
LUT 18	LUT 18.3	Provide and enhance all feasible alternatives to the automobile, such as bicycling and walking, and encourage public transit ridership on existing and future transit routes.	Yes	The Proposed Project would encourage use of transit through use of smart growth principles (mixed-use development, activity centers connected by pathways and bicycle facilities, etc.) and future goals and policies which would encourage transit shuttle services and orientation toward transit facilities as future project phases move forward in the urban design process. The project's extensive network of open space paseos, promenades, pathways, and bicycle facilities provide opportunities for non-motorized transportation throughout the project. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 18	LUT 18.4	Use master planning techniques in new development and redevelopment projects to enable effective use of public transit.	Yes	The Proposed Project is an example of the effective use of master planning to encourage the use of transit services and non-vehicular modes of travel. The overall site design is oriented to provide a mixture of land uses connected to existing transit facilities through pedestrian/bicycle-friendly corridors. The Proposed Project would therefore be consistent with this policy.
LUT 18	LUT 18.5	Implement Transportation Demand Management (TDM) strategies, such as carpooling, vanpooling, and flexible work hours that encourage alternatives to driving alone during peak periods.	Yes	See above LUT 18.4.
LUT 18	LUT 18.6	Encourage employer-based TDM strategies, such as employee transportation allowances, preferential parking for rideshare vehicles, workplace-based carpool programs, and shuttle services.	Yes	The planning process has been rooted in the idea that public transit service use by visitors and residents of the Bayfront should be promoted and private transit services should be encouraged whenever feasible. The use of alternative commuting practices such as telecommuting, vanpooling, etc. would also be encouraged. These policies would be further encouraged/refined in site-specific design review and entitlement planning. The project would not preclude the City from encouraging alternative commuting practices and, in fact, would support such practices through smart growth design and project goals/objectives.
LUT 18	LUT 18.7	Support the location of private "telework" centers.	Yes	See above LUT 18.6.
LUT 19	LUT 19.5	Plan for and promote improved access between the Palomar Street, E Street, and H Street light rail stations and land uses east of those stations and to the Bayfront. This may involve the construction of separate bridges or ramps connecting Chula Vista streets to transit facilities and/or a deck over I-5 to the Bayfront.	Yes	The Proposed Project would promote improved access to existing Trolley stations at Palomar Street, E Street, and H Streets through encouragement of transit connection services; establishment of pedestrian-friendly environments along roadway corridors connecting the Bayfront to these areas; and provision of non-vehicular pathways, paseos, bikeways and paths. Because the project would not involve areas east of I-5, the project neither encourages or discourages improved access between existing trolley stations and areas east of I-5.
LUT 20	LUT 20.1	Incorporate transit-friendly and pedestrian-friendly elements into roadway design standards, such as signal priority for transit and adequate sidewalk widths for pedestrians.	Yes	Major public pedestrian walkways that connect through privately developed areas shall have a minimum 25-foot-wide passageway where buildings are on one side and lagoon or open space is on the other side and a 30-foot-wide passageway where buildings are on both sides. These design parameters would provide for safe and adequate pedestrian spaces along roadways. The project



TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
				would also provide for roadway right-of-way with sufficient capacity and opportunities for bus stop locations to facilitate convenient bus services into Bayfront along Marina Parkway, E Street, Lagoon Drive, and Bay Boulevard. This capacity shall be maintained to provide the greatest flexibility in the routing of future bus service into the Bayfront and to achieve an effective connection to the trolley system. The Proposed Project would therefore be consistent with this policy.
LUT 20	LUT 20.2	Protect rights-of-way where possible to facilitate future transit service and support the development of secure park-and-ride lots within walking distance of transit stations.	Yes	The Proposed Project would also provide for roadway right-of-way with sufficient capacity and opportunities for bus stop locations to facilitate convenient bus services into Bayfront along Marina Parkway, E Street, Lagoon Drive, and Bay Boulevard. This capacity shall be maintained to provide the greatest flexibility in the routing of future bus service into the Bayfront and to achieve an effective connection to the trolley system. The Proposed Project is therefore consistent with this policy.
LUT 21	LUT 21.1	Provide alternatives and mitigation strategies, as reflected in SANDAG's Regional Comprehensive Plan, so that the area's transportation system is able to move people effectively through a combination of modes.	Yes	Interconnection of existing and proposed public transit would integrate Bayfront circulation patterns into the San Diego Trolley, the Chula Vista Transit System, and the regional bicycle/pedestrian circulation system, which would result in consistency with this policy.
LUT 21	LUT 21.3	Minimize adverse impacts of the transportation system on adjacent land uses.	Yes	Maintenance of required traffic level of service thresholds throughout the project area would ensure that adverse impacts to adjacent land uses as a result of traffic patterns would not occur. The Proposed Project would therefore be consistent with this guideline.
LUT 21	LUT 21.4	Maintain and improve existing infrastructure for the movement of people, goods, and vehicles within and throughout the City.	Yes	The Proposed Project would involve roadway improvements that would further assist with the regular movement of people, goods, and vehicles within and throughout the City. The extension of major east/west roadways into the Bayfront area would provide new, efficient access to these areas, which are currently underserved by the City's existing transportation system. Further, the project's incorporation of transit-oriented development and support of general transit services and facilities would provide additional methods for movement of people throughout the City. The Proposed Project would therefore be consistent with this guideline.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 21	LUT 21.5	Consider public and personal safety and comfort factors in the design of major transit centers and their connections to the surrounding area, including consideration of crime prevention through environmental design (CPTED) principles and minimizing potential vehicle/pedestrian conflicts.	Yes	The specific design parameters of transit stops, bus shelters, and other areas geared toward transit service would be addressed during the City's design review process. The Proposed Project would therefore be consistent with the project.
LUT 23	LUT 23.1	Encourage the use of bicycles and walking as alternatives to driving.	Yes	The proposed LUP includes an extensive network of bikeways, pedestrian corridors including paseos, docks, promenades, and courtyards to facilitate walking instead of driving. The Proposed Project would therefore be consistent with this policy.
LUT 23	LUT 23.2	Foster the development of a system of interconnecting bicycle routes throughout the City and region.	Yes	The Proposed Project would include an extensive network of bicycle facilities which would provide an important regional connection between the Sweetwater and Otay elements of the Chula Vista Greenbelt system. This would provide for consistency with this policy.
LUT 23	LUT 23.3	Preserve, restore, or provide the opportunity for a cyclist to ride a bicycle to virtually any chosen destination, in order to make the bicycle a viable transportation alternative.	Yes	The combination of the regional bicycle facilities coupled with planned bicycle lanes, bicycle-friendly streetscapes, and bicycle facilities, such as racks and resting places, would encourage bicycle use throughout the Bayfront area. Incorporation of these land use planning elements would provide for consistency with this policy.
LUT 23	LUT 23.4	Link major residential areas with principal trip destinations, such as schools; parks; community centers; and shopping centers.	Yes	The Proposed Project proposes a mixture of land uses including high-density residential in close proximity to shopping, civic/cultural areas, and open spaces. Development of these urban uses in close proximity to each other encourages non-vehicular travel. The Proposed Project would be consistent with this policy.
LUT 23	LUT 23.5	Provide linkages between bicycle facilities that utilize circulation element alignments and open space corridors.	Yes	The LUP provides the site design layout details that show how bicycle lanes within existing City streets would merge into regional trail and bicycle facilities. These non-motorized trail facilities would minimize automobile cross-traffic conflicts. Therefore, the Proposed Project would be consistent with this policy.
LUT 23	LUT 23.6	In addition to using open space corridors, off-street bicycle trails should use flood control and utility easements. The trails shall be designed to minimize interaction with automobile cross traffic.	Yes	The Proposed Project provides a variety of bicycle facilities that are separate from roadway corridors. This would help with bicycle safety and allow the Proposed Project to be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 23	LUT 23.7	Provide bicycle support facilities at all major bicycle usage locations.	Yes	Preliminary designs of the Proposed Project indicate that non-motorized modes of transportation would be encouraged both from a land use planning perspective (placement of buildings) and a specific site design perspective (placement and incorporation of bike racks). The Proposed Project would be consistent with this policy.
LUT 23	LUT 23.8	Provide and maintain a safe and efficient system of sidewalks, trails, and pedestrian crossings.	Yes	The Proposed Project would result in an extensive network of trails, which would be removed from vehicular traffic. Specifically, LUP policy A.PB1 states that no pedestrian or bicycle paths are to be located on the southern or eastern edges of the F & G Street Marsh due to the limited setback area. The Proposed Project would therefore be consistent with this policy.
LUT 23	LUT 23.9	Promote walking by providing short, direct, safe, and pleasant routes between residential areas and transit stations and/or activity centers.	Yes	The LUP provides extensive pedestrian walkways that would provide for efficient connections between residential, commercial/retail, and civic/cultural attractions. This would provide for consistency with this policy.
LUT 23	LUT 23.10	Promote the system of trails envisioned within the Chula Vista Greenbelt.	Yes	The Proposed Project would provide several greenbelt/pedestrian/bicycle facilities which would be interconnected throughout the Bayfront as well as to Otay and Sweetwater components of the Chula Vista Greenbelt System. The Proposed Project would therefore be consistent with this policy.
LUT 23	LUT 23.11	Implement recommendations of the City's Bikeway Master Plan and Greenbelt Master Plan.	Yes	The Proposed Project would help complete the western portion of the City's Greenbelt Master Plan by providing pedestrian and bicycle facility connections to the Otay and Sweetwater portions of the City's Greenbelt system.
LUT 23	LUT 23.12	Provide opportunities for use of personal mobility devices.	Yes	The Proposed Project would provide streets, walkways, and other corridors, which would provide for opportunities to use personal mobility devices such as wheelchairs and other mobility devices.
LUT 23	LUT 23.13	New overpasses and interchanges should be designed to accommodate bicycles and pedestrians.	Yes	New roadway interchanges within the Bayfront area would be reviewed during project specific design to ensure that all pedestrian and bicycle facility design parameters are met to ensure safe passage for non-motorized movement through intersections. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 23	LUT 23.14	Require new development projects to provide internal bikeway systems with connections to the citywide bicycle networks.	Yes	The LUP incorporates an extensive bikeway system along streets, within the public roadway right-of-way, and in separate, bicycle/pedestrian-only paths to connect to the existing Citywide bicycle network. The Proposed Project would therefore be consistent with this policy.
LUT 24	LUT 24.1	<u>Continue to coordinate with regional planning agencies to address regional issues integral to Chula Vista residents' quality of life, and advocate proactively with appropriate bodies regarding key issues.</u>	<u>Yes</u>	<u>The City, Port, SANDAG, MTS, and private land owners including Pacifica have participated in multi-year discussions regarding strategies for implementing plans to address regional issues within the Bayfront area, therefore the Proposed Project is consistent with this policy geared at supporting collaborative regional planning endeavors.</u>
LUT 28	LUT 28.2	Encourage development of projects on larger lots and consolidated lots in order to achieve the objectives of this General Plan and to take advantage of any incentive program.	Yes	The Proposed Project incorporates development on larger lots within the Bayfront area. These larger lots allow a greater diversity of urban uses to be planned in a comprehensive manner. Therefore, the Proposed Project would be consistent with this policy.
LUT 29	LUT 29.1	Clustering in response to site constraints must accomplish one or more of the following: preservation of natural landforms; significant reduction in the amount and extent of grading; response to geologic, soil or other hazards; and/or protection of sensitive biological resources.	Yes	The Proposed Project utilizes clustering for a variety of reasons: preservation of sensitive terrestrial and marine biological resources; preservation of land for establishment of park, civic, and cultural space; and provision of critical residential and office populations to promote transit use and reduce vehicle trips. Because the protection of biological resources is a justifiable reason to cluster development, the Proposed Project would be consistent with this policy.
LUT 29	LUT 29.2	Clustering may be allowed when it aggregates open space with the project for amenity and recreational purposes and/or improves the visual and functional qualities of the project.	Yes	The clustering of development in the LUP will allow for large open space uses in the form of nature preserves, passive and active parks, and civic activity centers. The extensive open space network enhances visual and function qualities of the Proposed Project.
LUT 30	LUT 30.1	Consider limiting parking in appropriate areas to discourage single-occupant vehicle commuting and to reinforce non-auto travel modes, but not so limiting as to adversely affect the viability and vitality of the area.	Yes	The Proposed Project includes an extensive parking plan which consists of parking garages and lots throughout the Bayfront area. Parking quantities are based on a variety of factors: intended land uses, provision of transit services which would decrease parking need, etc. The project would provide an overall surplus of parking based on requirements. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
LUT 30	LUT 30.3	Emphasize the provision of short-term parking (e.g., parking duration limits, time of day, restricted parking zones) over long-term parking in commercial areas.	Yes	The provision of short-term parking management is related to commercial/residential uses. Because the Proposed Project within the City is residential and provides adequate parking on site for the densities proposed, this City policy would not be applicable to the project.
LUT 31	LUT 31.1	Strategically locate parking structures to serve commercial and employment centers, and to provide park-and-ride opportunities for use of express shuttle, trolley service, and other transit.	Yes	A detailed parking analysis was completed as part of the traffic impact study and is provided in Section 9.0 of the Traffic Impact Analysis ( <i>Appendix 4.2-1</i> ). That analysis indicates the parking standards required by the City and the Port and demonstrates that these standards are met.
LUT 32	LUT 32.1	Consider the joint use of parking facilities in mixed-use areas where peak parking occurs at different times of the day or week and the parking facility is within one quarter mile of the uses it will serve.	Yes	Implementation of the "shared parking" concept shall be permitted where it can be demonstrated that the proposed mix of uses have predictable parking demands that do not significantly overlap. Shared parking is allowed by both the City and the Port using methodologies developed by the Urban Land Institute. This approach was used in the parking analysis for the project only for those uses that would be using the shared facility on Parcel H-18.
LUT 33	LUT 33.1	Off-street surface parking areas should be located and designed in a manner that supports and does not conflict with pedestrian activity, such as to the side or rear of buildings, wherever feasible. In pedestrian-oriented areas, locate surface parking lots to the rear or side of buildings, wherever feasible.	Yes	Due to the fact that the Proposed Project has been master planned, parking lots are either located in the back of buildings, away from central pedestrian or street activity corridors or beneath mixed-use buildings, such as the high-density mixed-use units proposed within the City. Parking lot design would be subject to the City's design review process, at which time specific landscape treatments, buffers, and orientations can be finalized in an effort to eliminate pedestrian/vehicle conflicts. The Proposed Project would therefore be consistent with this policy.
LUT 33	LUT 33.2	Establish design guidelines for the siting and creation of parking structures, including the requirement that parking structures adjacent to street frontage have ground floor commercial uses along the frontage and that their facades incorporate design features that enhance the street frontage.	Yes	All projects within the City of Chula Vista would be subject to the City's design review process. This process would be used to determine appropriate building façade treatment to reduce glare and provide as visually appealing a streetscape as possible.
LUT 34	LUT 34.1	Encourage the development of parks and open space, as well as a network of pedestrian walkways for physical activity in all neighborhoods.	Yes	The Proposed Project includes an extensive network of parks and open spaces throughout the Bayfront area. These park and open space resources would be connected through greenbelt and pedestrian walkways, which would help promote physical activity

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
				throughout the entire Bayfront area. The Proposed Project would therefore be consistent with this policy.
LUT 34	LUT 34.2	Provide adequate lighting for streets, parks, recreation facilities, sidewalks, and bike paths to promote their use.	Yes	The Proposed Project would be subject to the City's design review process, at which time lighting standards would be determined. Lighting standards are assumed to be as low intensity as possible to safely illuminate the intended area. Further, a full lighting analysis has been prepared (see <i>Section 4.4</i> ), which outlines the project's potential impacts. This analysis has determined that lighting impacts would be less than significant with mitigation incorporated. The Proposed Project would be consistent with this policy.
LUT 46	LUT 46.3	Promote the development and operation of a circulator system to link and serve the Bayfront Planning Area, the Chula Vista Urban Core Subarea's commercial areas, and the H and E Street trolley stations.	Yes	The project proposes an extensive network of streets, pathways, and pedestrian/bicycle corridors which link the Bayfront Planning Area with the Chula Vista Urban Core and the H and E Street Trolley Stations. Further, the project's proposed transit system would encourage use of all forms of this circulation system, including van pools, transit shuttles, walking, and driving. The project would help the City realize a functional, multimodal circulation system that connects these two central City nodes. The Proposed Project would be consistent with this policy.
LUT ,5	LUT 5.13	Higher-density residential and mixed-use residential/commercial development should be designed to: 1) Create a pleasant walking environment to encourage pedestrian activity; 2) Maximize transit usage; 3) Provide opportunities for residents to conduct routine errands close to their residence; 4) Integrate with surrounding uses to become a part of the neighborhood rather than an isolated project; 5) Use architectural elements or themes from the surrounding neighborhood; and 6) Provide appropriate transition between land use designations to minimize neighbor compatibility conflicts.	Yes	The Proposed Project would result in high-rise residential use near shopping, jobs, and transit. Residential uses are limited from high- to very-high-density multifamily dwelling in clusters of varying size and configuration to provide a range of housing types. Retail uses would be included at the street level to create a village atmosphere and pedestrian-friendly area. All projects within the City of Chula Vista would be subject to the design review process; therefore, incorporation of architectural features which would provide positive visual benefits to the project would be evaluated. The Proposed Project is therefore consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
<b>Public Facilities And Services</b>				
PFS 11	PFS 11.1	During review of land use issues requiring discretionary approval, coordinate with the City of Chula Vista Public Library to provide adequate library facilities that meet the needs generated by development.	No	Prior to the approval of a building permit for any residential project within the City, the applicant shall pay a public facilities development impact fee (PFDIF) or equivalent fee in an amount calculated according to the City's PFDIF program in effect at the time of permit issuance. Payment of funds could be used to construct new facilities, as required, to meet the need resulting from project development. Due to existing library deficiency and inability to demonstrate that fees would fully mitigate, implementation of the measure would not reduce the significant impact to library services to a level below significance.
PFS 11	PFS 11.3	In needed timeframes, assist the Chula Vista Public Library in identifying and acquiring library sites for new construction.	No	See above under PFS 11.1. Even though the existing Chula Vista Library system is not appropriately sized to accommodate the existing population, the Proposed Project would not be consistent with this policy as it is not providing sufficient resources to fully mitigate the project's needs to a level below significance.
PFS 1	PFS 1.2	Plan for adequate systems and facilities to manage the City's wastewater generation, treatment, and disposal.	Yes	An analysis of the Proposed Project's wastewater generation, treatment and disposal needs was prepared during the project planning process. Mitigation measures in the form of fair share contributions or project features including installation of several key sewer system components have been incorporated into the project. This effort would therefore ensure that adequate wastewater facilities are implemented prior to building or facility occupancy. The Proposed Project would therefore be consistent with this policy.
PFS 1	PFS 1.3	Plan and design drainage facilities and upgrade existing facilities, as necessary, to meet current needs, accommodate growth, and satisfy state and federal requirements.	Yes	The Proposed Project would require a variety of stormwater improvements as well as installation of new facilities associated with new urban development planned throughout the Bayfront area. The project includes installation of storm drain systems prior to final site construction. All stormwater systems would be reviewed by the City through the design review process to ensure that facilities are appropriately sized, dissipation mechanisms are adequate and any water quality parameters are incorporated into facility designs. The Proposed Project would therefore be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
PFS 1	PFS 1.4	For new development, require on-site detention of stormwater flows such that, where practical, existing downstream structures will not be overloaded. Slow runoff and maximize on-site infiltration of runoff.	Yes	The Proposed Project would include a variety of stormwater attenuation techniques including vegetated swales and mechanisms to slow down surface water flow across impervious services. Further the stormwater system would be designed to adequately handle projected stormwater flows. The Proposed Project would be consistent with this policy.
PFS 2	PFS 2.2	As part of project construction and design, assure that drainage facilities in new development incorporate stormwater runoff and sediment control, including state-of-the-art technologies, where appropriate.	Yes	An extensive list of site design and source control measures are outlined in Mitigation Measures 4.5-1 through 4.5-5 and would be required at various stages of project development in an attempt to avoid stormwater quality issues. The Proposed Project would therefore be consistent with this policy.
PFS 5	PFS 5.1	Continue to adequately equip and staff the Fire Department to ensure that established service standards for emergency calls are met.	Yes	The Proposed Project would contribute to the citywide fire services through establishment of a fire station within the Bayfront area, design of water delivery facilities so that optimal fire flow can be realized in all critical areas, and construction coordination to ensure adequate fire service during interim construction periods. These elements of the Proposed Project would ensure the project's consistency with this policy.
PFS 5	PFS 5.2	Upgrade fire and emergency medical equipment, as required, to protect the public from hazards and to ensure the safety of firefighters.	Yes	See above PFS 5.1. The Proposed Project would assist in supporting an additional fire station and the costs of equipment and staff to service the Bayfront's fire needs. The Proposed Project would be consistent with this policy.
PFS 5	PFS 5.3	Support the provision of new fire stations, as deemed necessary through the existing or updated Fire Station Master Plan.	Yes	The Proposed Project would involve construction of a new fire station within the Harbor District to allow quick service to the new Bayfront district. This would support this policy.
PFS 5	PFS 5.4	Provide adequate law enforcement staff and equipment pursuant to Police Department strategic plans to meet established service standards.	Yes	A full analysis of the Proposed Project's potential impact to law enforcement services was conducted for the project (see <i>Section 4.13, Public Services</i> ). This analysis determined that significant impacts would not occur, therefore mitigation for law enforcement protection would not be required. This provides for consistency with this policy.



TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
PFS 5	PFS 5.7	Prior to approval of any discretionary projects, ensure that construction is phased with provision of police and fire protection services such that services are provided prior to or concurrent with need.	Yes	The Proposed Project would be required to construct the fire station within the Harbor District prior to Phase I of the project to ensure that this facility is in working order at the beginning of master plan build-out. The Proposed Project would therefore ensure consistency with this policy.
PFS 6	PFS 6.1	Continue to require new development and redevelopment projects to demonstrate adequate access for fire and police vehicles.	Yes	All project plans within the City would be subject to the City's design review procedures, which would require circulation of plans to City fire and police departments to ensure adequate access for police and fire vehicles. This established City process would ensure consistency with this policy.
PFS 6	PFS 6.2	Require new development and redevelopment projects to demonstrate adequate water pressure to new buildings.	Yes	All project plans within the City would be subject to the City's design review procedures, which would require circulation of plans to City fire department personnel to ensure adequate water pressure is provided to new buildings. This established City process would ensure consistency with this policy.
PFS 9	PFS 9.1	Coordinate with local school districts during review of applicable discretionary approval to provide adequate school facilities, to meet needs generated by development, and to avoid overcrowding, in accordance with the guidelines and limitations of Government Code 65996(b).	Yes	The Proposed Project would contribute appropriate fair share fees to offset impacts to Chula Vista Elementary School and Sweetwater High School District fees prior to issuance of a residential building permit. Once these fees are paid, they are "deemed to provide full and complete school facilities mitigation" (Government Code Section 65996(b)). Once the statutory school mitigation fee (sometimes referred to as a "developer fee") is paid, the impact would be deemed mitigated as a matter of law. This mitigation measure (4.13.4-1) would provide for consistency with this policy.
PFS 11	PFS 11.4	Assist the Chula Vista Public Library in identifying sources of funding for the expansion of facilities in western Chula Vista as needed, based on growth.	Yes	The Proposed Project would serve as a source of funding for the Chula Vista Library system. The project would not preclude the City from taking additional action with the library to secure other sources of funding. The Proposed Project would ensure consistency with this policy.
PFS 14	PFS 14.1	Maximize the use of existing parks and recreation facilities through upgrades and additions/changes to programs to meet the needs of the community.	Yes	An extensive network of parks and open space resources are included in the LUP. These park and open space amenities would help meet the needs of the future Bayfront community as well as provide existing Chula Vista residents and visitors enhanced recreational opportunities.
PFS 14	PFS 14.2	Construct new parks and recreation facilities that reflect the interests and needs of the community.	Yes	The Proposed Project would incorporate a variety of park and open space uses, including tot lots, large passive park areas, nature reserves, bicycle paths, and pedestrian promenades to

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
				meet the needs of a diverse Bayfront community consisting of commuters to/from office space, residents, patrons/merchants of the retail/commercial uses, and visitors/employees of the tourist commercial uses. These project features provide for consistency with this policy.
PFS 14	PFS 14.4	Use park dedication, location, site design, and acceptance standards, as provided in the Chula Vista Parks and Recreation Master Plan, the Park Dedication Ordinance, and the Recreation Development Impact Fee (DIF) program, as may be amended from time to time.	Yes	The Proposed Project generally incorporates design guidelines and siting recommendations of these regional planning documents; however, specific park or recreational facilities would need to be reviewed against specific guidelines as individual projects are reviewed via the City's design review process. This existing City design review process would ensure consistency with this policy.
PFS 14	PFS 14.5	Work with proponents of new development projects and redevelopment projects at the earliest stages to ensure that parks, recreation, trails, and open space facilities are designed to meet City standards and are built in a timely manner to meet the needs of residents they will serve.	Yes	The Proposed Project includes a diverse network of park and open space facilities. Design of these facilities will occur as individual projects are brought forward. All park and recreation facilities would be subject to the City's own design review guidelines, at which time consistency with City specifications would occur. Further, timing for the construction of park and recreation facilities are spaced throughout the various project phases to ensure that construction of these amenities keep pace with construction of urban development. These forthcoming procedures would ensure consistency with this policy.
PFS 15	PFS 15.1	Continue to pursue a citywide standard for the provision of developed parkland for new development projects of 3 acres per estimated 1,000 new residents.	Yes	As outlined in <i>Section 4.13</i> , the Proposed Project would provide more than adequate park land to support the 3,000+ anticipated new residents. Therefore, the Proposed Project would be consistent with this policy.
PFS 15	PFS 15.4	Promote the inclusion of park and recreation facilities in or near redevelopment areas to both serve the new development and to contribute to meeting existing park and recreation needs.	Yes	The Proposed Project would result in implementation of new park areas within an existing City of Chula Vista Redevelopment area, therefore allowing for consistency with this policy.
PFS 15	PFS 15.5	Use park dedication, location, site design, and acceptance of dedication standards, as provided in the Chula Vista Parks and Recreation Master Plan, the Park Dedication Ordinance, and the Recreation DIF program, as may be amended from time to time.	Yes	The Proposed Project utilizes a variety of methods to ensure that adequate recreational facilities are planned within the Bayfront Master Plan to support the residential and hotel room park and recreational facility requirements.
PFS 15	PFS 15.7	Work with proponents of new development projects and redevelopment projects at the earliest stages to ensure	Yes	The LUP includes space for proposed park and open space amenities. As specific projects are brought forward for final

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
		that parks, recreation, trails, and open space facilities are designed to meet City standards and are built in a timely manner to meet the needs of residents they will serve.		planning phases, facilities would be subject to the City's design review process, which would allow an opportunity to ensure that all city safety and design standards are incorporated. This established City process would ensure consistency with this policy.
PFS 22	PFS 22.4	Review energy facility requests and encourage siting and design techniques that minimize community impacts. Such techniques may include undergrounding facilities, where possible; co-locating new facilities with existing utility infrastructure; locating facilities in non-residential areas; and implementing architectural details and landscaping that help facilities to blend with the surrounding area. The development and operation of natural-gas-fired plants within the City shall utilize "best available control technology" to the greatest extent practicable.	Yes	Provisions for attractive site design, utility line undergrounding, etc., have been included within the LUP. See above LUT consistency analyses.
PFS 22	PFS 22.5	Maximize future sustainable energy options by pursuing distributed generation and planning energy transmission and transportation options that complement the development of local renewable energy options.	Yes	The Proposed Project would not preclude the City's efforts to encourage sustainability by pursuing options to complement the development of local renewable energy alternatives. It should be noted that a variety of energy conservation elements e.g., achievement of LEED certification, use of low energy utilities, etc.) have been incorporated into the project. The Proposed Project would therefore provide for consistency with this policy.
PFS 23	PFS 23.2	Provide sufficient open space buffering between utility facilities and residential development.	Yes	The existing SDG&E easement that is located along the eastern edge of the Bayfront area has been incorporated into the overall park and open space design. This avoids having residential land uses immediately adjacent to these transmission lines which would help reduce potential noise and visual impacts. The Proposed Project would be consistent with this policy.
PFS 23	PFS 23.3	Ensure adequate area is reserved early in the development process for critical electrical service facilities.	Yes	The Proposed Project has incorporated electrical utility needs into project design, therefore eliminating the need for costly acquisition or site redesign to accommodate electricity. The Proposed Project would be consistent with this policy.

TABLE 4.1-9 (Cont.)

Objective	Policy	Text	Consistent?	Consistency Analysis
PFS 23	PFS 23.4	Ensure that utility facilities safely integrate into the developed landscape.	Yes	All specific projects within the City are subject to the City's extensive design review process, where all project plans are reviewed by several members of the public works department. During these specific project site review efforts, utility setbacks and design parameters can be incorporated. This existing process would ensure consistency with this policy.
PFS 23	PFS 23.5	Appropriate secondary land uses (such as nurseries, RV storage, and useable open space and parks, among others) should be encouraged to locate within overhead transmission facility rights-of-way, when appropriate. Trails can also be included as a secondary land use, pursuant to agreement with SDG&E.	Yes	The Proposed Project incorporates the SDG&E easement along the eastern edge of the Bayfront into the overall site park and open space design concept, therefore providing for consistency with this policy.
PFS 25	PFS 25.1	Plan for adequate systems and facilities to manage the City's solid waste generation, treatment, and disposal.	Yes	The Proposed Project was reviewed for adequate provision of solid waste generation, treatment, and disposal. Several project features are incorporated to ensure adequate timing of waste services. The Proposed Project would not conflict with this policy.

Objective LUT 6, as identified in *Table 4.1-9*, stresses compatibility of adjacent land uses. The plan improves adjacent compatibility by eliminating the intensive development in the Sweetwater District that is currently permitted under the adopted City of Chula Vista General Plan and by reducing land use conflicts between development in this district and the F & G Street Marsh.

e. Local Coastal Program

The Proposed Project includes an amendment to the Chula Vista LCP that was last certified by the CCC on January 15, 1993. The proposed amendment reflects changes to the respective jurisdictional boundaries of the Port and the City. The boundary adjustments shown in the PMP are designed to accommodate a land exchange between the Port and a private land owner as part of the Proposed Project, as well as previous Port land acquisitions that would transfer lands from City to Port jurisdiction.

The LCP amendment includes both an LUP and the implementing ordinance in the form of a Specific Plan. The LCP Amendments for the LUP and Specific Plan are included as appendices to this report (*Appendices 4.1-2 and 4.1-3*). *Figure 4.1-7* shows the zoning and types of land uses allowed within the LCP and Specific Plan boundary as proposed in the amendment. The LUP includes the objectives and policies that are intended to be applied throughout the LCP Planning Area. These Area-wide Objectives and Policies are organized into five elements:

- Land Use and Intensity
- Circulation and Public Access
- Physical Form and Appearance
- Utilities and Area-wide Grading
- Environmental Management.

The Specific Plan is intended to implement the LCP and includes the following elements:

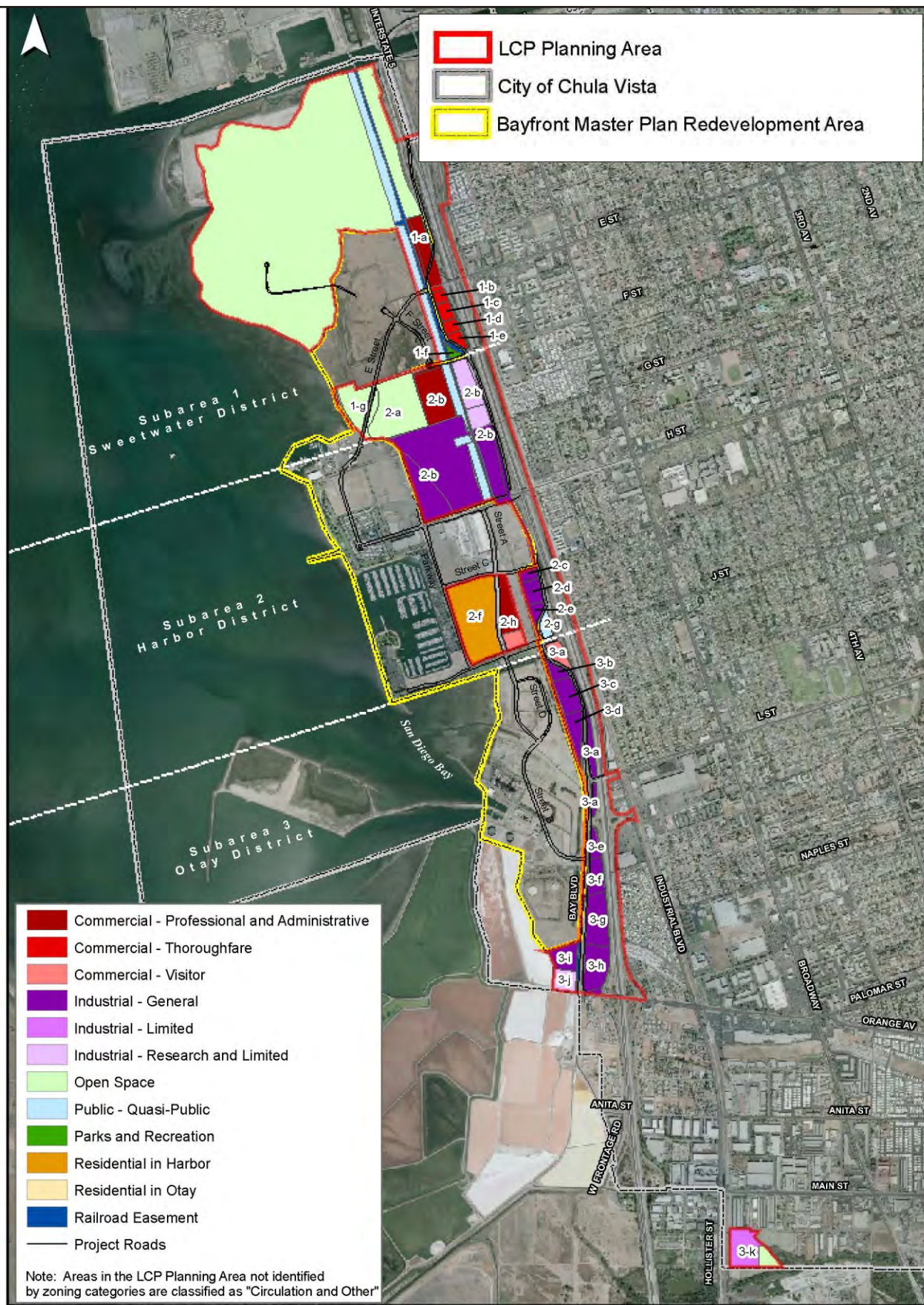
- Purpose and Scope
- General Provisions
- Coastal Development Permit Procedures
- Land Use Classifications
- Development Criteria
- Environmental Management Program
- Infrastructure Financing and Funding Mechanisms.

Chapter 3 of the California Coastal Act provides the standards by which the CCC determines adequacy of LCPs and PMPs. Chapter 3 also sets forth criteria for judging whether a particular project proposed in the Coastal Zone complies with the Act. Section II B of the proposed LUP evaluates the Proposed Project's conformance with the California Coastal Act jurisdictional lands within the City. *Table 4.1-7*, presented above, provides a summary of the Proposed Project's conformance with this section.

Of specific interest are the following project features:

- Sweetwater Marsh NWR: Public access to view the 316-acre wildlife refuge is provided from the intersection of E Street and Bay Boulevard. Public access is strictly controlled. A shuttle conveys visitors from the public parking lot to the Chula Vista Nature Center. The Nature Center is not directly accessible to pedestrians or private cars. The project would relocate parking for visitors of the NWR to Parcel SP-3. A service road would be provided from Parcel SP-3 to the NWR from the end of E Street connecting to ~~the~~ D Street.
- An interpretive nature trail would be constructed a minimum of 200 feet from the NWR, within the 400-foot buffer that borders Parcels S-1, SP-3, and S-2. The footpath would be constructed using decomposed granite and would not be paved. A bike path would also be constructed at least 200 feet from the NWR boundary on Parcel SP-1, closer to future development.
- An interpretive nature trail and bike path would be constructed within the buffer zone located on the western edge of the Otay District extending from south of the industrial business park in Parcel O-1 to Parcel O-4 and adjacent to the RV Park and South Park. The bike path would extend from the northernmost portion of the Sweetwater District, through the Harbor District to the end of the Otay District. Various pullouts and view corridors of the Bay would be accessible from the bike path.
- Coastal access is provided along J Street to the Chula Vista boat launch located at the end of J Street. This would remain a coastal access route. A retail use and a parking lot are proposed on Parcel H-21. Public access to the Bay in the Harbor District would also be provided by a promenade or baywalk. The promenade would be located along the western and southern edges of the Bayside Park (Parcel HP-3). This continuous paved shoreline walkway would offer views of docked boats and provide access to additional parking lots, restaurants, and marine-related retail uses located on the adjacent Parcels, including H-1 and H-8.
- A private shuttle ~~would~~ may provide access for employees from the Parcel H-18 parking facility to Parcel H-3.





SOURCE: P & D Consultants, 2008

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Chula Vista Local Coastal Program Proposed Land Use Plan**

**FIGURE**

**4.1-7**

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- The Specific Plan identifies the potential for a shuttle service that would link various destinations within the western portions of Chula Vista, including the Proposed Project area. Based on a concept proposed to serve the Chula Vista Urban Core and Bayfront, the Green Car Line (also called the West Side Shuttle) would stop frequently along its entire route to provide a fast and convenient link between the high-density redevelopment areas in the Chula Vista Urban Core and Bayfront and the regional light rail Trolley system. The general route of the transit shuttle would be along Third Avenue between F Street and H Street; along F Street between Woodlawn Avenue and Third Avenue, along Woodlawn Avenue between E Street and F Street; along E Street, Marina Parkway, Street C, and Street A within the Bayfront development area; and along H Street between the Bayfront and Third Avenue. The route would operate as a two-way loop with stops in both directions. The Green Car Line is intended to be a feature of the Proposed Project, in conjunction with the Urban Core Specific Plan. However, implementation of the shuttle is unknown at this time, and this feature of the Proposed Project would not occur until operational and funding responsibilities are established.
- A marina and community boating center are proposed at the existing South Bay Boatyard site on Parcel HW-6 and a reconfigured commercial harbor at the location of the current harbor.
- The new South Park is proposed on Parcel OP-1A/OP-1B. This would result in improved coastal access.
- No land use changes are proposed for the LCP area located outside the Proposed Project boundary.

Because the Proposed Project achieves the goals of the current LCP and, since the adoption of the proposed LCP amendment is a proposed action covered by this report, the Proposed Project would be consistent with the LCP if it is adopted.

**2. The Proposed Project would have a significant impact if it conflicts with any applicable habitat conservation plan or natural community conservation plan.**

The City's Subarea Plan and HLIT Ordinance apply only to lands within the City's jurisdiction. These plans establish the criteria for evaluating compliance for those projects not exempt from the habitat plan. In this case, all aspects of the Proposed Project that lie within the City's jurisdiction are not "covered projects."

The Proposed Project will require an amendment to the MSCP Subarea Plan to adjust the boundaries of the plan to correspond to the change in land use jurisdictional boundaries. The amendment will change the designation of Parcels H-13, H-14, H-15, and HP-5 from "Other Agency—Preserve Planning Efforts" to "Development Area" outside of "Covered Projects," and

will change the designation of lands within Parcels S-1, S-2, S-3, SP-1, SP-2 and SP-3 from “Development Area” to “Other Agency—Preserve Planning Efforts.” The proposed amendment must be approved by the City of Chula Vista, USFWS, and CDFG. None of the areas proposed for exchange are designated as Preserve, and as such are not proposed for conservation under the Subarea Plan. Mitigation ratios for affected habitats within the parcels proposed for exchange would not be affected by the proposed exchange or amendment, since the mitigation ratios being applied to the affected resources within these parcels are consistent between the Port and City jurisdictions. Therefore, the biological effect of the proposed land exchange and MSCP Amendment would be less than significant.

As a result of the proposed amendment, development within the future City jurisdiction on Parcels H-13, H-14, H-15, and HP-5 will be subject to a HLIT Permit. Projects within the City of Chula Vista’s jurisdiction are required to comply with the City of Chula Vista’s MSCP Subarea Plan. This includes obtaining a HLIT permit pursuant to the HLIT Ordinance which is the implementing regulatory vehicle for the City of Chula Vista MSCP Subarea Plan. This project is subject to this ordinance because, as stated in Section 5.2.2 Habitat Loss and Incidental Take Ordinance, the Subarea Plan requires issuance of an HLIT permit for “all development within the City’s jurisdiction which is not located within the Development Areas of Covered Projects prior to issuance of any land development permit.”

In order to approve an HLIT Permit, certain findings must be made by the City. *Table 4.1-10* summarizes the project’s conformity to MSCP Development Guidelines and Findings for the HLIT Ordinance. As shown on this table, the project would not conform to the adopted MSCP Subarea Plan unless an HLIT Permit is obtained for the development on Parcels H-13, H-14, H-15, and HP-5 (**Significant Impact 4.1-6**). The project would not impact any narrow endemic species, and impacts to wetlands within the City’s jurisdiction have been avoided to the greatest extent possible and would be mitigated in accordance with the MSCP Subarea Plan. An amendment to the MSCP will be prepared as further described in *Section 4.8, Terrestrial Biological Resources*. Mitigation for potential impacts to natural vegetation would be required in accordance to the MSCP Subarea Plan.

While the development of the parcels within the City’s jurisdiction would have no direct impacts to MSCP preserve lands within the City of Chula Vista, the F & G Street Marsh (an MSCP preserve), is adjacent to the City’s jurisdiction in the Sweetwater District, and there is potential for indirect impacts to occur from lighting, noise, drainage, invasives, and toxic substances. Indirect impacts to preserve lands and refuges would be significant. See *Section 4.8, Terrestrial Biological Resources* for a discussion of adjacency issues.

**TABLE 4.1-10**  
**MSCP Subarea Plan Consistency**

<b>MSCP Development Guidelines (Section 17.35.090)</b>	<b>Analysis</b>	<b>Consistency</b>
Overall development within the Project Area including public facilities and circulation shall be located to minimize impacts to Sensitive Biological Resources in accordance with this chapter of the Chula Vista MSCP Subarea Plan and the MSCP Implementation Guidelines.	The portion of the Harbor District that would fall within the City's jurisdiction is mapped as "Other Agency – Preserve Planning Efforts" and would be amended to the designation "Development Area" in the Subarea Plan. As described in <i>Section 4.8, Terrestrial Biological Resources</i> , and summarized in <i>Table 4.8-3</i> , the Proposed Project components within the City's future jurisdiction would have limited impacts on sensitive biological resources. Mitigation for these impacts has been established in accordance with the ratios in the Subarea Plan. No narrow endemics occur on the project site.	Consistent
Pursuant to Chapter 15.04 of the Chula Vista Municipal Code, no Land Development or Clearing and Grubbing Permit that allows clearing, grubbing, or grading of Natural Vegetation shall be issued on any portion of a Project Area where impacts are proposed to Wetlands or Listed Non-covered Species until all applicable federal and state permits have been issued.	Because the Proposed Project would affect resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the CDFG, the applicant for City entitlements would be required to obtain a 404 permit from the USACE, a 401 permit from the RWQCB, and Section 1600 agreements from the CDFG.	Consistent
Impacts to Wetlands shall be avoided to the maximum extent practicable. Where impacts to Wetlands are not avoided, impacts shall be minimized and mitigated pursuant to Section 17.35.110 of the Municipal Code.	Impacts to wetlands within the City's future jurisdiction have been avoided and minimized to the maximum extent possible through the following measures: (1) Some of the circulation roadways were redesigned to avoid wetland resources, and (2) several bridges have been incorporated into the project design to avoid direct impacts to resources, specifically at the HP-5 drainage ditch. Mitigation, consistent with the MSCP Subarea Plan Wetlands Protection Program, has been proposed for all unavoidable impacts to wetland resources, as discussed in <i>Section 4.8, Terrestrial Biological Resources</i> .	Consistent
No temporary disturbance or storage of material or equipment is permitted in Sensitive Biological Resources unless the disturbance or storage occurs within an area approved by the City for development or unless it can be demonstrated that the disturbance or storage will not cause permanent habitat loss and the land will be revegetated and restored in accordance with the MSCP Implementation Guidelines.	The project does not propose any temporary disturbance or storage of material or equipment in Sensitive Biological Resource areas.	Consistent
Grading during wildlife breeding seasons shall be avoided or modified consistent with the requirements of the Chula Vista MSCP Subarea Plan and in accordance with the MSCP Implementation Guidelines.	To avoid any direct impacts associated with construction activities, mitigation measures are proposed to encourage construction outside of the breeding season (January 15 through July 31). If construction does occur during the breeding season, specific actions would be taken to avoid impacts consistent with the requirements of the Chula Vista MSCP Subarea Plan and in accordance with the MSCP Implementation Guidelines.	Consistent

TABLE 4.1-10 (Cont.)

MSCP Development Guidelines (Section 17.35.090)	Analysis	Consistency
All fuel modification brush management zones required as a result of new development and as required by the City Fire Marshal shall be located outside the Preserve.	The Proposed Project does not require any fuel modification brush management zones to be located within the Preserve.	Consistent
Required HLIT Permit Findings (Section 17.35.080).	A complete analysis and HLIT findings are included in <i>Section 4.8, Terrestrial Biological Resources</i> .	Consistent
The proposed development in the Project Area and associated mitigation are consistent with the Chula Vista MSCP Subarea Plan as adopted on May 13, 2003, and as may be amended from time to time, the MSCP Implementation Guidelines, and the development standards set forth in Section 17.35.100 of the Municipal Code.	<p>Section 5.2.2, Habitat Loss and Incidental Take Ordinance, of the Subarea Plan requires issuance of an HLIT permit for “all development within the City’s jurisdiction which is not located within the Development Areas of Covered Projects prior to issuance of any land development permit.”</p> <p>While portions of the Sweetwater District and Harbor District are mapped as Development Area in the Subarea Plan, the portion of the project area currently within the jurisdiction of the Port is mapped as “Other Agency – Preserve Planning Efforts.” To comply with Section 5.2.2 of the Subarea Plan, however, a HLIT would be required.</p> <p>As described in this section and summarized in <i>Table 4.8-3</i>, the project would impact sensitive biological resources. Mitigation for these impacts has been established in accordance with the ratios in the Subarea Plan. Mitigation measures have been incorporated into the project to compensate for direct and indirect impacts to riparian and natural vegetation communities (e.g., disturbed coastal sage scrub, mulefat/riparian scrub) and special-status bird species (e.g., light-footed clapper rail, western burrowing owl, raptors) in accordance with the MSCP Subarea Plan.</p> <p>As described below, Mitigation Measures 4.8-6 and 4.8-23 ensure implementation of the measures outlined in the City’s MSCP adjacency guidelines and Wetlands Protection Program.</p>	Consistent
The Project Area is physically suitable for the design and siting of the proposed development, and the development results in minimum disturbance to Sensitive Biological Resources except impacts to Natural Vegetation in mapped Development Areas.	<p>Disturbance to sensitive biological resources will occur as detailed in <i>Table 4.8-3</i>. The sensitive biological resources that would be affected by the Proposed Project include upland vegetation communities and wetland vegetation communities, as defined in the MSCP Subarea Plan Wetlands Protection Program. With the land exchange, Parcels H13, H14, H15, and HP5 will be transferred to the jurisdiction of the City. They are currently mapped in the MSCP Subarea Plan as “Other Agency – Preserve Planning Efforts,” and the Proposed Project does not change that designation. Development on those parcels would impact non-native grassland and wetland vegetation communities.</p> <p>For unavoidable impacts to these resources, mitigation has been proposed (See <i>Section 4.8, Terrestrial Biological Resources</i>).</p> <p>There is the potential for impacts to nesting raptors, including the western burrowing owl, within the City’s jurisdiction. Mitigation Measures 4.8-1 and 4.8-2 would avoid or minimize this impact through pre-construction surveys and establishment of avoidance buffers around active nests until the young are independent of the nest. No narrow endemics occur on the project site.</p>	Consistent

TABLE 4.1-10 (Cont.)

MSCP Development Guidelines (Section 17.35.090)	Analysis	Consistency
The nature and extent of mitigation required as a condition of the permit is reasonably related to and calculated to alleviate negative impacts created in the Project Area.	Appropriate mitigation measures, consistent with the MSCP, have been proposed and will be implemented for this project and are provided herein for impacts within the City's jurisdiction.	Consistent
Narrow Endemic Findings.	Not applicable for this project. No narrow endemics will be impacted.	N/A
Prior to the issuance of a Land Development Permit or Clearing and Grubbing Permit, the project proponent will be required to obtain any applicable state and federal permits, with copies provided to the Director of Planning and Building or his/her designee.	A wetland delineation has been conducted and the results are provided herein. Further consultation with CDFG, USACE, RWQCB, and CCC is necessary to verify the extent of jurisdiction for each agency. Upon this determination, the necessary permits will need to be obtained from the agencies and copies provided to the City prior to grading in order to address this finding.	Consistent
Impacts to wetlands have been avoided and/or minimized to the maximum extent practicable, consistent with the City of Chula Vista MSCP Subarea Plan Section 5.2.4.	The Proposed Project was redesigned to avoid impacts to the coastal brackish marsh on Parcel HP-5 in the Harbor District. Development on H-13 and H-14 includes a bridge over the marsh on HP-5 to avoid direct impacts to this resource.	Consistent
Unavoidable impacts to wetlands have been mitigated pursuant to Section 17.35.110.	For unavoidable impacts to these resources, mitigation has been proposed that includes the establishment and restoration of the ecological buffers. Mitigation Measures 4.8-10 and 4.8-23 require the mitigation of impacts to wetlands at the ratios established in the MSCP Subarea Plan.	Consistent

**3. The Proposed Project would have a significant impact if it creates a substantial land/water use incompatibility with adjacent or nearby existing and proposed land uses, resulting in significant incompatibility or nuisance impacts.**

**a. Project Level**

The development of the Proposed Project would place non-industrial uses adjacent to the Goodrich facility; however, no land use conflicts are expected. The proposed residential uses in the Harbor District (Parcels H-13 and H-14) are approximately 1,265 feet away from this facility and separated from it by a resort hotel and cultural/retail use located on H-23 later in Phase I. There are currently recreational and commercial uses near the Goodrich facility that are operating in a compatible manner and, while there is the potential for limited nuisance effects, such as noise (see *Section 4.7, Noise*), to result from activities at the Goodrich facility, the Proposed Project does not represent a substantial land use incompatibility.

Although the Proposed Project will not result in a significant land use incompatibility or related nuisance effects with respect to the Goodrich facility, the Port and the City have agreed to implement certain measures to address Goodrich's concerns regarding the potential effects of residential development on Parcels H-13 and H-14 on Goodrich's ongoing and future operations. (see *Section 2.1.1.3(b)* of the Final EIR). These measures are set forth in the Goodrich Agreement, which is described in the *Preface* to the FEIR and incorporated by reference in the Final EIR. The Goodrich Agreement provides specific measures for the disclosure of information regarding Goodrich's operations to future occupants of the residential project proposed on Parcels H-13 and H-14, for the minimum distance between residential development and the northern boundary of the Goodrich property, development conditions for the residential parcels relating to foundation systems, grading requirements, development sequencing, vapor intrusion requirements, and interior noise levels, and for fencing, landscaping, screening and buffer areas where appropriate. Because the distance of the proposed residential development from the Goodrich facility and the development of other buildings between the proposed residential development and the Goodrich facility would avoid or reduce any potential land use incompatibility and related nuisance effects below a level of significance, the additional measures in the Goodrich Agreement provide further assurance that the Proposed Project will not result in a significant land use incompatibility or related nuisance effects.

**b. Program Level**

The Proposed Project also improves compatibility of developed land uses with the wildlife refuge. It provides 400-foot buffers and setbacks for the Sweetwater District and eliminates the more intensive development from this district, placing the more urbanized uses in the Harbor District, where such uses already exist. In addition, the Proposed Project increases the size of the Bayside Park by setting the hotel back on Parcel H-3 to protect wetlands north of the Harbor

District. It also places intense development in the Harbor District away from (1) the refuge north of and within the Sweetwater District, and (2) important resources within the SDBNWR to the south of the project site.

The Proposed Project calls for demolition and relocation of the existing switchyard (subject to the exclusive jurisdiction and proceedings of the California Energy Commission (CEC)). The SBPP is currently under a must-run status, and demolition or relocation is not proposed at this time. The Independent System Operator (ISO) must determine any adjustments on the Reliability Must-Run (RMR) status and is outside the realm of the jurisdiction of the Port. Furthermore, no residential units would be constructed in the Otay District.

**4. The Proposed Project would have a significant impact if it is inconsistent with or conflicts with an adopted PMP water use designation where substantial indirect or secondary environmental impacts would occur.**

**a. Project Level**

No water use changes are expected to occur in Phase I of the Proposed Project and, therefore, there are no identified significant impacts.

The Proposed Project follows these priorities in establishing land uses within the Bayfront area. Proposed water-dependent uses include the two marinas on HW-1 and HW-4 and development of the community boating center. The Sweetwater Marsh NWR also constitutes a critical water-dependent use. By providing the 400-foot buffer/setback and placing the most intensive development on the Harbor District (such as development on H-3 ~~(Gaylord)~~ later in Phase I, the project assures the continued viability of the Sweetwater Marsh NWR.

**b. Program Level**

The PMP establishes three categories for site planning relative to water uses. In order of priority, these are (1) water-dependent uses, (2) water-linked uses, and (3) waterfront enhancing uses.

Water-dependent uses are those that require waterside sites and direct access to water in order to function. These include boat and ship building and repair, marinas, marine terminals, fishing piers, and berthing and tending areas. Also included are conservation activities that require wildlife habitat, wetlands, and shallow water to maintain the ecosystem.

Water-linked uses do not require a waterside site but must be located close to water to capitalize on the benefits derived. Uses of this type include such things as boat sales, fish markets, and marine hardware sales.

Waterfront enhancing uses do not require waterfront sites, but can lend enhancement to the waterfront. These uses include restaurants, hotels, and public recreation areas.

Water-linked uses include the public parks, commercial activities, and cultural uses located in the Sweetwater and Harbor Districts. Parks include Bayside Park, Bayfront Park, Sweetwater Signature Park, the park near Bay Boulevard, Marina View Park, and South Park. While these parks are not water dependent, they provide increased coastal access to the public. In addition, water-linked commercial uses are planned for Parcels H-9 and H-21.

The project proposes construction of a recreational pier north of the existing Chula Vista Marina at H Street. Half of this pier would be built during Phase II, and half would be built during Phase IV. As discussed in *Section 4.9, Marine Biological Resources*, in this report, construction of the pier would create impacts from the driving of piles for pier support into shallow subtidal benthic habitat where eelgrass is known to occur. While this is a significant impact to eelgrass, it is not inconsistent with the adopted PMP because the plan does not prohibit impacts to eelgrass.

The existing Chula Vista Harbor would be reconfigured during Phase IV to facilitate the creation of a new active commercial harbor on Parcels HW-1, HW-2, HW-3, and HW-4. The entire harbor area currently consists of approximately 51 acres, of which 45 acres are open water.

The existing number of boat slips at the Chula Vista Harbor would decrease from approximately 900 slips to approximately 700 slips. However, the additional 200 slips would be relocated to the existing South Bay Boatyard site as described below. Approximately 200 slips would be provided on Parcel HW-4, and approximately 500 slips would be provided over Parcel HW-1. A ferry dock/pier, approximately 1 acre in size (identified as Parcel H-12), is proposed along the harbor wall on Parcel HW-3. Approximately 14,407 square feet of existing riprap would be removed from the edge of Parcel HW-3 and replaced with approximately 544 square feet of bulkhead.

The existing South Bay Boatyard boat basin, located north of the Chula Vista Marina, would be converted into a 200-slip marina during Phase IV. The existing harbor boundaries would remain as they are; this area would be dredged to accommodate the slips. Although a temporary loss of subtidal benthic habitat would occur, this impact would be less than significant due to the rapid recolonization of the benthic community in the new area following dredging. No permanent loss of this habitat would result. Therefore, this impact is not significant.

Increasing the number of boat slips at the existing South Bay Boatyard (Parcel HW-6) to 200 would result in the loss of just under 1 acre of moderately deep open-water habitat. This would constitute a loss of surface-water foraging habitat for some birds, such as terns and pelicans, but would increase foraging opportunities for other species, such as black-crowned night herons (MBC 2005a). This impact is discussed in *Section 4.8, Terrestrial Biological Resources*, of this



report. While this is a significant biological impact, it is not inconsistent with the adopted PMP because the Port does not have a policy against the loss of open-water habitat. *Section 4.9, Marine Biological Resources*, discusses the impacts associated with dredging required for the various harbor modifications.

Because the Proposed Project (which includes a PMP amendment) would be consistent with the objectives outlined in the PMP for uses on and adjacent to water, there would not be a significant impact (see *Table 4.1-7*, above).

#### 4.1.4 Mitigation Measures

##### Mitigation Measure 4.1-1

The following mitigation measure shall be implemented to avoid **Significant Impact 4.1-1** (impacts resulting from development of a CCC jurisdictional wetland on Parcels HP-7 and HP-13B during Phase II within the Port's jurisdiction).

**Port:** Prior to the issuance of the first grading permit for activities that could impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall consult with the CCC to determine whether the proposed impact is allowed under the California Coastal Act. If the impact is not allowed, then a design shall be developed that avoids impacts to CCC jurisdictional wetlands. In the event that the CCC concurs that the impact to CCC jurisdictional wetlands is allowed, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands to provide 2:1 mitigation for the impact to CCC wetlands on Parcels HP-13B and HP-7. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, shall detail the target functions and values, and shall address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, and monitoring and maintenance practices and shall establish performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum 5-year maintenance and monitoring period would be implemented following installation, to ensure each area is successful. The restoration plan shall address monitoring requirements and shall specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report, and remediation will occur within 3 months or the start of the growing season. The Port shall be

responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.

### Mitigation Measure 4.1-2

The following mitigation measure shall be implemented to avoid **Significant Impacts 4.1-2 and 4.1-3** (the direct impact to the CCC jurisdictional wetlands within the Port's jurisdiction):

**Port:** The Port or Port tenants, as appropriate, will need to mitigate impacts to the areas identified as seasonal pond, mapped as a CCC wetland at a 2:1 ratio.

The Port or Port tenants, as appropriate, shall confer with the CCC in order to determine whether drainages mapped as a potential CCC wetland fall under CCC jurisdiction. If this area is not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the final development design must mitigate impacts at a 2:1 ratio.

Prior to the issuance of the first grading permit for projects that could impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall consult with the CCC to determine whether the proposed impact is allowed under the California Coastal Act. If the impact is not allowed, then a design shall be developed that avoids impacts to CCC jurisdictional wetlands. In the event that the CCC concurs that the impact to CCC jurisdictional wetlands is allowed, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, shall detail the target functions and values, and shall address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, and monitoring and maintenance practices and shall establish performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum 5-year maintenance and monitoring period would be implemented following installation, to ensure each area is successful. The restoration plan shall address monitoring requirements and shall specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within 3 months or the start of the growing season. The Port shall be

responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.

### Mitigation Measure 4.1-3

The following mitigation measure shall be implemented in Phase I of the Proposed Project to reduce **Significant Impact 4.1-5** (associated with the inconsistency with the General Plan related to inadequate library facilities) but, due to existing deficiency in library service in the City, the impact would remain significant.

**City:** Prior to the approval of a building permit for any residential project, the applicant shall pay a PFDIF or equivalent fee in an amount calculated according to the City's PFDIF program in effect at the time of permit issuance.

### Mitigation Measure 4.1-4

The following mitigation measure shall be implemented to reduce **Significant Impact 4.1-6** (impacts resulting from the Proposed Project's conflict with the City of Chula Vista MSCP) to below a level of significance:

**City:** Prior to issuance of any permit for clearing, grubbing, or grading, the project applicant shall be required to obtain an HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protection under the City's MSCP Subarea Plan.

### 4.1.5 Significance of Impacts After Mitigation

Implementation of the project features and Mitigation Measures 4.1-1, 4.1-2, and 4.1-5 would reduce significant land use impacts (**Significant Impacts 4.1-1** through **4.1-3** and **4.1-6**) to below a level of significance.

**Significant Impacts 4.1-4** and **4.1-5** remain significant after mitigation. Impacts to view quality resulting from a change in scale and character and substantial view blockage associated with the Pacifica Residential and Retail Project (**Significant Impact 4.1-4**) would not be reduced to below a level of significance. No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce the impacts to view quality associated with the Pacifica Residential and Retail Project. See *Section 4.4, Aesthetics/Visual Quality* and *Chapter 5, Alternatives*, for further discussion. Due to existing library deficiency and inability to demonstrate that fees would fully mitigate, implementation of Mitigation Measure 4.1-4 would not reduce **Significant Impact 4.1-5** to below a level of significance.

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## 4.2 Traffic and Circulation

This section analyzes the potential impacts of the Chula Vista Bayfront Master Plan (Proposed Project) on traffic and circulation in the project area.

The analysis in this section is based on the following technical study prepared for the Proposed Project:

- Chula Vista Bayfront Master Plan Traffic Impact Analysis (CVBMP TIA) (March 2008), prepared by Kimley-Horn and Associates, Inc. (*Appendix 4.2-1*)
- Technical Memorandum—Traffic, Chula Vista Bayfront Master Plan, Pacifica Development (October 2007), prepared by Kimley-Horn and Associates, Inc. (*Appendix 4.2-2*)
- Technical Memorandum—Traffic, Chula Vista Bayfront Master Plan, Gaylord (October 2007), prepared by Kimley-Horn and Associates, Inc. (*Appendix 4.2-3*)
- Memorandum—Analysis of Intersections with Significant Chula Vista Bayfront Traffic (April 2008), prepared by Kimley-Horn and Associates, Inc. (*Appendix 4.2-4*).

Appendix 4.2-3 was prepared for the RCC proposed by Gaylord on Parcel H-3. Gaylord has withdrawn its proposal to develop Parcel H-3 and is no longer a participant in the project. The technical study provided in Appendix 4.2-3 is still relied upon for the program-level analysis of the proposed RCC on Parcel H-3; therefore, it remains relevant to this section's analysis and is included as an appendix.

### 4.2.1 Methodology

The scope of the traffic impact analysis was determined through collaboration with Port of San Diego and City of Chula Vista Engineering staff. The study area for the Proposed Project is bound by E Street to the north, the Interstate 5 (I-5) ramps immediately south of L Street to the south, Marina Parkway to the west, and Third Avenue to the east. The study area limits were defined using modeled traffic volumes and modeled traffic distributions from the areas (traffic analysis zones) incorporating the Chula Vista Bayfront project. In addition, the traffic analysis results of the recently completed Chula Vista General Plan and Chula Vista Urban Core Specific Plan were considered. Based on these collaborations and documents, the study area shown in *Figure 4.2-1a* was defined. Through the course of preparing the traffic impact study, various refinements to land uses, intensity of use, and geographical location of use within the project created a slightly different traffic assignment than was anticipated when the study was scoped. The resulting project traffic assignment at project buildout was not substantial, as defined by Congestion Management Plan Traffic Impact Study guidelines, at any intersections forecast to operate at an unacceptable level of service (LOS) by the Urban Core Specific Plan Traffic Impact Analysis. The land use program for the area encompassed by the Bayfront Master Plan was more intense and generated more trips as analyzed in the Urban Core Specific Plan Traffic

Impact analysis than is currently proposed in the Master Plan. Therefore, this comparison is conservative and with the proposed project, intersections would operate at a LOS equal to or better than as shown in the Urban Core Specific Plan. Thus, the study area was not expended to include these additional intersections primarily located east of I-5.

The City of Chula Vista's traffic study guidelines require that all Congestion Management Plan arterial segments, including Reasonably Significant Arterials, carrying 800 or more daily trips or 50 or more directional peak-hour trips, be analyzed. The Proposed Project is forecasted to generate 79,317 daily trips including 5,251 in the a.m. peak hour and 7,324 in the p.m. peak hour. Applying these trips to Chula Vista intersections based on the distribution determined for the select zone analysis yielded a total of eight intersections that are not analyzed in the CVBMP TIA, but handle a minimum of 50 peak-hour directional Proposed Project trips, in either the a.m. or p.m. peak hour. These intersections are identified in *Figure 4.2-1b*. The Urban Core Specific Plan TIA assumed implementation of land uses in the Chula Vista General Plan Update for the Proposed Project area. These land uses were forecast to generate 152,654 daily trips. It is forecasted that the Proposed Project would generate just over half as many trips, at 79,317 daily trips. Therefore, the volumes analyzed in the Urban Core Specific Plan TIA were higher than would be anticipated with the Proposed Project and are conservative. As a result, the intersection LOS calculated by the study represents conditions that are worse than would be forecast with the Proposed Project. Thus, if an intersection was shown to be operating at an acceptable LOS in the Urban Core Specific Plan TIA, it would also operate at an acceptable LOS with the Proposed Project.

The methodology was used for calculating traffic volumes (including project-related and non-project related traffic), and project traffic associated with all phases of development is discussed below.

#### **4.2.1.1 Traffic Volumes**

Future traffic volumes were determined by using traffic volumes from the City of Chula Vista's General Plan Update (GPU). The General Plan Update used a number of year 2030 travel demand forecasts to help evaluate land use and transportation scenarios. Of those scenarios discussed in the GPU, Alternative 54 was used for the Proposed Project. This scenario assumed land uses consistent with the GPU and the City's Urban Core Specific Plan. In addition, this scenario assumed the proper transit and highway assumptions for the area. The scenario would result in impacts along roadway segments which would require mitigation for operations to be restored to acceptable levels. These improvements would change roadway classifications in the Chula Vista General Plan Circulation Element in the vicinity of the proposed project. *Figure 4.2-1c* shows the proposed project impact on the General Plan Circulation Element.



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Study Intersections

**FIGURE**  
**4.2-17**

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4/5

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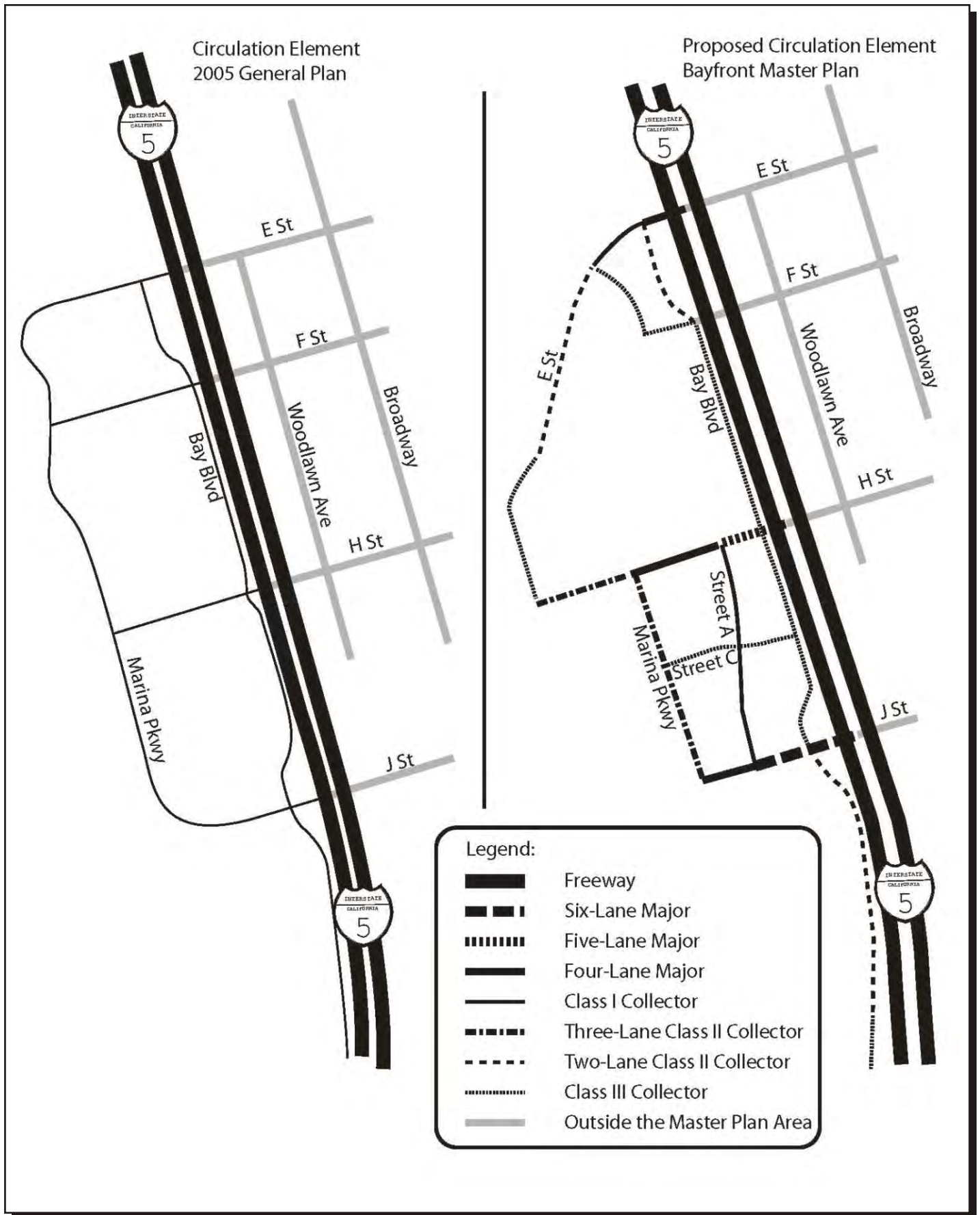


SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Intersection with Significant Bayfront Traffic**

**FIGURE**  
**4.2-15**

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SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Impact to Circulation Element with Proposed Project**

**FIGURE**

**4.2-10**

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This model was used to determine project traffic distribution patterns and “background” traffic volumes. Background traffic is considered non-project related traffic. The background traffic was determined by subtracting traffic associated with General Plan land uses attributed to the project area, from the General Plan model. Then, for each street and intersection within the study area, a growth rate was calculated to account for future traffic increases. This growth in traffic is considered to be background traffic and is shown in Figure 2-2 of the Traffic Impact Analysis (see *Appendix 4.2-1*).

In order to determine the traffic generation for the Proposed Project, trip generation rates, published by SANDAG in its *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002, were applied to the land uses identified for each land use and transportation scenario identified in the City of Chula Vista’s GPU. Trip generation was estimated for the A.M. and P.M. peak hour and daily traffic. Each scenario consisted of a range of intensities for the different type of land uses assumed and the highest end of the range was chosen to estimate the project traffic. Therefore, the analysis for the Proposed Project represents the worst-case scenario because the project would be considered to develop the maximum intensity of each proposed land use.

#### **4.2.1.2 Project Traffic**

The Proposed Project will be developed in four phases. Traffic counts for the Proposed Project were gathered in 2005 and are considered existing baseline conditions. Traffic volumes for all phases were calculated as described below.

Phase I traffic volumes are calculated by increasing the existing traffic volumes gathered in 2005 by annual growth over 7 years, which is the difference between year 2012 (Phase I) and year 2005 (Existing). Phase I Baseline traffic volumes are calculated as the increase in traffic volumes resulting from 7 years of growth between 2005 and 2012 (as projected in the Chula Vista GPU) added to the existing baseline conditions. Phase I Plus Project volumes are calculated by adding the Phase I project trips (generated by proposed land uses) to the Phase I Baseline volumes and subtracting the trip credits associated with existing land uses to be redeveloped as part of Phase I (RV Park).

Phase II baseline traffic volumes are the same as Phase I Plus Project volumes. Phase II Plus Project volumes are calculated by adding the Phase II project trips to the Phase II Baseline volumes.

Phase III traffic volumes are calculated by increasing the existing traffic volumes by annual growth over 12 years, which is the difference between year 2017 (Phase III) and year 2005 (Existing), and adding the Phases I and II project trips. This sum becomes the baseline condition for Phase III. Phase III Plus Project volumes are calculated by adding the Phase III project trips to the Phase III Baseline volumes.

Phase IV traffic volumes are calculated by increasing the existing traffic volumes by an annual growth over 25 years, which is the difference between year 2030 (Phase IV) and year 2005 (Existing), and adding the Phases I, II, and III project trips. This sum becomes the baseline condition for Phase IV. Phase IV Plus Project volumes are calculated by adding the Phase IV project trips to the Phase IV Baseline volumes.

## **4.2.2 Existing Conditions**

### **4.2.2.1 Level of Service Criteria**

The following section outlines the LOS criteria applied to roadway segments, signalized and unsignalized intersections, and freeway segments located in the Proposed Project area. The methodology used to calculate roadway segment LOS is also provided below. Additionally, the section includes a discussion concerning significance determination for roadway segments and freeway segments utilizing LOS.

Existing conditions represent the traffic conditions of the existing street network, including roadway segments, key intersections, and freeway segments. I-5 and I-805 provide regional access to the City of Chula Vista. I-5, as well as several east–west connector streets, including E, F, H, and J Streets, provides access to the Chula Vista Bayfront area. State Route 54 (SR-54) provides access from the east immediately north of the Bayfront area. E, F, H, and J Streets provide an east–west transport connection to the greater urban core of Chula Vista. Connections via E, H, and Palomar Streets are highlighted as primary east–west corridors to Chula Vista. The street network in this area of Chula Vista is set up in a grid system, with “streets” typically running east–west and “avenues” typically running north–south.

#### **a. Roadway Segments**

The ability of roadway segments to accommodate traffic is evaluated using a performance LOS rating, which provides a qualitative description based on certain quantitative calculations. As a measure of the relative ease or difficulty of traffic movement at designated points along a street, LOS relates to delay in traffic flow, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. There are six defined levels of service, A through F, which describe conditions ranging from “ideal” to “worst.”

In order to determine the LOS for a roadway segment on a daily basis, the average daily traffic (ADT) volume is compared to the maximum capacity for each type of roadway (e.g., arterial, collector) in the City. The roadway segment capacities of Circulation Element roadways (Class I Collectors and above) were evaluated under existing and proposed conditions using LOS thresholds published by the City of Chula Vista’s adopted General Plan. Within the proposed project area, additional Class II and Class III Collector roadways were evaluated. Volume-to-

Capacity (v/c) ratios were calculated for each roadway segment. It should be noted that the capacity of a roadway is equal to the maximum LOS E pursuant to the Chula Vista General Plan (2005). *Table 4.2-1* summarizes the capacities and LOS for each Circulation Element and Urban Core Circulation Element roadway.

**TABLE 4.2-1**  
**Roadway Segment Capacity and Level of Service**

Facility		Acceptable LOS	Level of Service (LOS)				
Class <sup>a</sup>	Lanes		A (.6)	B (.7)	C (.8)	D (.9)	E (1.0)
Circulation Element Roadways							
Expressway	7/8	C	52,500	61,300	70,000	78,800	87,500
Prime	6	C	37,500	43,800	50,000	56,300	62,500
Major Street	6	C	30,000	35,000	40,000	45,000	50,000
	5	C	26,250	30,650	35,000	39,400	43,750
	4	C	22,500	26,300	30,000	33,800	37,500
Class I Collector	4	C	16,500	19,300	22,000	24,800	27,500
Class II Collector	2	C	9,000	10,500	12,000	13,500	15,000
Class III Collector	2	C	5,600	6,600	7,500	8,400	9,400
Urban Core Circulation Element Roadways							
Gateway Street	6	D	40,800	47,600	54,400	61,200	68,000
	4	D	28,800	33,600	38,400	43,200	48,000
Urban Arterial	4	D	25,200	29,400	33,600	37,800	42,000
Commercial Blvd.	4	D	22,500	26,250	30,000	33,750	37,500
Downtown Promenade	4	D	22,500	26,250	30,000	33,750	37,500
	2	D	9,600	11,200	12,800	14,400	16,000

Note: Shaded cells correspond to the acceptable traffic volumes for each roadway.

<sup>a</sup> The adopted Circulation Element roadways are considered to be Class I Collector Streets and above, and the Urban Core Circulation Element roadways are considered to be six-lane Gateway Streets and below.

Street classifications, discussed in more detail below and identified for specific roadway segments in the study area as shown in *Figure 4.2-2*, are based on standards provided in the 2005 Chula Vista General Plan.

To determine LOS, traffic counts were conducted during peak commute periods. Existing A.M. (7:00 A.M. to 9:00 A.M.) and P.M. (4:00 P.M. to 6:00 P.M.) peak-hour turning movement counts were conducted by Southland Car Counters, Turning Point Traffic Service, and Traffic Data Service Southwest. These intersection counts were taken during several different times of the day in 2004 and 2005. Traffic volumes along segments of F Street, J Street, and Bay Boulevard were collected by Field Data Services in 2006. The remaining roadway segment traffic volumes were provided by the City of Chula Vista and Traffic Data Services Southwest (which collected data on two segments of Broadway). In addition, Kimley-Horn and Associates, Inc. conducted supplemental roadway counts for older count locations. Existing freeway volumes (2004) were

provided by the California Department of Transportation (Caltrans). For roadways east of the freeway, the Traffic Impact Analysis focuses on east-west roadways where they intersect with key north-south roadways and Broadway.

**b. Signalized and Unsignalized Intersections**

LOS for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, LOS criteria are stated in terms of the average control delay per vehicle for the peak 15-minute period within the hour analyzed. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay. LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. The existing intersection geometrics for intersections in the Proposed Project area is shown on *Figures 4.2-3a through 4.2-3d*.

The level of service criteria for intersections is summarized in *Table 4.2-2*.

**TABLE 4.2-2**  
**Level of Service Criteria for Signalized Intersections**

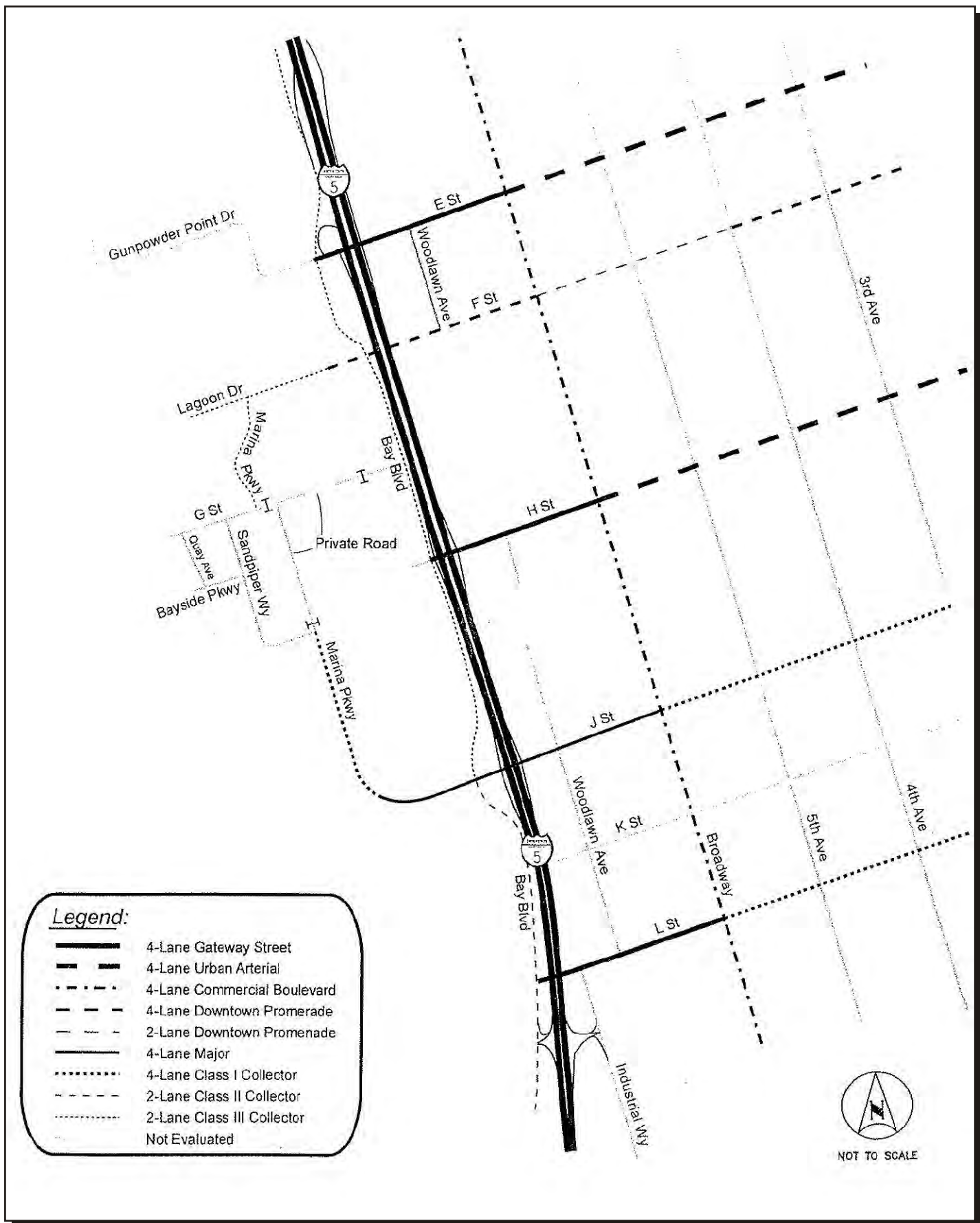
LOS	Signalized <sup>1</sup> Control delay (sec/veh)	Unsignalized <sup>2</sup> Control delay (sec/veh)	Description
A	≤10.0	≤10.0	Operations with very low delay and most vehicles do not stop.
B	<10.0 and <20.0	<10.0 and <15.0	Operations with good progression but with some restricted movement.
C	>20.0 and <35.0	>15.0 and <25.0	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35.0 and <55.0	>25.0 and <35.0	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55.0 and <80.0	>35.0 and <50.0	Operations where there is significant delay, extensive queuing, and poor progression.
F	<80.0	<50.0	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

<sup>1</sup> 2000 Transportation Research Board's Highway Capacity Manual, Chapter 16, Page 2, Exhibit 16-2.

<sup>2</sup> 2000 Transportation Research Board's Highway Capacity Manual, Chapter 17, Page 2, Exhibit 17-2.

Within the City of Chula Vista, the acceptable LOS for intersections is LOS D (see subsection 4.2.3, *Impact Significance Criteria*).





SOURCE: Kimley-Horn and Associates, Inc.

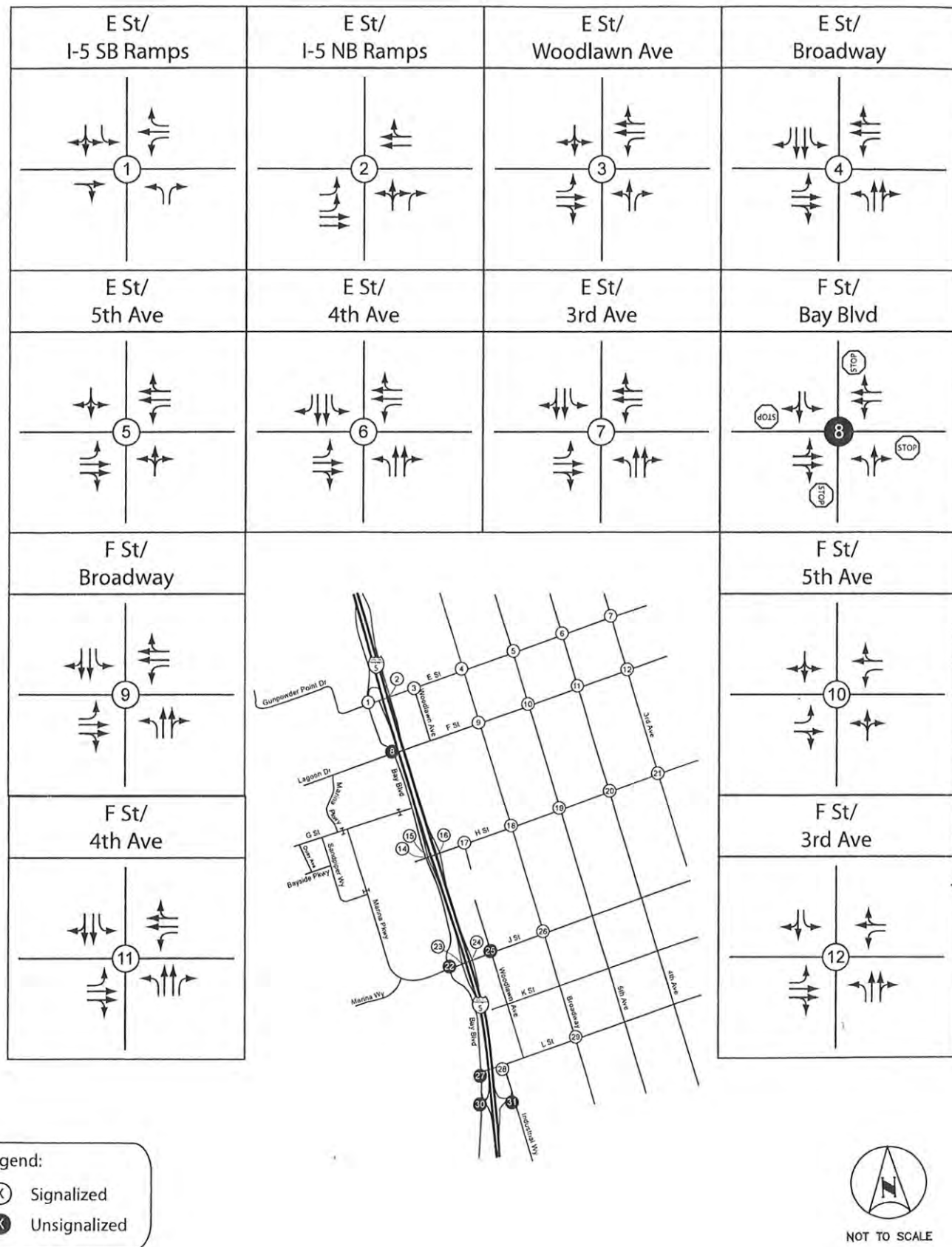
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Existing Roadway Geometrics**

**FIGURE**

**4.2-2**

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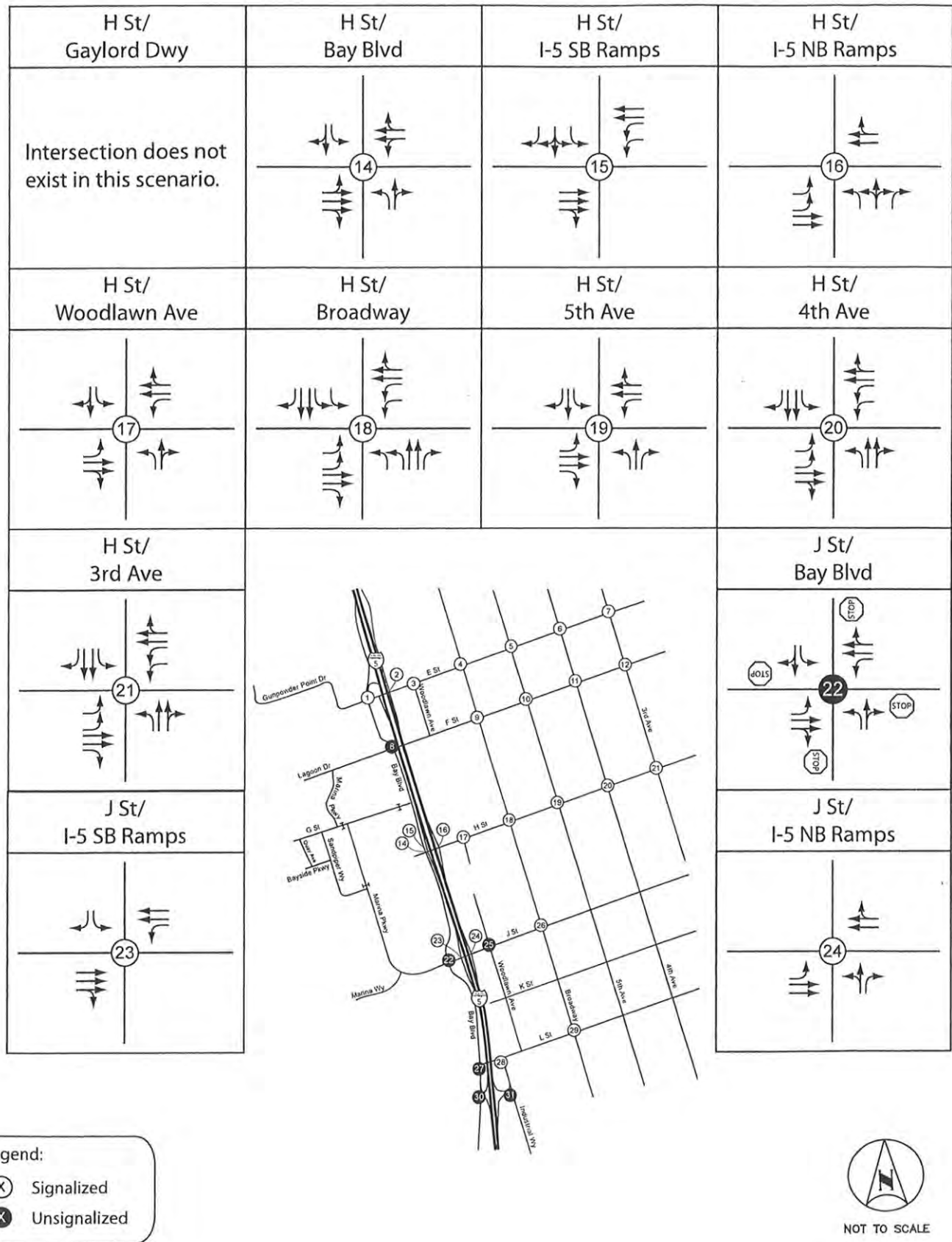
SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Existing Intersection Geometrics (1 of 4)**

**FIGURE**  
**4.2-39**

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467

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SOURCE: Kimley-Horn and Associates, Inc.

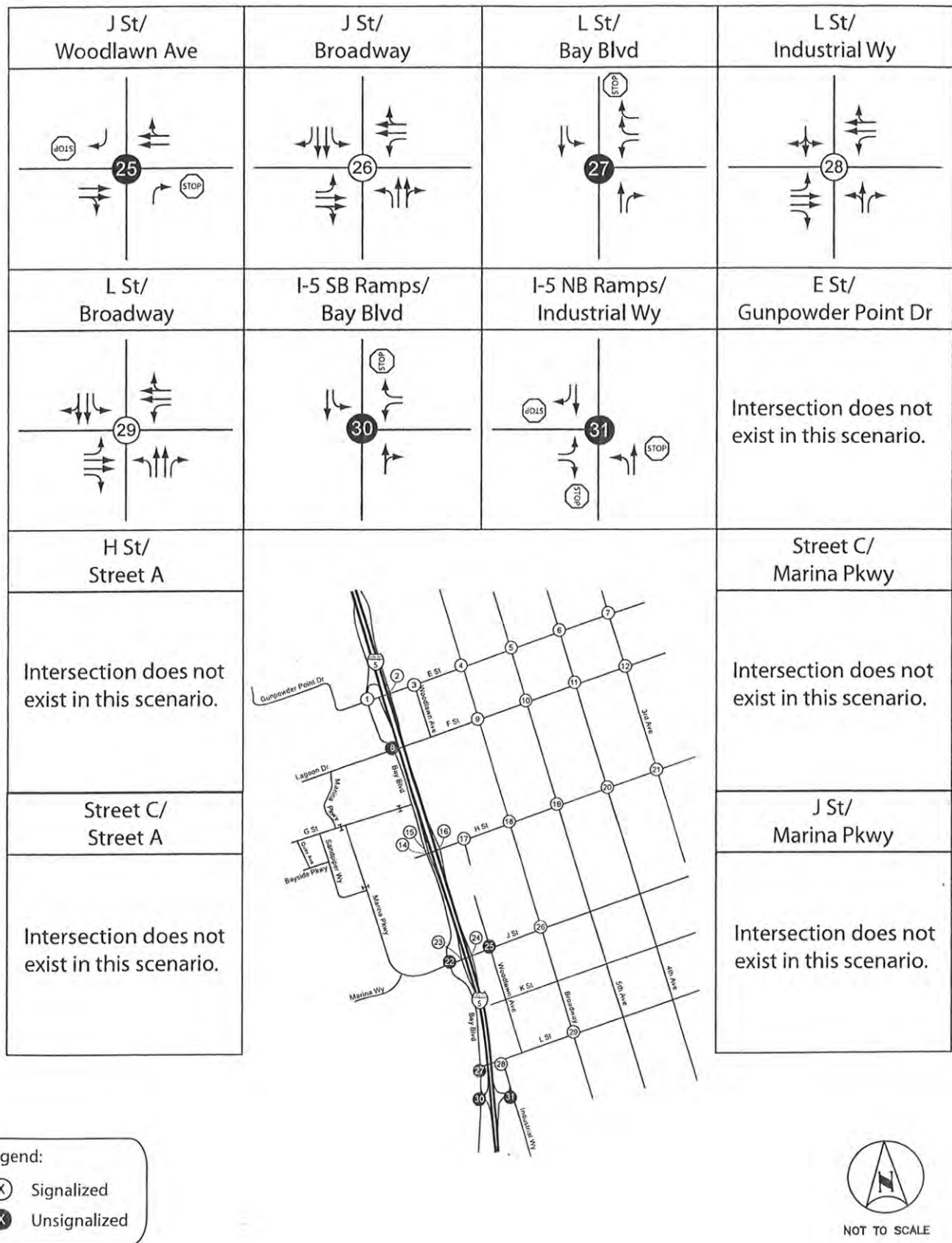
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Existing Intersection Geometrics (2 of 4)**

**FIGURE**

**4.2-35**

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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Existing Intersection Geometrics (3 of 4)**

**FIGURE**

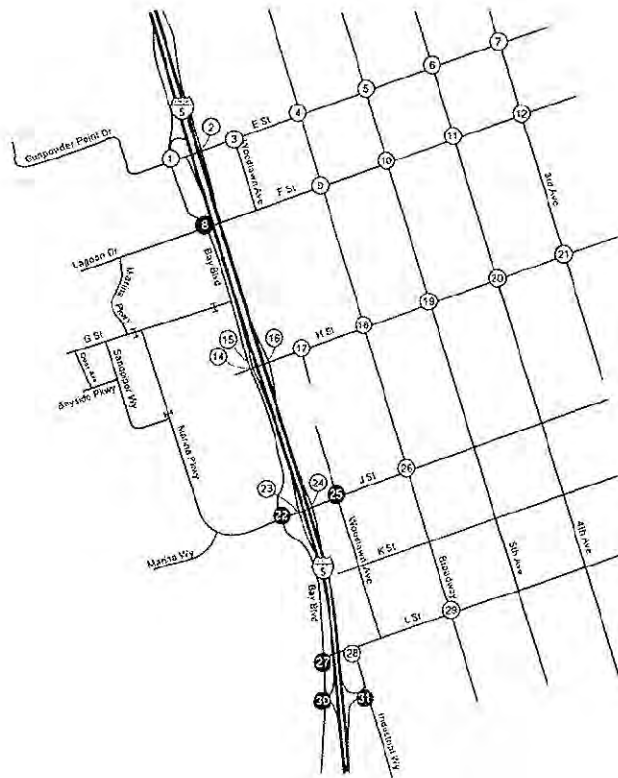
**4.2-30**

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J St/ Street A	Street B/ Bay Blvd	Gaylord Secondary Dwy/ E St
Intersection does not exist in this scenario.	Intersection does not exist in this scenario.	Intersection does not exist in this scenario.



Legend:



Signalized



Unsignalized



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Existing Intersection Geometrics (4 of 4)**

FIGURE

4.2-30

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### c. Freeway Segments

In order to determine the impacts to the study area freeway segments, the data in *Table 4.2-3* has been developed by Caltrans District 11 and is used to estimate peak-hour directional volumes based on daily data, peak-hour percentages (k factors), directional splits (d factors), and truck/heavy vehicle percentages. This data was assembled from Caltrans for the nearest available count station, located at milepost 8.562 along I-5, at approximately E Street. The estimated peak-hour volume was then compared to the peak-hour capacity and the resulting v/c ratio was reviewed against Caltrans thresholds corresponding to an acceptable LOS of D (see *Table 4.2-3*).

**TABLE 4.2-3**  
**Level of Service Criteria for Freeway Segment Analysis**

LOS	V/C Ratio	Congestion/Delay	Traffic Description
A	$\leq 0.41$	None	Free flow
B	$>0.41$ and $<0.62$	None	Free to stable flow, light to moderate volumes
C	$>0.62$ and $<0.80$	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
D	$>0.80$ and $<0.92$	Minimal to substantial	Approaches unstable flow, heavy volumes, and very limited freedom to maneuver
E	$> 0.92$ and $< 1.00$	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor
F <sub>0</sub>	$>1.00$ and $<1.25$	Considerable 0–1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go
F <sub>1</sub>	$>1.25$ and $<1.35$	Severe 1–2 hour delay	Very heavy congestion, very long queues
F <sub>2</sub>	$>1.35$ and $<1.45$	Very severe 2–3 hour delay	Extremely heavy congestion, very long queues
F <sub>3</sub>	$>1.45$	Extremely severe 3+ hours of delay	Gridlock

Note:

Based on the 1992 Caltrans guidelines. Caltrans' threshold standard is an acceptable LOS D.

#### 4.2.2.2 Existing Road Network

The following provides a description of the existing street system within the Proposed Project study area. The study area includes E Street to the north, the I-5 ramps just south of L Street to the south, Marina Parkway to the west, and Third Avenue to the east. The existing average daily trip volumes for the street system are shown in *Figure 4.2-4a*. It should be noted that the street network is set up in a grid system, with “Street” typically running east–west and “Avenues” typically running north–south.

a. E Street

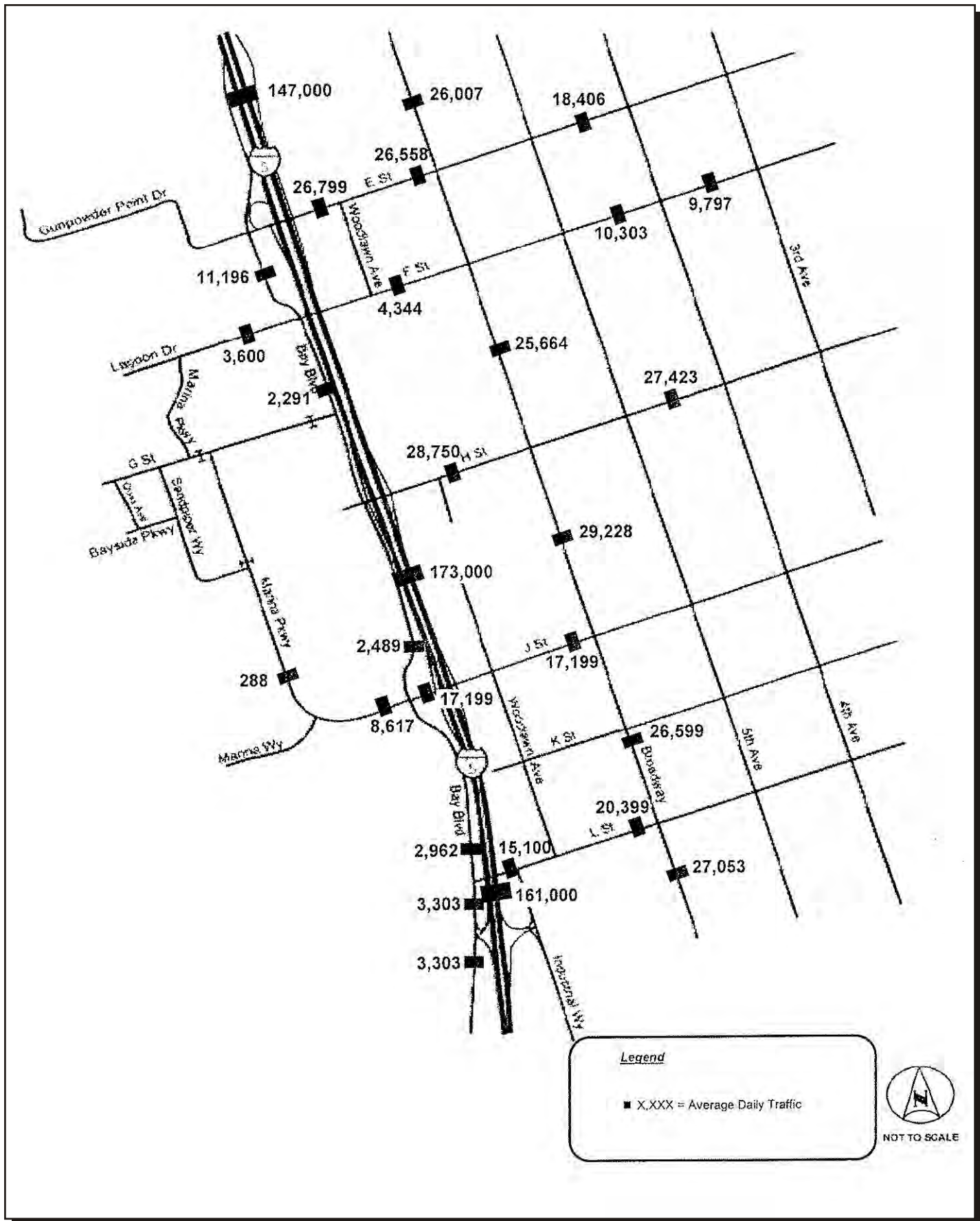
E Street is an east–west roadway classified as a four-lane gateway street between I-5 and I-805, with the exception of the segment between Broadway and First Avenue, which is classified as a four-lane Urban Arterial. Between Third Avenue and Broadway, E Street is comprised of four lanes extending approximately 62 feet in width, with parallel parking provided on both sides of the street. E Street to the west of Broadway is comprised of four lanes extending approximately 70 feet in width, with a two-way left-turn lane and no on-street parking. Sidewalks are provided on both sides of the roadway in both sections. The posted speed limit is 30 miles per hour (mph). E Street terminates at Bay Boulevard, with access to a parking lot that shuttles visitors to the Chula Vista Nature Center.

b. F Street

F Street is an east–west roadway classified as a four-lane Downtown Promenade between I-5 and Broadway. Between Broadway and Third Avenue, F Street is classified as a two-lane Downtown Promenade. F Street consists of four lanes between Third Avenue and Fourth Avenue and measures approximately 65 feet in width. On-street parking is not provided. Between Fourth Avenue and Broadway, F Street is a two-lane roadway approximately 40 feet in width, with parallel parking on both sides of the street. F Street widens to four lanes between Broadway and I-5, measuring approximately 66 feet in width, with parallel parking on both sides of the street. Sidewalks are provided on both sides of the roadway in all three sections. F Street does not have an interchange at I-5. West of I-5, F Street continues as a two-lane street, providing access to BF Goodrich and the harbor. The posted speed limit is 30 mph.

c. H Street

H Street is an east–west roadway with a center two-way left turn lane. H Street is classified as a six-lane Gateway Street between I-5 and Broadway and between Hilltop and I-805 and a four-lane Urban Arterial between Broadway and Hilltop Drive. Note, however, that H Street is not built to its ultimate classification and functions as a four-lane roadway between I-5 and Broadway. H Street measures approximately 70 feet in width between Third Avenue and Broadway, and 64 feet in width between Broadway and I-5. West of I-5, H Street terminates at the BF Goodrich site. Sidewalks are provided on both sides of the street and on-street parking is not provided. The posted speed limit is 35 mph.



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Existing ADT Volumes**

**FIGURE**  
**4.2-47**

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d.      **Broadway**

Broadway is a north-south roadway classified as a four-lane Gateway Street between SR-54 and C Street. Between C Street and L Street, Broadway is classified as a four-lane Commercial Boulevard. Parallel parking is provided on both sides of the roadway. Between F Street and H Street, there is a two-way left turn lane and the roadway measures approximately 82 feet in width. Broadway measures approximately 68 feet in width between E Street and F Street. Sidewalks are provided on both sides of the street. The posted speed limit is 35 mph.

e.      **Third Avenue**

Third Avenue is a north-south roadway classified as four-lane Commercial Boulevard between C Street and E Street and between H Street and L Street and a four-lane downtown promenade between E Street and H Street. Third Avenue is two lanes between E Street and F Street, measuring approximately 72 feet in width. Between F Street and Madrona Street, Third Avenue is a four-lane roadway approximately 101 feet in width with a raised median and angled parking is provided in these first two sections. Third Avenue is a four-lane roadway with a center two-way left-turn lane between G Street and H Street measuring approximately 66 feet in width and parallel parking is provided. Sidewalks are provided on both sides of the street in all three sections. The posted speed limit is 35 mph.

f.      **Marina Parkway**

Marina Parkway is a north-south roadway classified as a four-lane Major Street between J Street and Sandpiper Way. It has bike lanes on both sides of the street and parking is allowed on the west side. West of Sandpiper Way, connecting to G Street, Marina Parkway is a two-lane road with gate-controlled access. From G Street to Lagoon Drive, Marina Parkway is classified as a two-lane Class III Collector.

g.      **Bay Boulevard**

Bay Boulevard is a north-south roadway classified as a two-lane Class III Collector from F Street to J Street and south of its intersection with the I-5 southbound ramps. Portions of the roadway between F Street and J Street have a two-way left-turn lane. From E Street to F Street and J Street to the I-5 southbound ramps, Bay Boulevard is classified as a Class II Collector. While Bay Boulevard does not have a two-way left-turn lane from E Street to F Street, it does have turn lanes at each end and limited driveway access along the segment. Therefore, according to the City of Chula Vista engineering staff, the appropriate classification is as a Class II Collector.

### 4.2.2.3 Intersection Analysis

The CVMBP TIA examined operations at 39 intersections in or around the Proposed Project area in the City of Chula Vista. These intersections were selected by forecasting the distribution of Proposed Project traffic, based on the modeled land uses and roadways incorporated in the City of Chula Vista General Plan Update. Concurrence on the study area was provided by City of Chula Vista staff. The intersections analyzed in the traffic study are the most impacted by the Bayfront Master Plan and were analyzed with each phase of the Proposed Project as well as buildout of the Proposed Project, assuming forecast year 2030 conditions.

The City of Chula Vista's traffic study guidelines require that all Congestion Management Plan arterial segments, including Reasonably Significant Arterials, carrying 800 or more daily trips or 50 or more directional peak-hour trips be analyzed. Chula Vista does not have any of these facilities near the study area. The City's guidelines state that roadways and intersections outside of these facilities be analyzed based on direction provided by the City. Therefore, the study area was scoped per City of Chula Vista traffic study guidelines.

Throughout the preparation of the traffic study, various refinements to land uses, intensity of use, and geographical location of use within the project created a slightly different traffic assignment than was anticipated when the study was scoped. Following these refinements, it was determined that additional intersections, particularly to the east of I-5, may carry significant project traffic, but were not added to the CVBMP TIA since they were previously analyzed in the Urban Core Specific Plan TIA with more intense traffic scenarios and were determined to operate at an acceptable LOS under those scenarios.

In order to develop the distribution and assignment of trips from the Bayfront Master Plan area, select zone model runs were conducted in 2005, using the City of Chula Vista General Plan Update land uses. These model runs were used to distribute project traffic through study intersections analyzed in the TIA and the additional intersections identified above in *Figure 4.2-1c*. Some adjustments were made to the select zone distribution to account for specific project land uses and locations within CVBMP and the proposed CVBMP roadway network.

The CVBMP is forecasted to generate 79,317 daily trips including 5,251 in the a.m. peak hour and 7,324 in the p.m. peak hour. Applying these trips to Chula Vista intersections based on the distribution determined for the select zone analysis yielded a total of eight intersections that are not analyzed in the CVBMP TIA, but handle a minimum of 50 peak-hour directional CVBMP project trips, in either the a.m. or p.m. peak hour. The Urban Core Specific Plan TIA assumed implementation of land uses in the Chula Vista General Plan Update for the CVBMP area. These land uses were forecast to generate 152,654 daily trips. The Proposed Project is forecast to generate just over half as many trips, at 79,317 daily trips. Therefore, the volumes analyzed in the Urban Core Specific Plan TIA were higher than would be anticipated with the Proposed



Project and are conservative. As a result, the intersection LOS calculated by the study represents conditions that are worse than would be forecast with the Proposed Project. Thus, if an intersection was shown to be operating at an acceptable LOS in the Urban Core Specific Plan TIA, it would also operate at an acceptable LOS with the Proposed Project.

*Table 4.2-4* describes the existing traffic control method at all study area intersections. *Table 4.2-5* displays the LOS analysis results for the study intersections operating under existing conditions. As shown in this table, all study intersections operate at LOS D or better during both peak periods, except for the following intersections:

- L Street/Bay Boulevard (LOS F during the PM peak hour)
- I-5 southbound Ramps/Bay Boulevard (LOS E during the PM peak hour).

The intersection geometrics for internal intersections within the project area are shown above on *Figures 4.2-3a* through *4.2-3d*. Currently, four existing internal intersections analyzed operate at LOS A:

- E Street/5th Avenue (AM and PM peak hour)
- F Street/5th Avenue (AM and PM peak hour)
- F Street/Bay Boulevard (AM peak hour)
- H Street/Bay Boulevard (PM peak hour).

The E Street and H Street intersections affected by the trolley crossings would experience additional delay along the arterial and at adjacent intersections. Additional delays would be between 17 and 40 seconds per vehicle (depending on the direction and time of day) and drop the LOS by at least one grade. *Appendix 4.2-1* contains the peak-hour intersections LOS calculation worksheets.

**TABLE 4.2-4**  
**Study Intersections**

Intersection		Existing Traffic Control <sup>a</sup>
1	E Street & I-5 SB Off-Ramp	Signal
2	E Street & I-5 NB On-Ramp	Signal
3	E Street & Woodlawn Avenue	Signal
4	E Street & Broadway	Signal
5	E Street & 5th Avenue	Signal
6	E Street & 4th Avenue	Signal
7	E Street & 3rd Avenue	Signal
8	F Street & Bay Boulevard	AWSC
9	F Street & Broadway	Signal
10	F Street & 5th Avenue	Signal

TABLE 4.2-4 (Cont.)

Intersection		Existing Traffic Control <sup>a</sup>
11	F Street & 4th Avenue	Signal
12	F Street & 3rd Avenue	Signal
13	H Street & Marina Parkway	DNE
14	H Street & Bay Boulevard	Signal
15	H Street & I-5 SB Ramps	Signal
16	H Street & I-5 NB Ramps	Signal
17	H Street & Woodlawn Avenue	Signal
18	H Street & Broadway	Signal
19	H Street & 5th Avenue	Signal
20	H Street & 4th Avenue	Signal
21	H Street & 3rd Avenue	Signal
22	J Street & Bay Boulevard	AWSC
23	J Street & I-5 SB Ramps	Signal
24	J Street & I-5 NB Ramps	Signal
25	J Street & Woodlawn Avenue	TWSC
26	J Street & Broadway	Signal
27	L Street & Bay Boulevard	TWSC
28	L Street & Industrial Boulevard	Signal
29	L Street & Broadway	Signal
30	I-5 SB Ramps & Bay Boulevard	TWSC
31	I-5 NB Ramps & Industrial Boulevard	AWSC

<sup>a</sup>Notes:

Signal = Traffic Signal

AWSC = All-Way Stop Control

TWSC = Two-Way Stop Control

DNE = Does Not Exist

TABLE 4.2-5

## Existing Conditions Peak-Hour Intersection Level of Service Summary

Intersection		Peak-Hour	Existing	
			Delay <sup>1</sup>	LOS <sup>2</sup>
1	E Street & I-5 SB Off-Ramp	A.M.	10.4	B
		P.M.	16.6	B
2	E Street & I-5 NB On-Ramp <sup>4</sup>	A.M.	20.7	C
		P.M.	16.6	B
3	E Street & Woodlawn Avenue <sup>4</sup>	A.M.	23.1	C
		P.M.	17.7	B
4	E Street & Broadway	A.M.	18.4	B
		P.M.	31.2	C
5	E Street & 5th Avenue	A.M.	5.0	A
		P.M.	6.4	A
6	E Street & 4th Avenue	A.M.	13.6	B
		P.M.	25.7	C
7	E Street & 3rd Avenue	A.M.	12.3	B
		P.M.	19.5	B
8	F Street & Bay Boulevard	A.M.	8.8	A
		P.M.	14.7	B
9	F Street & Broadway	A.M.	15.7	B
		P.M.	23.3	C
10	F Street & 5th Avenue	A.M.	6.4	A

TABLE 4.2-5 (Cont.)

	Intersection	Peak-Hour	Existing	
			Delay <sup>1</sup>	LOS <sup>2</sup>
		P.M.	8.6	A
11	F Street & 4th Avenue	A.M.	15.1	B
		P.M.	20.5	C
12	F Street & 3rd Avenue	A.M.	14.2	B
		P.M.	20.7	C
13	H Street & Marina Parkway <sup>3</sup>	A.M.	DNE	
		P.M.		
14	H Street & Bay Boulevard	A.M.	15.4	B
		P.M.	5.9	A
15	H Street & I-5 SB Ramps	A.M.	22.9	C
		P.M.	23.7	C
16	H Street & I-5 NB Ramps <sup>4</sup>	A.M.	12.9	B
		P.M.	13.7	B
17	H Street & Woodlawn Avenue <sup>4</sup>	A.M.	29.3	C
		P.M.	25.9	C
18	H Street & Broadway	A.M.	24.4	C
		P.M.	29.8	C
19	H Street & 5th Avenue	A.M.	10.8	B
		P.M.	14.9	B
20	H Street & 4th Avenue	A.M.	23.1	C
		P.M.	32.6	C
21	H Street & 3rd Avenue	A.M.	19.0	B
		P.M.	29.2	C
22	J Street & Bay Boulevard	A.M.	10.8	B
		P.M.	12.8	B
23	J Street & I-5 SB Ramps	A.M.	15.1	B
		P.M.	18.6	B
24	J Street & I-5 NB Ramps	A.M.	15.2	B
		P.M.	15.1	B
25	J Street & Woodlawn Avenue	A.M.	11.0	B
		P.M.	11.4	B
26	J Street & Broadway	A.M.	14.1	B
		P.M.	21.0	C
27	L Street & Bay Boulevard	A.M.	16.8	C
		P.M.	120.3	F
28	L Street & Industrial Boulevard	A.M.	24.9	C
		P.M.	24.7	C
29	L Street & Broadway	A.M.	15.7	B
		P.M.	23.2	C
30	I-5 SB Ramps & Bay Boulevard	A.M.	22.2	C
		P.M.	48.6	E
31	I-5 NB Ramps & Industrial Boulevard	A.M.	15.4	B
		P.M.	17.7	B

SOURCE: Kimley-Horn and Associates 2008.

NOTES: Bold values indicate intersections operating at level of service (LOS) E or F.

<sup>1</sup> Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>2</sup> LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 6.0.

<sup>3</sup> This intersection does not exist currently.

<sup>4</sup> Additional delay likely experienced at intersection due to trolley crossing.

#### 4.2.2.4 Roadway Segment Analysis

Table 4.2-6 summarizes the LOS for the roadway segments under existing conditions. As shown in this table, all roadway segments in the study area function at an acceptable LOS C or better.

**TABLE 4.2-6**  
**Existing Conditions Analyzed Roadway Segments Level of Service**

Roadway Segment	Roadway Classifications <sup>1</sup>	Acceptable Volume <sup>2</sup>	Daily Traffic Volume <sup>3</sup>	V/C Ratio <sup>4</sup>	LOS
<b><i>E Street</i></b>					
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	38,400	26,799	0.56	A
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	38,400	26,558	0.55	A
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	18,406	0.44	A
<b><i>Lagoon Dr / F Street</i></b>					
Marina Parkway to Bay Boulevard	2 Lanes Class III Collector	7,500	3,600	0.38	A
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	4,344	0.12	A
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	10,303	0.64	B
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	9,797	0.26	A
<b><i>H Street</i></b>					
Bay Boulevard to I-5 Ramps	4 Lanes Gateway Street	38,400	15,841	0.33	A
I-5 Ramps to Broadway	4 Lanes Gateway Street	38,400	28,750	0.60	A
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	27,423	0.65	B
<b><i>J Street</i></b>					
Marina Parkway to Bay Boulevard	4 Lanes Major Street	30,000	8,671	0.23	A
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	17,199	0.46	A
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	17,199	0.46	A
<b><i>L Street</i></b>					
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	38,400	15,100	0.31	A
Industrial Way to Broadway	4 Lanes Gateway Street	38,400	20,399	0.42	A
<b><i>Marina Parkway</i></b>					
Lagoon Drive to G Street	2 Lanes Class III Collector	7,500	3,600	0.38	A
Sandpiper Way to J Street	4 Lanes Major Street	30,000	288	0.01	A
<b><i>Bay Boulevard</i></b>					
E Street to F Street	2 Lanes Class II Collector	12,000	11,196	0.75	C
F Street to H Street	2 Lanes Class III Collector	7,500	2,291	0.24	A
H Street to J Street	2 Lanes Class III Collector	7,500	2,489	0.26	A
J Street to L Street	2 Lanes Class II Collector	12,000	2,962	0.20	A
L Street to I-5 Ramps	2 Lanes Class II Collector	12,000	3,303	0.22	A
South of I-5 Ramps	2 Lanes Class III Collector	7,500	3,303	0.35	A
<b><i>Broadway</i></b>					
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,007	0.69	B
E Street to H Street	4 Lanes Commercial Boulevard	33,750	25,664	0.68	B
H Street to K Street	4 Lanes Commercial Boulevard	33,750	29,228	0.78	C
K Street to L Street	4 Lanes Commercial Boulevard	33,750	26,599	0.71	C
South of L Street	4 Lanes Major Street	30,000	27,053	0.72	C

SOURCE: Kimley-Horn and Associates 2008.

<sup>1</sup> Street Classification is based on the standards provided in the 2005 Chula Vista General Plan.

<sup>2</sup> The capacity is based on the City of Chula Vista General Plan.

<sup>3</sup> Average Daily Traffic (ADT) volumes for the roadway segments were provided by the City of Chula Vista.

<sup>4</sup> The V/C Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

#### 4.2.2.5 Freeway Segment Analysis

Table 4.2-7 displays the freeway segment analysis under Existing Conditions. With the exception of I-5 between SR-54 to E Street (which currently operates at LOS D in the a.m. peak hour), all segments of I-5 operate at LOS E or worse during both peak hours.

#### 4.2.2.6 Alternative Transportation

##### a. Bayshore Bikeway

The Bayshore Bikeway is a designated bicycle facility surrounding the Bay from Downtown San Diego near Seaport Village to Imperial Beach and Coronado. This scenic facility includes Class I (bike path), Class II (bike lane on streets), and Class III (bike route–signage on streets) segments. Current plans to improve the Bayshore Bikeway vary in schedule and scope from segments currently in the planning stages to segments recently constructed. The goal of the Bayshore Bikeway is to provide as much off-street Class I bike path as possible around the Bay for the use of commuter and recreational bicyclists.

The current alignment of the Bayshore Bikeway within the Chula Vista Bayfront area utilizes on-street bikeway facilities (Class III facilities). The existing Class III facilities traverse along Lagoon Drive, Sandpiper Way, Bay Boulevard, and Marina Parkway. As part of the Chula Vista General Plan Update, F Street has been designated as a bicycle route (Class II).

##### b. Transit Service

Public transportation is readily available within the City. Currently the San Diego Metropolitan Transit System operates Light Rail Transit services along the east side of I-5, with transit stations located at H Street and E Street in the project vicinity. However, no public transportation currently serves the project area.

##### c. Bayfront Shuttle Route

Long term planning efforts for the Urban Core include a shuttle service that would link various destinations within the western portions of Chula Vista. This route is referred to as the Green Car Line (also called the West Side Shuttle). No implementation schedule has been identified.

##### d. Applicable Plans and Policies

The PMP, the adopted City of Chula Vista General Plan, the Chula Vista Bayfront LCP, LUP, and the Chula Vista Bayfront Specific Plan contain goals and policies pertaining to the development of alternative transportation. Table 4.2-8 lists the relevant goals and policies that apply to the Proposed Project area.

**TABLE 4.2-7**  
**Existing Conditions Freeway Segment Level of Service Summary**

Freeway Segment	Direction	Number of Lanes	Capacity <sup>1</sup>	ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS
A.M. Peak — Interstate 5							
SR-54 to E St	NB	4 M	8,000	147,000	7,148	0.894	D
	SB	4 M	8,000				
E St to H St	NB	4 M	8,000	176,000	8,558	1.070	F0
	SB	4 M	8,000				
H St to J St	NB	4 M	8,000	173,000	8,413	1.052	F0
	SB	4 M	8,000				
J St to L St	NB	4 M	8,000	170,000	8,267	1.033	F0
	SB	4 M	8,000				
L St to Palomar St	NB	4 M	8,000	161,000	7,829	0.979	E
	SB	4 M	8,000				
P.M. Peak — Interstate 5							
SR-54 to E St	NB	4 M	8,000	147,000			
	SB	4 M	8,000		7,656	0.957	E
E St to H St	NB	4 M	8,000	176,000			
	SB	4 M	8,000		9,166	1.146	F0
H St to J St	NB	4 M	8,000	173,000			
	SB	4 M	8,000		9,010	1.126	F0
J St to L St	NB	4 M	8,000	170,000			
	SB	4 M	8,000		8,854	1.107	F0
L St to Palomar St	NB	4 M	8,000	161,000			
	SB	4 M	8,000		8,385	1.048	F0

SOURCE: Kimley-Horn and Associates 2008.

NB = Northbound; SB = Southbound.

Bold values indicate freeway segments operating at LOS E or F.

<sup>1</sup> The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Main Lane, A: Auxiliary Lane, HOV: High Occupancy Vehicle, ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux).

<sup>2</sup> Average Daily Traffic Volumes provided by Caltrans (year 2004).

<sup>3</sup> Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

**TABLE 4.2-8**  
**Relevant Policies, Plans, or Programs Supporting Alternative Transportation**

<b>City of Chula Vista General Plan: Land Use and Transportation Element</b>		
<b>Principle</b>	<b>Element</b>	
The City of Chula Vista has already undertaken planning efforts that serve to implement Smart Growth principles.	Provide a variety of transportation choices.	
<b>Objectives</b>	<b>Policies</b>	
<b>LUT 16</b> Integrate land use and transportation planning and related facilities.	<b>Policy 16.1</b> Promote the development of well-planned communities that will tend to be self-supportive and, thus, reduce the length of vehicular trips, reduce dependency on the automobile, and encourage the use of other modes of travel. <b>Policy 16.2</b> Ensure that new development and community activity centers have adequate transportation and pedestrian facilities. <b>Policy 16.3</b> Provide direct and convenient access to public transit stops within residential, commercial, and industrial areas.	
<b>LUT 17</b> Plan and coordinate development to be compatible and supportive of planned transit.	<b>Policy 17.1</b> Designate sufficient land at appropriate densities to support planned transit and require that development be transit-oriented, as appropriate to its proximity to transit facilities. <b>Policy 17.2</b> Direct higher intensity and mixed use development to areas within walking distance of transit, including San Diego Trolley stations along E, H, and Palomar Streets, and new stations along future transit lines, including BRT. <b>Policy 17.4</b> Require developers to consult and coordinate with San Diego Association of Governments (SANDAG) and the City to ensure that development is compatible with and supports the planned implementation of public transit.	
<b>LUT 18</b> Reduce traffic demand through Transportation Demand Management (TDM) strategies, increased use of transit, bicycles, walking, and other trip reduction measures.	<b>Policy 18.1</b> Support and encourage the use of public transit. <b>Policy 18.2</b> Provide an efficient and effective para-transit service for elderly and handicapped persons unable to use conventional transit service. <b>Policy 18.3</b> Provide and enhance all feasible alternatives to the automobile, such as bicycling and walking, and encourage public transit ridership on existing and future transit routes. <b>Policy 18.4</b>	

TABLE 4.2-8 (Cont.)

<p><b>LUT 19</b> Coordinate with the regional transportation planning agency, SANDAG, and transit service providers such as the Metropolitan Transit System, to develop a state-of-the-art transit system that provides excellent service to residents; workers; students; and the disabled, both within the City, and with inter-regional destinations.</p>	<p>Use master planning techniques in new development and redevelopment projects to enable effective use of public transit.</p> <p><b>Policy 18.5</b> Implement TDM strategies, such as carpooling, vanpooling, and flexible work hours that encourage alternatives to driving alone during peak periods.</p> <p><b>Policy 18.6</b> Encourage employer-based TDM strategies, such as: employee transportation allowances; preferential parking for rideshare vehicles; workplace-based carpool programs; and shuttle services.</p> <p><b>Policy 18.7</b> Support the location of private “telework” centers.</p> <p><b>Policy 18.8</b> Encourage establishment of park-and-ride facilities near or at transit stations, as appropriate to the area’s character and surrounding land uses.</p>
	<p><b>Policy 19.1</b> Designate transportation corridors as potential express transit facilities, such as BRT.</p> <p><b>Policy 19.2</b> Actively support and contribute to local and regional planning efforts for the design and implementation of regional transit facilities.</p> <p><b>Policy 19.3</b> Support the implementation of Transit First! concepts and other innovative technologies to raise the standard of transit service.</p> <p><b>Policy 19.4</b> Provide incentives to promote transit in higher density areas.</p> <p><b>Policy 19.5</b> Plan for and promote improved access between the Palomar Street, E Street and H Street light rail stations and land uses east of those stations and to the Bayfront. This may involve the construction of separate bridges or ramps connecting Chula Vista streets to transit facilities and/or a deck over I-5 to the Bayfront.</p>



TABLE 4.2-8 (Cont.)

<b>LUT 20</b>	Make transit-friendly roads a top consideration in land use and development design.	<p><b>Policy 20.1</b> Incorporate transit-friendly and pedestrian-friendly elements into roadway design standards, such as signal priority for transit and adequate sidewalk widths for pedestrians.</p> <p><b>Policy 20.2</b> Protect rights-of-way where possible to facilitate future transit service and support the development of secure park-and-ride lots within walking distance of transit stations.</p>
	<b>Objectives</b>	<b>Policies</b>
<b>LUT 22</b>	Encourage regional and local efforts to continue planning for enhancements to Light Rail Trolley service along the west side of the City.	<p><b>Policy 22.1</b> Provide grade separated Trolley Crossings at E Street and H Street.</p> <p><b>Policy 22.2</b> Pursue regional, state and federal funding for grade separated Trolley crossings of E and H Streets.</p>
<b>LUT 23</b>	Promote the use of non-polluting and renewable alternatives for mobility through a system of bicycle and pedestrian paths and trails that are safe, attractive and convenient forms of transportation.	<p><b>Policy 23.1</b> Encourage the use of bicycles and walking as alternatives to driving.</p> <p><b>Policy 23.2</b> Foster the development of a system of inter-connecting bicycle routes throughout the City and region.</p> <p><b>Policy 23.3</b> Preserve, restore, or provide the opportunity for a cyclist to ride a bicycle to virtually any chosen destination, in order to make the bicycle a viable transportation alternative.</p> <p><b>Policy 23.5</b> Provide linkages between bicycle facilities that utilize circulation element alignments and open space corridors.</p> <p><b>Policy 23.6</b> In addition to using open space corridors, off-street bicycle trails should use flood control and utility easements. The trails shall be designed to minimize interaction with automobile cross traffic.</p> <p><b>Policy 23.7</b> Provide bicycle support facilities at all major bicycle usage locations.</p>

TABLE 4.2-8 (Cont.)

	<p><b>Policy 23.8</b> Provide and maintain a safe and efficient system of sidewalks, trails, and pedestrian crossings.</p> <p><b>Policy 23.9</b> Promote walking by providing short, direct, safe, and pleasant routes between residential areas and transit stations and/or activity centers.</p> <p><b>Policy 23.10</b> Promote the system of trails envisioned within the Chula Vista Greenbelt.</p> <p><b>Policy 23.11</b> Implement recommendations of the City's Bikeway Master Plan and Greenbelt Master Plan.</p> <p><b>Policy 23.12</b> Provide opportunities for use of personal mobility devices.</p> <p><b>Policy 23.13</b> New overpasses and interchanges should be designed to accommodate bicycles and pedestrians.</p> <p><b>Policy 23.14</b> Require new development projects to provide internal bikeway systems with connections to the City-wide bicycle networks.</p>
<p><b>LUT 27</b> Establish a program for development to provide public amenities, and/or community services necessary to support urban development and implement the following policies.</p>	<p><b>Policy 27.1</b> Establish a program that relates the allowable floor area ratios and residential densities of projects to the provision of the following potential public benefits or amenities and community services, as well as others not listed: Pedestrian path improvements; enhanced pedestrian connections between parks, public spaces, and neighborhoods by means of paths and open space areas; jogging, walking and fitness trails; sidewalk widening; arcades; transit station access and improvement; bike lockers; and locate secure bicycle parking facilities near transit centers and major public and private buildings.</p>

TABLE 4.2-8 (Cont.)

<b>LUT 34</b>	Support healthy lifestyles among residents through increasing opportunities for regular physical activity.	<b>Policy 34.2</b> Provide adequate lighting for streets; parks; recreation facilities; sidewalks; and bike paths to promote their use.
<b>Chula Vista Bayfront Specific Plan</b>		
<b>Chula Vista Municipal Code 19.85.007</b>	Infrastructure: Circulation Standards	<p><u>Bike Lane</u>. A bike lane is a lane on the paved area of a street for preferential use by bicycles. These lanes are used for Regional Bicycle Routes. On street parking, except for emergency stopping, will not be permitted where bike lanes are designated. These lanes shall be a minimum of five feet in width. The filling of wetlands for bike paths is not permitted, including but not limited to, any expansion of the toe of the Caltrans fill slope for the freeway into the mitigation areas of the connector marsh.</p> <p><u>Bike Path</u>. A bike path is use for off street travel by bicycles. These paths shall be a minimum of eight feet in width.</p> <p><u>Pedestrian Route</u>. All pedestrian routes depicted on Exhibit __ within the Circulation Element of the Specific Plan shall be a minimum of six feet in width. The filling of wetlands for bike paths is not permitted, including but not limited to, any extension of the toe of the Caltrans fill slope for the freeway into the mitigations areas of the connector marsh.</p> <p>Bicycle parking facilities shall be provided for business and professional offices (over 20,000 square feet of gross floor area), shopping centers (over 50,000 square feet of gross floor area), commercial recreation, fast food restaurants, coffee shops, delicatessens, and other eating and drinking establishments. Bicycle parking facilities shall be fixed storage racks or devices designed to secure the frame and wheel of the bike.</p>
<b>Chula Vista Municipal Code 19.85.008</b>	Parking Requirements: Bicycle Parking Standards	
<b>Recommendations</b>		
<b>Chula Vista Municipal Code 19.87.003</b>	Industrial Subarea: Specific development plans for the development of property located south of Lagoon Drive (F Street) and west of the SDG&E ROW shall be subject to Design Review Committee review and Redevelopment Agency approval based on the following guidelines.	<p><u>Special Condition "C"</u>: Pedestrian or other off-street circulation connections to adjacent industrial and business park uses shall be provided.</p> <p><u>Special Condition "F"</u>: Pedestrian linkages shall be provided to connect both sides of J Street as well as linking the projects to the Bayfront development.</p>

TABLE 4.2-8 (Cont.)

Chula Vista Local Coastal Program Land Use Plan	
<b>Objective LU.2</b> Integrate new development with the existing National Wildlife Refuge in a manner which permits public enjoyment/access to the resources while protecting sensitive habitat areas from intrusion or adverse impacts due to development and/or human activities.	<b>Policy LU.2.A</b> Public parks and open space are designated on the Land Use Plan Map. Exhibit 3, to buffer the wetlands from development and to provide visual access to the coastal resources. Public access to the Chula Vista Nature Center, located within the NWR, shall be provided only via a shuttle bus. Public trails with interpretive signage shall be provided within the buffer adjacent to the NWR to allow public enjoyment of the refuge without disturbing its inhabitants.
<b>Objective AC.4</b> Create auto-free zones along the shoreline and other areas which have unique environmental conditions or potential, and make provision for pedestrians and bicyclists.	<b>Policy AC.4.A</b> The Circulation Element Map designates pedestrian and bicycle routes along the perimeter of the Midbayfront, separate from the vehicle access routes. These shall be implemented concurrent with adjacent development. Public access to the Chula Vista Nature Center within the NWR shall be limited to shuttle bus transport to minimize impacts to environmentally sensitive areas.
<b>Objective AC.5</b> Reduce dependency upon the private automobile by providing for complementary public transit service, including smaller "mini-transit" vehicles or private jitneys.	<b>Policy AC.5.A</b> A comprehensive Transit Service Plan shall be prepared and approved for the Midbayfront development as a part of the "master plan." The plan shall address the use of private intra-project transit, as well as connection/coordination with public bus and trolley transit services. The plan shall demonstrate that public/private transit services provide a viable alternative to private vehicles for access and travel within the Midbayfront.
<b>Objective AC.7</b> Provide for convenient pedestrian, bicycle, and vehicular access to the Bayfront from community areas east of I-5.	<b>Policy AC.7.A</b> Local access to the Bayfront shall be provided along the same routes which provide regional access. In addition, the F Street bridge over I-5 shall be utilized to provide Midbayfront access for local residents. Provisions for pedestrians and bicyclists, as well as motor vehicles, shall be made within the bridge travelway.  <b>Policy AC.7.B</b> Circulation routes and services which exist or are provided within the urban core of Chula Vista shall be extended to and through the Bayfront in order to integrate the coastal area with the overall community. Development projects within the Bayfront shall incorporate, extend, and/or utilize these transportation facilities as a part of the development concept.

TABLE 4.2-8 (Cont.)

<p><b>Objective PT.1</b> Maximize use of the public transit services by visitors and residents of the Bayfront.</p>	<p><b>Policy PT.1.A</b> The Bayfront Plan recognizes that connections to the trolley system are significant benefits to the feasibility of development in the Bayfront. Opportunities for interconnecting the Bayfront, especially the Midbayfront, with the existing trolley stations are included in the Plan. These opportunities, which shall be addressed in the Comprehensive Transit Service Plan for the Midbayfront, include: <u>Bus Improvements:</u> Provide for convenient bus stop location son convenient travel loops within the Bayfront and at areas of concentrated activity. <u>Pedestrian Access:</u> Provide for convenient, direct pedestrian access to the Midbayfront from the E Street Trolley Station.</p> <p><b>Policy PT.1.B</b> The Circulation Element provides for roadway right-of-ways with sufficient capacity and opportunities for bus stop locations to facilitate convenient bus service into the Bayfront along Marina Parkway, E Street, Lagoon Drive, and Bay Boulevard. This capacity shall be maintained to provide the greatest flexibility in the routing of future bus service into the Bayfront and to achieve an effective connection to the trolley system.</p>
<p><b>Objective PT.2</b> Encourage private transit services where feasible.</p>	<p><b>Policy PT.2.A</b> The concentrations of land use intensity provide opportunities for private jitney service to supplemental public transit service. Where it is determined that private service will not compete with public services, the evaluation of jitney-type services provided by the private sector shall be evaluated as a part of all development proposals associated with Rohr, Inc. facilities or within the Midbayfront.</p>
<p><b>Objective PB.1</b> Provide pedestrian access to the shoreline.</p>	<p><b>Policy PB.A.A</b> Continuous shoreline access is provided adjacent to the 100 foot Primary Buffer as designated in the Environmental Management section. An improved public path shall be provided within the park and open space improvements in the area. The combination of landscape screening and out-looks adjacent to the wetlands will provide major recreational opportunities without undue impact on wildlife resources. No pedestrian or bicycle paths are to be located on the southern or eastern edges of the F &amp; G Street Marsh due to the limited setback area.</p>

TABLE 4.2-8 (Cont.)

	<p><b>Policy PB.1.B</b></p> <p>In order to provide continuity with adjacent planning areas, pedestrian shoreline access shall interconnect with other existing or proposed circulation routes. Project level planning and coordination shall provide for:</p> <p><u>Connection South to Port District Lands.</u> In the Marina Parkway areas, public access will be integrated with Port District development. This will result in a continuous public access route with intermittent exposure to the water edge within the Port lands.</p> <p><u>Connection North to Sweetwater River Project.</u> Pedestrian and bicycle routes in the Bayfront shall have the potential to interconnect with the recreational improvement included in the Caltrans/USACE project, and/or the Chula Vista Greenbelt trail system proposed in the Sweetwater River Valley. The filling of wetlands for bike paths is not permitted, including, but not limited to, any extension of the toe of the Caltrans fill slope for the freeway into the mitigation areas of the connector marsh.</p> <p><u>Connection with Chula Vista Neighborhoods.</u> Pedestrian routes will interconnect major open spaces in the Bayfront to adjacent city neighborhoods via E Street and F Street.</p>
<p><b>Objective PB.2</b></p> <p>Provide bicycle routes for alternative access and circulation in the Bayfront.</p>	<p><b>Policy PB.2.A</b></p> <p>The Circulation Element Map indicates extensive bicycles routes incorporated with the pedestrian and vehicular circulation systems. In indicated locations, the bicycle route will consist of an on-street bike lane while along with perimeter of the Midbayfront it will be a part of the pedestrian/bicycle trail system.</p>

### 4.2.3 Impact Significance Criteria

The significance criteria used to evaluate the project impacts to intersections are based on (1) the City's Guidelines for Traffic Impact Studies in the City of Chula Vista dated February 13, 2001 and (2) on the City of Chula Vista's adopted General Plan. At intersections, the measurement of effectiveness is based on allowable increases in delay. At roadway segments, the measurement of effectiveness is based on allowable increases in the ADT.

According to Appendix G of the CEQA Guidelines, City's Guidelines for Traffic Impact Studies in the City of Chula Vista, and the City of Chula Vista's adopted General Plan, the Proposed Project would have a significant impact on traffic circulation if:

1. It substantially increases hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
2. It conflicts with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)
3. If changes to the land use and the circulation plans would result in the following:

For non-Urban Core circulation element roadways (Expressway, Prime Arterial, Major Street, Town Center Arterial, Class I Collector):

- a) A roadway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D or worse at General Plan buildout.
- b) A roadway segment that currently operates at LOS D or E and with the proposed changes would operate at LOS E or F at General Plan buildout respectively, or which operates at LOS D, E, or F and would worsen by five percent or more at General Plan buildout.

For Urban Core Circulation Element roadways (Gateway Street, Urban Arterial, Commercial Boulevard, and Downtown Promenade):

- a) A roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout.
- b) A roadway segment that currently operates at LOS F and would worsen by five percent or more at General Plan buildout.

For all roadways, if the intersections along a LOS D or LOS E segment all operate at LOS D or better, the segment impact is not considered significant since the intersection analysis is more indicative of actual roadway system operations than street segment analysis. If segment Level of Service is LOS F, impact is significant regardless of intersection LOS.

4. If changes to the land use and circulation plans would affect signalized and unsignalized intersections as follows:
  - a) An intersection that currently operates at LOS D or better and with proposed changes would operate at LOS E or worse at General Plan buildout.
  - b) An intersection that currently operates at LOS E or F and the project trips generated comprise five percent or more of the entering volume. Entering volumes are the total approach volumes entering an intersection.
  - c) A cumulative impact would occur if the operations at intersection are at LOS E or F only.

#### 4.2.4 Impact Analysis

Roadway networks in the Proposed Project area are relatively minimal due to historic low intensity of existing land uses in the area. In order to identify those roads that are required to provide land uses access and frontage improvements, the Phase I – Baseline scenario is treated as the existing condition, even though it requires the construction of new roads within the area.

##### 4.2.4.1 *Proposed Roadway Improvements*

The proposed roadway improvements for the Proposed Project are described below. For purposes of this ~~Draft~~ EIR, all of the roadway improvements within the Sweetwater and Harbor Districts are evaluated at a project level, and roadway improvements in subsequent phases in the Otay District are analyzed at a program level. Although the project level roads are described as project features in *Chapter 3* of this EIR, this chapter specifically analyzes circulation improvements, including timing of construction for the improvements, based on access and frontage requirements of proposed adjacent development, and mitigation requirements for traffic impacts caused by various project components. For Phase I project-level components, therefore, only those improvements required for access, frontage, and traffic impact mitigation for development on Parcels H-13, H-14, HP-5, and H-17 are proposed for construction prior to or concurrently with development of these Phase I components. Roadway improvements necessary for program-level components proposed in Phases I, II, III, and IV would be required prior to or concurrently with development of these specific components. Although this chapter identifies which roadways are required for each phase based on proposed adjacent development, the Draft EIR analysis has been structured to provide flexibility in the ability to construct identified roadway improvements sooner than required in the traffic analysis. Associated intersection improvements are described below. Proposed roadway cross sections are illustrated in *Figure 3-13a* through *3-13d*.



Within the study area, some of the existing land uses will remain with development of the Proposed Project. Each of the three districts has areas that includes existing land uses. The total trips that are estimated to be generated from these existing land uses are shown in *Table 4.2-9*. In addition, several existing land uses will be demolished and redeveloped as part of Phase I. The two primary development components included in Phase I are, ~~is the Gaylord Resort Conference Center, and the Pacifica Residential and Retail Project, both~~ located in the Harbor District.

#### **4.2.4.2 Project Trip Generation**

The Proposed Project assumes a total development of 1,500 residential units, 640,000 square feet of mixed-use office/commercial, 580,000 square feet of restaurant/retail, 100,000 square feet of civic/cultural uses, 3,500 hotel rooms, an industrial business park generating up to 1,200 daily trips; 139 acres of public space, and a 236-space RV Park.

In order to determine the traffic generation for the Proposed Project, trip generation rates published by the SANDAG (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002, were applied to the land uses associated with the Proposed Project, with the exception of the Civic/Cultural land uses. In this case, the library rate outline in the City of San Diego *Trip Generation Manual* revised in May 2003 was used since it most accurately reflected this type of land use. Trip generation was estimated for the A.M. and P.M. peak-hour and daily traffic. The specific development proposed in Phases I, II, III, and IV and the traffic trips expected to be generated by each phase of development, are found in *Tables 4.2-10, 4.2-11, 4.2-12, and 4.2-13*. A summary of the total proposed project trip generation is provided in *Table 4.2-14*.

**TABLE 4.2-9**  
**Traffic Generated by Existing Land Uses**

Parcel		Land Use		Units¹	Trip Rate²		Daily Trips		A.M. Peak Hour			P.M. Peak Hour			
Sweetwater District															
S-5	Existing Park			1.06	ac	5	/	ac	5	0	0	0	0	0	0
Harbor District															
H-17	Existing Open Space			2	ac	5	/	ac	9	0	0	0	0	0	0
HP-07	Existing Marina Park View			6.6	ac	50	/	ac	330	21	22	43	15	15	30
HP-15	Existing Bayfront Park			8.8	ac	50	/	ac	440	29	28	57	20	20	40
HW-01-05	Existing Marina			911.0	berth	4	/	berth	3,644	33	76	109	153	102	255
HW-06	Boat Yard			12.0	ac	50	/	ac	600	103	11	114	24	96	120
Otay District															
O-4	Industrial Business Park			33.13	ac	6	/	ac	199	11	11	22	8	12	20
Total									4,627	94	137	231	196	149	345

SOURCE: Kimley-Horn and Associates 2008.

Notes:

<sup>1</sup> The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup> Trip Generation rates are based on SANDAG's (Not So) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

**TABLE 4.2-10**  
**Summary of Phase I Trip Generation**

Phase			Parcel		Land Use		Units <sup>1</sup>			Trip Rate <sup>2</sup>		Daily Trips		A.M. Peak Hour		P.M. Peak Hour							
Sweetwater District														In	Out	Total	In	Out	Total				
I		S-2					18	Ac	50	/	ac		900	59	58	117	41	40	81				
Subtotal													900	59	58	117	41	40	81				
Harbor District																							
I		H-3					2,000	rm	10	/	rm		20,000	720	480	1,200	960	640	1,600				
I		H-13, H-14					1,500	du	6	/	du		9,000	144	576	720	567	243	810				
I		H-8, HP-1											900	59	58	117	41	40	81				
I		H-17											400	38	10	48	10	38	48				
I		HP-3											42	1	1	2	2	2	3				
Subtotal													29,942	924	1,115	2,039	1,570	924	2,494				
Total													30,842	983	1,173	2,156	1,611	964	2,575				

SOURCE: Kimley-Horn and Associates 2008.

rm = room; ac = acre; ksf = thousand square feet; du = dwelling unit

<sup>1</sup>The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup>Trip Generation rates are based on SANDAG's (Not So) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

**TABLE 4.2-11**  
**Summary of Phase II Trip Generation**

Phase	Parcel	Land Use	Units¹	Trip Rate²	Daily Trips	A.M. Peak Hour		P.M. Peak Hour		
						In	Out	In	Out	Total
Harbor District										
II	H-9	Retail/Commercial Recreation	50 ksf	40 / ksf	2,000	36	24	60	90	180
II	H-15	Mixed Use Office	210 ksf	17 / ksf	3,570	418	46	464	100	500
II	H-15	Visitor Hotel	250 rm	8 / rm	2,000	60	40	100	56	140
II	H-15	Retail	120 ksf	40 / ksf	4,800	86	58	144	216	432
II	H-15	General Office	90 ksf	20 / ksf	1,800	227	25	252	47	234
II	H-23	Hotel	500 rm	10 / rm	5,000	180	120	300	240	400
II	H-23	Cultural	100 ksf	16 / ksf	1,600	22	10	32	80	160
II	H-23	Retail	100 ksf	40 / ksf	4,000	72	48	120	180	360
II	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	2
Subtotal					25,190	1,140	383	1,523	1,436	2,456
Total					25,190	1,140	383	1,523	1,436	2,456

SOURCE: Kimley-Horn and Associates 2008.

ksf = thousand square feet; ac = acre; du = dwelling unit

<sup>1</sup>The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup>Trip Generation rates are based on SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.

**TABLE 4.2-12**  
**Summary of Phase III Trip Generation**

Phase	Parcel	Land Use	Units <sup>1</sup>	Trip Rate <sup>2</sup>	Daily Trips	A.M. Peak Hour		P.M. Peak Hour					
						In	Out	In	Out				
Harbor District													
III	H-21	Retail	150	ksf	40	/	ksf	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	/	ac	3	4	7	2	3	5
Subtotal								111	76	187	272	273	545
Otay District													
III	O-1/O-2	Industrial Business Park <sup>3</sup>						115	29	144	29	115	144
III	O-3	RV Park	236	du	5	/	du	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	/	ac	5	5	10	10	10	20
Subtotal								148	101	249	117	177	294
Total								259	176	435	389	450	s

SOURCE: Kimley-Horn and Associates 2008.

ksf = thousand square feet

<sup>1</sup>The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup>Trip Generation rates are based on SANDAG's (Not So) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

<sup>3</sup> The size of the industrial business park has not been determined, but trips for its use, which is consistent with the General Plan, have been assumed as shown.

**TABLE 4.2-13**  
**Summary of Phase IV Trip Generation**

Phase	Parcel	Land Use	Units¹		Trip Rate²			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Sweetwater District														
IV	S-3	Mixed Use Commercial	120	ksf	17	/	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	/	ksf	2,040	239	26	265	57	229	286
IV	S-1	Resort Hotel	750	rm	8	/	rm	6,000	180	120	300	168	252	420
Subtotal								10,080	658	172	830	282	710	992
Harbor District														
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	/	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	/	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.40	ac	50	/	ac	20	1	2	3	1	1	2
Subtotal								4,520	268	40	308	193	269	462
Total								14,600	926	212	1,138	475	979	1,454

SOURCE: Kimley-Horn and Associates 2008.

ksf = thousand square feet

<sup>1</sup>The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup>Trip Generation rates are based on SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

TABLE 4.2-14  
Total Project Trip Generation Summary

Phase	Parcel	Land Use	Units¹	Trip Rate²	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
						In	Out	Total	In	Out	Total
Sweetwater District											
IV	S-1	Resort Hotel	750	Rm	8	/	Rm				420
I	S-2	Signature Park	18.0	Ac	50	/	Ac			40	81
IV	S-3	Mixed Use Commercial	120	Ksf	17	/	Ksf			229	286
IV	S-4	Office	120	Ksf	17	/	Ksf			229	286
Subtotal								10,980			1,073
Harbor District											
I	H-3	Hotel	2,000	Rm	10	/	Rm				1,600
I	H-8/HP-1	Signature Park	18.0	Ac	50	/	Ac			40	81
II	H-9	Retail/Commercial Recreation	50	Ksf	40	/	Ksf			90	180
IV	H-12	Ferry Terminal/Restaurant	25	Ksf	100	/	Ksf			60	200
I	H-13/H-14	Residential	1,500	Du	6	/	Du			243	810
II	H-15	Mixed Use Office	210	Ksf	17	/	Ksf			400	500
II	H-15	Visitor Hotel	250	Rm	8	/	Rm			84	140
II	H-15	Retail	120	Ksf	40	/	Ksf			216	432
II	H-15	General Office	90	Ksf	20	/	Ksf			187	234
II	H-17	Fire Station	2.0	Ac	200	/	Ac			38	48
IV	H-18	Office	100	Ksf	20	/	Ksf			52	260
III	H-21	Retail	150	Ksf	40	/	Ksf			270	540
II	H-23	Hotel	500	Rm	10	/	Rm			160	400
II	H-23	Cultural	100	Ksf	16	/	Ksf			80	160
II	H-23	Retail	100	Ksf	40	/	Ksf			180	360
I	HP-3	Shoreline Promenade	8.4	Ac	5	/	Ac			2	3
III	HP-23A	Industrial Business Park	1.0	Ac	50	/	Ac			3	5
II	HP-28	H Street Pier	0.4	Ac	50	/	Ac			1	2
IV	HP-28	H Street Pier	0.4	Ac	50	/	Ac			1	2
Subtotal								65,706			5,957
Otay District											
III	O-1/O-4	Industrial Business Park						1,200		115	144
III	O-3A/O-3B	RV Park	236	du	5	/	du			66	94
III	OP-1A/B and OP-3	South Park	51.0	ac	5	/	ac			5	10
Subtotal								2,635		148	249
Total								79,317		3,308	5,251
										1,943	3,495
											3,829
											294
											7,324

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1. **The Proposed Project would have a significant impact if it substantially increases hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

The roadways and intersections proposed within the plan area have been designed in conformance with the City of Chula Vista's engineering design guidelines. These standards provide adequate road width and curve radii for future traffic conditions and assure avoidance of hazards related to roadway and intersection design features or incompatible uses. Development of the project components without adequate access and frontage would result in a significant impact related to roadway design (**Significant Impact 4.2-1**).

Mitigation for access and frontage impacts includes construction of adjacent roadways and connection to the existing roadway network. The following discussion related to site access is based on the mitigated condition (i.e. roadways providing access and frontage are assumed to be constructed). Detailed site access alternative studies were conducted for the Pacifica Residential and Retail Project, and ~~Gaylord~~ Resort and Convention Center developments. These studies analyzed driveway configurations for site access, which are described below.

a. **Pacifica Residential and Retail Project**

A detailed access analysis was prepared for the residential parcels H-13 and H-14. The access analysis looked at driveway configurations to provide access for the site bordered by Marina Parkway to the west, Street C to the north, Street A to the east, and J Street to the south. The project distribution beyond the periphery of the site was kept constant.

This configuration assumes that the L-Ditch will not be filled, and that the 1,500 residential units will be divided into six residential buildings. Three driveways are assumed, two connecting to Marina Parkway and one connecting to Street A. The one driveway connecting to Street A will require a bridge to be constructed over the L-Ditch. *Figure 4.2-4b* shows the general location of each of the three driveways and the share of project traffic using those driveways. Each of the driveways would operate at an acceptable LOS as one-way stop controlled intersections. A right-turn lane would be required on southbound Street A to and for access to Access Driveway #3. Right-turn lanes are not necessary for either Marina Parkway driveway. None of the driveways, including the bridge, is required to be more than two lanes. No additional improvements are required at the adjacent intersections, and no significant impacts related to hazards associated with roadway and driveway design would result.

b. ~~Gaylord~~ **Resort and Convention Center (RCC)**

An in-depth site access analysis was performed for the ~~Gaylord~~ Resort and Convention Center (RCC) site at Parcel H-3. The area is bound by E Street to the west and north, the BF Goodrich

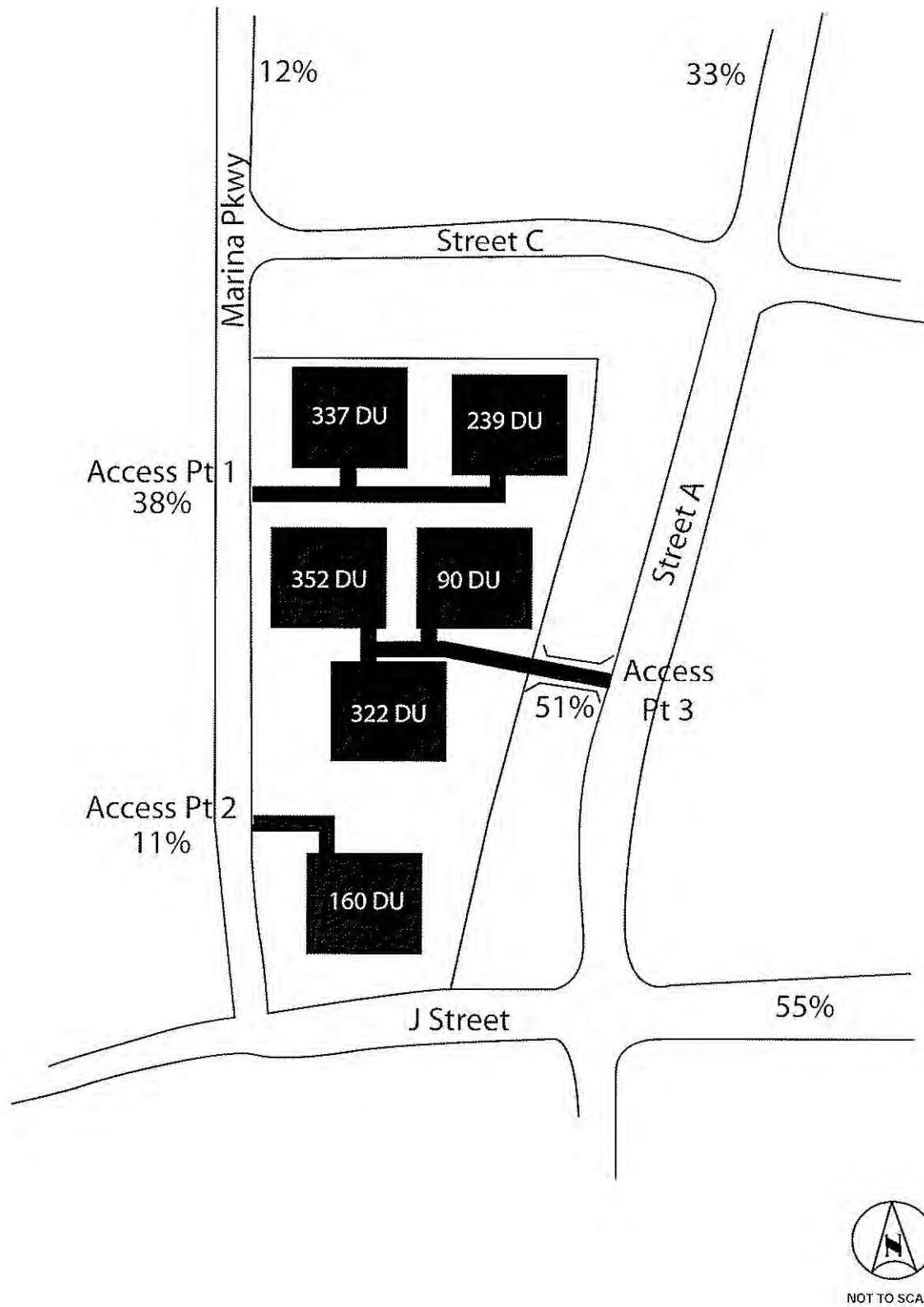
site to the east, and H Street to the south. As part of this analysis, the four adjacent intersections were examined. These intersections are:

- E Street & ~~Gaylord~~ RCC Secondary Driveway
- Main Exit & H Street
- Main Entrance & H Street
- Marina Parkway/~~Gaylord~~ RCC Truck Driveway & H Street.

The location of the driveways, the geometry of the driveways, and the distribution of traffic using each driveway is shown in *Figure 4.2-4c*. Most of the parking will be accessed via the main driveway on H Street, west of Marina Parkway. Additional parking is accessible from the secondary driveway off of E Street.

Parking for the first 1,500 rooms to be constructed by ~~Gaylord~~ for the RCC is assumed to be on site at H-3. At buildout of the 2,000 rooms proposed for the RCC site, H-18 will provide 500 spaces to meet the parking requirements for H-3. Parking at H-18 ~~will~~ may be used for ~~Gaylord~~ RCC employees and during large RCC special events and a shuttle between H-3 and H-18 ~~will~~ may be provided. The RCC is expected to require 2,816 parking spaces; 2,316 of those spaces will be provided on H-3. Thus, 18% of the total parking will be provided off site at H-18. Therefore, 82% of trips were distributed to H-3 and 18% of trips were distributed to H-18.

The ~~Gaylord~~ RCC access analysis uses the year 2030 volumes from the July 2006 TIA. The exit driveway only allows movements exiting the site and the entrance driveway only allows movements entering the site. Both entering and exiting movements are allowed at the other driveways. The main entrance and exit driveways would not require signals, but operate at an acceptable LOS as one-way stop-controlled intersections. It is suggested but not required that the main exit driveway provide a dedicated left-turn and a dedicated right-turn. The Secondary ~~Gaylord~~ RCC Driveway is required to provide separate left-turn and right-turn lanes in order to operate at an acceptable LOS as a one-way stop-controlled intersection. The ~~Gaylord~~ RCC Truck Driveway intersection must be signalized, which is identified as a mitigation measure related to **Significant Impact 4.2-1**. With the proposed access and frontage improvements in place, no significant impacts related to hazards associated with roadway and driveway design would result.



SOURCE: Kimley-Horn and Associates, Inc.

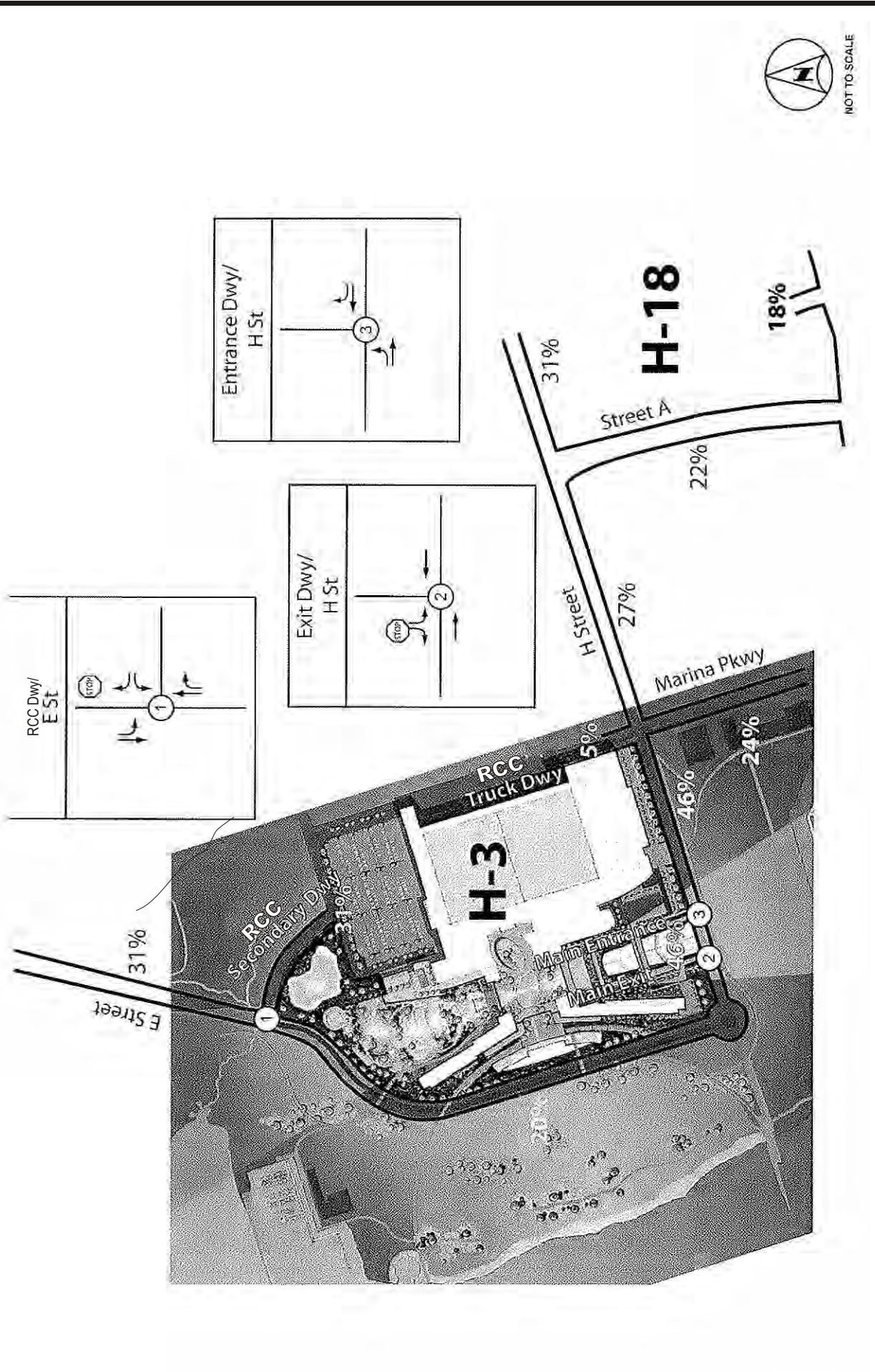
Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Pacifica (Parcels H-13 & H-14) Proposed Access**

**FIGURE**

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**FIGURE 4.2-4C**

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**RCC (Parcel H-13) Proposed Access**

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**2. The Proposed Project would have a significant impact if it conflicts with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).**

The Proposed Project is designed to encourage the use of alternate transportation by including the H Street transit center close to the rail line, bike and pedestrian pathways, water taxis, and a private employee parking shuttle. As described in *Chapter 3, Project Description*, the Proposed Project includes connections to the planned Bayshore Bikeway and provides an additional local bikeway loop that would be safer and more scenic as its located closer to the water. As evidenced in this analysis and in the analysis contained in *Section 4.1, Land/Water Use Compatibility*, of this EIR, these project components would not conflict with alternate transportation plans and policies identified above in *Table 4.2-8*. No significant impact is identified.

**3. The Proposed Project would have a significant impact if changes to the land use and the circulation plans result in the following:**

For Non-Urban Core circulation element roadways (Expressway, Prime Arterial, Major Street, Town Center Arterial, Class I Collector):

- a) A roadway segment that currently operates at LOS C or better and with the proposed changes would operate at LOS D or worse at General Plan buildout.
- b) A roadway segment that currently operates at LOS D or E and with the proposed changes would operate at LOS E or F at General Plan buildout respectively, or which operates at LOS D, E, or F and would worsen by five percent or more at General Plan buildout.

For Urban Core Circulation Element roadways (Gateway Street, Urban Arterial, Commercial Boulevard, Downtown Promenade):

- a) A roadway segment that currently operates at LOS D or better and with the proposed changes would operate at LOS E or F at General Plan buildout.
- b) A roadway segment that currently operates at LOS F and would worsen by five percent or more at General Plan buildout.

For changes to signalized and unsignalized intersections:

- a) An intersection that currently operates at LOS D or better and with proposed changes would operate at LOS E or worse at General Plan buildout.
- b) An intersection that currently operates at LOS E or F and the project trips generated comprise five percent or more of the entering volume. Entering volumes are the total approach volumes entering an intersection.
- c) A cumulative impact would occur if the operations at intersection are at LOS E or F only.

a. Phase I

Phase I is expected to be complete in the year 2012. The assumed transportation network improvements, projected traffic volumes, and analysis for this scenario are described below.

i. Proposed Roadway Network

The proposed roadway improvements for the Proposed Project are described below. For purposes of this Draft EIR, all of the roadway improvements within the Sweetwater and Harbor Districts are evaluated at a project level, and roadway improvements in subsequent phases in the Otay District are analyzed at a program level. Although the project level roads are described as project features in *Chapter 3* of this EIR, this chapter specifically analyzes circulation improvements, including timing of construction for the improvements, based on access and frontage requirements of proposed adjacent development, and mitigation requirements for traffic impacts caused by various project components. In addition, the analysis of project impacts includes incremental analysis of required mitigation. That is to say that when an impact is identified, and mitigation is provided, the subsequent step in the analysis includes re-analysis of traffic conditions with the improvements in place, to determine if the improvements result in redistribution of traffic that could cause an impact elsewhere. The purpose of this method of analysis is to determine timing and responsibility for each Phase of the development and for each project component within Phase I. Given that approach, the Draft EIR analysis has been structured to provide flexibility in the ability to construct identified roadway improvements sooner than required in the traffic analysis. Associated intersection improvements are described below. Proposed roadway cross sections are illustrated in *Figure 3-13a* through *3-13d* in *Chapter 3, Project Description*.

*Table 4.2-10*, provides a summary of trip generation in Phase I for the Proposed Project. The Proposed Project in Phase I is expected to generate a total of 30,842 daily trips, all of which would be generated by proposed land uses in Harbor District, except for the 900 trips per day that would be generated by the proposed signature park located in the Sweetwater District. This represents about 47 percent of the Proposed Project traffic generated by development occurring within the Harbor District.

ii. Project Traffic Volumes

The project traffic in Phase I would be distributed and assigned based on the actual location of the development. In situations where shared parking exists, project traffic would be distributed and assigned based on the availability of parking. This distribution and assignment was done based on SANDAG Series 10 Select Zone model plots of zones within the Bayfront Redevelopment Area.



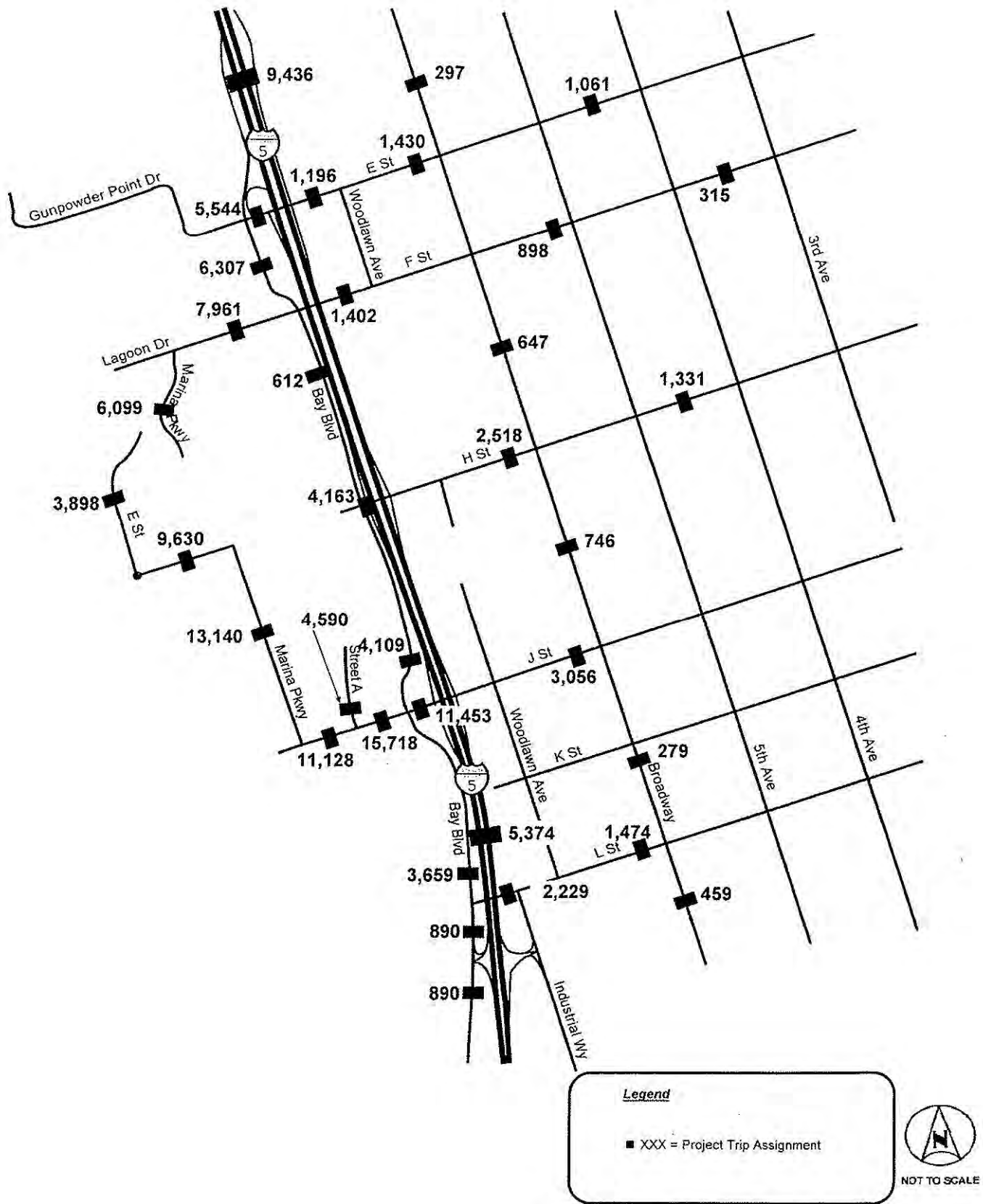
Phase I traffic volumes are calculated by increasing the existing traffic volumes gathered in 2005 by annual growth over 7 years, which is the difference between year 2012 (Phase I) and year 2005 (Existing). Phase I Baseline traffic volumes are calculated as the increase in traffic volumes resulting from 7 years of growth between 2005 and 2012 (as projected in the Chula Vista GPU) added to the existing baseline conditions. Phase I Plus Project volumes are calculated by adding the Phase I project trips (generated by proposed land uses) to the Phase I Baseline volumes and subtracting the trip credits associated with existing land uses to be redeveloped as part of Phase I (RV Park).

### iii. Roadway Segment Analysis

As discussed earlier, *Figure 4.2-4a* shows the existing ADTs for street segments in the project area. *Figure 4.2-5* shows the Phase I Roadway Segment Trip Assignment for street segments in the project area. *Figure 4.2-6* shows the Phase I Baseline ADT Volume for street segments in the project area. *Figure 4.2-7* shows the Phase I Plus Project Conditions ADT Volumes. *Table 4.2-15* provides the Phase I Conditions Roadway Level of Service summary and presents the LOS analysis results for the roadway segments under Phase I Baseline and Phase I Plus Project conditions. As shown in the table, the following segments will experience congested LOS D or worse conditions for segments outside of the Urban Core and LOS E conditions for segments inside of the Urban Core and will require mitigation:

- Lagoon Drive/F Street (Marina Parkway to Bay Boulevard) (LOS F) (**Significant Impact 4.2-2**)
- H Street (west of Marina Parkway)(LOS F) (**Significant Impact 4.2-3**)
- Marina Pkwy (Lagoon Drive to G Street) (LOS F) (**Significant Impact 4.2-4**)
- Bay Boulevard (E Street to F Street) (LOS F) (**Significant Impact 4.2-5**).

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SOURCE: Kimley-Horn and Associates, Inc.

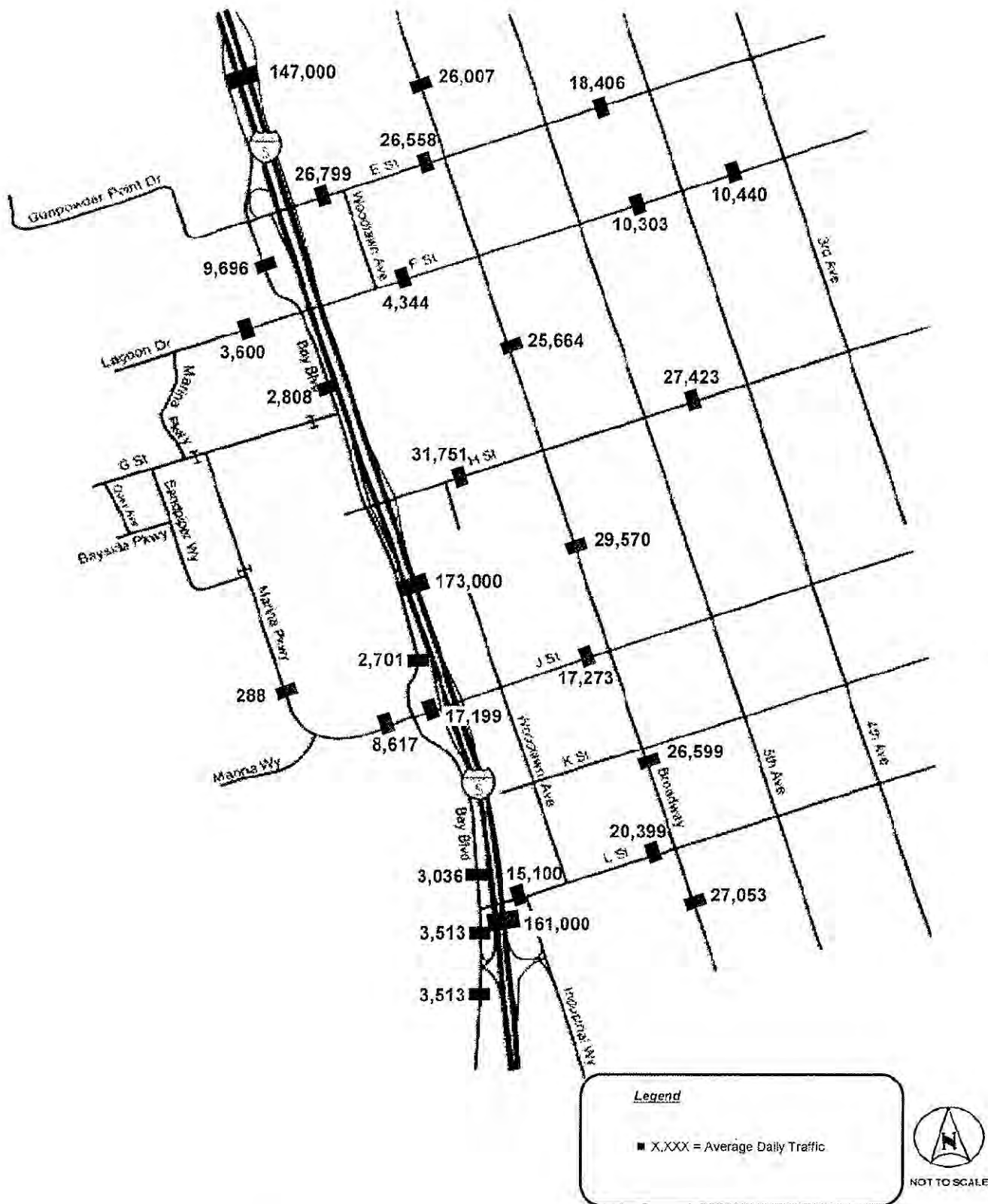
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Roadway Segment Trip Assignment

FIGURE

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SOURCE: Kimley-Horn and Associates, Inc.

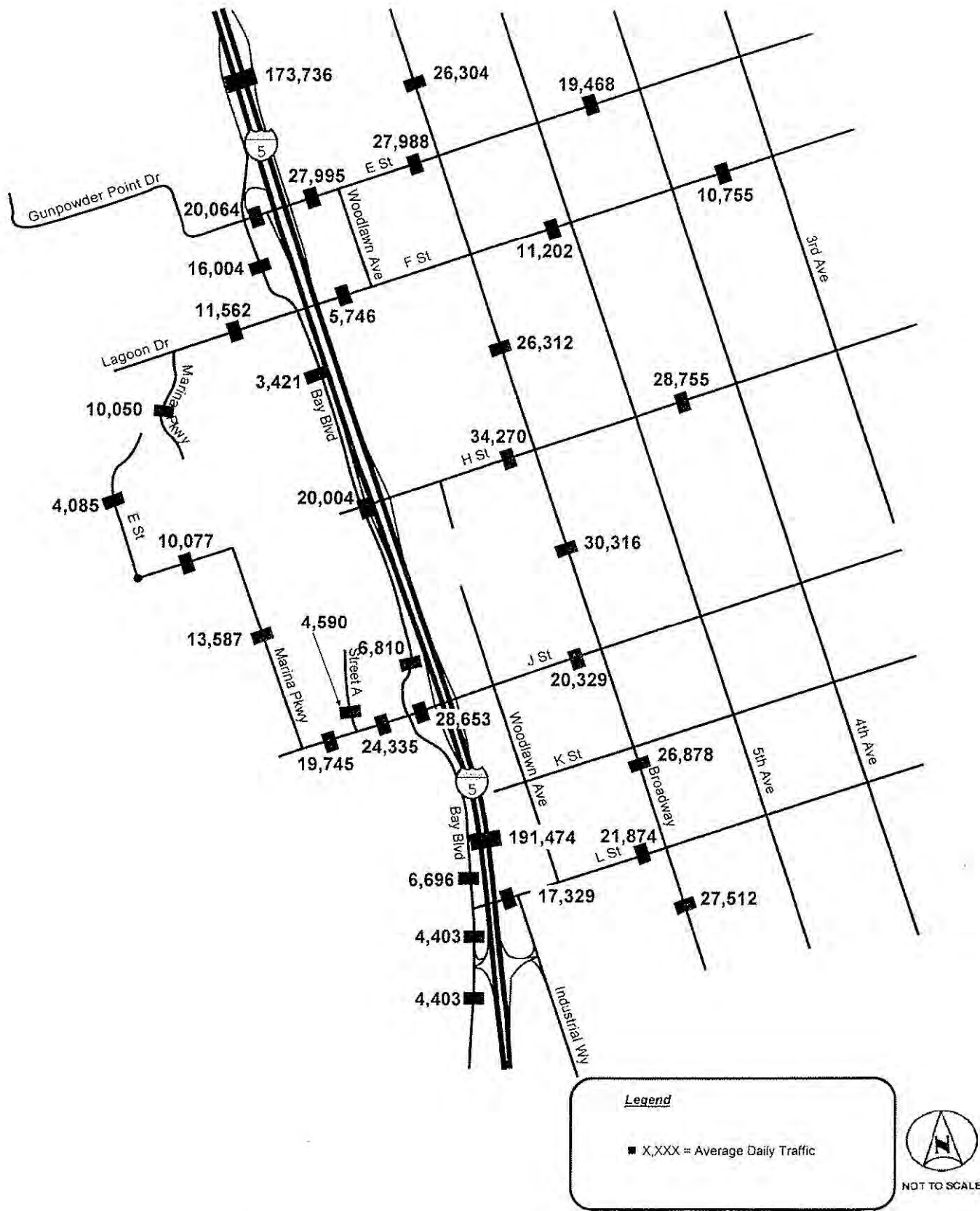
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Baseline Conditions ADT Volumes

FIGURE

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SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Plus Project Conditions ADT Volumes

FIGURE

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TABLE 4.2-15

## Phase I Conditions Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification¹	Acceptable Volume	Phase I Baseline		Phase I Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to Gaylord-RCC Dwy (c)	2 Lanes Class III Collector	7,500	—	—	4,085	A	3,898	95	NO
Bay Blvd to I-5 Ramps	4 Lanes Major Street	30,000	14,520	A	20,064	A	5,544	28	NO
I-5 Ramps to Woodlawn Ave	4 Lanes Gateway Street	43,200	26,800	A	27,995	A	1,196	4	NO
Woodlawn Ave to Broadway	4 Lanes Gateway Street	43,200	26,560	A	27,988	A	1,430	5	NO
Broadway to 3rd Ave	4 Lanes Urban Arterial	37,800	18,410	A	19,468	A	1,061	5	NO
Lagoon Drive/F Street									
Marina Pkwy to Bay Blvd	2 Lanes Class III Collector	7,500	3,600	A	11,562	F	7,961	69	DIRECT
Bay Blvd to Broadway	4 Lanes Downtown Promenade	33,750	4,350	A	5,746	A	1,402	24	NO
Broadway to 4th Ave	2 Lanes Downtown Promenade	14,400	10,310	B	11,202	C	898	8	NO
4th Ave to 3rd Ave	4 Lanes Downtown Promenade	33,750	10,440	A	10,755	A	315	3	NO
H Street									
West of Marina Parkway (c)	2 Lanes Class III Collector	7,500	—	—	10,077	F	9,630	96	DIRECT
Bay Blvd to I-5 Ramps	4 Lanes Gateway Street	43,200	15,850	A	20,004	A	4,163	21	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	31,760	B	34,270	C	2,518	7	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	27,430	B	28,755	B	1,331	5	NO
J Street									
Marina Parkway to Street A²	4 Lanes Major Street	30,000	8,620	A	19,745	A	11,128	56	NO
Street A to Bay Blvd²	4 Lanes Major Street	30,000	8,620	A	24,335	B	15,718	65	NO
Bay Blvd to I-5 Ramps	4 Lanes Major Street	30,000	17,200	A	28,653	C	11,453	40	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	17,280	A	20,329	A	3,056	15	NO
L Street									
Bay Blvd to Industrial Way	4 Lanes Gateway Street	43,200	15,100	A	17,329	A	2,229	13	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	20,400	A	21,874	A	1,474	7	NO
Marina Parkway									
Lagoon Dr to G Street	2 Lanes Class III Collector	7,500	3,950	A	10,050	F	6,099	61	DIRECT
H Street to J Street (b)	3 Lanes Class II Collector	17,000	450	A	13,587	B	13,140	97	NO

TABLE 4.2-15 (Cont.)

Roadway Segment	Roadway Classification¹	Acceptable Volume	Phase I Baseline		Phase I Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	9,700	B	16,004	F	6,307	39	DIRECT
F Street to H Street	2 Lanes Class III Collector	7,500	2,810	A	3,421	A	612	18	NO
H Street to J Street	2 Lanes Class III Collector	7,500	2,710	A	6,810	C	4,109	60	NO
J Street to L Street	2 Lanes Class II Collector	12,000	3,040	A	6,696	A	3,659	55	NO
L Street to I-5 Ramps	2 Lanes Class II Collector	12,000	3,520	A	4,403	A	890	20	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	3,520	A	4,403	A	890	20	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,010	B	26,304	C	297	1	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	25,670	B	26,312	C	647	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	29,570	C	30,316	D	746	2	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	26,600	C	26,878	C	279	1	NO
South of L Street	4 Lanes Major Street	30,000	27,060	C	27,512	C	459	2	NO
Street A									
Pacifica Dwy to J Street (c)	2 Lanes Class III Collector	7,500	—	—	4,590	A	4,590	100	NO

iv. Intersection Analysis

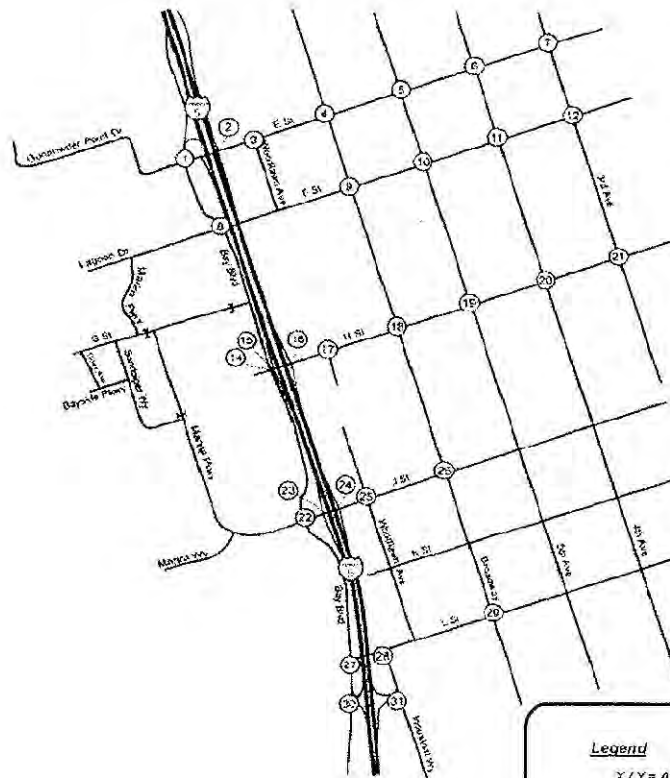
*Figures 4.2-8a through 4.2-8d* depict the Phase I Baseline Conditions Peak-Hour Traffic Volumes for intersections in the study area. Only the intersections that are constructed or those that will be constructed in Phase I are depicted. *Figures 4.2-9a through 4.2-9d* depict the Phase I Plus Project Conditions Peak-Hour Traffic Volumes. Finally, *Table 4.2-16* summarizes the Phase I Conditions Peak-Hour Level of Service for intersections in the project area.

As shown in *Table 4.2-16*, the following intersections will be characterized by LOS E or F conditions under Phase I Baseline Plus Project conditions and would result in direct project impacts and would require mitigation:

- E Street/I-5 Southbound Off-Ramps (LOS F, PM peak hour) (**Significant Impact 4.2-6**)
- F Street/Bay Boulevard (LOS F, PM peak hour) (**Significant Impact 4.2-7**)
- J Street/Bay Boulevard (LOS F, both peak hours) (**Significant Impact 4.2-8**)
- L Street/Bay Boulevard (LOS F, both peak hours) (**Significant Impact 4.2-9**)
- I-5 Southbound Ramps/Bay Boulevard (LOS F, PM peak hour) (**Significant Impact 4.2-10**)
- J Street/Marina Parkway (LOS E, PM peak hour) (**Significant Impact 4.2-11**).

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<p>1</p> <p>21 / 27 327 / 693 348 / 845</p> <p>I-5 SB Ramps</p> <p>257 / 453 53 / 20 22 / 84</p> <p>E St</p> <p>2 / 13 1 / 2</p> <p>Bay Blvd</p> <p>0 / 6 170 / 344</p>	<p>2</p> <p>I-5 NB On Ramp</p> <p>566 / 536 249 / 465</p> <p>E St</p> <p>120 / 242 251 / 743</p> <p>I-5 NB Off Ramp</p> <p>21 / 17 289 / 2 369 / 410</p>	<p>3</p> <p>4 / 20 0 / 11 12 / 23</p> <p>0%</p> <p>5 / 9 598 / 844 106 / 94</p> <p>E St</p> <p>3 / 11 540 / 833 116 / 90</p> <p>Woodlawn Ave</p> <p>162 / 173 21 / 12 77 / 54</p>	<p>4</p> <p>160 / 254 156 / 849 27 / 100</p> <p>Broadway</p> <p>121 / 50 407 / 465 28 / 119</p> <p>E St</p> <p>305 / 318 238 / 513 95 / 177</p> <p>174 / 216 441 / 550 40 / 77</p>
<p>5</p> <p>26 / 45 40 / 128 7 / 18</p> <p>5th Ave</p> <p>26 / 36 435 / 500 19 / 43</p> <p>E St</p> <p>21 / 36 337 / 615 15 / 40</p> <p>24 / 28 45 / 91 18 / 55</p>	<p>6</p> <p>34 / 72 292 / 781 112 / 223</p> <p>4th Ave</p> <p>49 / 105 372 / 439 88 / 128</p> <p>E St</p> <p>38 / 55 271 / 526 53 / 80</p> <p>81 / 106 249 / 503 31 / 98</p>	<p>7</p> <p>26 / 53 73 / 231 34 / 148</p> <p>3rd Ave</p> <p>98 / 91 463 / 501 160 / 217</p> <p>E St</p> <p>16 / 43 312 / 613 59 / 165</p> <p>63 / 114 213 / 240 45 / 149</p>	<p>8</p> <p>206 / 33 51 / 318 116 / 308</p> <p>Bay Blvd</p> <p>72 / 103 57 / 18 46 / 64</p> <p>F St</p> <p>30 / 157 17 / 62 4 / 13</p> <p>14 / 4 71 / 71 21 / 29</p>
<p>9</p> <p>29 / 49 275 / 1092 43 / 81</p> <p>Broadway</p> <p>41 / 61 118 / 120 56 / 96</p> <p>F St</p> <p>27 / 47 120 / 358 104 / 187</p> <p>64 / 81 608 / 764 63 / 89</p>	<p>10</p> <p>9 / 36 45 / 191 15 / 32</p> <p>5th Ave</p> <p>16 / 41 142 / 225 8 / 37</p> <p>F St</p> <p>14 / 15 163 / 317 19 / 64</p> <p>11 / 32 47 / 114 11 / 20</p>	<p>11</p> <p>45 / 31 286 / 782 50 / 92</p> <p>4th Ave</p> <p>43 / 121 189 / 189 25 / 105</p> <p>F St</p> <p>23 / 45 81 / 316 54 / 106</p> <p>48 / 50 307 / 565 48 / 104</p>	<p>12</p> <p>37 / 77 218 / 475 5 / 75</p> <p>3rd Ave</p> <p>35 / 46 181 / 157 42 / 86</p> <p>F St</p> <p>16 / 70 108 / 261 57 / 189</p> <p>69 / 118 241 / 370 61 / 62</p>



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Baseline Conditions Peak Hour Traffic Volume (1 of 4)

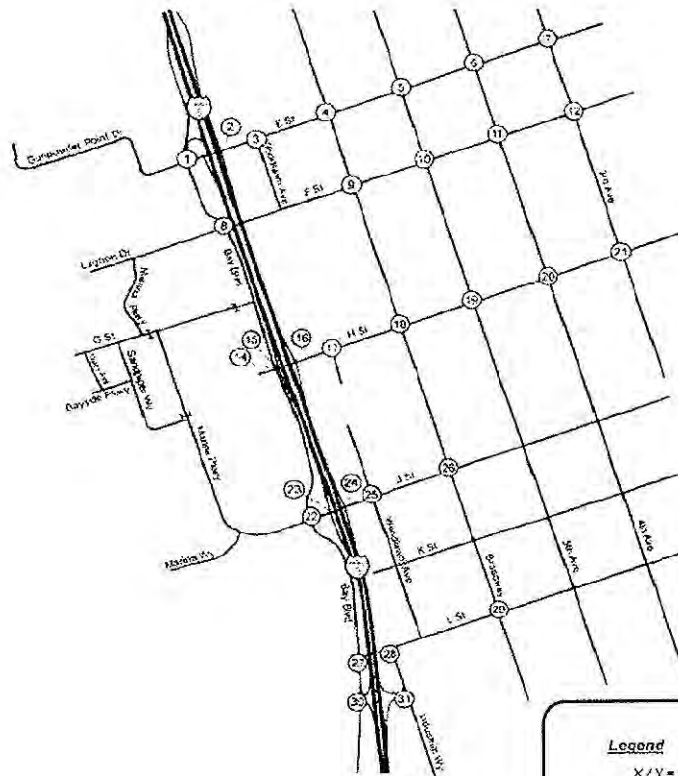
FIGURE

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<p>13</p> <p>Intersection is not constructed in this phase</p>	<p>14</p> <p>6 / 14 18 / 337 28 / 180</p> <p>Bay Blvd</p> <p>63 / 5 6 / 9 44 / 41</p> <p>H St</p> <p>17 / 18 7 / 16 1 / 26</p> <p>0 / 11 99 / 33 15 / 51</p>	<p>15</p> <p>54 / 108 3 / 0 484 / 714</p> <p>I-5 SB Off-Ramp</p> <p>71 / 47 520 / 596</p> <p>H St</p> <p>19 / 179 15 / 110</p> <p>I-5 SB On Ramp</p>	<p>16</p> <p>I-5 NB On Ramp</p> <p>392 / 591 606 / 601</p> <p>H St</p> <p>9 / 62 491 / 651</p> <p>I-5 NB Off Ramp</p> <p>36 / 18 514 / 573</p>
<p>17</p> <p>193 / 165 41 / 30 133 / 108</p> <p>0%</p> <p>102 / 98 708 / 835 104 / 63</p> <p>H St</p> <p>131 / 92 927 / 898 78 / 50</p> <p>Woodlawn Ave</p> <p>52 / 107 14 / 29 48 / 40</p>	<p>18</p> <p>59 / 135 441 / 894 89 / 223</p> <p>Broadway</p> <p>112 / 142 375 / 602 154 / 343</p> <p>H St</p> <p>219 / 205 498 / 568 80 / 233</p> <p>Broadway</p> <p>97 / 246 1022 / 747 105 / 221</p>	<p>19</p> <p>94 / 112 26 / 148 153 / 187</p> <p>5th Ave</p> <p>207 / 177 598 / 776 55 / 244</p> <p>H St</p> <p>187 / 51 544 / 722 44 / 178</p> <p>38 / 201 41 / 104 46 / 242</p>	<p>20</p> <p>86 / 212 349 / 590 102 / 192</p> <p>4th Ave</p> <p>115 / 168 591 / 739 89 / 137</p> <p>H St</p> <p>124 / 156 511 / 758 102 / 211</p> <p>184 / 157 447 / 448 80 / 91</p>
<p>21</p> <p>55 / 150 313 / 537 102 / 184</p> <p>3rd Ave</p> <p>136 / 147 631 / 617 230 / 247</p> <p>H St</p> <p>81 / 142 389 / 712 160 / 206</p> <p>132 / 190 492 / 487 83 / 189</p>	<p>22</p> <p>3 / 17 29 / 193 15 / 159</p> <p>Bay Blvd</p> <p>238 / 48 88 / 134 359 / 180</p> <p>J St</p> <p>5 / 17 65 / 179 19 / 29</p> <p>14 / 28 62 / 57 29 / 186</p>	<p>23</p> <p>194 / 95 232 / 417</p> <p>I-5 SB Off-Ramp</p> <p>491 / 231 149 / 261</p> <p>J St</p> <p>98 / 343 32 / 179</p> <p>I-5 SB On Ramp</p>	<p>24</p> <p>I-5 NB On Ramp</p> <p>367 / 312 377 / 375</p> <p>J St</p> <p>50 / 172 290 / 636</p> <p>I-5 NB Off Ramp</p> <p>267 / 100 211 / 0 518 / 291</p>



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Baseline Conditions Peak Hour Traffic Volume (2 of 4)

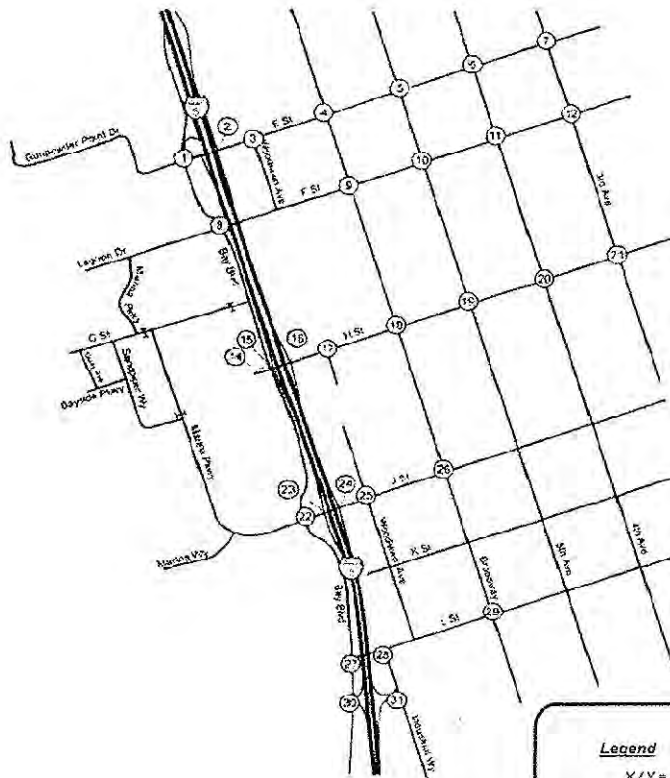
FIGURE

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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 601 / 724</p> <p>J St</p> <p>560 / 977 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>82 / 195 401 / 1053 55 / 78</p> <p>Broadway</p> <p>115 / 177 277 / 426 78 / 135</p> <p>99 / 116 605 / 798 35 / 74</p> <p>J St</p>	<p>27</p> <p>49 / 67 92 / 125</p> <p>Bay Blvd</p> <p>183 / 6 355 / 598</p> <p>L St</p> <p>70 / 7 476 / 866</p>	<p>28</p> <p>3 / 9 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 387 / 419 228 / 354</p> <p>L St</p> <p>4 / 6 376 / 554 265 / 453</p> <p>131 / 83 3 / 2 421 / 446</p>
<p>29</p> <p>81 / 80 415 / 973 70 / 118</p> <p>Broadway</p> <p>113 / 92 435 / 380 109 / 159</p> <p>L St</p> <p>123 / 130 395 / 554 88 / 179</p> <p>109 / 161 480 / 743 60 / 123</p>	<p>30</p> <p>51 / 155 317 / 471</p> <p>Bay Blvd</p> <p>458 / 697 62 / 24</p> <p>I-5 SB Ramps</p> <p>69 / 120 4 / 13</p>	<p>31</p> <p>214 / 291 283 / 426</p> <p>Industrial Wy</p> <p>339 / 281 135 / 171</p> <p>335 / 331 193 / 224</p>	<p>32</p> <p>Intersection is not constructed in this phase</p>
<p>33</p> <p>Intersection is not constructed in this phase</p>	<p>34</p> <p>Intersection is not constructed in this phase</p>	<p>35</p> <p>Intersection is not constructed in this phase</p>	<p>36</p> <p>Intersection is not constructed in this phase</p>



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Baseline Conditions Peak Hour Traffic Volume (3 of 4)

FIGURE

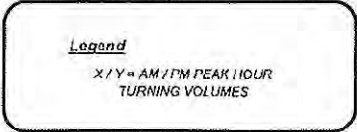
4.2-8C

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39

Intersection is not constructed in this phase



NOT TO SCALE

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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Phase I Baseline Conditions Peak Hour Traffic Volume (4 of 4)**

**FIGURE**

4.2-80

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<p>1</p> <p>21 / 27 527 / 933 348 / 845 I-5 SB Off-Ramp</p> <p>25 / 1453 53 / 20 85 / 139 E St</p> <p>2 / 13 1 / 2 Bay Blvd</p> <p>0 / 6 353 / 555</p>	<p>2</p> <p>I-5 NB On Ramp</p> <p>566 / 536 317 / 538 E St</p> <p>250 / 408 305 / 789 I-5 NB Off-Ramp</p> <p>21 / 17 289 / 2 417 / 418</p>	<p>3</p> <p>4 / 20 0 / 11 12 / 23 Woodlawn Ave</p> <p>5 / 9 766 / 947 106 / 94 E St</p> <p>3 / 11 612 / 887 116 / 90</p> <p>132 / 173 21 / 12 77 / 54</p>	<p>4</p> <p>172 / 267 156 / 849 27 / 100 Broadway</p> <p>121 / 50 463 / 531 28 / 119 E St</p> <p>314 / 326 300 / 557 95 / 177</p> <p>174 / 216 441 / 550 40 / 77</p>
<p>5</p> <p>32 / 50 40 / 128 7 / 18 5th Ave</p> <p>26 / 36 485 / 558 19 / 43 E St</p> <p>27 / 40 594 / 655 15 / 40</p> <p>24 / 28 45 / 91 18 / 55</p>	<p>6</p> <p>42 / 83 292 / 781 112 / 223 4th Ave</p> <p>48 / 105 411 / 484 86 / 128 E St</p> <p>50 / 62 312 / 557 57 / 83</p> <p>85 / 109 249 / 503 31 / 99</p>	<p>7</p> <p>26 / 53 73 / 231 34 / 148 3rd Ave</p> <p>98 / 91 501 / 545 160 / 217 E St</p> <p>16 / 43 352 / 643 61 / 166</p> <p>65 / 115 213 / 240 46 / 149</p>	<p>8</p> <p>468 / 328 51 / 318 116 / 308 Bay Blvd</p> <p>72 / 103 111 / 80 51 / 82 F St</p> <p>213 / 368 54 / 106 27 / 29</p> <p>37 / 20 71 / 71 39 / 37</p>
<p>9</p> <p>42 / 72 275 / 1092 43 / 81 Broadway</p> <p>41 / 61 151 / 184 56 / 96 F St</p> <p>46 / 60 147 / 387 114 / 197</p> <p>77 / 95 608 / 764 63 / 89</p>	<p>10</p> <p>16 / 45 45 / 191 15 / 32 5th Ave</p> <p>16 / 41 169 / 260 8 / 37 F St</p> <p>18 / 21 186 / 341 19 / 54</p> <p>11 / 32 47 / 114 11 / 20</p>	<p>11</p> <p>52 / 40 296 / 782 50 / 92 4th Ave</p> <p>43 / 121 208 / 215 25 / 105 F St</p> <p>27 / 51 98 / 332 56 / 107</p> <p>50 / 51 307 / 565 48 / 104</p>	<p>12</p> <p>37 / 77 218 / 475 6 / 76 3rd Ave</p> <p>35 / 46 190 / 167 42 / 86 F St</p> <p>16 / 70 114 / 268 59 / 190</p> <p>71 / 119 241 / 370 61 / 62</p>



**Legend**

X/Y = AM/PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Plus Project Conditions Peak Hour Traffic Volumes (1 of 4)

**FIGURE**  
**4.2-9A**

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<p>13</p> <p>H St</p> <p>195 / 289</p> <p>Gaylord Dr</p> <p>Marina Pkwy</p> <p>336 / 399 35 / 45</p>	<p>14</p> <p>Bay Blvd</p> <p>6 / 14 27 / 358 47 / 193</p> <p>82 / 19 6 / 9 148 / 246</p> <p>17 / 18 7 / 16 1 / 26</p> <p>0 / 11 121 / 44 170 / 163</p>	<p>15</p> <p>I-5 SB Off-Ramp</p> <p>103 / 170 3 / 0 484 / 714</p> <p>145 / 204 520 / 596</p> <p>177 / 293 32 / 122</p> <p>I-5 SB On-Ramp</p>	<p>16</p> <p>I-5 NB On-Ramp</p> <p>38 / 103 621 / 723</p> <p>362 / 591 664 / 746</p> <p>I-5 NB Off-Ramp</p> <p>53 / 30 514 / 573</p>
<p>17</p> <p>Woodlawn Ave</p> <p>193 / 165 41 / 30 133 / 108</p> <p>102 / 98 766 / 980 104 / 63</p> <p>H St</p> <p>131 / 92 1057 / 970 78 / 60</p> <p>52 / 107 14 / 29 49 / 40</p>	<p>18</p> <p>Broadway</p> <p>76 / 166 441 / 894 89 / 228</p> <p>112 / 142 406 / 698 154 / 343</p> <p>H St</p> <p>239 / 221 591 / 612 98 / 245</p> <p>109 / 268 1022 / 747 105 / 221</p>	<p>19</p> <p>5th Ave</p> <p>99 / 130 26 / 148 153 / 187</p> <p>207 / 77 622 / 643 55 / 244</p> <p>H St</p> <p>205 / 59 608 / 754 50 / 181</p> <p>40 / 207 41 / 104 46 / 242</p>	<p>20</p> <p>4th Ave</p> <p>86 / 212 349 / 550 102 / 152</p> <p>115 / 168 615 / 806 89 / 137</p> <p>H St</p> <p>124 / 156 575 / 790 102 / 211</p> <p>184 / 157 447 / 448 80 / 31</p>
<p>21</p> <p>3rd Ave</p> <p>58 / 162 313 / 537 102 / 184</p> <p>136 / 147 649 / 666 230 / 247</p> <p>H St</p> <p>93 / 147 434 / 736 168 / 210</p> <p>136 / 197 492 / 487 83 / 189</p>	<p>22</p> <p>Bay Blvd</p> <p>35 / 142 33 / 196 44 / 200</p> <p>287 / 110 356 / 690 359 / 180</p> <p>J St</p> <p>132 / 71 500 / 475 162 / 136</p> <p>115 / 222 66 / 80 29 / 186</p>	<p>23</p> <p>I-5 SB Off-Ramp</p> <p>262 / 289 232 / 417</p> <p>740 / 655 149 / 261</p> <p>J St</p> <p>393 / 525 202 / 334</p> <p>I-5 SB On-Ramp</p>	<p>24</p> <p>I-5 NB On-Ramp</p> <p>229 / 264 407 / 727</p> <p>367 / 312 466 / 538</p> <p>J St</p> <p>428 / 363 211 / 0 518 / 291</p>



**Legend**  
X/Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Plus Project Conditions Peak Hour Traffic Volumes (2 of 4)

FIGURE

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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 690 / 887</p> <p>J St</p> <p>677 / 1068 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>82 / 195 401 / 1053 55 / 78</p> <p>Broadway</p> <p>62 / 85 392 / 479 31 / 48</p> <p>J St</p> <p>115 / 177 394 / 517 78 / 135</p> <p>99 / 116 655 / 798 35 / 74</p>	<p>27</p> <p>84 / 06 206 / 207</p> <p>Bay Blvd</p> <p>259 / 156 355 / 598</p> <p>L St</p> <p>100 / 54 476 / 866</p>	<p>28</p> <p>3 / 9 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 426 / 500 228 / 354</p> <p>L St</p> <p>4 / 6 440 / 597 317 / 491</p> <p>167 / 153 3 / 2 421 / 446</p>
<p>29</p> <p>88 / 98 415 / 973 70 / 118</p> <p>Broadway</p> <p>113 / 92 461 / 444 109 / 159</p> <p>L St</p> <p>127 / 136 450 / 585 92 / 185</p> <p>116 / 170 480 / 743 60 / 123</p>	<p>30</p> <p>86 / 184 317 / 471</p> <p>Bay Blvd</p> <p>458 / 597 62 / 24</p> <p>I-5 SB Ramps</p> <p>99 / 175 4 / 13</p>	<p>31</p> <p>214 / 291 335 / 464</p> <p>Industrial Wy</p> <p>I-5 NB Ramps</p> <p>339 / 281 135 / 171</p> <p>335 / 331 229 / 294</p>	<p>32</p> <p>Intersection is not constructed in this phase</p>
<p>33</p> <p>Intersection is not constructed in this phase</p>	<p>34</p> <p>Intersection is not constructed in this phase</p>	<p>35</p> <p>Intersection is not constructed in this phase</p>	<p>36</p> <p>485 / 450</p> <p>Marina Pkwy</p> <p>380 / 659 44 / 67</p> <p>J St</p> <p>45 / 113</p>



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase I Plus Project Conditions Peak Hour Traffic Volumes (3 of 4)

**FIGURE**  
**4.2-9C**

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<div>37</div> <div> <div>9 / 6</div> <div>294 / 124</div> <div>Street A</div> </div> <div> <div>74 / 290</div> <div>415 / 720</div> <div>J St</div> </div>	<div>38</div> <div>Intersection is not constructed in this phase</div>	<div>39</div> <div>Intersection is not constructed in this phase</div>
<div>9 / 6</div> <div>500 / 556</div> <div>5 0</div>		



**Legend**  
X / Y - AM / PM PEAK HOUR  
TURNING VOLUMES



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**TABLE 4.2-16**  
**Phase I Conditions Peak-Hour Intersection Level of Service Summary**

	Intersection	Peak Hour	Phase I Baseline		Phase I Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
1	E Street & I-5 SB Off-Ramp	A.M.	12.8	B	19.2	B	28.7	NO
		P.M.	16.6	B	100.7	F	18.2	DIRECT
2	E Street & I-5 NB On-Ramp	A.M.	22.9	C	33.7	C	13.4	NO
		P.M.	16.7	B	30.0	C	11.5	NO
3	E Street & Woodlawn Avenue	A.M.	24.6	C	33.4	C	7.6	NO
		P.M.	18.4	B	21.1	C	5.7	NO
4	E Street & Broadway	A.M.	19.2	B	19.8	B	6.2	NO
		P.M.	34.1	C	35.7	D	3.5	NO
5	E Street & 5th Avenue	A.M.	5.2	A	5.2	A	10.8	NO
		P.M.	6.6	A	6.6	A	6.4	NO
6	E Street & 4th Avenue	A.M.	14.7	B	14.7	B	6.3	NO
		P.M.	27.7	C	27.8	C	3.2	NO
7	E Street & 3rd Avenue	A.M.	12.7	B	12.8	B	5.2	NO
		P.M.	21.9	C	22.1	C	3.0	NO
8	F Street & Bay Boulevard	A.M.	8.9	A	28.0	C	48.7	NO
		P.M.	15.5	B	100.0	F	38.7	DIRECT
9	F Street & Broadway	A.M.	16.8	B	17.1	B	7.5	NO
		P.M.	24.9	C	25.0	C	4.6	NO
10	F Street & 5th Avenue	A.M.	6.4	A	6.6	A	11.8	NO
		P.M.	8.7	A	8.8	A	6.8	NO
11	F Street & 4th Avenue	A.M.	15.2	B	15.4	B	4.4	NO
		P.M.	20.5	C	21.0	C	2.5	NO
12	F Street & 3rd Avenue	A.M.	15.3	B	15.3	B	1.9	NO
		P.M.	23.1	C	23.2	C	1.0	NO
13	H Street & Gaylord <del>RCC</del> Dwy	A.M.	DNE		11.2	B	100	NO
		P.M.			14.5	B	100	NO
14	H Street & Bay Boulevard	A.M.	19.4	B	21.4	C	53.8	NO
		P.M.	7.3	A	14.2	B	35.0	NO
15	H Street & I-5 SB Ramps	A.M.	24.2	C	20.6	C	21.5	NO
		P.M.	24.4	C	25.9	C	17.2	NO

TABLE 4.2-16 (Cont.)

Intersection	Peak Hour	Phase I Baseline		Phase I Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
		Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
16	H Street & I-5 NB Ramps	12.7	B	13.8	B	10.7	NO
		15.0	B	18.0	B	10.2	NO
17	H Street & Woodlawn Avenue	30.3	C	32.6	C	7.1	NO
		27.7	C	34.7	C	8.2	NO
18	H Street & Broadway	26.7	C	28.4	C	5.8	NO
		32.8	C	35.1	D	4.8	NO
19	H Street & 5th Avenue	11.5	B	11.6	B	5.6	NO
		18.4	B	19.3	B	4.3	NO
20	H Street & 4th Avenue	24.7	C	25.0	C	3.1	NO
		33.9	C	34.5	C	2.6	NO
21	H Street & 3rd Avenue	19.4	B	19.6	B	3.2	NO
		30.1	C	30.4	C	2.6	NO
22	J Street & Bay Boulevard	12.1	B	80.9	F	58.4	DIRECT
		13.3	B	ECL	F	56.3	DIRECT
23	J Street & I-5 SB Ramps	14.6	B	25.4	C	41.3	NO
		18.6	B	24.2	C	40.4	NO
24	J Street & I-5 NB Ramps	16.8	B	37.4	D	21.5	NO
		15.1	B	33.5	C	25.7	NO
25	J Street & Woodlawn Avenue	11.0	B	11.5	B	14.6	NO
		11.7	B	12.6	B	13.0	NO
26	J Street & Broadway	14.3	B	16.0	B	9.0	NO
		21.5	C	24.1	C	7.1	NO
27	L Street & Bay Boulevard	21.3	C	134.6	F	18.0	DIRECT
		148.0	F	ECL	F	16.4	DIRECT
28	L Street & Industrial Boulevard	25.0	C	25.8	C	9.9	NO
		24.9	C	24.8	C	9.5	NO
29	L Street & Broadway	15.9	B	16.2	B	4.3	NO
		26.3	C	27.4	C	3.5	NO
30	I-5 SB Ramps & Bay Boulevard	23.1	C	25.8	D	6.6	NO
		48.6	E	57.5	F	5.2	DIRECT

TABLE 4.2-16 (Cont.)

Intersection	Peak Hour	Phase I Baseline		Phase I Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
		Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
31 I5 NB Ramps & Industrial Boulevard	A.M.	15.9	B	17.5	B	5.9	NO
	P.M.	17.7	B	20.8	C	6.3	NO
36 J Street & Marina Pkwy	A.M.	DNE		19.4	B	84.9	NO
	P.M.	DNE		67.4	<b>E</b>	76.0	<b>DIRECT</b>
37 J Street & Street A	A.M.	DNE		16.7	B	89.2	NO
	P.M.	DNE		27.6	C	81.8	NO

SOURCE: Kimley-Horn and Associates 2008.

SB = Southbound; NB = Northbound

**Bold** values indicate intersections operating at Level of Service (LOS) E or F. **Bold and shaded** values indicate project significant impact.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

<sup>1</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>2</sup>LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.

<sup>3</sup>Percentage of entering trips consisting of project trips (significance threshold criteria)

v. Freeway Segment Analysis

Table 4.2-17 summarizes the LOS analysis for the freeway segments under Phase I conditions. As shown in the table, all freeway segments would operate at LOS F with or without the project, except for the northbound I-5 segment between SR-54 and E Street which would operate at LOS E. The addition of Phase I traffic would result in a direct project impact to the following freeway segment and would require mitigation:

- I-5 between SR-54 and E Street (LOS F, AM and PM peak hours) (**Significant Impact 4.2-12**).

b. Phase I Conditions/Traffic Volumes with Closure of F Street, Extension of H Street, and Partial Extension of E Street

With the closure of F Street, extension of H Street, and partial extension of E Street, a redistribution of traffic in the Proposed Project study area would occur. The intersection, roadway segment, and freeway analyses were re-analyzed with the mitigated roadway network to determine if additional mitigation would be required by the Proposed Project.

i. Roadway Segments

Table 4.2-18 presents the LOS analysis results for the roadway segments under the Proposed Project during Phase I conditions with the closure of F Street, extension of H Street, and partial extension of E Street traffic volumes.

As shown in Table 4.2-18 *Phase I Conditions with Closure of F Street, Extension of H Street, and Partial Extension of E Street Roadway Segment Level of Service Summary*, the following segments will experience congested LOS D or worse conditions for segments outside of the Urban Core and LOS E or worse conditions for segments inside the Urban Core:

- H Street (west of Marina Parkway) (LOS F) (**Same as Significant Impact 4.2-3**)
- H Street (Marina Parkway to Bay Boulevard) (LOS F) (**Same as Significant Impact 4.2-4**).



**TABLE 4.2-17**  
**Phase I Conditions Freeway Segment Level of Service Summary**

Freeway Segment	Direction	Peak Period	Number of Lanes	Phase I Baseline				Phase I Baseline Plus Project				Phase I Project Trips	Project Trip (Percent) <sup>4</sup>	IMPACT?
				ADT <sup>1</sup>	Peak-Hour Volume <sup>2</sup>	V/C Ratio <sup>3</sup>	LOS	ADT	Peak-Hour Volume	V/C Ratio	LOS			
Interstate 5														
State Route 54 to E Street	NB	AM	4M	164,300	7,990	0.999	E	173,736	8,448	1.056	F0	9,438	5	DIRECT
	SB	PM	4M		8,557	1.070	F0		9,048	1.131	F0			DIRECT
E Street to H Street	NB	AM	4M	184,000	8,947	1.118	F0	188,595	9,171	1.146	F0	4,595	2	CUMULATIVE
	SB	PM	4M		9,583	1.198	F0		9,822	1.228	F0			CUMULATIVE
H Street to J Street	NB	AM	4M	186,000	9,045	1.131	F0	189,526	9,216	1.152	F0	3,526	2	CUMULATIVE
	SB	PM	4M		9,687	1.211	F0		9,871	1.234	F0			CUMULATIVE
J Street to L Street	NB	AM	4M	186,100	9,050	1.131	F0	191,474	9,311	1.164	F0	5,374	3	CUMULATIVE
	SB	PM	4M		9,692	1.212	F0		9,972	1.246	F0			CUMULATIVE
L Street to Palomar Street	NB	AM	4M	176,200	8,568	1.071	F0	181,574	8,830	1.104	F0	5,375	3	CUMULATIVE
	SB	PM	4M		9,176	1.147	F0		9,456	1.182	F0			CUMULATIVE

ADT = Average Daily Trips; LOS = Level of Service; NB = Northbound; SB = Southbound SOURCE: Kimley-Horn and Associates 2008.

**Bold** values indicate freeway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup>The ADT volumes were estimated by applying a growth factor to existing volumes provided by the California Department of Transportation.

<sup>2</sup>Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

<sup>3</sup>The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Mainline; A: Aux.; HOV: High Occupancy Vehicle; ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux). Capacity for all segments is 8,000.

<sup>4</sup>Percentage of total freeway trips generated by the project.

**TABLE 4.2-18**  
**Phase I Conditions with Closure of F Street, Extension of H Street, and Partial Extension of E Street**  
**Roadway Segment Level of Service Summary**

Roadway Segment	Roadway Classification <sup>1</sup>	Acceptable Volume	Phase I Baseline		Phase I Plus Project Mitigated		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to <del>Gaylord</del> RCC Dwy (c)	2 Lanes Class III Collector	7,500	—	—	6,034	B	5,847	97	NO
West of Bay Boulevard (d)	2 Lanes Class III Collector	7,500	—	—	2,294	A	1,800	78	NO
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	14,520	A	15,834	A	1,314	8	NO
I-5 Ramps to Woodlawn Ave	4 Lanes Gateway Street	43,200	26,800	A	28,355	A	1,556	5	NO
Woodlawn Ave to Broadway	4 Lanes Gateway Street	43,200	26,560	A	27,988	A	1,430	5	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	18,410	A	19,468	A	1,061	5	NO
Lagoon Dr/F Street									
Bay Blvd to Broadway	4 Lanes Downtown Prom.	33,750	4,350	A	5,746	A	1,402	24	NO
Broadway to 4th Ave	2 Lanes Downtown Prom.	14,400	10,310	B	11,202	C	898	8	NO
4th Ave to 3rd Ave	4 Lanes Downtown Prom.	33,750	10,440	A	10,755	A	315	3	NO
H Street									
West of Marina Parkway (c)	2 Lanes Class III Collector	7,500	—	—	15,028	F	15,028	100	DIRECT
Marina Pkwy to Bay Blvd (d)	2 Lanes Class III Collector	7,500	—	—	14,263	F	13,780	97	DIRECT
Bay Blvd to I-5 Ramps	4 Lanes Gateway Street	43,200	15,850	A	29,621	B	13,780	47	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	31,760	B	35,402	C	3,650	10	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	27,430	B	28,755	B	1,331	5	NO
J Street									
Marina Parkway to Street A <sup>2</sup>	4 Lanes Major Street	30,000	8,620	A	15,784	A	7,167	45	NO
Street A to Bay Blvd <sup>2</sup>	4 Lanes Major Street	30,000	8,620	A	18,998	A	10,381	55	NO
Bay Blvd to I-5 Ramps	4 Lanes Major Street	30,000	17,200	A	24,675	B	7,475	30	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	17,280	A	19,198	A	1,924	10	NO
L Street									
Bay Blvd to Industrial Way	4 Lanes Gateway Street	43,200	15,100	A	17,329	A	2,229	13	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	20,400	A	21,874	A	1,474	7	NO

TABLE 4.2-18 (Cont.)

Roadway Segment	Roadway Classification <sup>1</sup>	Acceptable Volume	Phase I Baseline		Phase I Plus Project Mitigated		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Marina Parkway									
H Street to J Street (b)	3 Lanes Class II Collector	17,000	450	A	7,991	A	7,544	94	NO
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	9,700	B	9,984	B	288	3	NO
F Street to H Street	2 Lanes Class III Collector	7,500	2,810	A	4,318	A	1,510	35	NO
North of J Street	2 Lanes Class III Collector	7,500	2,710	A	5,451	A	2,750	50	NO
J Street to L Street	2 Lanes Class II Collector	12,000	3,040	A	6,696	A	3,659	55	NO
L Street to I-5 Ramps	2 Lanes Class II Collector	12,000	3,520	A	4,403	A	890	20	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	3,520	A	4,403	A	890	20	NO
Broadway									
C Street to E Street	4 Lanes Commercial Blvd	33,750	26,010	B	26,304	C	297	1	NO
E Street to H Street	4 Lanes Commercial Blvd	33,750	25,670	B	26,312	C	647	2	NO
H Street to K Street	4 Lanes Commercial Blvd	33,750	29,570	C	30,316	D	746	2	NO
K Street to L Street	4 Lanes Commercial Blvd	33,750	26,600	C	26,878	C	279	1	NO
South of L Street	4 Lanes Major Street	30,000	27,060	C	27,512	C	459	2	NO
Street A									
Pacifica Dwy to J Street (c)	2 Lanes Class III Collector	7,500	—	—	5,246	A	5,246	100	NO

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service

**Bold** values indicate roadway segments operating at LOS E or F.

<sup>a</sup>Existing roads street classification is based on the standards provided in the 2005 Chula Vista General Plan.

<sup>b</sup>Marina Parkway currently exists as a 4-Lane Major Street but will be realigned and reduced with the project.

<sup>c</sup>Roads will be built to given classification with Phase I of the project as required adjacent site frontage.

<sup>d</sup>Roads will be built to given classifications with Phase I of the project as required by a Phase I impact.

iii. Intersections

Table 4.2-19 displays the LOS analysis for the study intersections under the Proposed Project-Phase I conditions with the closure of F Street, extension of H Street, and partial extension of E street traffic volumes.

As shown in the Table 4.2-19, *Phase I Conditions with Closure of F Street, Extension of H Street, and Partial Extension of E Street Peak-Hour Intersection Level of Service Summary*, the following intersections will be characterized by LOS E or F conditions and would result in direct project impacts and would require mitigation:

- H Street/~~Gaylord~~ RCC Driveway (LOS E, PM peak hour) (**Significant Impact 4.2-13**)
- J Street/Bay Boulevard (LOS F, PM peak hour) (**Significant Impact 4.2-14**)
- L Street/Bay Boulevard (LOS F, both peak hours) (**Significant Impact 4.2-15**)
- I-5 Southbound Ramps/Bay Boulevard (LOS F, PM peak hour) (**Significant Impact 4.2-16**).

**TABLE 4.2-19**  
**Phase I Conditions with Closure of F Street, Extension of H Street,**  
**and Partial Extension of E Street Peak-Hour Intersection Level of Service Summary**

Intersection		Peak Hour	Phase I Baseline		Phase I Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
1	E Street & I-5 SB Off-Ramp	A.M.	12.8	B	10.2	B	16.4	NO
		P.M.	16.6	B	16.2	B	6.2	NO
2	E Street & I-5 NB On-Ramp	A.M.	22.9	C	34.3	C	9.9	NO
		P.M.	16.7	B	28.3	C	6.8	NO
3	E Street & Woodlawn Avenue	A.M.	24.6	C	31.8	C	8.2	NO
		P.M.	18.4	B	20.5	C	6.1	NO
4	E Street & Broadway	A.M.	19.2	B	19.9	B	6.7	NO
		P.M.	34.1	C	35.8	D	3.7	NO
5	E Street & 5th Avenue	A.M.	5.2	A	5.2	A	11.6	NO
		P.M.	6.6	A	6.6	A	6.8	NO
6	E Street & 4th Avenue	A.M.	14.7	B	14.7	B	6.9	NO
		P.M.	27.7	C	27.8	C	3.5	NO
7	E Street & 3rd Avenue	A.M.	12.7	B	12.8	B	5.8	NO
		P.M.	21.9	C	22.1	C	3.4	NO
8	F Street & Bay Boulevard	A.M.	8.9	A	9.7	A	16.2	NO
		P.M.	15.5	B	17.9	B	11.4	NO
9	F Street & Broadway	A.M.	16.8	B	17.1	B	7.5	NO
		P.M.	24.9	C	25.0	C	4.6	NO
10	F Street & 5th Avenue	A.M.	6.4	A	6.6	A	11.8	NO
		P.M.	8.7	A	8.8	A	6.8	NO
11	F Street & 4th Avenue	A.M.	15.2	B	15.4	B	4.4	NO
		P.M.	20.5	C	21.0	C	2.5	NO
12	F Street & 3rd Avenue	A.M.	15.3	B	15.3	B	1.9	NO
		P.M.	23.1	C	23.2	C	1.0	NO

TABLE 4.2-19 (Cont.)

Intersection		Peak Hour	Phase I Baseline		Phase I Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
13	H Street & <del>Gaylord</del> -RCC Dwy	A.M.	DNE		19.4	B	100	NO
		P.M.			71.5	E	100	DIRECT
14	H Street & Bay Boulevard	A.M.	19.4	B	12.4	B	81	NO
		P.M.	7.3	A	26.0	B	66.9	NO
15	H Street & I-5 SB Ramps	A.M.	24.2	C	21.9	C	45	NO
		P.M.	24.4	C	32.9	C	40.8	NO
16	H Street & I-5 NB Ramps	A.M.	12.7	B	16.5	B	21.7	NO
		P.M.	15.0	B	22.7	c	22.4	NO
17	H Street & Woodlawn Avenue	A.M.	30.3	C	30.1	C	9.5	NO
		P.M.	27.7	C	31.7	C	11.3	NO
18	H Street & Broadway	A.M.	26.7	C	29.6	C	6.7	NO
		P.M.	32.8	C	35.5	D	5.9	NO
19	H Street & 5th Avenue	A.M.	11.5	B	12.2	B	4.8	NO
		P.M.	18.4	B	19.1	B	3.7	NO
20	H Street & 4th Avenue	A.M.	24.7	C	25.0	C	2.6	NO
		P.M.	33.9	C	34.3	C	2.2	NO
21	H Street & 3rd Avenue	A.M.	19.4	B	19.6	B	2.2	NO
		P.M.	30.1	C	3.3	C	1.8	NO
22	J Street & Bay Boulevard	A.M.	12.1	B	34.1	C	49.6	NO
		P.M.	13.3	B	123.3	F	46.7	DIRECT
23	J Street & I-5 SB Ramps	A.M.	14.6	B	24.7	C	32.1	NO
		P.M.	18.6	B	24.5	C	31.1	NO
24	J Street & I-5 NB Ramps	A.M.	16.8	B	32.8	C	15.5	NO
		P.M.	15.1	B	20.8	C	17.3	NO
25	J Street & Woodlawn Avenue	A.M.	11.0	B	11.2	B	1.1	NO
		P.M.	11.7	B	12.4	B	8.6	NO
26	J Street & Broadway	A.M.	14.3	B	15.6	B	6.3	NO
		P.M.	21.5	C	24.8	C	4.8	NO
27	L Street & Bay Boulevard	A.M.	21.3	C	134.6	F	18.0	DIRECT
		P.M.	148.0	F	ECL	F	16.4	DIRECT

TABLE 4.2-19 (Cont.)

Intersection		Peak Hour	Phase I Baseline		Phase I Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
28	L Street & Industrial Boulevard	A.M.	25.0	C	25.8	C	9.9	NO
		P.M.	24.9	C	24.8	C	9.5	NO
29	L Street & Broadway	A.M.	15.9	B	16.1	B	4.3	NO
		P.M.	26.3	C	27.5	C	3.5	NO
30	I-5 SB Ramps & Bay Boulevard	A.M.	23.1	C	25.8	D	6.6	NO
		P.M.	48.6	<b>E</b>	57.5	<b>F</b>	5.2	<b>DIRECT</b>
31	I-5 NB Ramps & Industrial Boulevard	A.M.	15.9	B	17.5	B	5.9	NO
		P.M.	17.7	B	20.8	C	6.3	NO
32	E Street & Gunpowder Pt Drive	A.M.	DNE		10.2	B	75.2	NO
		P.M.			9.7	A	72.3	NO
36	J Street & Marina Pkwy	A.M.	DNE		11.4	B	76.4	NO
		P.M.			16.3	B	65.2	NO
37	J Street & Street A	A.M.	DNE		14.5	B	84.5	NO
		P.M.			16.0	B	75.2	NO

SOURCE: Kimley-Horn and Associates 2008.

SB = Southbound; NB = Northbound

**DNE = Does Not Exist**

**Bold** values indicate intersections operating at Level of Service (LOS) E or F. **Bold and shaded** values indicate project significant impact.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

<sup>1</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>2</sup>LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.

<sup>3</sup>Percentage of entering trips consisting of project trips (significance threshold criteria).

iv. Freeway Segments

*Table 4.2-20* summarizes the LOS analysis results for freeway segments under the Proposed Project Phase I conditions with Closure of F Street, extension of H Street, and partial extension of E Street. As shown in *Table 4.2-20*, the following freeway segments of I-5 will be characterized by LOS E or F conditions and would result in direct impacts requiring mitigation:

- SR-54 to E Street (LOS F, AM peak hour northbound with the Proposed Project, LOS F in PM peak hour southbound with or without the Proposed Project) (**Significant Impact 4.2-17**)
- E Street to H Street (LOS F both AM and PM peak hours, both directions, with or without the Proposed Project) (**Significant Impact 4.2-18**)

v. At-Grade Trolley Crossings

As part the City of Chula Vista GPU transportation analysis, the effects of the trolley grade crossings at E Street and H Street were evaluated. The analysis replicated the effects of a trolley/rail crossing by simulating a traffic signal at the trolley crossing. The analysis assumed that a trolley would cross once every 5 minutes, using current trolley service, and once every 2 and a half minutes using an extremely conservative assumption of planned service increases. Field observations indicate that the trolley crossing guards stay down for approximately 54 seconds.

The General Plan analysis determined that with the trolley crossings gates down, queues would start to form in the east–west direction and would extend into adjacent intersections. This would cause additional delays and affect the operations at each impacted intersection. As such, delays shown in the respective intersection summary tables for the intersections affected by the at-grade trolley crossings may be increased between 17 and 40 seconds per vehicle, causing a drop in LOS (**Significant Impact 4.2-19**).

In order to address potential impacts to adjacent trolley intersections, the City has identified E Street Grade Separation and H Street Grade Separation projects as part of the City’s Western Traffic Development Impact Fee (WTDIF). Based on SANDAG’s Concept Engineering Report for E Street and H Street Grade Separations, dated October 14, 2003, the preferred recommendation is for the roadways to stay at their current elevations (as an overpass), while constructing an LRT underpass at E Street and at H Street. The projects are listed in the City’s General Plan Traffic Study, Appendix A. The LRT underpass option for both crossings is listed in the City’s WTDIF table.



**TABLE 4.2-20**  
**Phase I Conditions with Closure of F Street, Extension of H Street,**  
**and Partial Extension of E Street Freeway Segment Level of Service Summary**

Freeway Segment	Direction	Peak Period	Number of Lanes	Phase I Baseline				Phase I Plus Project Mitigated				Phase I Project Trips	Project Trip (Percent) <sup>4</sup>	IMPACT?
				ADT <sup>1</sup>	Peak-Hour Volume <sup>2</sup>	V/C Ratio <sup>3</sup>	LOS	ADT	Peak-Hour Volume	V/C Ratio	LOS			
Interstate 5														
State Route 54 to E Street	NB	AM	4M	164,300	7,990	0.999	E	173,736	8,448	1.056	F0	9,436	5	DIRECT
	SB	PM	4M		8,557	1.070	F0		9,048	1.131	F0			DIRECT
E Street to H Street	NB	AM	4M	184,000	8,947	1.118	F0	194,272	9,447	1.181	F0	10,272	5	DIRECT
	SB	PM	4M		9,583	1.198	F0		10,118	1.265	F1			DIRECT
H Street to J Street	NB	AM	4M	186,000	9,045	1.131	F0	191,962	9,335	1.167	F0	5,962	3	CUMULATIVE
	SB	PM	4M		9,687	1.211	F0		9,997	1.250	F0			CUMULATIVE
J Street to L Street	NB	AM	4M	186,100	9,050	1.131	F0	191,474	9,311	1.164	F0	5,374	3	CUMULATIVE
	SB	PM	4M		9,692	1.212	F0		9,972	1.246	F0			CUMULATIVE
L Street to Palomar Street	NB	AM	4M	176,200	8,568	1.071	F0	181,574	8,830	1.104	F0	5,374	3	CUMULATIVE
	SB	PM	4M		9,176	1.147	F0		9,456	1.182	F0			CUMULATIVE

ADT = Average Daily Trips; LOS = Level of Service; NB = Northbound; SB = Southbound SOURCE: Kimley-Horn and Associates 2008.

**Bold** values indicate freeway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup>The ADT volumes were estimated by applying a growth factor to existing volumes provided by the California Department of Transportation.

<sup>2</sup>Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

<sup>3</sup>The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Mainline; A: Aux.; HOV: High Occupancy Vehicle; ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux). Capacity for all segments is 8,000.

<sup>4</sup>Percentage of total freeway trips generated by the Proposed Project.

### c. Phase II

Phase II Baseline traffic volumes are the same as Phase I Plus Project volumes. Phase II Plus Project volumes are calculated by adding the Phase II project trips to the Phase II Baseline volumes. The projected traffic volumes, and analysis for this scenario are described below. Phase II roads and infrastructure have been analyzed at a project level in the EIR, and therefore can be constructed in Phase I.

Phase II is expected to be complete in the year 2012. *Table 4.2-21* summarizes the trip generation for Phase II of the Proposed Project. The Proposed Project in Phase II is expected to generate a total of 25,190 daily trips, all of which would be generated by proposed land uses in Harbor District. This represents about 38 percent of the Proposed Project traffic generated by development occurring within the Harbor District.

Development of Phase II components without adequate roadway access and frontage would result in a significant impact on circulation (**Significant Impact 4.2-20**).

#### i. Project Traffic Volumes

The project traffic in Phase II would be distributed and assigned based on the actual location of the development. In situations where shared parking exists, project traffic would be distributed and assigned based on the availability of parking. This distribution and assignment was done based on SANDAG Series 10 Select Zone model plots of zones within the Bayfront Redevelopment Area.

#### ii. Roadway Segment Analysis

As discussed earlier, *Figure 4.2-4a* shows the existing ADTs for street segments in the project area. *Figure 4.2-10* shows the Phase II Roadway Segment Trip Assignment for street segments in the project area. *Figure 4.2-11* shows the Phase II Baseline Conditions ADT Volumes for street segments in the project area. *Figure 4.2-12* shows the Phase II Plus Project Conditions ADT Volumes. *Table 4.2-21* provides the Phase II Conditions Roadway Level of Service summary.

**TABLE 4.2-21**  
**Phase II Conditions Roadway Segment Level of Service Summary**

Roadway Segment	Roadway Classification	Acceptable Volume	Phase II Baseline		Phase II Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to <del>Gaylord</del> <b>RCC</b> Dwy	2 Lanes Class III Collector	7,500	6,034	B	6,041	B	6	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,294	A	2,612	A	318	12	NO
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	15,834	A	17,567	A	1,192	7	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	28,355	A	29,818	B	1,193	4	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	27,988	A	28,744	A	756	3	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,468	A	19,972	A	504	3	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	5,746	A	6,099	A	353	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,202	C	11,515	C	313	3	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	10,755	A	11,007	A	252	2	NO
H Street									
West of Marina Parkway	3 Lanes Class II Collector	17,000	15,028	C	15,672	C	644	4	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	14,263	A	18,106	A	4,104	23	NO
Street A to I-5 Ramps	4 Lanes Major Street	30,000	29,621	C	40,005	F	9,574	24	DIRECT
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	35,402	C	40,325	D	4,922	12	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	28,755	B	31,113	C	2,357	8	NO
J Street									
Marina Parkway to Street A	4 Lanes Major Street	30,000	15,784	A	19,540	A	5,311	27	NO
Street A to Bay Boulevard	4 Lanes Major Street	30,000	18,998	A	31,404	D	13,216	42	DIRECT
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	24,675	B	33,657	D	9,116	27	DIRECT
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	19,198	A	21,881	A	2,683	12	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	17,329	A	19,345	A	2,015	10	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	21,874	A	23,809	A	1,934	8	NO

TABLE 4.2-21 (Cont.)

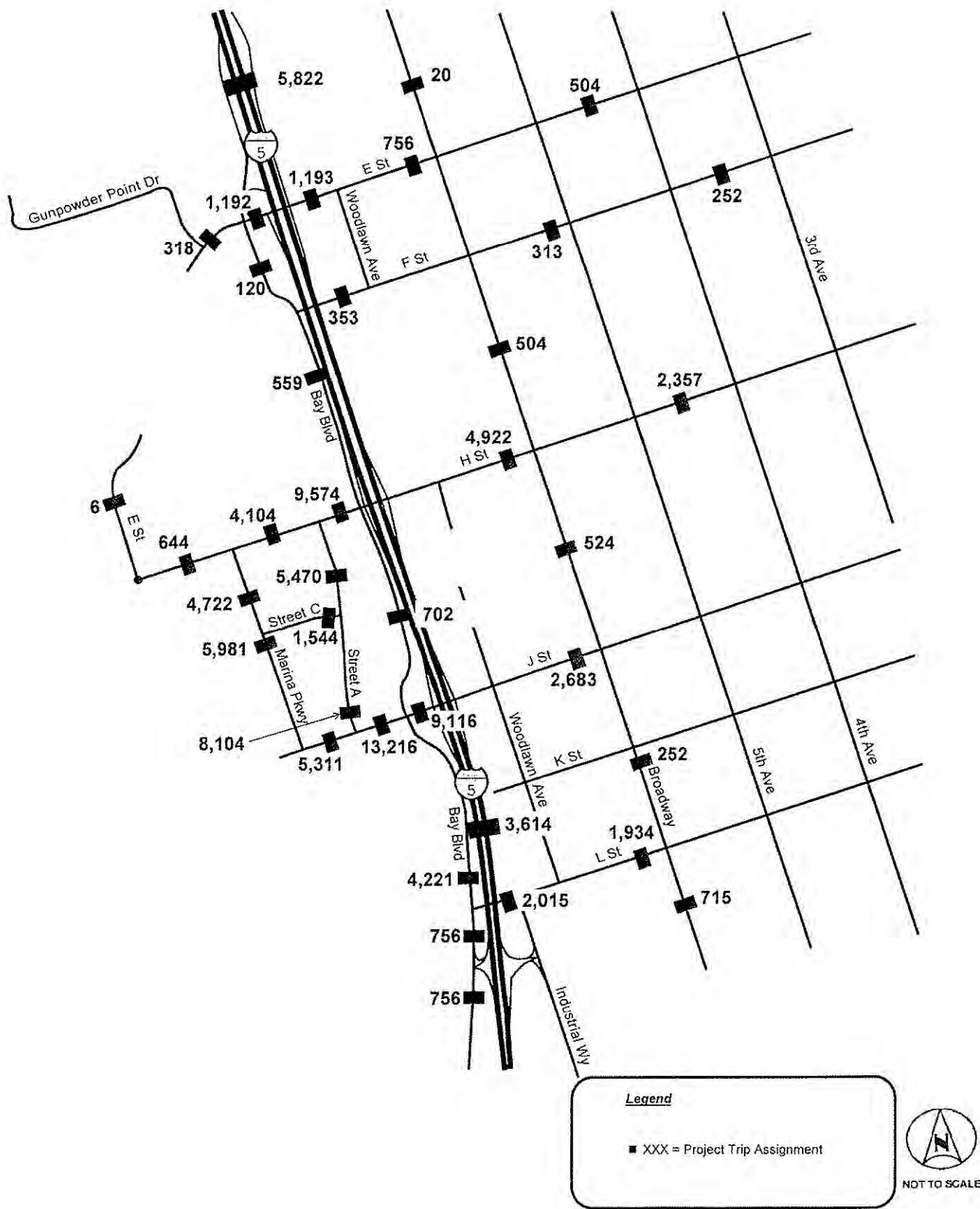
Roadway Segment	Roadway Classification	Acceptable Volume	Phase II Baseline		Phase II Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Marina Parkway									
H Street to Street C	3 Lanes Class III Collector	17,000	7,991	A	9,089	A	4,722	52	NO
Street C to J Street	3 Lane Class II Collector	17,000	9,991	A	12,039	A	5,981	50	NO
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	9,984	B	10,104	B	120	1	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,318	A	4,608	A	559	12	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,451	A	5,479	A	702	13	NO
J Street to L Street	2 Lanes Class II Collector	12,00	6,696	A	10,918	C	4,221	39	NO
L Street to I-5 Ramps <sup>1</sup>	2 Lanes Class II Collector	12,000	4,403	A	5,159	A	756	15	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	4,403	A	5,159	A	756	15	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,304	C	26,325	C	20	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,312	C	26,816	C	504	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	30,316	D	30,840	D	524	2	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	26,878	C	27,130	C	252	1	NO
South of L Street	4 Lanes Major Street	30,000	27,512	C	28,228	C	715	3	NO
Street A									
H Street to Street C (a)	2 Lanes Class III Collector	7,500	-	-	7,297	C	5,470	75	NO
Street C to J Street	2 Lanes Class III Collector	7,500	5,246	A	12,630	F	8,104	64	DIRECT
Street C									
Marina Parkway to Street A (a)	2 Lanes Class III Collector	7,500	-	-	2,085	A	1,544	74	NO

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service

**Bold** values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>a</sup> Roads will be built to given classification with Phase I of the Proposed Project as required to provide site frontage.



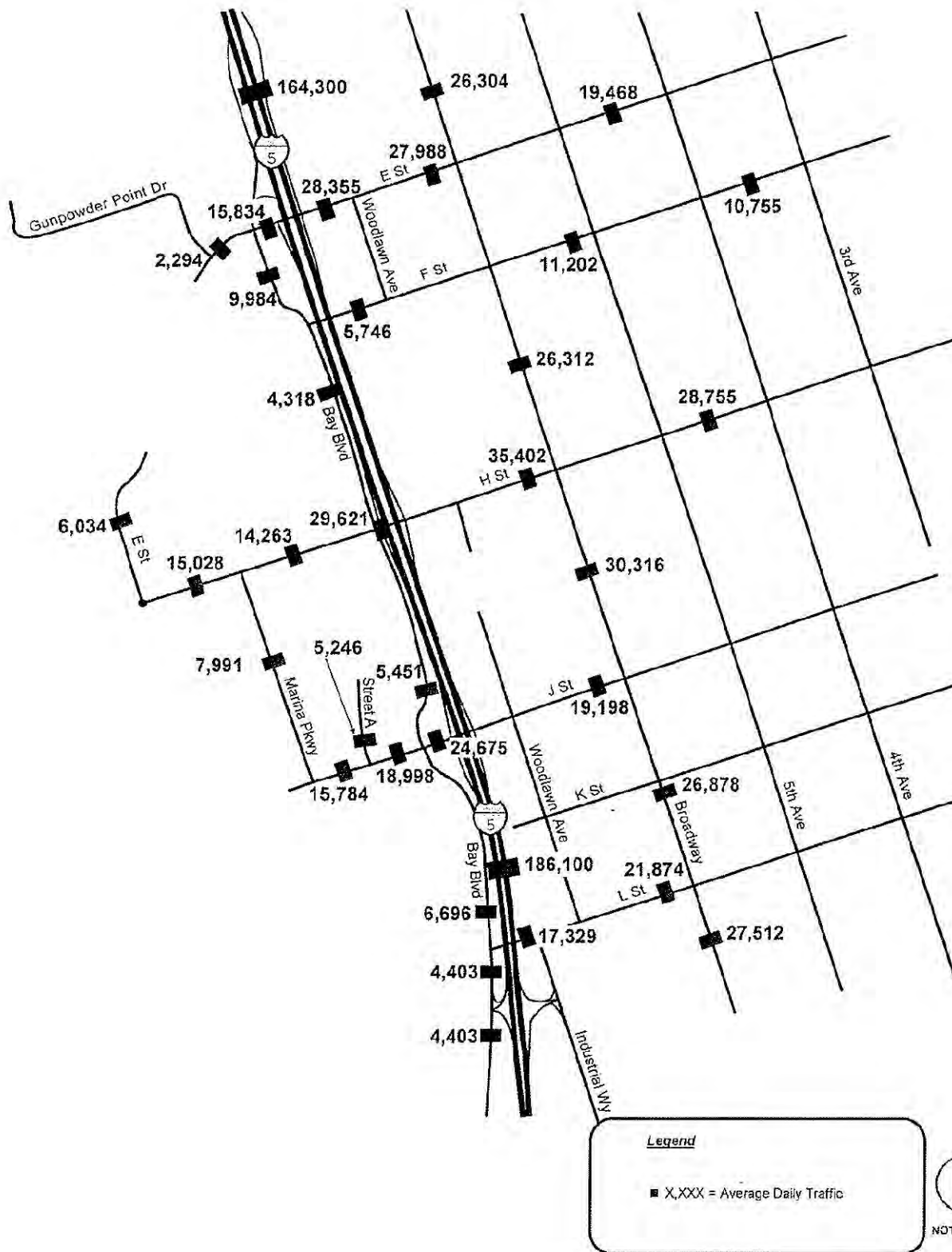
SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Roadway Segment Trip Assignment

FIGURE  
4.2-10

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SOURCE: Kimley-Horn and Associates, Inc.

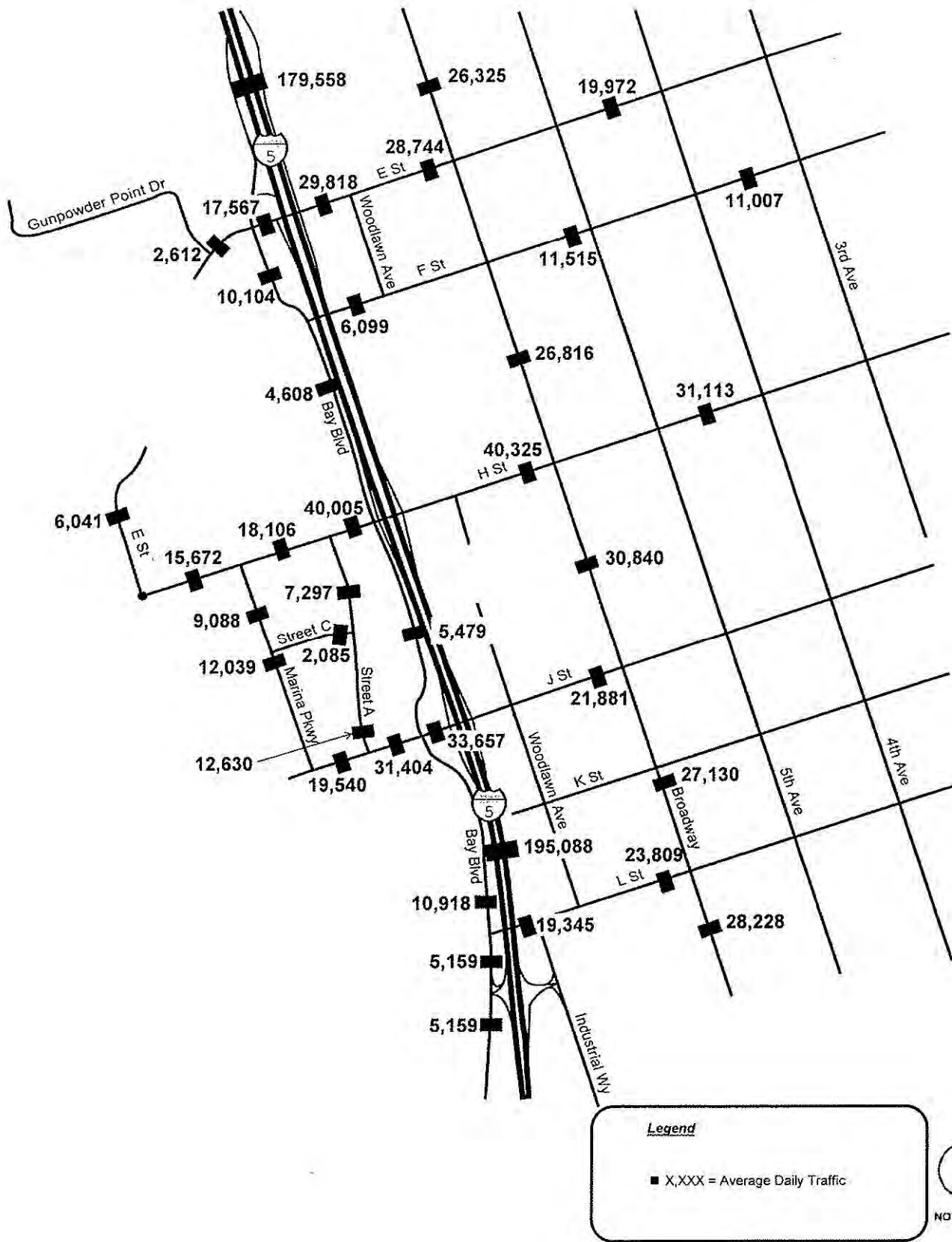
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Baseline Conditions ADT Volumes

**FIGURE**  
**4.2-1**

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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Phase II plus Project Conditions ADT Volumes

FIGURE  
4.2-12

4852  
681

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*Table 4.2-21* depicts the Phase II Baseline roadway segment conditions and the Phase II Baseline Plus Project conditions. As shown in *Table 4.2-21*, the following segments will experience congested LOS D or worse conditions for segments outside of the Urban Core and LOS E or worse conditions for segments inside of the Urban Core and will require mitigation:

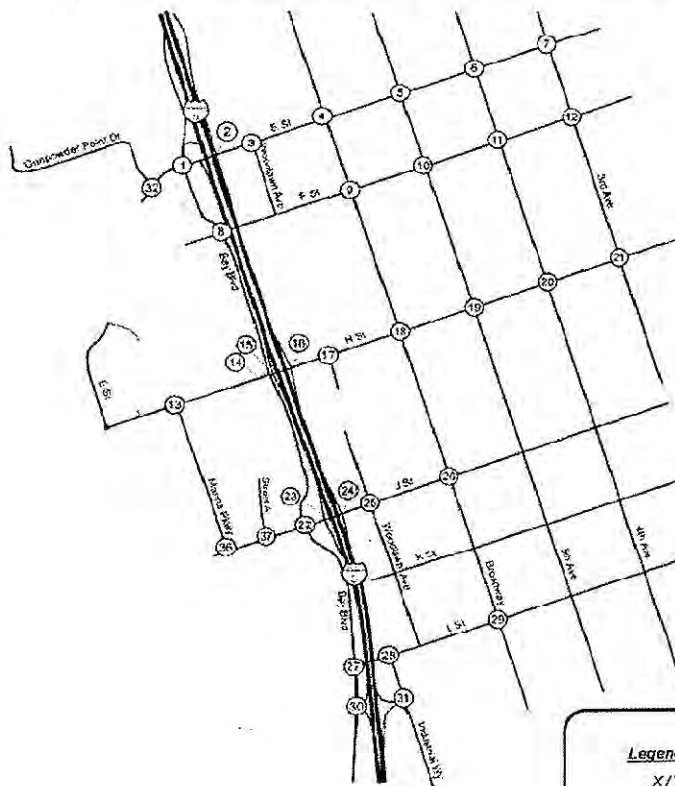
- H Street (Street A to I-5 Ramps) (LOS F) (**Significant Impact 4.2-21**)
- J Street (Street A to Bay Boulevard to I-5 Ramps) (LOS D) (**Significant Impact 4.2-22**)
- Street A (Street C to J Street) (LOS F) (Significant Impact 4.2-23).

iii. Intersection Analysis

*Figures 4.2-13a* through *4.2-13d* depict the Phase II Baseline Conditions Peak-Hour Traffic Volumes for intersections in the study area. Only the intersections that are constructed or those that will be constructed in Phase II are depicted. *Figures 4.2-14a* through *4.2-14d* depicts the Phase II Plus Project Conditions Peak-Hour Traffic Volumes. Finally, *Table 4.2-22* summarizes the Phase II Conditions Peak-Hour Level of Service for intersections in the project area.

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<p>1</p> <p>47 / 46 327 / 893 348 / 845 I-5 SB Off-Ramp</p> <p>257 / 453 127 / 71 22 / 84 E St</p> <p>100 / 81 20 / 15 Bay Blvd</p> <p>19 / 20 170 / 344</p>	<p>2</p> <p>I-5 NB On Ramp</p> <p>566 / 536 323 / 542 E St</p> <p>146 / 260 298 / 775 I-5 NB Off Ramp</p> <p>47 / 36 289 / 2 430 / 436</p>	<p>3</p> <p>4 / 20 0 / 11 12 / 23 Woodlawn Ave</p> <p>5 / 9 772 / 921 106 / 94 E St</p> <p>3 / 11 618 / 891 116 / 90</p> <p>162 / 173 21 / 12 77 / 54</p>	<p>4</p> <p>172 / 267 156 / 848 27 / 100 Broadway</p> <p>121 / 50 469 / 535 26 / 119 E St</p> <p>314 / 328 306 / 561 95 / 177</p> <p>174 / 216 441 / 550 40 / 77</p>
<p>5</p> <p>32 / 50 40 / 128 7 / 18 5th Ave</p> <p>26 / 36 491 / 562 19 / 43 E St</p> <p>27 / 40 399 / 659 15 / 40</p> <p>24 / 28 45 / 91 18 / 55</p>	<p>6</p> <p>42 / 83 292 / 781 112 / 223 4th Ave</p> <p>48 / 105 417 / 488 86 / 128 E St</p> <p>50 / 62 318 / 581 57 / 83</p> <p>85 / 109 249 / 503 31 / 99</p>	<p>7</p> <p>25 / 53 73 / 231 34 / 148 3rd Ave</p> <p>98 / 91 506 / 550 160 / 217 E St</p> <p>16 / 43 358 / 647 61 / 166</p> <p>55 / 115 213 / 240 46 / 149</p>	<p>8</p> <p>206 / 33 58 / 323 128 / 316 Bay Blvd</p> <p>84 / 112 57 / 18 93 / 135 F St</p> <p>30 / 157 17 / 62 4 / 13</p> <p>14 / 4 79 / 76 64 / 72</p>
<p>9</p> <p>42 / 72 275 / 1032 43 / 81 Broadway</p> <p>41 / 61 151 / 164 56 / 96 F St</p> <p>46 / 60 147 / 387 114 / 197</p> <p>77 / 95 808 / 764 63 / 89</p>	<p>10</p> <p>16 / 45 45 / 191 15 / 32 5th Ave</p> <p>16 / 41 169 / 260 8 / 37 F St</p> <p>18 / 21 186 / 341 19 / 64</p> <p>11 / 32 47 / 114 11 / 20</p>	<p>11</p> <p>52 / 40 296 / 782 50 / 92 4th Ave</p> <p>43 / 121 208 / 215 25 / 105 F St</p> <p>27 / 51 98 / 332 56 / 107</p> <p>50 / 51 307 / 565 48 / 104</p>	<p>12</p> <p>37 / 77 218 / 475 6 / 76 3rd Ave</p> <p>35 / 46 160 / 167 42 / 86 F St</p> <p>16 / 70 114 / 268 59 / 190</p> <p>71 / 119 241 / 370 51 / 62</p>



**Legend**

X/Y = AM/PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Baseline Conditions Peak Hour Traffic Volume (1 of 4)

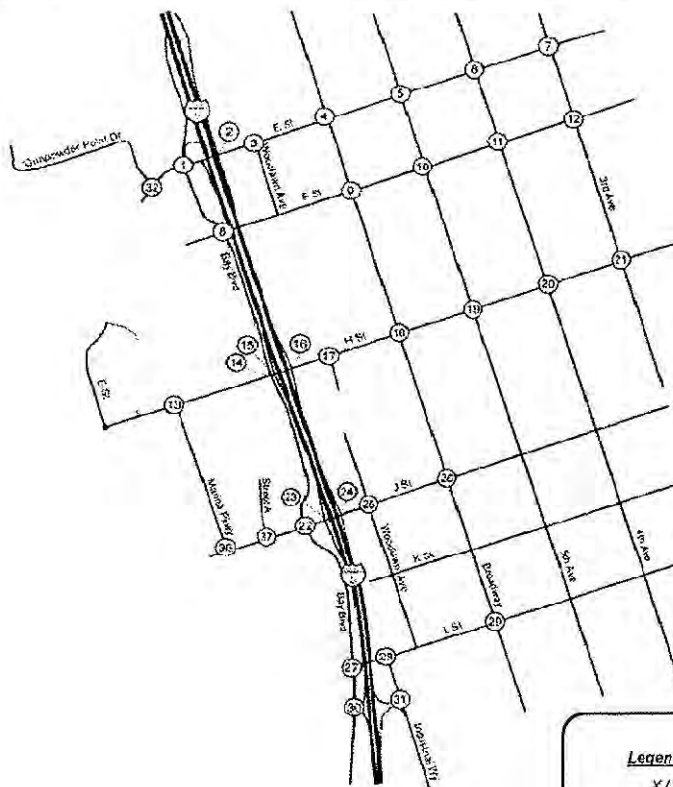
**FIGURE**

**4.2-13A**

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<p>13</p> <p>21 / 30</p> <p>Gaylord Dr</p> <p>35 / 45</p> <p>427 / 546</p> <p>59 / 98</p> <p>H St</p> <p>279 / 389</p> <p>87 / 141</p> <p>Marina Pkwy</p> <p>180 / 181</p> <p>58 / 25</p>	<p>14</p> <p>10 / 17</p> <p>65 / 408</p> <p>32 / 183</p> <p>Bay Blvd</p> <p>88 / 28</p> <p>502 / 664</p> <p>H St</p> <p>347 / 434</p> <p>36 / 71</p> <p>21 / 41</p> <p>142 / 76</p> <p>67 / 73</p>	<p>15</p> <p>325 / 453</p> <p>3 / 0</p> <p>484 / 714</p> <p>L-S SB Off-Ramp</p> <p>278 / 339</p> <p>533 / 648</p> <p>H St</p> <p>357 / 538</p> <p>73 / 192</p> <p>L-S SB On-Ramp</p>	<p>16</p> <p>L-S NB On-Ramp</p> <p>392 / 591</p> <p>708 / 801</p> <p>H St</p> <p>192 / 313</p> <p>547 / 760</p> <p>L-S NB Off-Ramp</p> <p>133 / 142</p> <p>514 / 573</p>
<p>17</p> <p>193 / 165</p> <p>41 / 30</p> <p>133 / 106</p> <p>Woodlawn Ave</p> <p>102 / 98</p> <p>809 / 1034</p> <p>104 / 63</p> <p>H St</p> <p>131 / 92</p> <p>1082 / 1006</p> <p>78 / 60</p> <p>52 / 107</p> <p>14 / 29</p> <p>49 / 40</p>	<p>18</p> <p>89 / 183</p> <p>441 / 894</p> <p>89 / 228</p> <p>Broadway</p> <p>112 / 142</p> <p>406 / 678</p> <p>154 / 343</p> <p>H St</p> <p>248 / 233</p> <p>566 / 605</p> <p>111 / 262</p> <p>Broadway</p> <p>129 / 294</p> <p>1022 / 747</p> <p>105 / 221</p>	<p>19</p> <p>100 / 135</p> <p>26 / 148</p> <p>153 / 187</p> <p>5th Ave</p> <p>207 / 77</p> <p>623 / 830</p> <p>55 / 244</p> <p>H St</p> <p>211 / 51</p> <p>589 / 749</p> <p>44 / 178</p> <p>38 / 201</p> <p>41 / 104</p> <p>46 / 242</p>	<p>20</p> <p>93 / 221</p> <p>349 / 590</p> <p>102 / 192</p> <p>4th Ave</p> <p>115 / 165</p> <p>609 / 784</p> <p>89 / 137</p> <p>H St</p> <p>128 / 162</p> <p>552 / 780</p> <p>102 / 211</p> <p>184 / 157</p> <p>447 / 448</p> <p>80 / 91</p>
<p>21</p> <p>58 / 102</p> <p>313 / 537</p> <p>102 / 184</p> <p>3rd Ave</p> <p>136 / 147</p> <p>643 / 644</p> <p>230 / 247</p> <p>H St</p> <p>93 / 147</p> <p>411 / 726</p> <p>168 / 210</p> <p>136 / 197</p> <p>492 / 487</p> <p>83 / 189</p>	<p>22</p> <p>8 / 35</p> <p>29 / 193</p> <p>44 / 200</p> <p>Bay Blvd</p> <p>287 / 110</p> <p>209 / 533</p> <p>363 / 183</p> <p>J St</p> <p>75 / 47</p> <p>407 / 339</p> <p>162 / 138</p> <p>115 / 222</p> <p>62 / 57</p> <p>33 / 189</p>	<p>23</p> <p>258 / 312</p> <p>232 / 417</p> <p>L-S SB Off-Ramp</p> <p>602 / 479</p> <p>149 / 261</p> <p>J St</p> <p>362 / 473</p> <p>144 / 251</p> <p>L-S SB On-Ramp</p>	<p>24</p> <p>L-S NB On-Ramp</p> <p>367 / 312</p> <p>423 / 484</p> <p>J St</p> <p>222 / 248</p> <p>382 / 691</p> <p>L-S NB Off-Ramp</p> <p>331 / 239</p> <p>211 / 0</p> <p>518 / 251</p>



**Legend**

X/Y = AM/PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Baseline Conditions Peak Hour Traffic Volume (2 of 4)

**FIGURE**

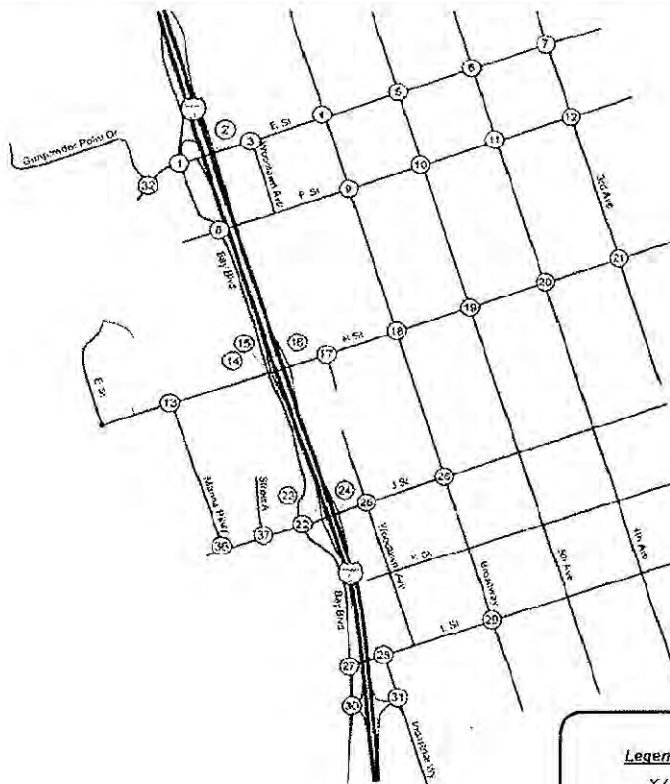
**4.2-13**

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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 647 / 833</p> <p>J St</p> <p>652 / 1032 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>94 / 222 401 / 1053 55 / 78</p> <p>Broadway</p> <p>62 / 85 325 / 363 31 / 48</p> <p>J St</p> <p>137 / 191 314 / 450 111 / 154</p> <p>114 / 154 655 / 798 35 / 74</p>	<p>27</p> <p>84 / 96 206 / 207</p> <p>Bay Blvd</p> <p>259 / 156 355 / 598</p> <p>L St</p> <p>100 / 54 476 / 866</p>	<p>28</p> <p>3 / 9 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 426 / 500 228 / 354</p> <p>L St</p> <p>4 / 6 440 / 587 317 / 491</p> <p>167 / 153 3 / 2 421 / 446</p>
<p>29</p> <p>90 / 95 415 / 973 70 / 118</p> <p>Broadway</p> <p>113 / 92 455 / 421 109 / 159</p> <p>L St</p> <p>133 / 139 427 / 575 110 / 193</p> <p>121 / 188 480 / 743 60 / 123</p>	<p>30</p> <p>86 / 184 317 / 471</p> <p>Bay Blvd</p> <p>458 / 697 62 / 24</p> <p>I-5 SE Ramps</p> <p>99 / 175 4 / 13</p>	<p>31</p> <p>214 / 291 335 / 464</p> <p>Industrial Wy</p> <p>I-5 NB Ramps</p> <p>339 / 281 135 / 171</p> <p>335 / 331 229 / 294</p>	<p>32</p> <p>3 / 15</p> <p>Gunpowder Point Dr</p> <p>74 / 47 118 / 82</p> <p>E St</p> <p>116 / 80</p>
<p>33</p> <p>Intersection is not constructed in this phase</p>	<p>34</p> <p>Intersection is not constructed in this phase</p>	<p>35</p> <p>Intersection is not constructed in this phase</p>	<p>36</p> <p>347 / 338</p> <p>Marina Pkwy</p> <p>247 / 451 44 / 67</p> <p>J St</p> <p>45 / 113</p>



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Baseline Conditions Peak Hour Traffic Volume (3 of 4)

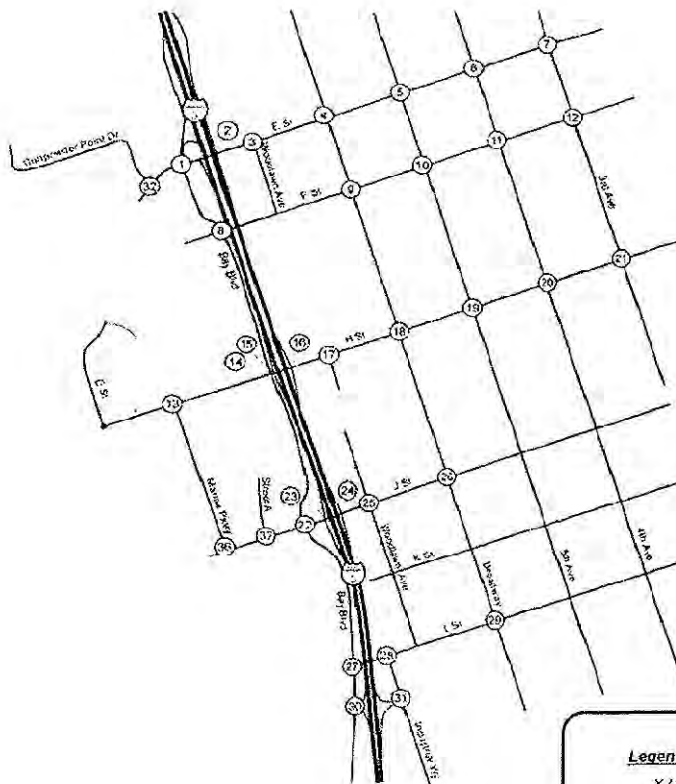
FIGURE

4.2-13C

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37	50 / 39 274 / 117 Street A 73 / 265 242 / 480 J St	38	Intersection is not constructed in this phase	39	Intersection is not constructed in this phase
21 / 47 372 / 402	0 0				



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



Z:\Projects\570301\Figs\EIR Figs\Section 4\Fig4-2\_13D.cdr

SOURCE: Kimley-Horn and Associates, Inc.

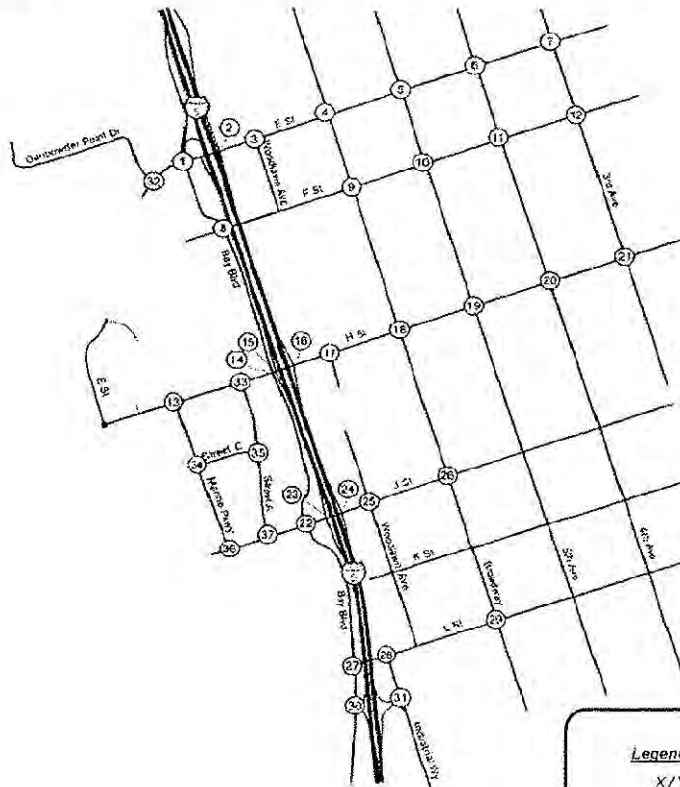
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Baseline Conditions Peak Hour Traffic Volume (4 of 4)

**FIGURE**  
4.2-13

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<p>1</p> <p>47 / 46 327 / 693 348 / 845 I-5 SB Off-Ramp</p> <p>257 / 453 133 / 84 25 / 90 E St</p> <p>109 / 96 20 / 15 Bay Blvd</p> <p>19 / 20 172 / 350</p>	<p>2</p> <p>I-5 NE On Ramp</p> <p>566 / 536 390 / 607 E St</p> <p>146 / 260 300 / 781 I-5 NE Off-Ramp</p> <p>53 / 49 289 / 2 465 / 513</p>	<p>3</p> <p>4 / 20 0 / 11 12 / 23 Woodlawn Ave</p> <p>5 / 9 810 / 956 106 / 94 E St</p> <p>3 / 11 533 / 939 140 / 126</p> <p>192 / 204 21 / 12 77 / 54</p>	<p>4</p> <p>177 / 275 156 / 849 27 / 100 Broadway</p> <p>121 / 50 503 / 563 28 / 119 E St</p> <p>318 / 336 318 / 603 95 / 177</p> <p>174 / 216 441 / 550 40 / 77</p>
<p>5</p> <p>32 / 50 40 / 128 7 / 18 5th Ave</p> <p>26 / 36 525 / 590 19 / 43 E St</p> <p>27 / 40 411 / 701 15 / 40</p> <p>24 / 28 45 / 91 18 / 55</p>	<p>6</p> <p>51 / 88 292 / 781 112 / 223 4th Ave</p> <p>48 / 105 440 / 507 86 / 128 E St</p> <p>52 / 72 325 / 590 57 / 83</p> <p>85 / 109 249 / 503 31 / 95</p>	<p>7</p> <p>26 / 53 73 / 231 34 / 148 3rd Ave</p> <p>98 / 91 529 / 568 160 / 217 E St</p> <p>16 / 43 366 / 675 61 / 166</p> <p>65 / 115 213 / 240 46 / 149</p>	<p>8</p> <p>205 / 33 61 / 329 129 / 316 Bay Blvd</p> <p>84 / 112 57 / 18 101 / 139 F St</p> <p>30 / 157 17 / 62 4 / 13</p> <p>14 / 4 81 / 82 55 / 84</p>
<p>9</p> <p>84 / 88 275 / 1092 43 / 81 Broadway</p> <p>41 / 61 166 / 179 56 / 96 F St</p> <p>54 / 86 153 / 407 116 / 199</p> <p>79 / 97 608 / 764 63 / 89</p>	<p>10</p> <p>18 / 47 45 / 191 15 / 32 5th Ave</p> <p>16 / 41 104 / 274 8 / 37 F St</p> <p>20 / 23 192 / 360 19 / 64</p> <p>11 / 32 47 / 114 11 / 20</p>	<p>11</p> <p>54 / 42 296 / 782 50 / 92 4th Ave</p> <p>43 / 121 222 / 223 25 / 105 F St</p> <p>29 / 53 104 / 350 56 / 107</p> <p>50 / 51 307 / 565 48 / 104</p>	<p>12</p> <p>37 / 77 218 / 475 6 / 78 3rd Ave</p> <p>35 / 46 192 / 109 42 / 86 F St</p> <p>16 / 70 116 / 270 59 / 190</p> <p>71 / 115 241 / 370 61 / 62</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Plus Project Conditions Peak Hour Traffic Volumes (1 of 4)

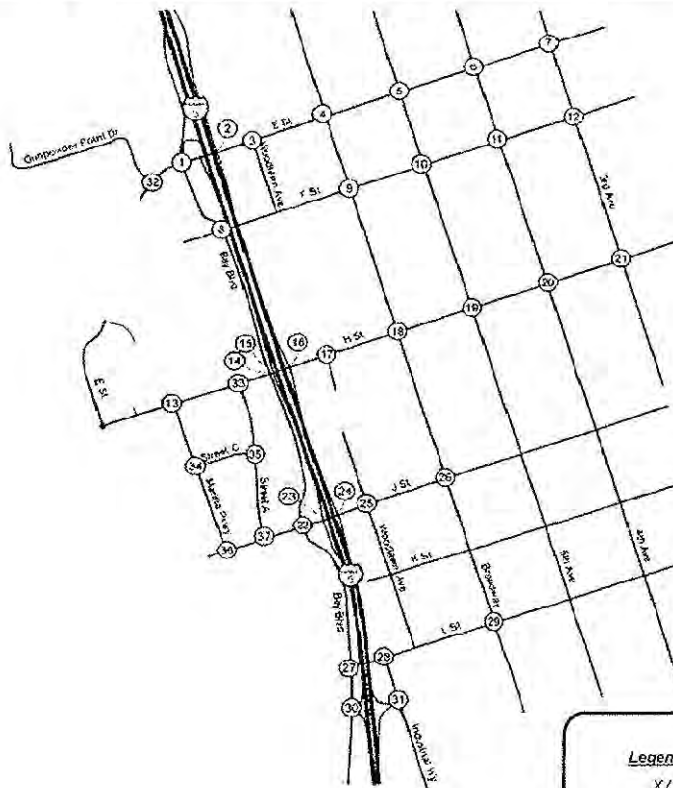
**FIGURE**

**4.2-14A**

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<p>13</p> <p>280 / 390 130 / 164</p> <p>Marina Pkwy</p> <p>170 / 229 95 / 201</p> <p>H St</p>	<p>14</p> <p>552 / 912 45 / 93</p> <p>Bay Blvd</p> <p>25 / 51 128 / 80 19 / 53</p> <p>H St</p>	<p>15</p> <p>495 / 963 93 / 237</p> <p>I-5 SB Off-Ramp</p> <p>547 / 656 520 / 596</p> <p>H St</p>	<p>16</p> <p>254 / 461 726 / 1038</p> <p>I-5 NB On Ramp</p> <p>352 / 591 932 / 1003</p> <p>H St</p>
<p>17</p> <p>153 / 165 41 / 30 133 / 108</p> <p>Woodlawn Ave</p> <p>131 / 92 1161 / 1285 78 / 60</p> <p>52 / 107 14 / 29 49 / 40</p> <p>H St</p>	<p>18</p> <p>120 / 216 441 / 994 69 / 228</p> <p>Broadway</p> <p>262 / 273 611 / 762 125 / 301</p> <p>Broadway</p> <p>159 / 326 1022 / 747 105 / 221</p> <p>H St</p>	<p>19</p> <p>140 / 163 26 / 148 153 / 187</p> <p>5th Ave</p> <p>223 / 107 613 / 835 48 / 187</p> <p>44 / 211 41 / 104 46 / 242</p> <p>H St</p>	<p>20</p> <p>94 / 222 349 / 590 102 / 192</p> <p>4th Ave</p> <p>129 / 163 576 / 865 102 / 211</p> <p>184 / 157 447 / 448 80 / 91</p> <p>H St</p>
<p>21</p> <p>81 / 181 313 / 537 102 / 184</p> <p>3rd Ave</p> <p>101 / 175 425 / 770 172 / 225</p> <p>148 / 207 492 / 487 93 / 189</p> <p>H St</p>	<p>22</p> <p>3 / 17 32 / 202 48 / 210</p> <p>Bay Blvd</p> <p>5 / 17 557 / 954 226 / 371</p> <p>306 / 385 66 / 68 33 / 189</p> <p>J St</p>	<p>23</p> <p>508 / 411 232 / 417</p> <p>I-5 SB Off-Ramp</p> <p>477 / 931 183 / 418</p> <p>I-5 SB On Ramp</p> <p>878 / 681 149 / 261</p> <p>J St</p>	<p>24</p> <p>295 / 542 425 / 856</p> <p>I-5 NB On Ramp</p> <p>367 / 312 558 / 590</p> <p>J St</p>



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase II Plus Project Conditions Peak Hour Traffic Volumes (2 of 4)

FIGURE

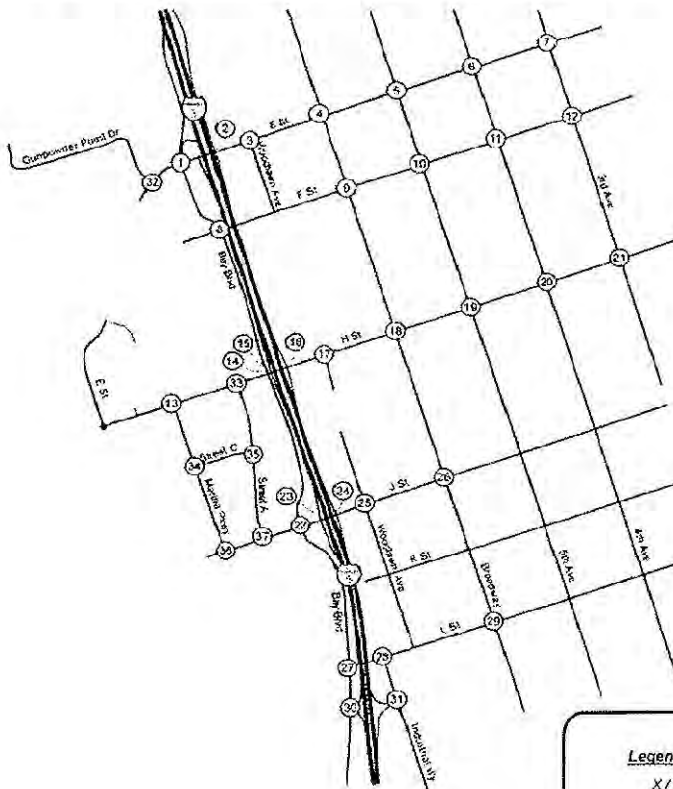
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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 782 / 939</p> <p>J St</p> <p>695 / 119 / 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>128 / 249 401 / 1053 55 / 78</p> <p>Broadway</p> <p>62 / 85 379 / 405 31 / 40</p> <p>J St</p> <p>149 / 232 331 / 515 128 / 218</p> <p>168 / 195 855 / 798 35 / 74</p>	<p>27</p> <p>98 / 141 261 / 407</p> <p>Bay Blvd</p> <p>420 / 293 355 / 593</p> <p>L St</p> <p>137 / 86 476 / 886</p>	<p>28</p> <p>3 / 9 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 519 / 563 228 / 354</p> <p>L St</p> <p>4 / 6 473 / 713 341 / 578</p> <p>237 / 214 3 / 2 421 / 446</p>
<p>29</p> <p>104 / 108 415 / 973 70 / 118</p> <p>Broadway</p> <p>113 / 92 503 / 463 109 / 159</p> <p>L St</p> <p>139 / 157 445 / 633 124 / 237</p> <p>157 / 219 480 / 743 80 / 123</p>	<p>30</p> <p>100 / 229 317 / 471</p> <p>Bay Blvd</p> <p>458 / 697 62 / 24</p> <p>I-5 SB Ramps</p> <p>136 / 207 4 / 13</p>	<p>31</p> <p>214 / 291 359 / 551</p> <p>Industrial Wy</p> <p>I-5 NB Ramps</p> <p>339 / 281 135 / 171</p> <p>335 / 331 299 / 355</p>	<p>32</p> <p>3 / 15 Gunpowder Pt Dr</p> <p>74 / 47 118 / 82</p> <p>E St</p> <p>116 / 80</p>
<p>33</p> <p>600 / 809 239 / 328</p> <p>H St</p> <p>397 / 623 14 / 19</p> <p>Street A</p> <p>22 / 27 170 / 312</p>	<p>34</p> <p>195 / 259 13 / 33</p> <p>Marina Pkwy</p> <p>19 / 37 59 / 61</p> <p>Street C</p> <p>235 / 346 46 / 71</p>	<p>35</p> <p>59 / 61 126 / 176</p> <p>Street A</p> <p>Street C</p> <p>46 / 71 13 / 33</p> <p>19 / 37 134 / 211</p>	<p>36</p> <p>9 / 21 375 / 630</p> <p>Marina Pkwy</p> <p>494 / 577 44 / 67</p> <p>J St</p> <p>14 / 25 45 / 113</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Phase II Plus Project Conditions Peak Hour Traffic Volumes (3 of 4)

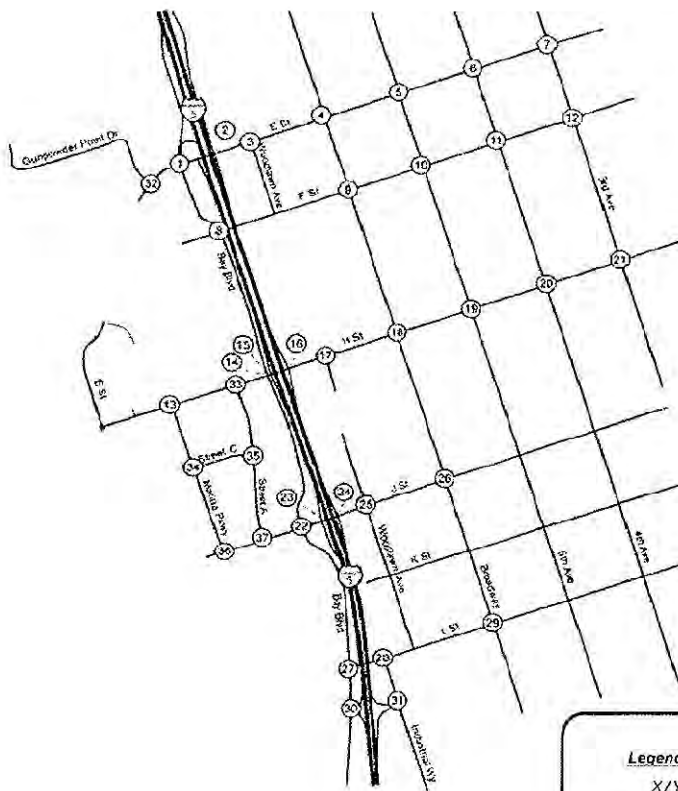
**FIGURE**

**4.2-14C**

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<div>37</div> <div>370 / 597 Street A</div> <div> <div>Q</div> <div>P</div> <div>482 / 538 538 / 644</div> <div>J St</div> </div> <div>419 / 742</div>	<div>38</div> <p>Intersection is not constructed in this phase</p>	<div>39</div> <p>Intersection is not constructed in this phase</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------



Legend

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Phase II Plus Project Conditions Peak Hour Traffic Volumes (4 of 4)**

FIGURE

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**TABLE 4.2-22**  
**Phase II Conditions Peak-Hour Intersection Level of Service Summary**

Intersection		Peak Hour	Phase II Baseline		Phase II Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
1	E Street & Bay Boulevard	A.M.	10.8	B	10.1	B	1.4	NO
		P.M.	16.2	B	16.6	B	1.5	NO
2	E Street & I-5 NB On-Ramp	A.M.	34.3	C	33.9	C	4.0	NO
		P.M.	28.3	C	28.0	C	5.0	NO
3	E Street & Woodlawn Avenue	A.M.	31.8	C	31.5	C	4.2	NO
		P.M.	20.5	C	21.0	C	5.0	NO
4	E Street & Broadway	A.M.	19.9	B	20.2	C	2.3	NO
		P.M.	35.8	D	36.4	D	2.2	NO
5	E Street & 5th Avenue	A.M.	5.2	A	5.2	A	3.9	NO
		P.M.	6.6	A	6.7	A	3.8	NO
6	E Street & 4th Avenue	A.M.	14.7	B	14.7	B	2.3	NO
		P.M.	27.8	C	27.9	C	1.9	NO
7	E Street & 3rd Avenue	A.M.	12.8	B	12.9	B	1.8	NO
		P.M.	22.1	C	22.3	C	1.7	NO
8	F Street & Bay Boulevard	A.M.	9.7	A	9.8	A	3.2	NO
		P.M.	17.9	B	18.5	B	4.0	NO
9	F Street & Broadway	A.M.	17.1	B	17.1	B	3.2	NO
		P.M.	25.0	C	25.4	C	2.5	NO
10	F Street & 5th Avenue	A.M.	6.6	A	6.5	A	4.3	NO
		P.M.	8.8	A	8.9	A	3.0	NO
11	F Street & 4th Avenue	A.M.	15.4	B	15.7	B	1.9	NO
		P.M.	21.0	C	21.3	C	1.3	NO
12	F Street & 3rd Avenue	A.M.	15.3	B	15.3	B	0.4	NO
		P.M.	23.2	C	23.2	C	0.2	NO
13	H Street & <del>Gaylord</del> <u>RCC</u> Dwy	A.M.	14.7	B	20.4	C	18.7	NO
		P.M.	35.6	D	72.2	<b>E</b>	24.0	<b>DIRECT</b>
14	H Street & Bay Boulevard	A.M.	12.1	B	9.0	A	28.9	NO
		P.M.	24.9	C	21.3	C	32.2	NO
15	H Street & I-5 SB Ramps	A.M.	20.4	C	20.8	C	19.7	NO
		P.M.	32.2	C	33.1	C	23.6	NO

TABLE 4.2-22 (Cont.)

Intersection		Peak Hour	Phase II Baseline		Phase II Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
16	H Street & I-5 NB Ramps	A.M.	16.5	B	17.3	B	13.2	NO
		P.M.	22.7	C	34.5	C	17.6	NO
17	H Street & Woodlawn Avenue	A.M.	30.5	C	29.9	C	9.8	NO
		P.M.	32.3	C	26.6	C	14.5	NO
18	H Street & Broadway	A.M.	29.6	C	32.6	C	6.9	NO
		P.M.	35.5	D	41.7	D	8.0	NO
19	H Street & 5th Avenue	A.M.	12.2	B	12.8	B	6.8	NO
		P.M.	19.1	B	19.8	B	7.0	NO
20	H Street & 4th Avenue	A.M.	25.0	C	25.7	C	3.2	NO
		P.M.	34.3	C	35.5	D	3.6	NO
21	H Street & 3rd Avenue	A.M.	19.6	B	19.8	B	3.3	NO
		P.M.	30.3	C	31.0	C	3.7	NO
22	J Street & Bay Boulevard	A.M.	26.1	C	32.7	C	35.1	NO
		P.M.	27.9	C	70.1	E	38.7	DIRECT
23	J Street & I-5 SB Ramps	A.M.	24.0	C	14.9	B	27.6	NO
		P.M.	24.5	C	26.6	C	30.6	NO
24	J Street & I-5 NB Ramps	A.M.	34.3	C	47.7	D	13.2	NO
		P.M.	20.8	C	39.4	D	22.4	NO
25	J Street & Woodlawn Avenue	A.M.	11.2	B	12.0	B	11.2	NO
		P.M.	12.4	B	13.3	B	12.0	NO
26	J Street & Broadway	A.M.	15.6	B	15.9	B	7.5	NO
		P.M.	24.8	C	27.6	C	7.1	NO
27	L Street & Bay Boulevard	A.M.	7.6	A	8.1	A	15.3	NO
		P.M.	12.1	B	16.2	B	17.5	NO
28	L Street & Industrial Boulevard	A.M.	25.8	C	26.7	C	9.8	NO
		P.M.	24.8	C	26.1	C	11.8	NO
29	L Street & Broadway	A.M.	16.1	B	16.6	B	5.0	NO
		P.M.	27.5	C	31.0	C	5.1	NO
30	I-5 SB Ramps & Bay Boulevard	A.M.	7.7	A	7.8	A	4.7	NO
		P.M.	12.6	B	14.1	B	4.7	NO

TABLE 4.2-22 (Cont.)

Intersection		Peak Hour	Phase II Baseline		Phase II Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
31	I5 NB Ramps & Industrial Boulevard	A.M.	17.5	B	19.1	B	5.6	NO
		P.M.	20.8	C	33.2	C	7.5	NO
32	E Street & Gunpowder Pt Dr	A.M.	7.9	A	10.2	B	0.0	NO
		P.M.	9.7	A	9.7	A	0.0	NO
33	H Street & Street A	A.M.	DNE		20.8	C	35.0	NO
		P.M.			ECL	<b>F</b>	42.5	<b>DIRECT</b>
34	Street C & Marina Pkwy	A.M.	DNE		12.7	B	48.1	NO
		P.M.			16.3	C	55.1	NO
35	Street C & Street A	A.M.	DNE		8.6	A	65.5	NO
		P.M.			9.9	A	72.8	NO
36	J Street & Marina Pkwy	A.M.	11.4	B	20.4	C	41.7	NO
		P.M.	16.3	B	97.9	<b>F</b>	41.7	<b>DIRECT</b>
37	J Street & Street A	A.M.	14.5	B	83.5	<b>F</b>	50.6	<b>DIRECT</b>
		P.M.	16.0	B	ECL	<b>F</b>	52.7	<b>DIRECT</b>

SOURCE: Kimley-Horn and Associates 2008.

SB = Southbound; NB = Northbound

**Bold** values indicate intersections operating at Level of Service (LOS) E or F. **Bold and shaded** values indicate project significant impact.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

<sup>1</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>2</sup>LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.

<sup>3</sup>Percentage of entering trips consisting of project trips (significance threshold criteria).

Table 4.2-22 displays the LOS analysis results for the study area intersections under the Proposed Project–Phase II Conditions scenario. As shown in the table, the following intersections will be characterized by LOS E or F conditions under baseline plus project conditions and will require mitigation:

- H Street/~~Gaylord~~ RCC Drive (LOS E, PM peak hour) (**Significant Impact 4.2-24**)
- J Street/Bay Boulevard (LOS E, PM peak hour) (**Significant Impact 4.2-25**)
- H Street/Street A (LOS F, PM peak hour) (**Significant Impact 4.2-26**)
- J Street/Marina Parkway (LOS F, PM peak hour) (**Significant Impact 4.2-27**)
- J Street/Street A (LOS F, both peak hours) (**Significant Impact 4.2-28**).

iv. Freeway Segment Analysis

Table 4.2-23 summarizes the LOS analysis for the freeway segments the Proposed Project–Phase II Conditions scenario. As shown in the table, the following I-5 freeway segments would operate at LOS F with or without the Proposed Project and would therefore be considered direct impacts:

- SR-54 to E Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-29**)
- E Street to F Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-30**).

The remaining freeway segments would operate at LOS F with and without the Proposed Project and would be considered cumulative impacts.



**TABLE 4.2-23**  
**Phase II Conditions Freeway Segment of Service Summary**

Freeway Segment	Direction	Number of Lanes	Peak Hour	Phase II Baseline				Phase II Baseline Plus Project				Phase II Project Trips	Project Trip (Percent) <sup>4</sup>	IMPACT?
				ADT <sup>1</sup>	Peak-Hour Volume <sup>2</sup>	V/C Ratio <sup>3</sup>	LOS	ADT <sup>2</sup>	Peak-Hour Volume <sup>2</sup>	V/C Ratio	LOS			
Interstate 5														
SR- 54 to E Street	NB	4 M	A.M.	164,300	7,990	0.999	F0	179,558	8,731	1.091	F0	5,822	3	DIRECT <sup>5</sup>
	SB	4 M	P.M.		8,557	1.070	F0		9,351	1.169	F0			
E Street to H Street	NB	4 M	A.M.	184,000	8,947	1.118	F0	201,809	9,813	1.227	F0	7,213	4	DIRECT <sup>5</sup>
	SB	4 M	P.M.		9,583	1.198	F0		10,510	1.314	F1			
H Street to J Street	NB	4 M	A.M.	186,000	9,045	1.131	F0	198,311	9,643	1.205	F0	4,975	3	CUMULATIVE
	SB	4 M	P.M.		9,687	1.211	F0		10,328	1.291	F1			
J Street to L Street	NB	4 M	A.M.	186,100	9,050	1.131	F0	195,088	9,487	1.186	F0	3,614	2	CUMULATIVE
	SB	4 M	P.M.		9,692	1.212	F0		10,160	1.270	F1			
L Street to Palomar Street	NB	4 M	A.M.	176,200	8,568	1.071	F0	185,188	9,005	1.126	F0	3,614	2	CUMULATIVE
	SB	4 M	P.M.		9,176	1.147	F0		9,645	1.206	F0			

SOURCE: Kimley-Horn and Associates 2008.

**Bold** values indicate freeway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup>The ADT volumes were estimated by applying a growth factor to existing volumes provided by Caltrans.

<sup>2</sup>Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

<sup>3</sup>The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Mainline, A: Aux., HOV: High Occupancy Vehicle, ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux). Capacity for all segments is 8,000.

<sup>4</sup>Percentage of total freeway trips generated by the project.

<sup>5</sup> In an effort to be conservative, the impact determination is a product of Phase I and Phase II project trips.

d. Phase III

Phase III traffic volumes are calculated by increasing the existing traffic volumes by annual growth over 12 years, which is the difference between year 2017 (Phase III) and year 2005 (Existing), and adding the Phases I and II project trips. This sum becomes the baseline condition for Phase III. Phase III Plus Project volumes are calculated by adding the Phase III project trips to the Phase III Baseline volumes.

Phase III is expected to be complete in the year 2012. The assumed transportation network improvements, projected traffic volumes, and analysis for this scenario are described below.

i. Proposed Roadway Network

Development of Phase III components without adequate site access and roadway frontage would result in significant impacts on circulation (**Significant Impact 4.2-31**)

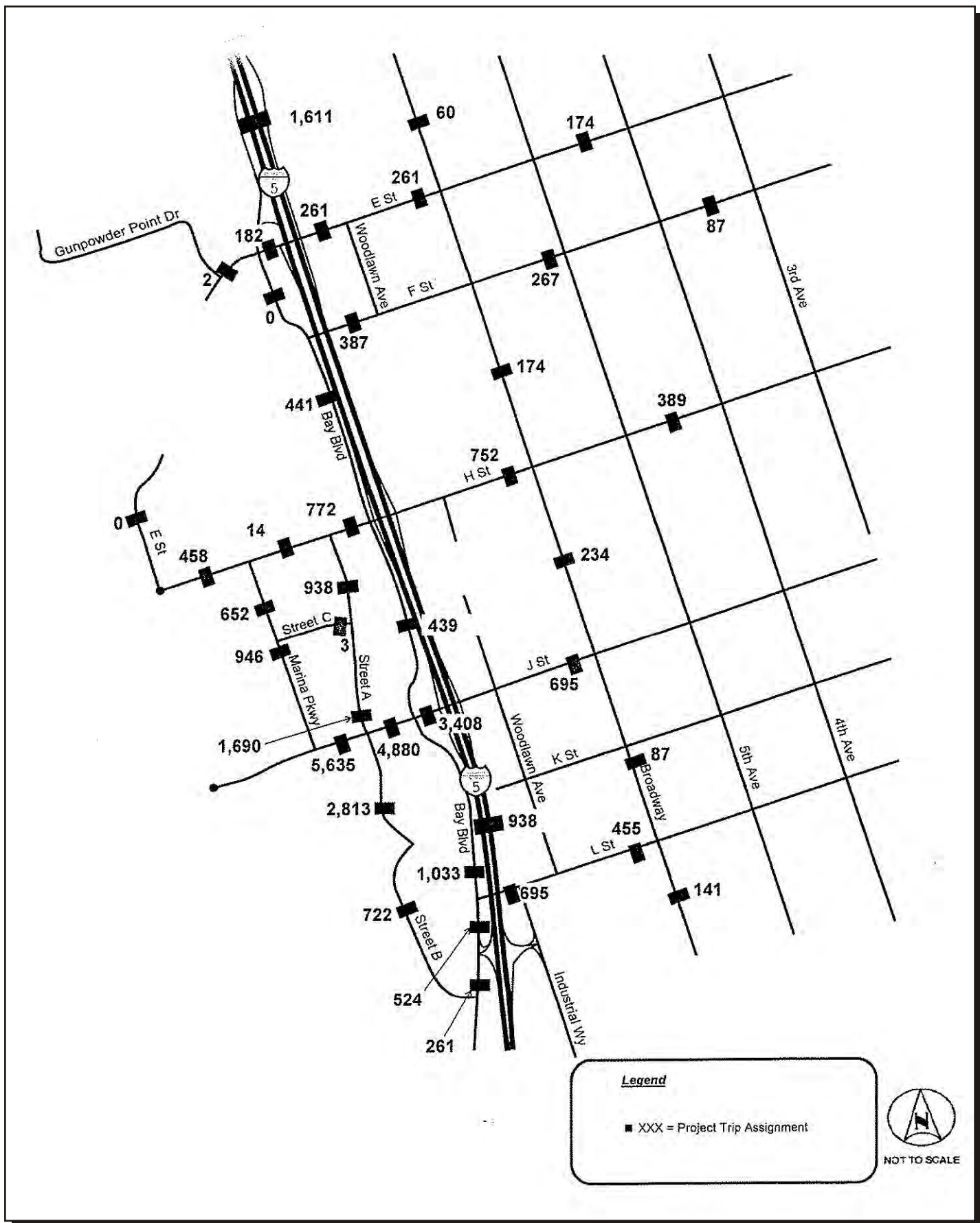
ii. Project Traffic Volumes

As seen above, *Table 4.2-12* summarizes the trip generation summary in Phase III for the Proposed Project. This phase is assumed to generate an additional 8,685 ADT which will be distributed along roadway segments in the project area. Development in Phase III would occur in the Harbor and Otay District. All of the development in the Otay District would occur in Phase III only.

The project traffic in Phase III would be distributed and assigned based on the actual location of the development. In situations where shared parking exists project traffic would be distributed and assigned based on the availability of parking. This distribution and assignment was done based on SANDAG Series 10 Select Zone model plots of zones within the Bayfront Redevelopment Area.

iii. Roadway Segment Analysis

*Figure 4.2-15* shows the Phase III Roadway Segment Trip Assignments. *Figure 4.2-16* shows the Phase III Baseline Conditions ADT Volumes. *Figure 4.2-17* shows the Phase III Plus Project Conditions ADT Volumes. Lastly, *Table 4.2-24* depicts the Phase III Conditions Roadway Segment Level of Service Summary.



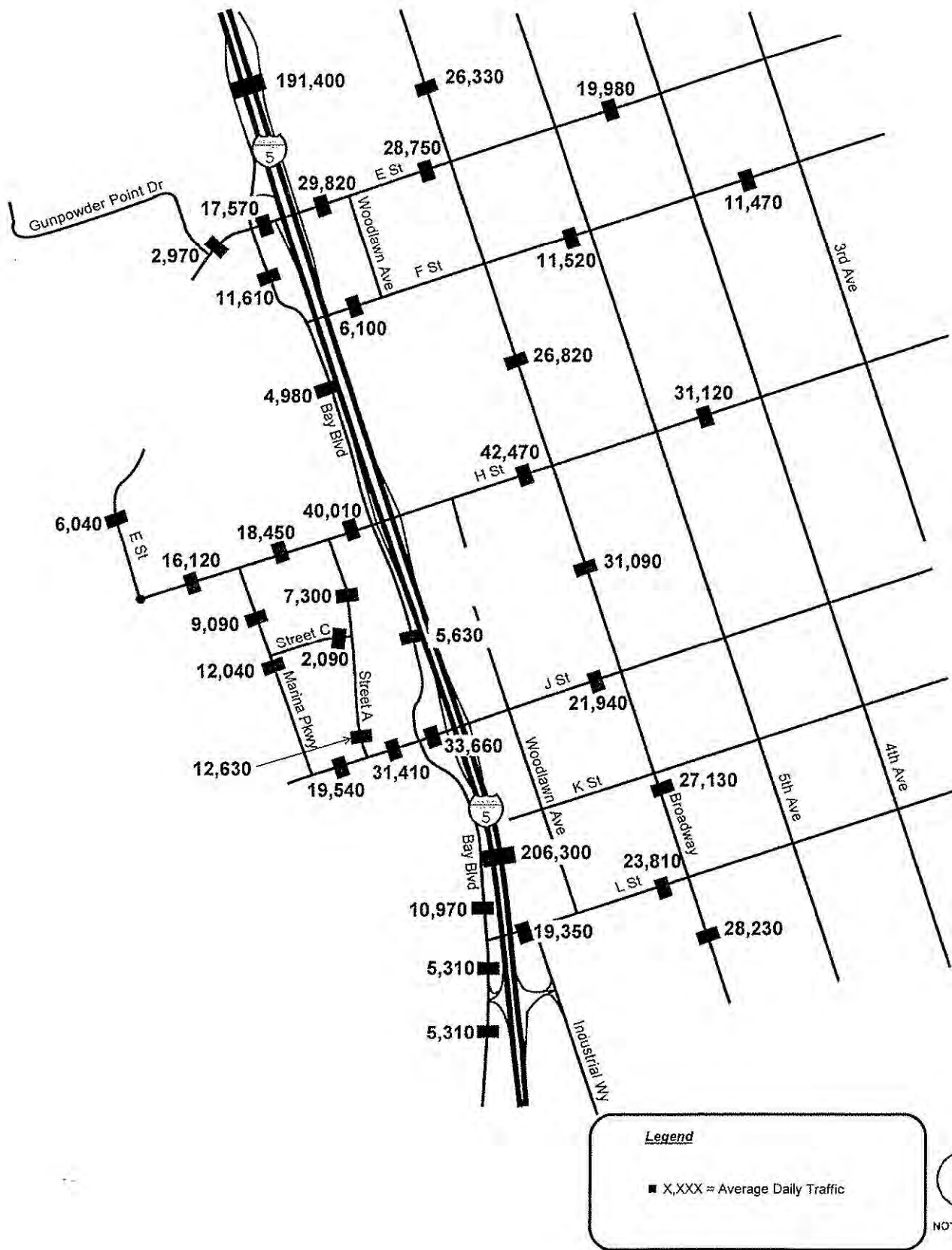
SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Roadway Segment Trip Assignment

**FIGURE**  
**4.2-15**

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SOURCE: Kimley-Horn and Associates, Inc.

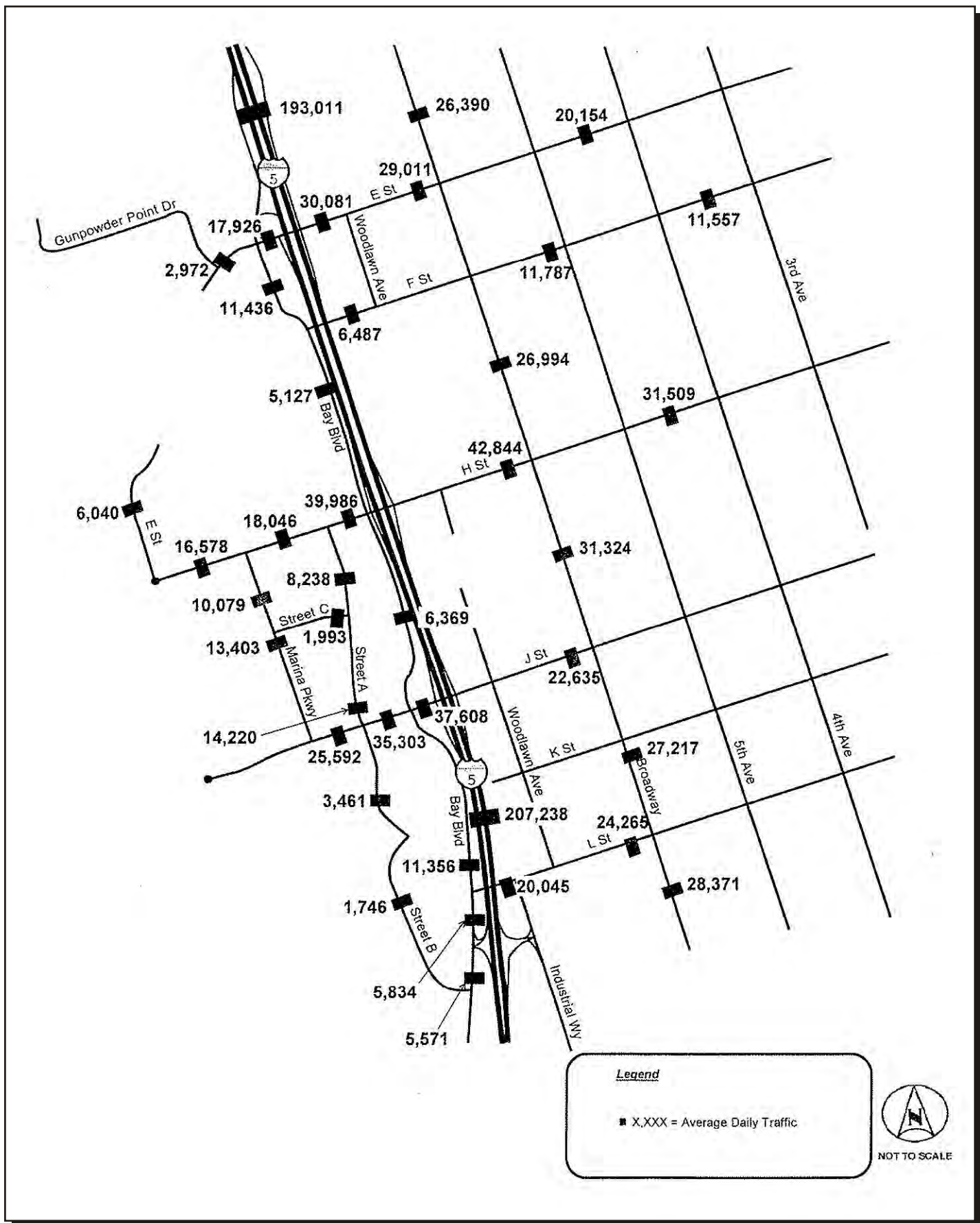
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Baseline Conditions ADT Volumes

**FIGURE**  
**4.2-16**

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SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Plus Project Conditions ADT Volumes

**FIGURE**  
**4.2-17**

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**TABLE 4.2-24**  
**Phase III Conditions Roadway Segment Level of Service Summary**

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline		Phase III Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to <del>Gaylord</del> RCC Dwy	2 Lanes Class III Collector	7,500	6,050	B	6,050	B	0	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,970	A	2,972	A	2	0	NO
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	17,570	A	17,926	A	182	1	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,820	B	30,081	B	261	1	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	28,750	A	29,011	B	261	1	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,980	A	20,154	A	174	1	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,100	A	6,487	A	387	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,520	C	11,787	C	267	2	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	11,470	A	11,557	A	87	1	NO
H Street									
West of Marina Parkway	3 Lanes Class II Collector	17,000	16,120	C	16,578	C	458	3	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	18,450	A	18,046	A	14	0	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	40,010	D	39,986	D	772	2	CUMULATIVE
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	42,470	D	42,844	D	752	2	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,120	C	31,509	C	389	1	NO
J Street									
Marina Parkway to Street A	4 Lanes Major Street	30,000	19,540	A	25,592	B	5,635	22	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	31,410	B	35,303	C	4,880	14	NO
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	33,660	B	37,608		3,408	9	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	21,940	A	22,635	B	695	3	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	19,350	A	20,045	A	695	3	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	23,810	A	24,265	A	455	2	NO
Marina Parkway									
H Street to Street C	3 Lanes Class II Collector	17,000	9,090	A	10,079	A	652	6	NO

TABLE 4.2-24 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline		Phase III Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Street C to J Street	3 Lane Class II Collector	17,000	12,040	A	13,403	B	946	7	NO
<b>Bay Boulevard</b>									
E Street to F Street	2 Lanes Class II Collector	12,000	11,610	C	11,436	C	0	0	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,980	A	5,127	A	441	9	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,630	B	6,369	B	439	7	NO
J Street to L Street	2 Lanes Class II Collector	12,000	10,970	C	11,356	C	1,033	9	NO
L Street to I-5 Ramps <sup>1</sup>	2 Lanes Class II Collector	12,000	5,310	A	5,834	A	524	9	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,310	A	5,571	A	261	5	NO
<b>Broadway</b>									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,330	C	26,390	C	60	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,820	C	26,994	C	174	1	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,090	D	31,324	D	234	1	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,130	C	27,217	C	87	0	NO
South of L Street	4 Lanes Major Street	30,000	28,230	C	28,371	C	141	0	NO
<b>Street A</b>									
H Street to Street C	2 Lanes Class III Collector	7,500	7,300	C	8,238	<b>D</b>	938	11	<b>DIRECT</b>
Street C to J Street	4 Lanes Class I Collector	22,000	12,630	A	14,220	A	1,690	12	NO
J Street to Street B (a)	2 Lanes Class III Collector	7,500	—	—	3,461	A	2,813	81	NO
<b>Street B</b>									
Street A to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	—	—	1,746	A	722	41	NO
<b>Street C</b>									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,090	A	1,993	A	3	0	NO

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service

**Bold** values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.<sup>a</sup> Roads will be built to given classification with Phase I of the Proposed Project as required to provide site frontage.

As shown in *Table 4.2-25*, Phase III Conditions Roadway Segment Level of Service Summary, the following roadway segments will experience congested LOS D or worse conditions for segments outside of the Urban Core and LOS E or worse conditions for segments inside the Urban Core and will require mitigation:

- Street A (H Street to Street C) (LOS D) (**Significant Impact 4.2-32**).

It should be noted that H Street between Street A to the I-5 Ramps, would operate at LOS D under Phase III Plus Project Conditions. However, this impact would be considered a cumulative impact (cumulative impacts are discussed in *Chapter 6*). Also, the segment of Street A between J Street and Street B and the segment of Street B between Street A and Bay Boulevard would be built (2-lane Class III Collector) with Phase III of the project as required to provide site frontage.

iv. Intersection Analysis

*Figures 4.2-18a* through *4.2-18d* depict the Phase III Baseline Conditions Peak-Hour Traffic Volumes for intersections in the study area. *Figures 4.2-19a* through *4.2-19d* depict the Phase III Plus Project Conditions Peak-Hour Traffic Volumes. Finally, *Table 4.2-25* summarizes the Phase III Conditions Peak Hour Level of Service for intersections in the project area.

As shown in *Table 4.2-25*, Phase III Conditions Peak-Hour Intersection Level of Service Summary, the following intersections will be characterized by LOS E or F conditions under Phase III Baseline Plus Project Conditions and will require mitigation:

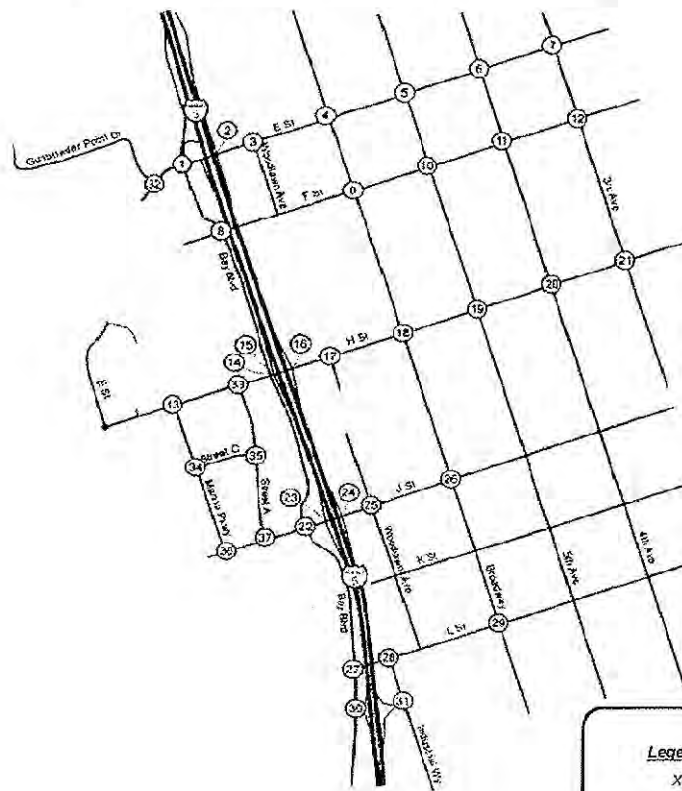
- J Street/Bay Boulevard (LOS E, PM peak hour) (**Significant Impact 4.2-33**)
- J Street/I-5 Northbound Ramps (LOS E, PM peak hour) (**Significant Impact 4.2-34**).

The following intersections would operate at LOS E under Phase III Plus Project Conditions but would be considered cumulative impacts and as such, are discussed in *Chapter 6* of this report:

- H Street/I-5 Southbound Ramps (LOS E, PM peak hour)
- J Street/I-5 Northbound Ramps (LOS E, AM peak hour).

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<p>1</p> <p>57 / 46 327 / 893 363 / 875 I-5 SB Ramps</p> <p>108 / 96 20 / 15 Bay Blvd</p> <p>19 / 20 172 / 350 E St</p>	<p>2</p> <p>I-5 NB On Ramp</p> <p>146 / 260 300 / 781 I-5 NB Off Ramp</p> <p>58 / 49 289 / 2 475 / 518 E St</p>	<p>3</p> <p>4 / 25 0 / 11 12 / 28 0%</p> <p>3 / 11 633 / 939 165 / 146 Woodlawn Ave</p> <p>227 / 239 26 / 17 92 / 64 E St</p>	<p>4</p> <p>177 / 275 166 / 894 27 / 105 Broadway</p> <p>318 / 336 318 / 603 100 / 182</p> <p>184 / 226 486 / 590 40 / 82 E St</p>
<p>5</p> <p>32 / 50 45 / 138 7 / 18 5th Ave</p> <p>27 / 40 411 / 701 15 / 40</p> <p>24 / 28 50 / 96 18 / 60 E St</p>	<p>6</p> <p>51 / 88 317 / 851 122 / 243 4th Ave</p> <p>52 / 72 326 / 590 57 / 83</p> <p>85 / 109 284 / 533 31 / 104 E St</p>	<p>7</p> <p>26 / 58 78 / 246 34 / 158 3rd Ave</p> <p>16 / 43 366 / 675 66 / 181</p> <p>70 / 125 238 / 270 51 / 169 E St</p>	<p>8</p> <p>206 / 33 61 / 339 133 / 326 Bay Blvd</p> <p>30 / 157 17 / 62 4 / 13</p> <p>14 / 4 86 / 87 55 / 84 F St</p>
<p>9</p> <p>64 / 88 295 / 1172 48 / 86 Broadway</p> <p>54 / 86 168 / 462 126 / 219</p> <p>41 / 61 166 / 179 56 / 101 F St</p>	<p>10</p> <p>18 / 47 45 / 196 15 / 32 5th Ave</p> <p>20 / 23 192 / 360 19 / 64</p> <p>11 / 32 47 / 119 11 / 20 F St</p>	<p>11</p> <p>54 / 42 306 / 812 50 / 97 4th Ave</p> <p>29 / 53 104 / 350 56 / 107</p> <p>43 / 126 222 / 228 25 / 110 F St</p>	<p>12</p> <p>42 / 87 243 / 530 6 / 101 3rd Ave</p> <p>21 / 75 116 / 275 59 / 195</p> <p>71 / 119 251 / 385 51 / 62 F St</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Phase III Baseline Conditions Peak Hour Traffic Volume (1 of 4)

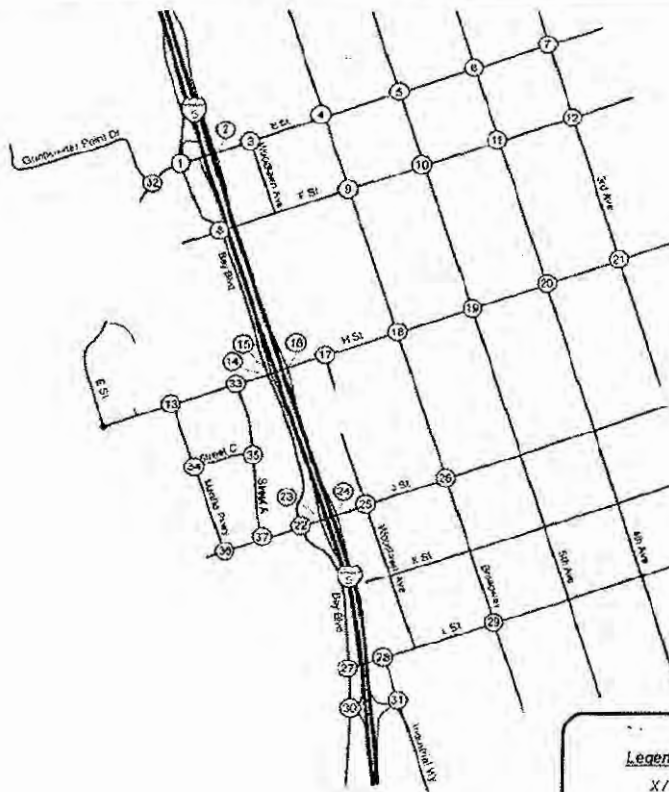
FIGURE

4.2-18

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<p>13</p> <p>22 / 31</p> <p>Marina Pkwy</p> <p>36 / 46</p> <p>428 / 547</p> <p>179 / 254</p> <p>H St</p> <p>280 / 390</p> <p>99 / 78</p> <p>75 / 194</p> <p>95 / 201</p>	<p>14</p> <p>16 / 62</p> <p>66 / 402</p> <p>32 / 183</p> <p>Bay Blvd</p> <p>104 / 51</p> <p>646 / 1123</p> <p>H St</p> <p>567 / 922</p> <p>45 / 93</p> <p>25 / 51</p> <p>128 / 80</p> <p>19 / 63</p>	<p>15</p> <p>410 / 660</p> <p>3 / 0</p> <p>489 / 754</p> <p>I-5 SB Off-Ramp</p> <p>557 / 666</p> <p>560 / 631</p> <p>II St</p> <p>505 / 1038</p> <p>93 / 257</p> <p>I-5 SB On Ramp</p>	<p>16</p> <p>I-5 NB On Ramp</p> <p>412 / 626</p> <p>1032 / 1003</p> <p>H St</p> <p>264 / 471</p> <p>766 / 1039</p> <p>I-5 NB Off Ramp</p> <p>162 / 199</p> <p>544 / 603</p>
<p>17</p> <p>263 / 205</p> <p>56 / 50</p> <p>103 / 133</p> <p>0%</p> <p>112 / 143</p> <p>1073 / 1236</p> <p>154 / 103</p> <p>H St</p> <p>166 / 92</p> <p>1161 / 1285</p> <p>103 / 85</p> <p>Woodlawn Ave</p> <p>62 / 177</p> <p>24 / 49</p> <p>49 / 55</p>	<p>18</p> <p>120 / 216</p> <p>481 / 974</p> <p>94 / 243</p> <p>Broadway</p> <p>112 / 147</p> <p>531 / 811</p> <p>159 / 358</p> <p>H St</p> <p>277 / 303</p> <p>651 / 802</p> <p>125 / 301</p> <p>Broadway</p> <p>159 / 331</p> <p>1112 / 812</p> <p>115 / 241</p>	<p>19</p> <p>140 / 163</p> <p>35 / 173</p> <p>163 / 197</p> <p>5th Ave</p> <p>217 / 82</p> <p>693 / 890</p> <p>70 / 284</p> <p>H St</p> <p>223 / 107</p> <p>613 / 835</p> <p>73 / 227</p> <p>64 / 266</p> <p>46 / 134</p> <p>71 / 302</p>	<p>20</p> <p>99 / 232</p> <p>364 / 610</p> <p>107 / 197</p> <p>4th Ave</p> <p>120 / 188</p> <p>723 / 853</p> <p>59 / 152</p> <p>H St</p> <p>134 / 168</p> <p>611 / 865</p> <p>107 / 221</p> <p>189 / 162</p> <p>462 / 463</p> <p>85 / 96</p>
<p>21</p> <p>81 / 181</p> <p>323 / 557</p> <p>107 / 189</p> <p>3rd Ave</p> <p>141 / 152</p> <p>714 / 675</p> <p>240 / 257</p> <p>H St</p> <p>101 / 175</p> <p>440 / 795</p> <p>172 / 225</p> <p>148 / 207</p> <p>512 / 507</p> <p>88 / 194</p>	<p>22</p> <p>3 / 17</p> <p>32 / 202</p> <p>48 / 210</p> <p>Bay Blvd</p> <p>305 / 120</p> <p>733 / 825</p> <p>398 / 203</p> <p>J St</p> <p>27 / 43</p> <p>557 / 954</p> <p>248 / 397</p> <p>305 / 385</p> <p>64 / 66</p> <p>33 / 194</p>	<p>23</p> <p>506 / 411</p> <p>242 / 432</p> <p>I-5 SB Off-Ramp</p> <p>933 / 681</p> <p>154 / 271</p> <p>J St</p> <p>477 / 931</p> <p>193 / 418</p> <p>I-5 SB On Ramp</p>	<p>24</p> <p>I-5 NB On Ramp</p> <p>382 / 322</p> <p>603 / 590</p> <p>J St</p> <p>295 / 542</p> <p>445 / 861</p> <p>I-5 NB Off Ramp</p> <p>504 / 336</p> <p>211 / 0</p> <p>538 / 301</p>



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Baseline Conditions Peak Hour Traffic Volume (2 of 4)

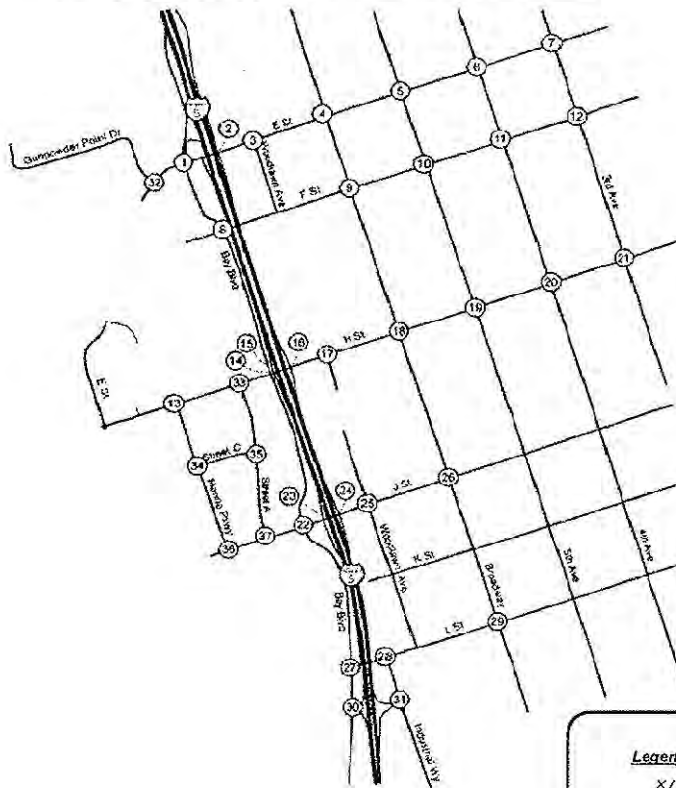
FIGURE

4.2-10

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<b>25</b> <div>40 / 21</div> <div>695 / 1197 12 / 33</div> <div>Woodlawn Ave</div> <div>45 / 51 782 / 939</div> <div>J St</div> <div>18 / 9</div>	<b>26</b> <div>128 / 249 416 / 1093 55 / 83</div> <div>149 / 232 331 / 515 128 / 218</div> <div>Broadway</div> <div>62 / 90 379 / 405 31 / 48</div> <div>J St</div> <div>168 / 195 680 / 828 35 / 79</div>	<b>27</b> <div>98 / 141 291 / 412</div> <div>485 / 298 365 / 608</div> <div>Bay Blvd</div> <div>137 / 86 491 / 871</div>	<b>28</b> <div>3 / 9 4 / 8 7 / 5</div> <div>4 / 6 493 / 723 356 / 578</div> <div>Industrial Wy</div> <div>5 / 12 564 / 583 228 / 354</div> <div>L St</div> <div>267 / 214 3 / 2 421 / 446</div>
<b>29</b> <div>104 / 103 430 / 1038 75 / 123</div> <div>144 / 157 445 / 633 124 / 237</div> <div>Broadway</div> <div>118 / 97 503 / 463 114 / 164</div> <div>L St</div> <div>157 / 219 500 / 773 60 / 128</div>	<b>30</b> <div>100 / 229 317 / 471</div> <div>458 / 697 62 / 24</div> <div>Bay Blvd</div> <div>151 / 207 4 / 13</div>	<b>31</b> <div>214 / 291 374 / 551</div> <div>339 / 281 135 / 171</div> <div>Industrial Wy</div> <div>335 / 331 329 / 355</div>	<b>32</b> <div>3 / 15</div> <div>116 / 80</div> <div>F St</div> <div>74 / 47 118 / 82</div> <div>E St</div>
<b>33</b> <div>600 / 809 283 / 369</div> <div>397 / 623 14 / 29</div> <div>H St</div> <div>22 / 27 175 / 312</div> <div>Street A</div>	<b>34</b> <div>195 / 269 13 / 33</div> <div>19 / 37 59 / 61</div> <div>Marina Pkwy</div> <div>235 / 346 46 / 71</div> <div>Street C</div>	<b>35</b> <div>59 / 61 170 / 227</div> <div>45 / 71 13 / 33</div> <div>Street A</div> <div>19 / 37 139 / 211</div>	<b>36</b> <div>9 / 21 375 / 630</div> <div>14 / 25 45 / 113</div> <div>Marina Pkwy</div> <div>494 / 577 44 / 67</div> <div>J St</div>



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

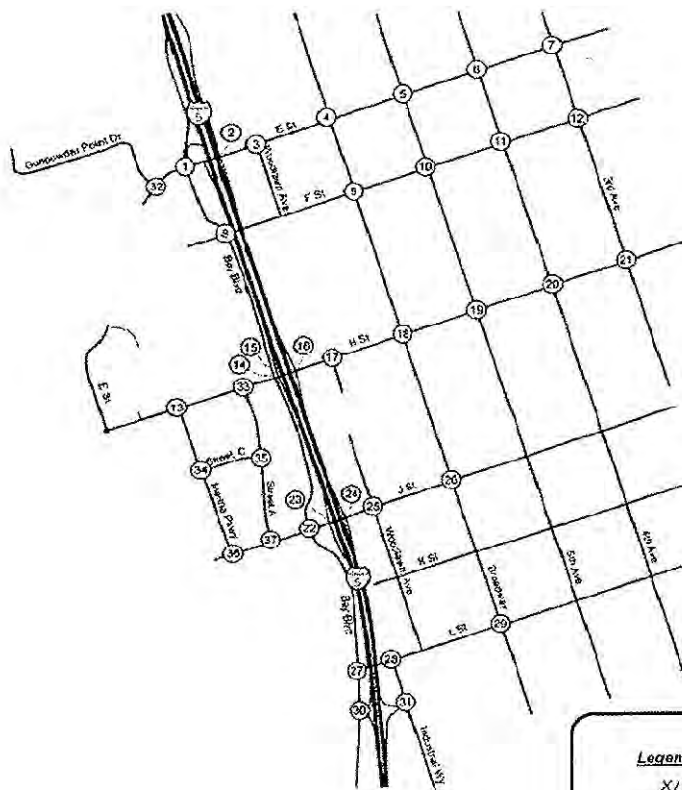
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Baseline Conditions Peak Hour Traffic Volume (3 of 4)

**FIGURE**

**4.2-10**

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<div>37</div> <div>414 / 648</div> <div>Street A</div> <div> <div> <div>0</div> <div>0</div> </div> <div> <div>487 / 538</div> <div>538 / 644</div> </div> <div>J St</div> </div>		<div>38</div> <div>Intersection is not constructed in this phase</div>	<div>39</div> <div>Intersection is not constructed in this phase</div>
<div>419 / 742</div>			



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Baseline Conditions Peak Hour Traffic Volume (4 of 4)

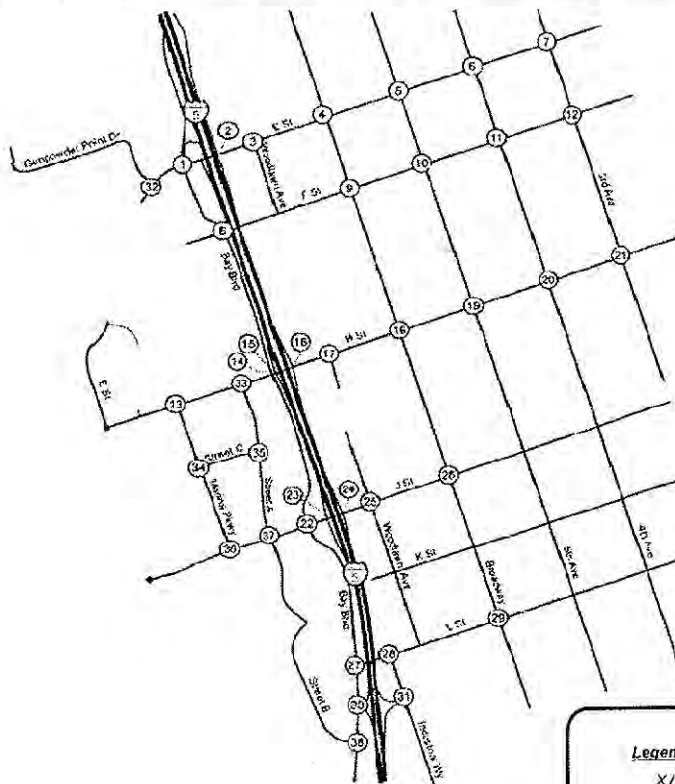
**FIGURE**

4.2-101

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623

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1	57 / 46 327 / 693 363 / 875 1.5 SB Off-Ramp 19 / 20 172 / 350 E St 110 / 97 20 / 15 Bay Blvd	2	1.5 NB On Ramp 586 / 556 395 / 617 E St 146 / 260 300 / 781 1.5 NB Off Ramp 59 / 50 289 / 2 479 / 528	3	4 / 25 0 / 11 12 / 28 Woodlawn Ave 5 / 9 815 / 966 126 / 114 E St 3 / 11 537 / 949 165 / 146	4	180 / 279 166 / 894 27 / 105 Broadway 125 / 50 507 / 570 28 / 124 E St 320 / 340 321 / 610 100 / 182 184 / 226 466 / 550 40 / 82
5	32 / 50 45 / 138 7 / 18 5th Ave 26 / 36 529 / 597 19 / 43 E St 27 / 40 414 / 708 15 / 40	6	51 / 88 317 / 851 122 / 243 4th Ave 48 / 110 444 / 514 91 / 133 E St 52 / 72 329 / 597 57 / 83	7	26 / 58 78 / 246 34 / 158 3rd Ave 103 / 96 533 / 675 180 / 242 E St 16 / 43 369 / 682 66 / 181	8	206 / 33 61 / 339 133 / 326 Bay Blvd 89 / 117 57 / 18 114 / 161 F St 30 / 157 17 / 62 4 / 13
9	70 / 95 295 / 1172 48 / 86 Broadway 41 / 61 174 / 193 56 / 101 F St 59 / 94 174 / 476 127 / 222	10	20 / 50 45 / 196 15 / 32 5th Ave 16 / 41 191 / 286 8 / 37 F St 21 / 26 198 / 372 19 / 64	11	56 / 45 306 / 812 50 / 97 4th Ave 43 / 126 228 / 237 25 / 110 F St 30 / 56 109 / 359 66 / 107	12	42 / 87 243 / 530 6 / 101 3rd Ave 40 / 51 199 / 172 42 / 91 F St 21 / 75 117 / 278 59 / 195



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Plus Project Conditions Peak Hour Traffic Volumes (1 of 4)

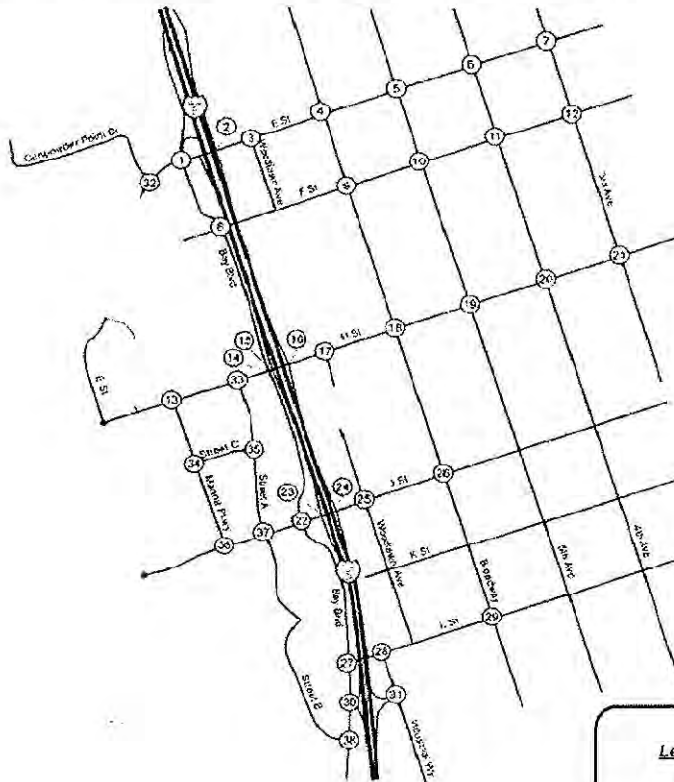
**FIGURE**

**4.2-19**

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<p>13</p> <p>22 / 31</p> <p>Gaylord Hwy</p> <p>272 / 378</p> <p>122 / 112</p> <p>Marina Pkwy</p> <p>101 / 237</p> <p>96 / 202</p> <p>36 / 46</p> <p>414 / 528</p> <p>180 / 255</p> <p>H St</p>	<p>14</p> <p>20 / 63</p> <p>78 / 423</p> <p>32 / 183</p> <p>Bay Blvd</p> <p>584 / 957</p> <p>45 / 93</p> <p>25 / 51</p> <p>137 / 103</p> <p>19 / 63</p> <p>105 / 52</p> <p>869 / 1141</p> <p>H St</p>	<p>15</p> <p>411 / 681</p> <p>3 / 0</p> <p>489 / 754</p> <p>I-5 SB Off-Ramp</p> <p>521 / 1073</p> <p>94 / 258</p> <p>I-5 SB On Ramp</p> <p>578 / 683</p> <p>550 / 631</p> <p>H St</p>	<p>16</p> <p>I-5 NB On Ramp</p> <p>266 / 472</p> <p>781 / 1073</p> <p>I-5 NB Off Ramp</p> <p>163 / 200</p> <p>544 / 603</p> <p>412 / 626</p> <p>1022 / 1019</p> <p>H St</p>
<p>17</p> <p>263 / 205</p> <p>56 / 50</p> <p>163 / 133</p> <p>Woodlawn Ave</p> <p>166 / 92</p> <p>1176 / 1319</p> <p>103 / 85</p> <p>112 / 143</p> <p>1093 / 1252</p> <p>154 / 103</p> <p>H St</p>	<p>18</p> <p>121 / 217</p> <p>481 / 974</p> <p>94 / 243</p> <p>Broadway</p> <p>279 / 309</p> <p>664 / 824</p> <p>121 / 297</p> <p>112 / 147</p> <p>549 / 827</p> <p>159 / 358</p> <p>H St</p>	<p>19</p> <p>147 / 159</p> <p>36 / 173</p> <p>163 / 197</p> <p>5th Ave</p> <p>229 / 116</p> <p>622 / 850</p> <p>74 / 228</p> <p>217 / 82</p> <p>705 / 902</p> <p>70 / 284</p> <p>H St</p>	<p>20</p> <p>99 / 232</p> <p>364 / 610</p> <p>107 / 197</p> <p>4th Ave</p> <p>134 / 166</p> <p>620 / 880</p> <p>107 / 221</p> <p>120 / 188</p> <p>735 / 965</p> <p>99 / 152</p> <p>H St</p>
<p>21</p> <p>85 / 185</p> <p>323 / 557</p> <p>107 / 189</p> <p>3rd Ave</p> <p>105 / 180</p> <p>446 / 805</p> <p>175 / 228</p> <p>141 / 152</p> <p>722 / 683</p> <p>240 / 257</p> <p>H St</p>	<p>22</p> <p>15 / 38</p> <p>32 / 202</p> <p>48 / 210</p> <p>Bay Blvd</p> <p>35 / 66</p> <p>626 / 1131</p> <p>268 / 449</p> <p>305 / 120</p> <p>835 / 979</p> <p>398 / 203</p> <p>J St</p>	<p>23</p> <p>561 / 491</p> <p>242 / 432</p> <p>I-5 SB Off-Ramp</p> <p>530 / 1062</p> <p>212 / 467</p> <p>I-5 SB On Ramp</p> <p>980 / 755</p> <p>154 / 271</p> <p>J St</p>	<p>24</p> <p>I-5 NB On Ramp</p> <p>333 / 635</p> <p>461 / 899</p> <p>I-5 NB Off Ramp</p> <p>530 / 380</p> <p>211 / 0</p> <p>533 / 301</p> <p>382 / 322</p> <p>625 / 623</p> <p>J St</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Plus Project Conditions Peak Hour Traffic Volumes (2 of 4)

**FIGURE**

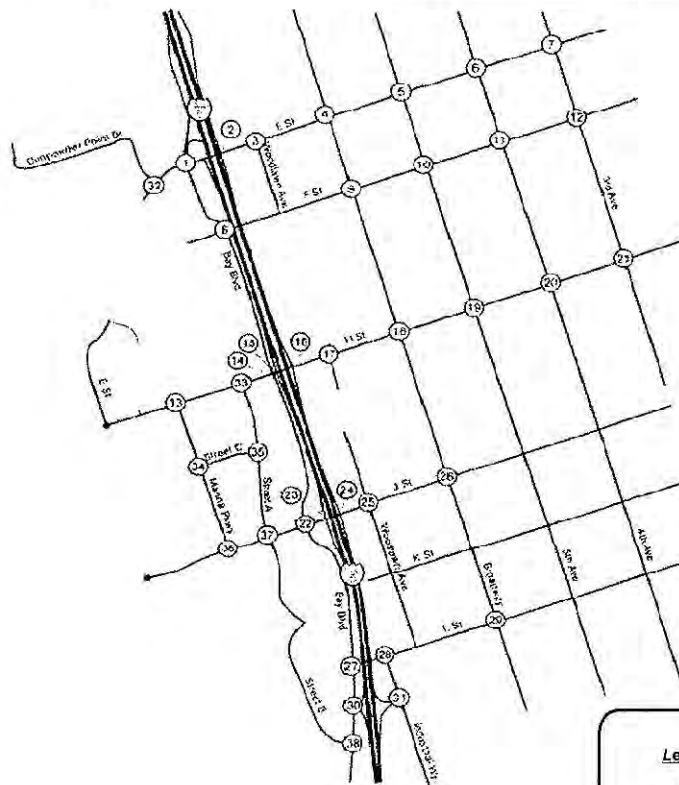
4.2-19

50552  
27

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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 804 / 972</p> <p>J St</p> <p>711 / 1235 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>135 / 252 416 / 1093 55 / 83</p> <p>Broadway</p> <p>62 / 90 389 / 419 31 / 48</p> <p>J St</p> <p>156 / 246 339 / 531 135 / 231</p> <p>177 / 206 680 / 828 35 / 79</p>	<p>27</p> <p>102 / 151 298 / 456</p> <p>Bay Blvd</p> <p>509 / 338 376 / 617</p> <p>L St</p> <p>142 / 96 491 / 871</p>	<p>28</p> <p>3 / 3 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 585 / 613 228 / 354</p> <p>L St</p> <p>4 / 6 509 / 758 360 / 590</p> <p>282 / 234 3 / 2 421 / 446</p>
<p>29</p> <p>110 / 117 430 / 1008 75 / 123</p> <p>Broadway</p> <p>118 / 97 514 / 478 114 / 164</p> <p>L St</p> <p>149 / 166 454 / 651 131 / 250</p> <p>166 / 230 500 / 773 60 / 128</p>	<p>30</p> <p>115 / 248 317 / 471</p> <p>Bay Blvd</p> <p>458 / 697 62 / 24</p> <p>I-5 SB Ramps</p> <p>156 / 217 11 / 24</p>	<p>31</p> <p>214 / 291 378 / 563</p> <p>Industrial Wy</p> <p>I-5 NB Ramps</p> <p>348 / 289 135 / 171</p> <p>335 / 331 335 / 367</p>	<p>32</p> <p>3 / 15</p> <p>Gunpowder Pt Dr</p> <p>74 / 47 118 / 82</p> <p>E St</p> <p>116 / 80</p>
<p>33</p> <p>588 / 793 319 / 404</p> <p>H St</p> <p>390 / 613 14 / 29</p> <p>Street A</p> <p>22 / 27 200 / 359</p>	<p>34</p> <p>223 / 312 14 / 34</p> <p>Marina Pkwy</p> <p>20 / 38 59 / 61</p> <p>Street C</p> <p>202 / 398 46 / 71</p>	<p>35</p> <p>59 / 61 208 / 270</p> <p>Street A</p> <p>Street C</p> <p>46 / 71 14 / 34</p> <p>20 / 38 166 / 265</p>	<p>36</p> <p>25 / 58 393 / 651</p> <p>Marina Pkwy</p> <p>516 / 606 144 / 311</p> <p>J St</p> <p>25 / 62 116 / 354</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase III Plus Project Conditions Peak Hour Traffic Volumes (3 of 4)

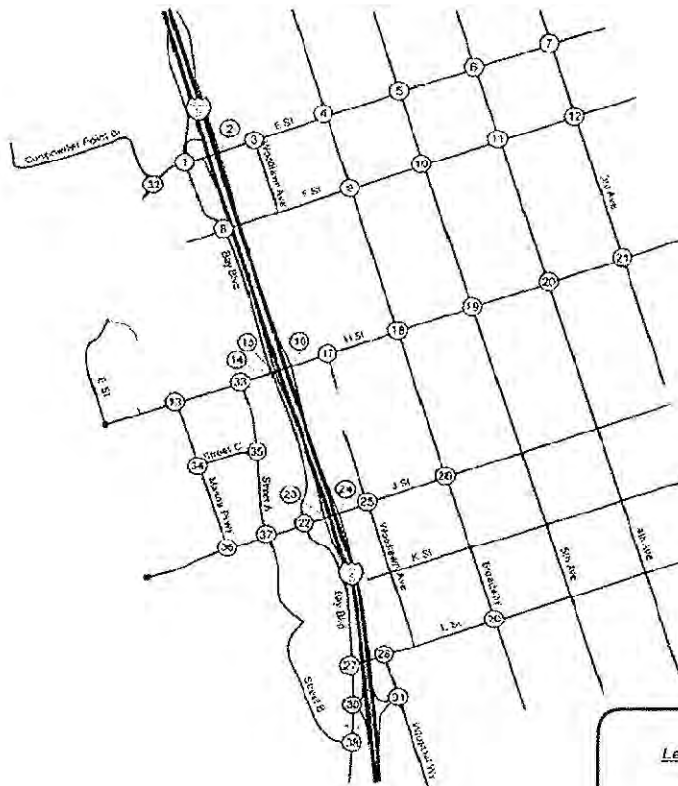
**FIGURE**

4.2-19

56552  
629

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<div>37</div> <div> <div>13 / 46</div> <div>37 / 30</div> <div>415 / 649</div> <div>Street A</div> </div> <div> <div>488 / 539</div> <div>604 / 807</div> <div>72 / 57</div> <div>J St</div> </div> <div> <div>13 / 46</div> <div>464 / 905</div> <div>58 / 88</div> <div> <div>68 / 97</div> <div>26 / 45</div> <div>49 / 85</div> </div> </div>	<div>38</div> <div> <div>20 / 46</div> <div>157 / 256</div> <div>Bay Blvd</div> </div> <div> <div>14 / 24</div> <div>37 / 54</div> <div>Street B</div> </div> <div> <div>50 / 54</div> <div>153 / 217</div> </div>	<div>39</div> <div>Intersection is not constructed in this phase</div>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Phase III Plus Project Conditions Peak Hour Traffic Volumes (4 of 4)

**FIGURE**

4.2-19

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**TABLE 4.2-25**  
**Phase III Conditions Peak-Hour Intersection Level of Service Summary**

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
1	E Street & Bay Boulevard	A.M.	9.9	A	9.9	A	0.1	NO
		P.M.	16.8	B	16.8	B	0.1	NO
2	E Street & I-5 NB On-Ramp	A.M.	33.2	C	33.2	C	0.4	NO
		P.M.	27.4	C	27.4	C	0.8	NO
3	E Street & Woodlawn Avenue	A.M.	35.0	C	34.9	C	0.4	NO
		P.M.	23.5	C	23.6	C	0.8	NO
4	E Street & Broadway	A.M.	20.7	C	20.7	C	0.5	NO
		P.M.	37.9	D	38.1	D	0.5	NO
5	E Street & 5th Avenue	A.M.	5.3	A	5.3	A	0.6	NO
		P.M.	6.8	A	6.8	A	0.8	NO
6	E Street & 4th Avenue	A.M.	15.0	B	15.0	B	0.4	NO
		P.M.	29.9	C	29.9	C	0.4	NO
7	E Street & 3rd Avenue	A.M.	13.2	B	13.2	B	0.4	NO
		P.M.	23.9	C	23.9	C	0.5	NO
8	F Street & Bay Boulevard	A.M.	9.9	A	10.0	A	2.6	NO
		P.M.	19.9	B	20.7	C	3.2	NO
9	F Street & Broadway	A.M.	17.6	B	17.6	B	1.7	NO
		P.M.	27.5	C	27.9	C	1.6	NO
10	F Street & 5th Avenue	A.M.	6.5	A	6.5	A	2.7	NO
		P.M.	9.0	A	9.1	A	2.4	NO

TABLE 4.2-25 (Cont.)

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
11	F Street & 4th Avenue	A.M.	15.6	B	15.7	B	1.1	NO
		P.M.	21.4	C	21.4	C	0.9	NO
12	F Street & 3rd Avenue	A.M.	16.0	B	16.0	B	0.3	NO
		P.M.	25.1	C	25.2	C	0.3	NO
13	H Street & <del>Gaylord</del> <u>RCC</u> Driveway	A.M.	22.0	C	23.3	C	2.2	NO
		P.M.	25.7	C	28.8	C	2.7	NO
14	H Street & Bay Boulevard	A.M.	8.9	A	9.2	A	4.4	NO
		P.M.	22.1	C	22.8	C	4.1	NO
15	H Street & I-5 SB Ramps	A.M.	20.8	c	20.8	c	2.4	NO
		P.M.	68.9	E	74.7	<b>E</b>	2.1	<b>CUMULATIVE</b>
16	H Street & I-5 NB Ramps	A.M.	18.5	B	18.6	B	1.9	NO
		P.M.	44.9	D	48.7	D	2.1	NO
17	H Street & Woodlawn Avenue	A.M.	36.2	D	36.8	D	1.7	NO
		P.M.	36.2	D	35.9	D	2.2	NO
18	H Street & Broadway	A.M.	34.6	C	35.1	D	1.4	NO
		P.M.	47.9	D	48.6	D	1.3	NO
19	H Street & 5th Avenue	A.M.	13.2	B	13.4	B	1.5	NO
		P.M.	24.3	C	24.5	C	1.2	NO
20	H Street & 4th Avenue	A.M.	27.6	C	27.9	C	0.7	NO
		P.M.	37.0	D	37.3	D	0.6	NO

TABLE 4.2-25 (Cont.)

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
21	H Street & 3rd Avenue	A.M.	20.4	C	20.4	C	0.9	NO
		P.M.	31.8	C	32.0	C	0.8	NO
22	J Street & Bay Boulevard	A.M.	29.0	C	31.3	C	8.0	NO
		P.M.	46.3	D	73.2	<b>E</b>	11.6	<b>DIRECT</b>
23	J Street & I-5 SB Ramps	A.M.	15.6	B	16.6	B	6.5	NO
		P.M.	29.3	C	30.6	C	9.6	NO
24	J Street & I-5 NB Ramps	A.M.	56.6	E	67.1	<b>E</b>	3.3	<b>CUMULATIVE</b>
		P.M.	41.5	D	59.4	<b>E</b>	6.6	<b>DIRECT</b>
25	J Street & Woodlawn Avenue	A.M.	12.0	B	12.1	B	2.3	NO
		P.M.	13.3	B	13.6	B	3.1	NO
26	J Street & Broadway	A.M.	16.0	B	16.2	B	1.9	NO
		P.M.	28.3	C	29.6	C	2.0	NO
27	L Street & Bay Boulevard	A.M.	8.4	A	8.7	A	3.2	NO
		P.M.	16.8	B	20.4	C	4.5	NO
28	L Street & Industrial Boulevard	A.M.	27.0	C	27.2	C	2.3	NO
		P.M.	26.3	C	26.9	C	3.2	NO
29	L Street & Broadway	A.M.	16.7	B	16.9	B	1.7	NO
		P.M.	31.9	C	33.2	C	1.8	NO
30	I-5 SB Ramps & Bay Boulevard	A.M.	7.8	A	7.8	A	2.4	NO
		P.M.	14.1	B	14.8	B	2.4	NO

TABLE 4.2-25 (Cont.)

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
31	I-5 NB Ramps & Industrial Boulevard	A.M.	20.3	C	21.2	C	1.1	NO
		P.M.	33.2	C	36.1	D	1.6	NO
32	E Street & Gunpowder Point Drive	A.M.	10.2	B	10.2	B	0.0	NO
		P.M.	9.7	A	9.7	A	0.0	NO
33	H Street & Street A	A.M.	10.1	B	10.7	B	4.1	NO
		P.M.	13.4	B	14.3	B	3.8	NO
34	Street C & Marina Parkway	A.M.	12.7	B	13.4	B	5.6	NO
		P.M.	16.3	C	18.4	C	7.3	NO
35	Street C & Street A	A.M.	7.5	A	7.7	A	13.1	NO
		P.M.	8.4	A	8.8	A	13.4	NO
36	J Street & Marina Parkway	A.M.	9.0	A	9.5	A	17.7	NO
		P.M.	11.4	B	17.9	B	28.4	NO
37	J Street & Street A	A.M.	8.7	A	18.3	B	16.3	NO
		P.M.	15.2	B	50.1	D	21.3	NO
38	Street B & Bay Boulevard	A.M.	DNE (4)		9.3	A	21.1	NO
		P.M.			9.8	A	21.8	NO

SOURCE: Kimley-Horn and Associates 2008.

SB = Southbound; NB = Northbound

**Bold** values indicate intersections operating at Level of Service (LOS) E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>2</sup>LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.

<sup>3</sup>Percentage of entering trips consisting of project trips (significance threshold criteria).

<sup>4</sup>Intersection does not exist in given scenario.



v. Freeway Segment Analysis

Table 4.2-26 summarizes the LOS analysis results for the freeway segments under the Proposed Project-Phase III Conditions. As shown in the table, all freeway segments would continue to operate at LOS F with or without the Proposed Project. The following segments of I-5 would experience a direct project impact:

- SR-54 to E Street (LOS F, both directions) (**Significant Impact 4.2-35**)
- E Street to H Street (LOS F, northbound and LOS F, southbound) (**Significant Impact 4.2-36**)
- H Street to J Street (LOS F, northbound and LOS F, southbound) (**Significant Impact 4.2-37**).

e. Phase III Conditions with Extension of E Street

In assessing the impacts of the project on the Phase III network, it was determined that H Street between Street A and the I-5 Ramps was already widened in Phase II to accommodate the growth in traffic and it would be difficult to widen more due to right-of-way constraints. Without additional improvements to H Street, conditions on H Street from Street A to I-5 would degrade to LOS F (**Significant Impact 4.2-38**). To accommodate traffic from the project and to provide another route to I-5, E Street would be extended from the ~~Gaylord~~ RCC Driveway to west of Bay Boulevard, which would be built as a 2-lane Class III Collector. The extension of E Street would cause a redistribution of traffic in the project area.

i. Phase III Conditions with Extension of E Street Traffic Volumes

With the E Street extension, project traffic would be redistributed in the project area. The roadway segment, intersection, and freeway analyses were re-analyzed with the E Street extension to determine if additional mitigation would be required by the project.

ii. Roadway Segments

Table 4.2-27 presents the LOS analysis results for the roadway segments under the Proposed Project – Phase III Conditions with the extension of E Street. As shown in the table below, the following segments will experience congested LOS D or worse conditions for segments outside of the Urban Core and LOS E or worse conditions for segments inside of the Urban Core and would require additional mitigation:

- Street A (H Street to Street C) (LOS F).

**TABLE 4.2-26**  
**Phase III Conditions Freeway Segment Level of Service Summary**

Freeway Segment	Direction	Number of Lanes	Peak Hour	Phase III Baseline				Phase III Baseline Plus Project				Phase III Project Trips	Project Trip (Percent) <sup>4</sup>	IMPACT?
				ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS	ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS			
Interstate 5														
State Route 54 to E Street	NB	4 M	A.M.	191,400	9,307	1.163	F0	193,011	9,386	1.173	F0	1,611	1	DIRECT <sup>5</sup>
	SB	4 M	P.M.		9,968	1.246	F0		10,052	1.256	F1			
E Street to H Street	NB	4 M	A.M.	207,400	10,085	1.261	F1	209,434	10,184	1.273	F1	1,794	1	DIRECT <sup>5</sup>
	SB	4 M	P.M.		10,801	1.350	F2		10,907	1.363	F2			
H Street to J Street	NB	4 M	A.M.	207,500	10,090	1.261	F1	209,784	10,201	1.275	F1	1,784	1	DIRECT <sup>5</sup>
	SB	4 M	P.M.		10,807	1.351	F2		10,926	1.366	F2			
J Street to L Street	NB	4 M	A.M.	206,300	10,032	1.254	F1	207,238	10,077	1.260	F1	938	0	CUMULATIVE
	SB	4 M	P.M.		10,744	1.343	F1		10,793	1.349	F1			
L Street to Palomar Street	NB	4 M	A.M.	195,800	9,521	1.190	F0	196,896	9,575	1.197	F0	1,096	1	CUMULATIVE
	SB	4 M	P.M.		10,197	1.275	F1		10,254	1.282	F1			

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service; NB = Northbound; SB = Southbound

**Bold** values indicate freeway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup>The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Mainline, A: Aux., HOV: High Occupancy Vehicle, ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux). Capacity for all segments is 8,000.

<sup>2</sup>The ADT volumes were estimated by applying a growth factor to existing volumes provided by Caltrans.

<sup>3</sup>Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

<sup>4</sup>Percentage of total freeway trips generated by the project.

<sup>5</sup> In an effort to be conservative, the impact determination is a product of Phase I, Phase II, and Phase III project trips.

**TABLE 4.2-27**  
**Phase III Conditions With Extension of E Street Roadway Segment Level of Service Summary**

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline		Phase III Plus Project Mitigated		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to <del>Gaylord</del> <b>RCC</b> Dwy	2 Lanes Class III Collector	7,500	6,050	B	4,800	A	0	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,970	A	7,872	D	2	0	CUMULATIVE
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	17,570	A	19,230	A	182	1	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,820	B	29,433	B	261	1	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	28,750	A	29,011	B	261	1	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,980	A	20,154	A	174	1	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,100	A	6,577	A	387	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,520	C	11,787	C	267	2	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	11,470	A	11,557	A	87	1	NO
H Street									
West of Marina Parkway	3 Lanes Class II Collector	17,000	16,120	C	11,373	A	458	4	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	18,450	A	14,269	A	14	0	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	40,010	D	33,116	B	772	2	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	42,470	D	42,844	D	752	2	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,120	C	31,509	C	389	1	NO
J Street									
Marina Parkway to Street A	4 Lanes Major Street	30,000	19,540	A	24,460	B	5,635	23	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	31,410	B	36,346	C	4,880	13	NO
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	33,660	B	37,653	C	3,408	9	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	21,940	A	22,635	B	695	3	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	19,350	A	20,0454	A	695	3	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	23,810	A	24,265	A	455	2	NO

TABLE 4.2-27 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline		Phase III Plus Project Mitigated		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Marina Parkway									
H Street to Street C	3 Lanes Class II Collector	17,000	9,090	A	9,468	A	652	7	NO
Street C to J Street	3 Lane Class II Collector	17,000	12,040	A	13,098	B	946	7	NO
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	11,610	C	11,472	C	0	0	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,980	A	5,120	A	441	8	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,630	B	7,061	C	439	6	NO
J Street to L Street	2 Lanes Class II Collector	12,000	10,970	C	11,302	C	1,033	9	NO
L Street to I-5 Ramps¹	2 Lanes Class II Collector	12,000	5,310	A	5,780	A	524	9	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,310	A	5,571	A	261	5	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,330	C	26,390	C	60	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,820	C	26,994	C	174	1	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,090	D	31,324	D	234	1	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,130	C	27,217	C	87	0	NO
South of L Street	4 Lanes Major Street	30,000	28,230	C	28,371	C	141	0	NO
Street A									
H Street to Street C	2 Lanes Class III Collector	7,500	7,300	C	10,504	F	938	9	DIRECT
Street C to J Street	4 Lanes Class I Collector	22,000	12,630	A	16,468	A	1,690	10	NO
J Street to Street B (a)	2 Lanes Class III Collector	7,500	-	-	3,838	A	2,813	73	NO
Street B									
Street A to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	-	-	1,746	A	722	41	NO
Street C									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,090	A	2,065	A	3	0	NO

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service

**Bold** values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.<sup>a</sup> Roads will be built to given classification with Phase I of the project as required to provide site frontage.

Although this segment of Street A would experience LOS F operating conditions under Phase III Conditions Mitigated, improvements would be required as a result of cumulative and growth-related traffic overall (of which the project would be a component). This “secondary impact” and associated mitigation are not solely the responsibility of the Proposed Project and thus, would not be considered a direct impact.

It should also be noted that E Street (~~Gaylord~~RCC Driveway to Bay Boulevard) would operate at LOS D under Phase III Conditions with the extension of E Street; however, this impact would be considered a cumulative impact as the segment would already operate at LOS D under Phase III Baseline Conditions. Cumulative impacts are discussed in *Section 6* of this report.

### iii. Intersections

*Table 4.2-28* displays the LOS analysis results for the study area intersections under the Proposed Project – Phase III Conditions with the extension of E Street. As shown in the table below, the following intersections will be characterized by LOS E or F conditions and will require additional mitigation:

- J Street/Bay Boulevard (LOS E, PM peak hour)
- J Street/I-5 NB Ramps (LOS E, PM peak hour).

Although these intersections would experience LOS E operating conditions under Phase III Conditions Mitigated, improvements would be required as a result of cumulative and growth-related traffic overall (of which the project would be a component). These “secondary impacts” and associated mitigation are not solely the responsibility of the Proposed Project and thus, would not be considered direct impacts.

Also, while the following intersections will be characterized by LOS E and F conditions, these impacts are considered part of the cumulative project impacts:

- E Street/Bay Boulevard (LOS F, PM peak hour)
- J Street/I-5 NB Ramps (LOS E, AM peak hour).

### iv. Freeway Segments

*Table 4.2-29* summarizes the LOS analysis results for the freeway segments under the Proposed Project – Phase III Conditions with the extension of E Street. As shown in this table, all freeway segments would continue to operate at LOS F with or without the Proposed Project. The addition of Phase III traffic would result in a significant cumulative impact at all freeway segments during both peak periods.

**TABLE 4.2-28**  
**Phase III Conditions With E Street Extension Peak-Hour Intersection Level of Service Summary**

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
1	E Street & Bay Boulevard	A.M.	9.9	A	23.4	C	0.1	NO
		P.M.	16.8	B	104.6	F	0.1	CUMULATIVE
2	E Street & I-5 NB On-Ramp	A.M.	33.2	C	33.2	C	0.4	NO
		P.M.	27.4	C	28.6	C	0.7	NO
3	E Street & Woodlawn Avenue	A.M.	35.0	C	34.5	C	0.4	NO
		P.M.	23.5	C	23.2	C	0.8	NO
4	E Street & Broadway	A.M.	20.7	C	20.7	C	0.5	NO
		P.M.	37.9	D	38.1	D	0.5	NO
5	E Street & 5th Avenue	A.M.	5.3	A	5.3	A	0.6	NO
		P.M.	6.8	A	6.8	A	0.8	NO
6	E Street & 4th Avenue	A.M.	15.0	B	15.0	B	0.4	NO
		P.M.	29.9	C	29.9	C	0.4	NO
7	E Street & 3rd Avenue	A.M.	13.2	B	13.1	B	0.4	NO
		P.M.	23.9	C	23.9	C	0.5	NO
8	F Street & Bay Boulevard	A.M.	9.9	A	10.5	A	2.5	NO
		P.M.	19.6	B	22.5	C	3.1	NO
9	F Street & Broadway	A.M.	17.6	B	17.6	B	1.7	NO
		P.M.	27.5	C	27.9	C	1.6	NO
10	F Street & 5th Avenue	A.M.	6.5	A	6.5	A	2.6	NO
		P.M.	9.0	A	9.0	A	2.3	NO

TABLE 4.2-28 (Cont.)

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
11	F Street & 4th Avenue	A.M.	15.6	B	15.7	B	1.1	NO
		P.M.	21.4	C	21.4	C	0.9	NO
12	F Street & 3rd Avenue	A.M.	16.0	B	16.0	B	0.3	NO
		P.M.	25.1	C	25.2	C	0.3	NO
13	H Street & <del>Gaylord</del> <u>RCC</u> Driveway	A.M.	22.0	C	19.4	B	3.4	NO
		P.M.	25.7	C	19.5	C	3.8	NO
14	H Street & Bay Boulevard	A.M.	8.9	A	10.0	A	5.5	NO
		P.M.	22.1	C	24.4	C	4.9	NO
15	H Street & I-5 SB Ramps	A.M.	20.8	C	18.1	B	2.8	NO
		P.M.	68.9	E	39.5	D	2.4	NO
16	H Street & I-5 NB Ramps	A.M.	18.5	B	17.4	B	2.0	NO
		P.M.	44.9	D	27.4	C	2.2	NO
17	H Street & Woodlawn Avenue	A.M.	36.2	D	36.1	D	1.7	NO
		P.M.	36.2	D	35.9	D	2.2	NO
18	H Street & Broadway	A.M.	34.6	C	35.0	C	1.4	NO
		P.M.	47.9	D	48.1	D	1.3	NO
19	H Street & 5th Avenue	A.M.	13.2	B	13.4	B	1.5	NO
		P.M.	24.3	C	24.5	C	1.2	NO
20	H Street & 4th Avenue	A.M.	27.6	C	28.5	C	0.7	NO
		P.M.	37.0	D	37.7	D	0.6	NO

TABLE 4.2-28 (Cont.)

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
21	H Street & 3rd Avenue	A.M.	20.4	C	20.4	C	0.9	NO
		P.M.	31.8	C	32.0	C	0.8	NO
22	J Street & Bay Boulevard	A.M.	29.0	C	30.8	C	8.2	NO
		P.M.	46.3	D	69.2	E	11.6	CUMULATIVE
23	J Street & I-5 SB Ramps	A.M.	15.6	B	15.8	B	6.6	NO
		P.M.	29.3	C	30.1	C	9.8	NO
24	J Street & I-5 NB Ramps	A.M.	56.6	E	64.7	E	3.3	CUMULATIVE
		P.M.	41.5	D	59.0	E	6.7	DIRECT
25	J Street & Woodlawn Avenue	A.M.	12.0	B	12.1	B	2.3	NO
		P.M.	13.3	B	13.6	B	3.1	NO
26	J Street & Broadway	A.M.	16.0	B	16.2	B	1.9	NO
		P.M.	28.3	C	29.6	C	2.0	NO
27	L Street & Bay Boulevard	A.M.	8.4	A	8.7	A	3.2	NO
		P.M.	16.8	B	20.4	C	4.5	NO
28	L Street & Industrial Boulevard	A.M.	27.0	C	27.2	C	2.3	NO
		P.M.	26.3	C	26.9	C	3.2	NO
29	L Street & Broadway	A.M.	16.7	B	16.9	B	1.7	NO
		P.M.	31.9	C	33.2	C	1.8	NO
30	I-5 SB Ramps & Bay Boulevard	A.M.	7.8	A	7.8	A	2.4	NO
		P.M.	14.1	B	14.8	B	2.4	NO



TABLE 4.2-28 (Cont.)

Intersection		Peak Hour	Phase III Baseline		Phase III Baseline Plus Project Mitigated		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
31	I-5 NB Ramps & Industrial Boulevard	A.M.	20.3	C	21.2	C	1.1	NO
		P.M.	33.2	C	36.1	D	1.6	NO
32	E Street & Gunpowder Point Drive	A.M.	10.2	B	10.2	B	0.3	NO
		P.M.	9.7	A	13.2	B	0.3	NO
33	H Street & Street A	A.M.	10.1	B	13.8	B	5.0	NO
		P.M.	13.4	B	30.1	C	4.6	NO
34	Street C & Marina Parkway	A.M.	12.7	B	12.9	B	5.8	NO
		P.M.	16.3	C	17.1	C	7.7	NO
35	Street C & Street A	A.M.	7.5	A	8.4	A	10.1	NO
		P.M.	8.4	A	10.1	B	10.6	NO
36	J Street & Marina Parkway	A.M.	9.0	A	9.3	A	18.7	NO
		P.M.	11.4	B	16.5	B	29.7	NO
37	J Street & Street A	A.M.	8.7	A	21.5	C	16.3	NO
		P.M.	15.2	B	52.9	D	21.2	NO
38	Street B & Bay Boulevard	A.M.	DNE (4)		9.2	A	24.3	NO
		P.M.			9.6	A	24.6	NO
39	<del>Gaylord</del> <u>RCC</u> Secondary Driveway & E Street	A.M.	DNE (4)		11.6	B	0.4	NO
		P.M.			14.3	B	0.3	NO

SOURCE: Kimley-Horn and Associates 2008.

SB = Southbound; NB = Northbound

**Bold** values indicate intersections operating at Level of Service (LOS) E or F. **Bold and shaded** values indicate project significant impact.<sup>1</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.<sup>2</sup>LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.<sup>3</sup>Percentage of entering trips consisting of project trips (significance threshold criteria).<sup>4</sup>Intersection does not exist in given scenario

**TABLE 4.2-29**  
**Phase III Conditions With E Street Extension Freeway Segment Level of Service Summary**

Freeway Segment	Direction	Number of Lanes	Peak Hour	Phase III Baseline				Phase III Baseline Plus Project Mitigated				Phase III Project Trips	Project Trip (percent) <sup>4</sup>	IMPACT?
				ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS	ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS			
Interstate 5														
State Route 54 to E Street	NB	4 M	A.M.	191,400	9,307	1.163	F0	192,237	9,348	1.169	F0	1,611	1	CUMULATIVE
	SB	4 M	P.M.		9,968	1.246	F0		10,012	1.251	F1			
E Street to H Street	NB	4 M	A.M.	207,400	10,085	1.261	F1	201,732	9,810	1.226	F0	1,790	1	CUMULATIVE
	SB	4 M	P.M.		10,801	1.350	F2		10,506	1.313	F1			
H Street to J Street	NB	4 M	A.M.	207,500	10,090	1.261	F1	206,116	10,023	1.253	F1	1,783	1	CUMULATIVE
	SB	4 M	P.M.		10,807	1.351	F2		10,734	1.342	F1			
J Street to L Street	NB	4 M	A.M.	206,300	10,032	1.254	F1	206,440	10,039	1.255	F1	937	0	CUMULATIVE
	SB	4 M	P.M.		10,744	1.343	F1		10,751	1.344	F1			
L Street to Palomar Street	NB	4 M	A.M.	195,800	9,521	1.190	F0	196,098	9,536	1.192	F0	1,095	1	CUMULATIVE
	SB	4 M	P.M.		10,197	1.275	F1		10,213	1.277	F1			

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service; NB = Northbound; SB = Southbound

**Bold** values indicate freeway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup>The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Mainline, A: Aux., HOV: High Occupancy Vehicle, ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux). Capacity for all segments is 8,000.

<sup>2</sup>The ADT volumes were estimated by applying a growth factor to existing volumes provided by Caltrans.

<sup>3</sup>Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

<sup>4</sup>Percentage of total freeway trips generated by the project.

## f. Phase IV

Phase IV traffic volumes are calculated by increasing the existing traffic volumes by an annual growth over 25 years, which is the difference between year 2030 (Phase IV) and year 2005 (Existing), and adding the Phases I, II, and III project trips. This sum becomes the baseline condition for Phase IV. Phase IV Plus Project volumes are calculated by adding the Phase IV project trips to the Phase IV Baseline volumes. Phase IV is expected to be complete in the year 2030. The assumed transportation network improvements, projected traffic volumes, and analysis for this scenario are described below.

i. Proposed Roadway Network

Development of Phase IV components without adequate site access and roadway frontage would result in significant impacts on circulation (**Significant Impact 4.2-39**).

ii. Project Traffic Volumes

*Table 4.2-13* summarizes the trip generation summary in Phase IV for the Proposed Project. This phase is assumed to generate an additional 14,600 ADT which will be distributed along roadway segments in the project area. Development in Phase IV would occur in the Sweetwater and Harbor Districts.

The project traffic in Phase IV would be distributed and assigned based on the actual location of the development. In situations where shared parking exists project traffic would be distributed and assigned based on the availability of parking. This distribution and assignment was done based on SANDAG Series 10 Select Zone model plots of zones within the Bayfront Redevelopment Area.

iii. Roadway Segment Analysis

*Figure 4.2-20* shows the Phase IV Roadway Segment Trip Assignments. *Figure 4.2-21* shows the Phase IV Baseline Conditions ADT Volumes. *Figure 4.2-22* shows the Phase IV Plus Project Conditions ADT Volumes. *Table 4.2-30* depicts the Phase IV Conditions Roadway Segment Level of Service Summary.

As shown in *Table 4.2-30*, the following roadway segments will experience congested LOS D or worse conditions for segments outside of the Urban Core and LOS E or worse conditions for segments inside of the Urban Core under Phase IV Plus Project conditions and will require mitigation:

- E Street (F Street to Bay Boulevard) (LOS F) (**Significant Impact 4.2-40**)
- Bay Boulevard (E Street to F Street) (LOS D) (**Significant Impact 4.2-41**)
- H Street (I-5 Ramps to Broadway) (LOS F) (**Significant Impact 4.2-42**).

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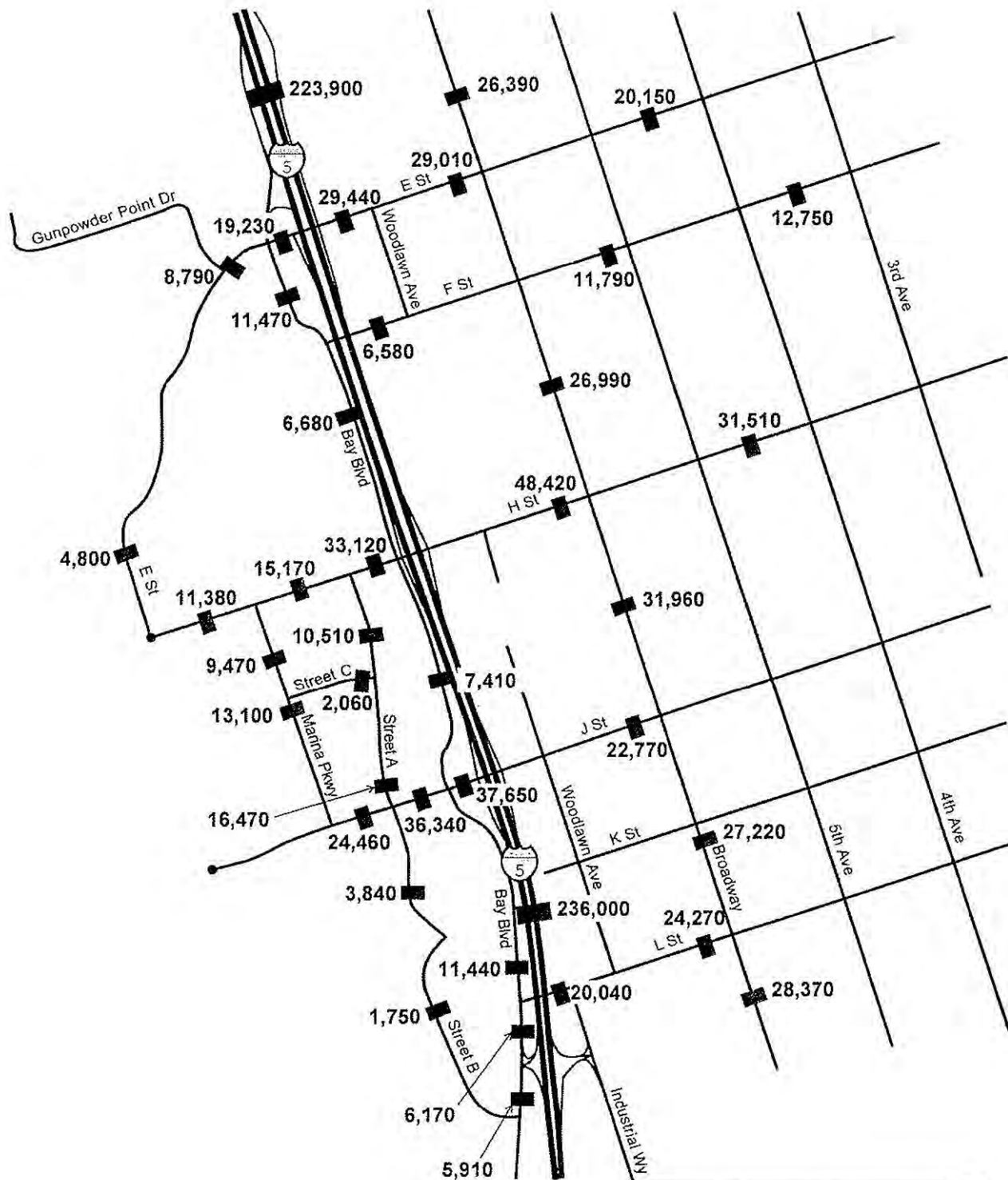
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# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Roadway Segment Trip Assignment

**FIGURE**

4.2-20

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**Legend**

■ X,XXX = Average Daily Traffic



SOURCE: Kimley-Horn and Associates, Inc.

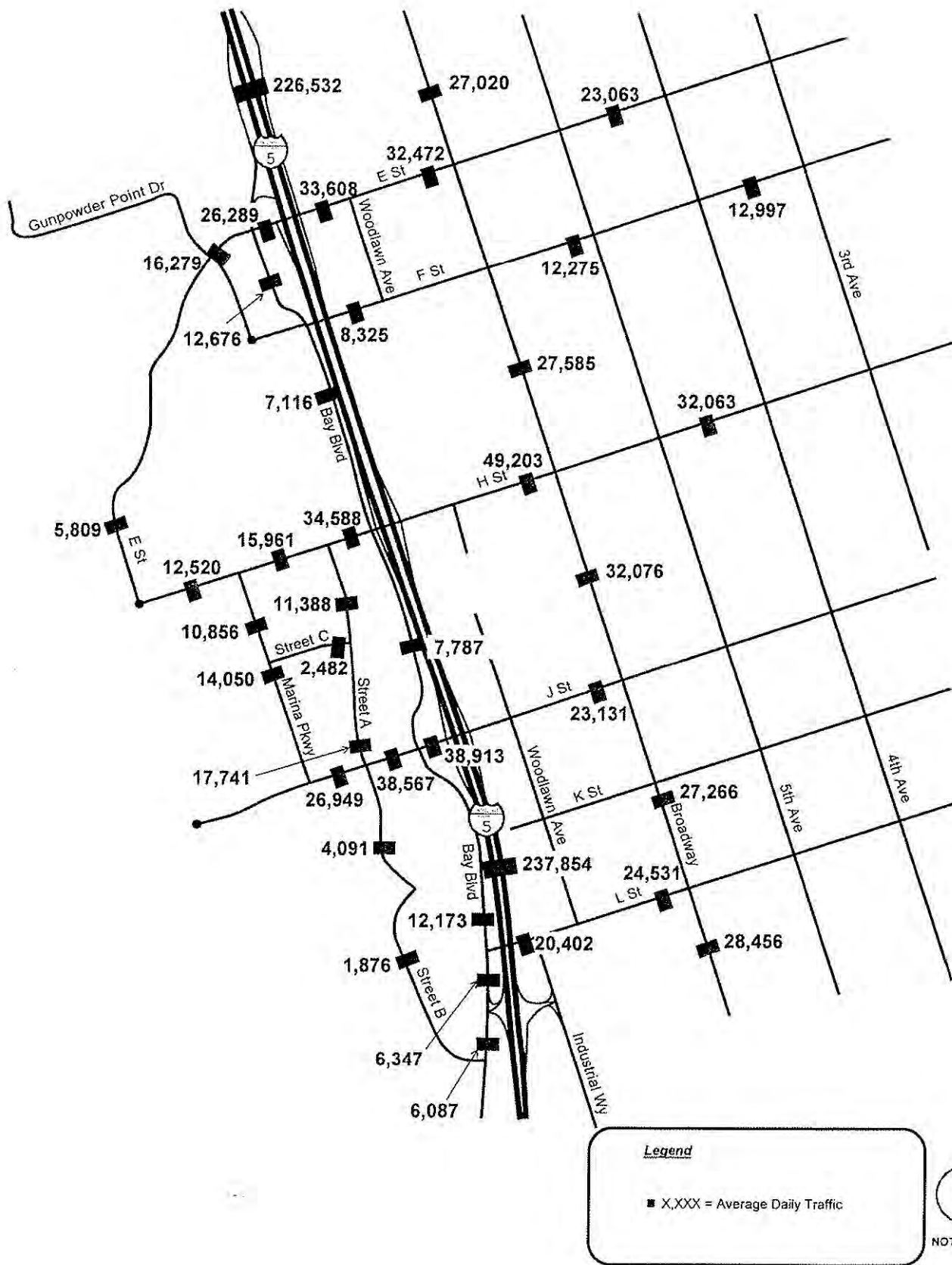
# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan **Phase IV Baseline Conditions ADT Volumes**

**FIGURE**  
**4.2-2**

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SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Plus Project Conditions ADT Volumes

**FIGURE**  
**4.2-22**

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**TABLE 4.2-30**  
**Phase IV Conditions Roadway Segment Level of Service Summary**

Roadway Segment	Roadway Classification	Acceptable Volume	Phase IV Baseline		Phase IV Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to <del>Gaylord</del> <u>RCC</u> Driveway	2 Lanes Class III Collector	7,500	4,810	A	5,809	B	1,008	17	NO
<del>Gaylord</del> <u>RCC</u> Driveway to F Street	2 Lanes Class II Collector	12,000	6,700	A	9,089	B	2,136	24	NO
F Street to Bay Boulevard	2 Lanes Class II Collector	12,000	8,790	A	16,279	F	7,705	47	DIRECT
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	19,230	A	26,289	B	6,950	26	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,440	B	33,608	C	4,168	12	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	29,010	B	32,472	B	3,462	11	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	20,150	A	23,063	A	2,913	13	NO
Lagoon St/ F Street									
E Street to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	-	-	2,630	A	2,413	92	NO
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,580	A	8,325	A	1,744	21	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,790	C	12,275	C	484	4	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	12,750	A	12,997	A	247	2	NO
H Street									
West of Marina Parkway	3 Lanes Class II Collector	17,000	11,380	A	12,520	A	1,140	9	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	15,170	A	15,961	A	791	5	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	33,120	B	34,588	C	1,467	4	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	48,420	F	49,203	F	783	2	DIRECT
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,510	C	32,063	C	553	2	NO
J Street									
Marina Parkway to Street A	4 Lanes Major Street	30,000	24,460	B	26,949	C	2,488	9	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	36,340	C	38,567	C	2,226	6	NO
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	37,650	C	38,913	C	1,262	3	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	22,770	B	23,131	B	361	2	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	20,040	A	20,402	A	362	2	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	24,270	A	24,531	A	261	1	NO
Marina Parkway									
H Street to Street C	3 Lanes Class II Collector	17,000	9,470	A	10,856	A	1,386	13	NO

TABLE 4.2-30 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase IV Baseline		Phase IV Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Street C to J Street	3 Lane Class II Collector	17,000	13,100	B	14,050	B	949	7	NO
<b>Bay Boulevard</b>									
E Street to F Street	2 Lanes Class II Collector	12,000	11,470	C	12,676	<b>D</b>	1,206	10	<b>DIRECT</b>
F Street to H Street	2 Lanes Class III Collector	7,500	6,680	C	7,116	C	436	6	NO
H Street to J Street	2 Lanes Class III Collector	7,500	7,410	A	7,787	<b>D</b>	377	5	<b>CUMULATIVE</b>
J Street to L Street	2 Lanes Class II Collector	12,000	11,440	C	12,173	<b>D</b>	733	6	<b>CUMULATIVE</b>
L Street to I-5 Ramps <sup>1</sup>	2 Lanes Class II Collector	12,000	6,170	A	6,347	A	176	3	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,910	B	6,087	B	176	3	NO
<b>Broadway</b>									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,390	C	27,020	C	630	2	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,990	C	27,585	C	594	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,960	D	32,076	D	116	0	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,220	C	27,266	C	45	0	NO
South of L Street	4 Lanes Major Street	30,000	28,370	C	28,456	C	85	0	NO
<b>Street A</b>									
H Street to Street C	4 Lanes Class I Collector	22,000	10,510	A	11,388	A	878	8	NO
Street C to J Street	4 Lanes Class I Collector	22,000	16,470	A	17,741	B	1,271	7	NO
J Street to Street B	2 Lanes Class III Collector	7,500	3,840	A	4,091	A	250	6	NO
<b>Street B</b>									
Street A to Bay Boulevard	2 Lanes Class III Collector	7,500	1,750	A	1,876	A	125	7	NO
<b>Street C</b>									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,060	A	2,482	A	422	17	NO

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service

**Bold** values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

The following segments will experience congested LOS F conditions under Phase IV Plus Project Conditions and would be considered cumulative impacts:

- Bay Boulevard (H Street to J Street) (LOS F)
- Bay Boulevard (J Street to L Street) (LOS F)

iv. Intersection Analysis

*Figures 4.2-23a through 4.2-23d* depict the Phase IV Baseline Conditions Peak-Hour Traffic Volumes for intersections in the study area. *Figures 4.2-24a through 4.2-24d* depict the Phase IV Plus Project Conditions Peak-Hour Traffic Volumes. Finally, *Table 4.2-31* summarizes the Phase IV Conditions Peak Hour Level of Service for intersections in the project area.

As shown in *Table 4.2-31*, the following intersections will be characterized by LOS E or F conditions under Phase IV Plus Project conditions and will require mitigation:

- E Street/Bay Boulevard (LOS F, PM peak hour) (**Significant Impact 4.2-43**)
- J Street/Bay Boulevard (LOS E, PM peak hour) (**Significant Impact 4.2-44**)
- J Street/Street A (LOS F, PM peak hour) (**Significant Impact 4.2-45**).

The following intersection will be characterized by LOS E or F conditions under Phase IV Plus Project conditions and would be considered cumulative impacts:

- H Street/Broadway (LOS F, PM peak hour)
- J Street/I-5 northbound ramps (LOS E, AM peak hour).

v. Freeway Segment Analysis

*Table 4.2-32* displays the LOS analysis results for the freeway segments under the Proposed Project – Phase IV Conditions scenario. As shown in the table, the following I-5 freeway segments would continue to operate at LOS F with or without the Proposed Project and would experience direct impacts as a result of the Proposed Project:

- SR-54 to E Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-46**)
- E Street to H Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-47**)
- H Street to J Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-48**)
- J Street to L Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-49**)
- L Street to Palomar Street (LOS F, both directions, both peak hours) (**Significant Impact 4.2-50**).

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<p>1</p> <p>250 / 258 327 / 693 402 / 953 I-5 SB Ramps</p> <p>208 / 247 19 / 14 Bay Blvd</p> <p>18 / 19 172 / 350 E St</p>	<p>2</p> <p>I-5 NB On Ramp</p> <p>246 / 402 321 / 814 I-5 NB Off Ramp</p> <p>55 / 28 289 / 2 462 / 473 E St</p>	<p>3</p> <p>4 / 38 0 / 11 12 / 41 0%</p> <p>3 / 11 636 / 949 206 / 162 Woodlawn Ave</p> <p>288 / 299 39 / 30 131 / 90 E St</p>	<p>4</p> <p>180 / 279 192 / 1011 27 / 118 Broadway</p> <p>320 / 340 317 / 607 115 / 196 Bay Blvd</p> <p>212 / 253 531 / 658 40 / 95 E St</p>
<p>5</p> <p>32 / 50 58 / 164 7 / 18 5th Ave</p> <p>27 / 40 409 / 704 15 / 40 E St</p> <p>24 / 28 63 / 109 18 / 73 E St</p>	<p>6</p> <p>50 / 87 382 / 1033 148 / 295 4th Ave</p> <p>51 / 72 323 / 593 57 / 83 E St</p> <p>65 / 109 303 / 611 31 / 117 E St</p>	<p>7</p> <p>26 / 71 91 / 285 34 / 184 3rd Ave</p> <p>16 / 43 363 / 678 79 / 220 E St</p> <p>83 / 151 303 / 348 64 / 221 E St</p>	<p>8</p> <p>206 / 33 54 / 360 152 / 356 Bay Blvd</p> <p>30 / 157 17 / 62 4 / 13 E St</p> <p>14 / 4 91 / 95 89 / 144 E St</p>
<p>9</p> <p>70 / 95 347 / 1380 61 / 99 Broadway</p> <p>59 / 94 216 / 821 153 / 274 E St</p> <p>81 / 100 770 / 962 85 / 113 F St</p>	<p>10</p> <p>22 / 51 45 / 209 15 / 32 5th Ave</p> <p>23 / 27 198 / 372 21 / 65 E St</p> <p>13 / 33 47 / 132 11 / 20 E St</p>	<p>11</p> <p>56 / 45 332 / 890 50 / 110 4th Ave</p> <p>30 / 55 109 / 359 56 / 107 E St</p> <p>50 / 51 343 / 637 48 / 122 E St</p>	<p>12</p> <p>55 / 113 308 / 673 5 / 166 3rd Ave</p> <p>34 / 88 117 / 291 59 / 208 E St</p> <p>71 / 119 277 / 424 61 / 62 E St</p>



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Baseline Conditions Peak Hour Traffic Volume (1 of 4)

**FIGURE**

**4.2-23A**

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<p>13</p> <p>22 / 31 Marina Pkwy</p> <p>36 / 46 303 / 390 172 / 240 H St</p> <p>189 / 258 63 / 42</p> <p>31 / 136 90 / 189</p>	<p>14</p> <p>16 / 138 108 / 454 28 / 180 Bay Blvd</p> <p>123 / 73 615 / 805 H St</p> <p>466 / 751 45 / 93</p> <p>25 / 51 161 / 139 19 / 63</p>	<p>15</p> <p>179 / 486 3 / 0 554 / 858 I-5 SB Off-Ramp</p> <p>597 / 707 628 / 722 H St</p> <p>404 / 1058 78 / 287 I-5 SB On-Ramp</p>	<p>16</p> <p>I-5 NB On-Ramp</p> <p>464 / 717 1204 / 1019 H St</p> <p>147 / 286 885 / 1073 I-5 NB Off-Ramp</p> <p>136 / 178 622 / 681</p>
<p>17</p> <p>445 / 309 95 / 102 241 / 198 0%</p> <p>138 / 260 1198 / 1253 284 / 207 H St</p> <p>257 / 92 1177 / 1320 168 / 150 Woodlawn Ave</p> <p>88 / 359 50 / 101 49 / 94</p>	<p>18</p> <p>121 / 217 595 / 1182 107 / 282 Broadway</p> <p>112 / 160 549 / 866 172 / 397 H St</p> <p>318 / 387 768 / 928 117 / 292 Broadway</p> <p>145 / 325 1348 / 981 141 / 293</p>	<p>19</p> <p>147 / 189 62 / 238 189 / 223 5th Ave</p> <p>243 / 96 705 / 902 109 / 388 H St</p> <p>229 / 116 622 / 850 139 / 332</p> <p>117 / 410 59 / 212 135 / 458</p>	<p>20</p> <p>104 / 248 403 / 862 120 / 210 4th Ave</p> <p>133 / 240 852 / 891 125 / 191 H St</p> <p>142 / 174 711 / 880 125 / 254</p> <p>210 / 185 501 / 502 98 / 109</p>
<p>21</p> <p>95 / 185 349 / 609 120 / 202 3rd Ave</p> <p>154 / 165 813 / 683 266 / 283 H St</p> <p>105 / 180 485 / 870 175 / 228</p> <p>151 / 210 564 / 559 101 / 207</p>	<p>22</p> <p>15 / 38 36 / 205 48 / 210 Bay Blvd</p> <p>336 / 120 813 / 954 485 / 252 J St</p> <p>36 / 79 602 / 1096 238 / 462</p> <p>344 / 433 62 / 69 26 / 204</p>	<p>23</p> <p>523 / 455 268 / 471 I-5 SB Off-Ramp</p> <p>1129 / 763 167 / 297 J St</p> <p>498 / 1021 242 / 473 I-5 SB On-Ramp</p>	<p>24</p> <p>I-5 NB On-Ramp</p> <p>421 / 348 742 / 623 J St</p> <p>301 / 593 513 / 912 I-5 NB Off-Ramp</p> <p>615 / 389 211 / 0 590 / 327</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Baseline Conditions Peak Hour Traffic Volume (2 of 4)

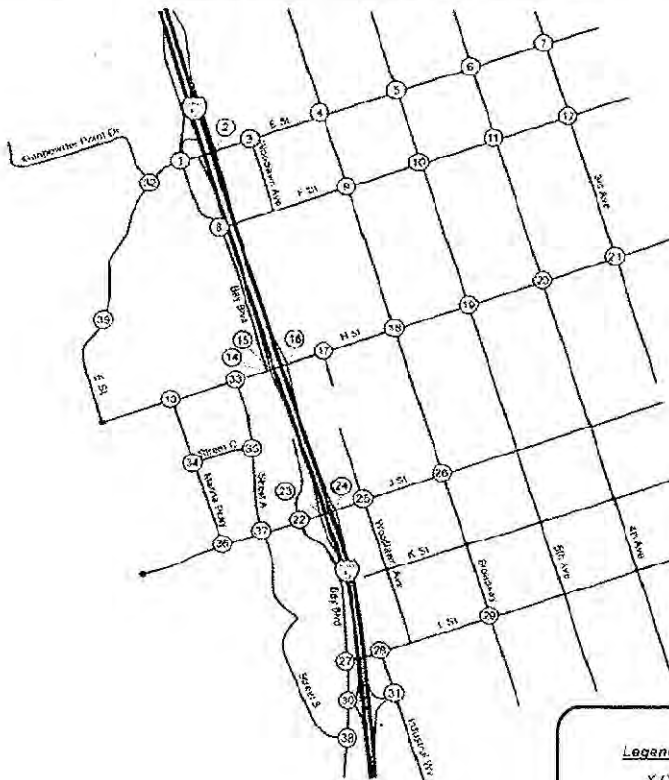
**FIGURE**

**4.2-23**

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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 804 / 972</p> <p>J St</p> <p>711 / 1235 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>136 / 262 455 / 1197 55 / 99</p> <p>Broadway</p> <p>62 / 103 383 / 419 31 / 48</p> <p>J St</p> <p>156 / 246 339 / 531 135 / 231</p> <p>177 / 205 745 / 906 35 / 92</p>	<p>27</p> <p>98 / 148 350 / 469</p> <p>Bay Blvd</p> <p>678 / 333 402 / 643</p> <p>L St</p> <p>138 / 93 530 / 884</p>	<p>28</p> <p>3 / 9 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 702 / 613 228 / 354</p> <p>L St</p> <p>4 / 6 551 / 784 339 / 590</p> <p>380 / 234 3 / 2 421 / 446</p>
<p>29</p> <p>110 / 117 469 / 1099 88 / 136</p> <p>Broadway</p> <p>131 / 110 514 / 478 127 / 177</p> <p>L St</p> <p>162 / 166 454 / 651 131 / 250</p> <p>166 / 230 552 / 851 80 / 141</p>	<p>30</p> <p>111 / 245 317 / 471</p> <p>Bay Blvd</p> <p>458 / 697 52 / 24</p> <p>L SB Ramps</p> <p>191 / 214 11 / 24</p>	<p>31</p> <p>214 / 291 417 / 563</p> <p>Industrial Wy</p> <p>346 / 289 135 / 171</p> <p>335 / 331 413 / 367</p>	<p>32</p> <p>3 / 15</p> <p>F St</p> <p>74 / 47 304 / 328</p> <p>E St</p> <p>224 / 246</p>
<p>33</p> <p>334 / 463 310 / 389</p> <p>H St</p> <p>238 / 391 77 / 147</p> <p>Street A</p> <p>119 / 156 207 / 346</p>	<p>34</p> <p>211 / 292 19 / 38</p> <p>Marina Pkwy</p> <p>25 / 42 59 / 61</p> <p>Street C</p> <p>240 / 367 46 / 71</p>	<p>35</p> <p>59 / 61 261 / 372</p> <p>Street A</p> <p>46 / 71 19 / 36</p> <p>25 / 42 269 / 380</p>	<p>36</p> <p>25 / 58 359 / 616</p> <p>Marina Pkwy</p> <p>475 / 554 144 / 311</p> <p>J St</p> <p>25 / 62 116 / 354</p>



**Legend**  
X/Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Baseline Conditions Peak Hour Traffic Volume (3 of 4)

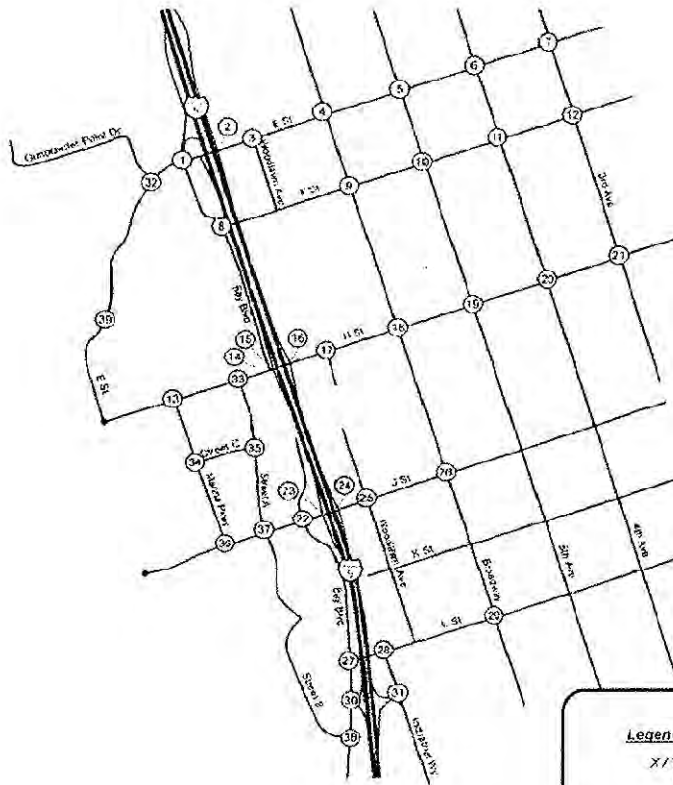
**FIGURE**

**4.2-23C**

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<div>37</div> <div> <div>19 / 46</div> <div>70 / 78</div> <div>428 / 695</div> <div>Street A</div> </div> <div> <div>13 / 46</div> <div>448 / 882</div> <div>25 / 40</div> </div>	<div> <div>537 / 595</div> <div>577 / 772</div> <div>72 / 157</div> <div>J St</div> </div> <div> <div>23 / 47</div> <div>71 / 95</div> <div>49 / 85</div> </div>
<div>38</div> <div> <div>20 / 15</div> <div>153 / 253</div> <div>Bay Blvd</div> </div> <div> <div>14 / 24</div> <div>28 / 42</div> </div>	<div> <div>35 / 35</div> <div>149 / 214</div> </div>
<div>39</div> <div> <div>102 / 130</div> <div>147 / 187</div> <div>E St</div> </div> <div> <div>68 / 97</div> <div>71 / 90</div> </div>	<div> <div>88 / 125</div> <div>43 / 60</div> <div>Gaylord Secondary Dwy</div> </div>



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Phase IV Baseline Conditions Peak Hour Traffic Volume (4 of 4)**

**FIGURE**

**4.2-23**

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<p>1</p> <p>368 / 308 327 / 693 402 / 953 1.5 SB Off-Ramp</p> <p>293 / 507 633 / 261 25 / 90 E St</p> <p>330 / 757 26 / 54 Bay Blvd</p> <p>49 / 35 172 / 350</p>	<p>2</p> <p>1.5 NB On Ramp</p> <p>638 / 608 640 / 708 E St</p> <p>275 / 530 383 / 1107 1.5 NB Off-Ramp</p> <p>142 / 66 289 / 2 463 / 475</p>	<p>3</p> <p>4 / 38 0 / 11 12 / 41 Woodlawn Ave</p> <p>5 / 9 1084 / 1084 178 / 166 E St</p> <p>3 / 11 708 / 1239 206 / 152</p> <p>288 / 299 39 / 30 131 / 90</p>	<p>4</p> <p>217 / 296 192 / 1011 27 / 118 Broadway</p> <p>139 / 50 724 / 664 28 / 137 E St</p> <p>331 / 379 376 / 845 118 / 204</p> <p>220 / 257 531 / 668 40 / 96</p>
<p>5</p> <p>65 / 65 58 / 164 7 / 18 5th Ave</p> <p>26 / 36 707 / 674 19 / 43 E St</p> <p>37 / 77 459 / 903 15 / 40</p> <p>24 / 28 63 / 109 18 / 73</p>	<p>6</p> <p>84 / 100 382 / 1033 148 / 295 4th Ave</p> <p>48 / 123 563 / 567 104 / 146 E St</p> <p>59 / 109 358 / 728 63 / 105</p> <p>106 / 118 303 / 611 31 / 117</p>	<p>7</p> <p>26 / 71 91 / 285 34 / 184 3rd Ave</p> <p>116 / 109 646 / 624 232 / 307 E St</p> <p>16 / 43 396 / 605 82 / 228</p> <p>91 / 155 303 / 348 64 / 221</p>	<p>8</p> <p>206 / 33 54 / 360 159 / 396 Bay Blvd</p> <p>139 / 150 135 / 48 154 / 204 F St</p> <p>30 / 157 38 / 138 7 / 39</p> <p>41 / 11 91 / 95 92 / 156</p>
<p>9</p> <p>92 / 106 347 / 1380 61 / 99 Broadway</p> <p>41 / 61 221 / 220 56 / 114 F St</p> <p>66 / 116 230 / 669 166 / 324</p> <p>128 / 121 770 / 962 85 / 113</p>	<p>10</p> <p>29 / 57 45 / 209 15 / 32 3rd Ave</p> <p>16 / 41 217 / 302 8 / 37 F St</p> <p>27 / 34 207 / 400 24 / 73</p> <p>21 / 37 47 / 132 11 / 20</p>	<p>11</p> <p>58 / 48 332 / 890 50 / 110 4th Ave</p> <p>43 / 139 247 / 249 25 / 123 F St</p> <p>32 / 58 116 / 380 59 / 115</p> <p>58 / 55 343 / 837 48 / 122</p>	<p>12</p> <p>55 / 113 308 / 673 6 / 166 3rd Ave</p> <p>53 / 64 222 / 179 42 / 104 F St</p> <p>34 / 88 122 / 301 82 / 216</p> <p>79 / 123 277 / 424 61 / 52</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Plus Project Conditions Peak Hour Traffic Volumes (1 of 4)

**FIGURE**

**4.2-24A**

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687

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<p>13</p> <p>23 / 32 Gaylord Dwy</p> <p>203 / 286 85 / 91 Marina Pkwy</p> <p>37 / 47 318 / 405 233 / 253 H St</p> <p>68 / 165 97 / 239</p>	<p>14</p> <p>24 / 140 113 / 490 25 / 180 Bay Blvd</p> <p>439 / 887 46 / 94</p> <p>124 / 80 764 / 847 H St</p> <p>26 / 52 190 / 151 19 / 63</p>	<p>15</p> <p>235 / 499 3 / 0 554 / 858 I-5 SB Off-Ramp</p> <p>425 / 1175 82 / 307 I-5 SB On-Ramp</p> <p>699 / 746 628 / 722 H St</p>	<p>16</p> <p>I-5 NB On-Ramp</p> <p>155 / 339 899 / 1138 I-5 NB Off-Ramp</p> <p>464 / 717 1263 / 1047 H St</p> <p>160 / 184 622 / 661</p>
<p>17</p> <p>445 / 309 95 / 102 241 / 198 Woodlawn Ave</p> <p>257 / 92 1191 / 1385 168 / 150</p> <p>138 / 260 1277 / 1281 264 / 207 H St</p> <p>88 / 359 50 / 101 49 / 94</p>	<p>18</p> <p>134 / 224 585 / 1182 108 / 289 Broadway</p> <p>322 / 399 776 / 965 123 / 308 Broadway</p> <p>112 / 160 600 / 882 172 / 397 H St</p> <p>153 / 334 1346 / 1981 141 / 293</p>	<p>19</p> <p>153 / 171 62 / 238 189 / 223 5th Ave</p> <p>230 / 121 629 / 877 140 / 337</p> <p>243 / 95 736 / 914 109 / 398 H St</p> <p>123 / 412 59 / 212 136 / 458</p>	<p>20</p> <p>104 / 248 403 / 662 120 / 210 4th Ave</p> <p>142 / 174 718 / 907 126 / 255</p> <p>133 / 240 883 / 903 125 / 191 H St</p> <p>211 / 186 501 / 502 98 / 108</p>
<p>21</p> <p>91 / 187 349 / 609 120 / 202 3rd Ave</p> <p>106 / 185 488 / 879 179 / 243</p> <p>154 / 165 823 / 688 266 / 283 H St</p> <p>167 / 216 564 / 559 101 / 207</p>	<p>22</p> <p>18 / 61 42 / 225 49 / 211 Bay Blvd</p> <p>52 / 87 611 / 1149 276 / 508</p> <p>339 / 121 853 / 1018 485 / 252 J St</p> <p>391 / 463 80 / 78 29 / 204</p>	<p>23</p> <p>526 / 483 268 / 471 I-5 SB Off-Ramp</p> <p>505 / 1056 247 / 493 I-5 SB On-Ramp</p> <p>1166 / 799 167 / 297 J St</p>	<p>24</p> <p>I-5 NB On-Ramp</p> <p>303 / 605 510 / 936 I-5 NB Off-Ramp</p> <p>421 / 348 766 / 641 J St</p> <p>631 / 410 211 / 0 590 / 327</p>



**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Plus Project Conditions Peak Hour Traffic Volumes (2 of 4)

**FIGURE**

**4.2-24**

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1052  
659

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<p>25</p> <p>40 / 21</p> <p>Woodlawn Ave</p> <p>45 / 51 828 / 990</p> <p>J St</p> <p>716 / 1258 12 / 33</p> <p>18 / 9</p>	<p>26</p> <p>144 / 270 455 / 1197 55 / 96</p> <p>Broadway</p> <p>62 / 103 399 / 427 31 / 48</p> <p>J St</p> <p>159 / 254 342 / 541 138 / 241</p> <p>187 / 212 745 / 906 35 / 92</p>	<p>27</p> <p>102 / 163 357 / 507</p> <p>Bay Blvd</p> <p>717 / 363 402 / 643</p> <p>L St</p> <p>153 / 103 530 / 884</p>	<p>28</p> <p>3 / 9 4 / 8 7 / 5</p> <p>Industrial Wy</p> <p>5 / 12 728 / 629 228 / 354</p> <p>L St</p> <p>4 / 6 566 / 807 403 / 607</p> <p>378 / 245 3 / 2 421 / 446</p>
<p>29</p> <p>115 / 122 469 / 1099 88 / 136</p> <p>Broadway</p> <p>131 / 110 527 / 487 127 / 177</p> <p>L St</p> <p>165 / 172 458 / 663 134 / 260</p> <p>176 / 236 552 / 851 60 / 141</p>	<p>30</p> <p>115 / 260 317 / 471</p> <p>Bay Blvd</p> <p>458 / 697 62 / 24</p> <p>I-5 SB Ramps</p> <p>206 / 224 11 / 24</p>	<p>31</p> <p>214 / 291 421 / 880</p> <p>Industrial Wy</p> <p>I-5 NB Ramps</p> <p>348 / 289 135 / 171</p> <p>335 / 331 431 / 378</p>	<p>32</p> <p>3 / 15</p> <p>Gunpowder Point Dr</p> <p>74 / 47 258 / 319 170 / 41</p> <p>E St</p> <p>179 / 236 32 / 68</p> <p>0%</p> <p>66 / 37 19 / 163</p>
<p>33</p> <p>409 / 484 392 / 412</p> <p>H St</p> <p>251 / 457 86 / 150</p> <p>Street A</p> <p>121 / 164 217 / 416</p>	<p>34</p> <p>225 / 357 27 / 69</p> <p>Marina Pkwy</p> <p>55 / 54 59 / 61</p> <p>Street C</p> <p>257 / 390 46 / 71</p>	<p>35</p> <p>59 / 61 270 / 421</p> <p>Street A</p> <p>Street C</p> <p>46 / 71 27 / 69</p> <p>55 / 54 317 / 396</p>	<p>36</p> <p>29 / 88 373 / 638</p> <p>Marina Pkwy</p> <p>502 / 561 159 / 440</p> <p>J St</p> <p>40 / 73 133 / 409</p>



**Legend**  
X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Plus Project Conditions Peak Hour Traffic Volumes (3 of 4)

**FIGURE**  
4.2-24

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37	<div> <div> <div>22 / 70</div> <div>71 / 79</div> <div>444 / 740</div> </div> <div>Street A</div> <div> <div>590 / 614</div> <div>614 / 870</div> <div>72 / 57</div> <div>J St</div> </div> </div> <div> <div>15 / 57</div> <div>466 / 942</div> <div>26 / 45</div> </div> <div> <div>25 / 61</div> <div>72 / 96</div> <div>49 / 85</div> </div>	38	<div> <div>20 / 16</div> <div>157 / 268</div> <div>Bay Blvd</div> </div> <div>Street B</div> <div> <div>14 / 24</div> <div>28 / 42</div> </div> <div> <div>35 / 35</div> <div>194 / 224</div> </div>	39	<div> <div>136 / 188</div> <div>148 / 188</div> <div>E St</div> </div> <div> <div>89 / 126</div> <div>44 / 61</div> <div>Gaylord Secondary Dwy</div> </div> <div> <div>118 / 135</div> <div>72 / 91</div> </div>
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**Legend**  
X / Y - AM / PM PEAK HOUR  
TURNING VOLUMES



NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Phase IV Plus Project Conditions Peak Hour Traffic Volumes (4 of 4)

FIGURE

4.2-24

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**TABLE 4.2-31**  
**Phase IV Conditions Peak-Hour Intersection Level of Service Summary**

	Intersection	Peak Hour	Phase IV Baseline		Phase IV Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
1	E Street & Bay Boulevard	A.M.	20.9	C	30.6	C	25	NO
		P.M.	34.5	C	ECL	F	19.6	DIRECT
2	E Street & I-5 NB On-Ramp	A.M.	32.3	C	43.6	D	16.4	NO
		P.M.	27.3	C	26.3	C	16.7	NO
3	E Street & Woodlawn Avenue	A.M.	35.6	D	34.5	C	12.9	NO
		P.M.	27.2	C	34.5	C	12.9	NO
4	E Street & Broadway	A.M.	22.4	C	30.5	C	11.6	NO
		P.M.	51.1	D	53.2	D	8.5	NO
5	E Street & 5th Avenue	A.M.	5.7	A	5.7	A	18.5	NO
		P.M.	7.2	A	7.8	A	14.9	NO
6	E Street & 4th Avenue	A.M.	15.6	B	15.8	B	10.2	NO
		P.M.	35.7	D	40.2	D	6.7	NO
7	E Street & 3rd Avenue	A.M.	14.5	B	15.1	B	7.7	NO
		P.M.	30.8	C	32.7	C	5.7	NO
8	F Street & Bay Boulevard	A.M.	10.7	B	12.3	B	15.6	NO
		P.M.	26.9	C	39.2	D	12.2	NO
9	F Street & Broadway	A.M.	19.9	B	19.5	B	6.5	NO
		P.M.	44.8	D	48.0	D	4.1	NO
10	F Street & 5th Avenue	A.M.	6.5	A	6.7	A	8.5	NO
		P.M.	9.3	A	9.5	A	5.0	NO
11	F Street & 4th Avenue	A.M.	15.5	B	16.3	B	2.9	NO
		P.M.	21.6	C	22.3	C	1.7	NO
12	F Street & 3rd Avenue	A.M.	17.9	B	17.9	B	2.0	NO
		P.M.	31.5	C	32.0	C	1.2	NO
13	H Street & <del>Gaylord</del> <u>RCC</u> Driveway	A.M.	19.3	B	29.6	C	14.3	NO
		P.M.	20.7	C	25.7	C	11.3	NO
14	H Street & Bay Boulevard	A.M.	9.6	A	9.6	A	11.9	NO
		P.M.	23.2	C	23.5	C	7.9	NO
15	H Street & I-5 SB Ramps	A.M.	18.6	B	19.1	B	7.0	NO
		P.M.	39.3	D	42.1	D	4.4	NO



TABLE 4.2-31 (Cont.)

Intersection		Peak Hour	Phase IV Baseline		Phase IV Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
16	H Street & I-5 NB Ramps	A.M.	37.0	D	50.6	D	3.5	NO
		P.M.	22.8	C	25.1	C	3.7	NO
17	H Street & Woodlawn Avenue	A.M.	117.1	F	124.7	<b>F</b>	2.2	<b>CUMULATIVE</b>
		P.M.	113.4	F	123.6	<b>F</b>	2.0	<b>CUMULATIVE</b>
18	H Street & Broadway	A.M.	43.8	D	45.5	D	2.2	NO
		P.M.	77.7	E	82.1	<b>F</b>	1.6	<b>CUMULATIVE</b>
19	H Street & 5th Avenue	A.M.	14.5	B	14.8	B	1.9	NO
		P.M.	41.2	D	45.9	D	1.2	NO
20	H Street & 4th Avenue	A.M.	39.5	D	42.5	D	1.1	NO
		P.M.	43.7	D	45.1	D	0.9	NO
21	H Street & 3rd Avenue	A.M.	22.2	C	22.4	C	1.2	NO
		P.M.	34.8	C	35.0	C	0.9	NO
22	J Street & Bay Boulevard	A.M.	30.4	C	37.8	D	4.6	NO
		P.M.	46.2	D	57.3	<b>E</b>	5.8	<b>DIRECT</b>
23	J Street & I-5 SB Ramps	A.M.	16.4	B	16.8	B	1.8	NO
		P.M.	25.2	C	23.3	C	3.3	NO
24	J Street & I-5 NB Ramps	A.M.	64.9	E	69.6	<b>E</b>	1.4	<b>CUMULATIVE</b>
		P.M.	30.0	C	33.3	C	2.3	NO
25	J Street & Woodlawn Avenue	A.M.	12.1	B	12.3	B	1.7	NO
		P.M.	13.1	B	13.1	B	1.7	NO
26	J Street & Broadway	A.M.	16.6	B	16.7	B	1.3	NO
		P.M.	31.9	C	32.9	C	1.1	NO
27	L Street & Bay Boulevard	A.M.	9.9	A	10.2	B	2.9	NO
		P.M.	23.2	C	28.8	C	3.3	NO
28	L Street & Industrial Boulevard	A.M.	28.0	C	28.2	C	1.9	NO
		P.M.	27.3	C	27.7	C	2.1	NO
29	L Street & Broadway	A.M.	17.6	B	17.8	B	1.3	NO
		P.M.	36.1	D	37.4	D	1.1	NO
30	I-5 SB Ramps & Bay Boulevard	A.M.	7.9	A	7.9	A	1.6	NO
		P.M.	14.6	b	15.1	b	1.5	NO



TABLE 4.2-31 (Cont.)

Intersection		Peak Hour	Phase IV Baseline		Phase IV Baseline Plus Project		Percent <sup>3</sup>	IMPACT?
			Delay <sup>1</sup>	LOS <sup>2</sup>	Delay <sup>1</sup>	LOS <sup>2</sup>		
31	I-5 NB Ramps & Industrial Boulevard	A.M.	27.7	c	29.6	c	1.2	NO
		P.M.	36.1	d	39.8	d	1.4	NO
32	E Street & Gunpowder Point Drive	A.M.	12.9	B	11.1	B	42.9	NO
		P.M.	13.2	B	15.5	C	42.4	NO
33	H Street & Street A	A.M.	11.9	B	13.0	B	12.9	NO
		P.M.	15.9	B	17.4	B	9.2	NO
34	Street C & Marina Parkway	A.M.	12.9	B	14.1	B	15.4	NO
		P.M.	17.1	C	21.3	C	13.1	NO
35	Street C & Street A	A.M.	8.4	A	8.9	A	12.3	NO
		P.M.	10.2	B	11.2	B	10.1	NO
36	J Street & Marina Parkway	A.M.	9.3	A	9.5	A	6.6	NO
		P.M.	16.5	B	49.1	D	11.5	NO
37	J Street & Street A	A.M.	21.5	C	22.8	C	5.4	NO
		P.M.	57.9	E	87.9	<b>F</b>	7.5	<b>DIRECT</b>
38	Street B & Bay Boulevard	A.M.	9.2	A	9.3	A	8.2	NO
		P.M.	9.6	A	9.8	A	8.1	NO
39	<del>Gaylord</del> RCC Secondary Driveway & E Street	A.M.	11.6	B	12.6	B	14.5	NO
		P.M.	14.3	B	16.1	C	12.8	NO

SOURCE: Kimley-Horn and Associates 200.

SB = Southbound; NB = Northbound

**Bold** values indicate intersections operating at Level of Service (LOS) E or F. **Bold and shaded** values indicate project significant impact.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

<sup>1</sup>Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

<sup>2</sup>LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 6.0.

<sup>3</sup>Percentage of entering trips consisting of project trips (significance threshold criteria).

**TABLE 4.2-32**  
**Phase IV Conditions Freeway Segment Level of Service Summary**

Freeway Segment	Direction	Number of Lanes	Peak Hour	Phase IV Baseline					Phase IV Baseline Plus Project				Phase IV Project Trips	Project Trip (Percent) <sup>4</sup>	IMPACT?
				ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS	ADT <sup>2</sup>	Peak-Hour Volume <sup>3</sup>	V/C Ratio	LOS				
Interstate 5															
State Route 54 to E Street	NB	4 M	A.M.	223,900	10,888	1.361	F2	226,532	11,016	1.377	F2	2,686	1	DIRECT <sup>5</sup>	
	SB	4 M	P.M.		11,661	1.458	F2		11,798	1.475	F2				
E Street to H Street	NB	4 M	A.M.	216,200	10,513	1.314	F1	218,432	10,622	1.328	F1	2,232	1	DIRECT <sup>5</sup>	
	SB	4 M	P.M.		11,260	1.407	F2		11,376	1.422	F2				
H Street to J Street	NB	4 M	A.M.	229,900	11,179	1.397	F2	231,852	11,274	1.409	F2	1,952	1	DIRECT <sup>5</sup>	
	SB	4 M	P.M.		11,973	1.497	F2		12,075	1.509	F2				
J Street to L Street	NB	4 M	A.M.	236,000	11,476	1.435	F2	237,854	11,566	1.446	F2	1,854	1	DIRECT <sup>5</sup>	
	SB	4 M	P.M.		12,291	1.536	F2		12,387	1.548	F2				
L Street to Palomar Street	NB	4 M	A.M.	224,100	10,897	1.362	F2	225,954	10,988	1.373	F2	1,854	1	DIRECT <sup>5</sup>	
	SB	4 M	P.M.		11,671	1.459	F2		11,768	1.471	F2				

SOURCE: Kimley-Horn and Associates 2008.

ADT = Average Daily Trips; LOS = Level of Service; NB = Northbound; SB = Southbound

**Bold** values indicate freeway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

<sup>1</sup> The capacity is calculated as 2,000 ADT per Mainline, 1,600 ADT per HOV lane, 1,600 ADT per ML and 1,200 ADT per auxiliary lane (M: Mainline, A: Aux., HOV: High Occupancy Vehicle, ML: Managed Lanes Ex. 4M+2A=4 Mainline + 2 Aux). Capacity for all segments is 8,000.

<sup>2</sup> The ADT volumes were estimated by applying a growth factor to existing volumes provided by Caltrans.

<sup>3</sup> Peak-hour volume calculated by: (ADT\*K\*D)/Truck Factor.

<sup>4</sup> Percentage of total freeway trips generated by the project.

<sup>5</sup> In an effort to be conservative, the impact determination is a product of Phase I, II, III and IV project trips.

### 4.2.5 Mitigation Measures

Developers of any parcel located within the Chula Vista Bayfront Master Plan shall reimburse the Port, City, and/or other developers the pro-rata cost of the installation of public transportation improvements, as obligated and required by the Port and/or City based on the nexus established in the technical studies and this Draft EIR.

#### a. Phase I Mitigation Measures

The following mitigation measures shall be required to be implemented by the developer to reduce impacts to a level less than significant:

#### 4.2-1 Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall:

- Construct H Street west of Marina Parkway as a 2-lane Class III Collector
- Construct E Street as a 2-lane Class III Collector along Parcel H-3. This would provide a connection to Lagoon Drive via Marina Parkway.
- Construct a traffic signal at H Street and ~~Gaylord~~ RCC Truck Driveway.

Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall:

- Rebuild that portion of Marina Parkway fronting H-13 and H-14 between ~~E Street~~ Sandpiper Way and J Street as a 3-lane Class II Collector with excess ROW used for pedestrian facilities, or secure such construction to the satisfaction to the City engineer. Frontage improvements for the remaining segments of Marina Parkway J Street and Sandpiper Way will be constructed in conjunction with the development of the adjacent parcels to these frontages in subsequent phases.
- Construct Street A north of J Street would be constructed as a 2-lane Class III Collector-, or secure such construction to the satisfaction of the City Engineer.

This mitigation would reduce **Significant Impact 4.2-1** to below a level of significance.

#### 4.2-2 Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall construct H Street from I-5 to Marina Parkway as a four-lane Major Street. This mitigation is provided in lieu of widening of F Street due to environmental constraints associated with the widening of F Street in the vicinity of the F&G Street Marsh. At the completion of the H Street Extension, the Port or Port tenant, as appropriate, shall also restrict access along the segment of Lagoon Drive/F Street (between Parcel H-3 and the BF Goodrich access

- on F Street) to emergency vehicle access only. This mitigation would reduce **Significant Impacts 4.2-2, 4.2-4, 4.2-6, 4.2-7, and 4.2-11** to below a level of significance.
- 4.2-3** Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall widen H Street west of Marina Parkway from a two-lane Class III Collector to a three-lane Class II Collector. This mitigation would reduce **Significant Impact 4.2-3** to below a level of significance.
- 4.2-4** Prior to the issuance of certificates of occupancy for any development on H-3 and building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, as appropriate, shall widen Bay Boulevard between E Street and F Street from a two-lane Class III Collector to a two-lane Class II Collector, or secure such widening to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce **Significant Impact 4.2-5** to below a level of significance.
- 4.2-5** Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall construct a traffic signal at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impacts 4.2-8 and 4.2-14** to below a level of significance.
- 4.2-6** Prior to the issuance of certificates of occupancy for any development on H-3 or building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of L Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impacts 4.2-9 and 4.2-15** to below a level of significance.
- 4.2-7** Prior to the issuance of certificates of occupancy for development on H-3 or building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of I-5 southbound ramps and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impacts 4.2-10 and 4.2-16** to below a level of significance.

**4.2-8** The following mitigation measure would reduce, but not eliminate project impacts on Interstate 5, as identified in **Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35 through 4.2-37, and 4.2-46 through 4.2-50.**

The Port and the City shall participate in a multi-jurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed I-5 corridor level study that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources and phasing that would reduce congestion ~~management~~ with Caltrans standards on the I-5 south corridor from the SR-54 interchange to the Otay River (the “I-5 South Corridor”) (hereinafter, the “Plan”). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on the nexus established in this Draft EIR as well as other mechanisms. The Plan required by this mitigation shall include the following:

- a) The responsible entities (the Entities) included in this effort will include, but may not be limited to, the City, other cities along I-5, the Port, SANDAG, and Caltrans. Other entities will be included upon the concurrence of the foregoing Entities.
- b) The Plan will identify physical and operational improvements to I-5 adjacent to the project area, relevant arterial roads and transit facilities (the Improvements), that are focused on regional impacts and specific transportation impacts from the project, and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan will include an implementation element that includes each Entity’s responsibilities and commitment to mitigate the impacts created by all phases of the Proposed Project.
- c) The Plan will set forth a timeline and other agreed upon relevant criteria for implementation of each Improvement.
- d) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs.
- e) The Plan will include the parameters for any agreed upon fair-share funding to be implemented, that would require private and/or public developers to contribute to the costs, in a manner that will comply with applicable law.
- f) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall

not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement.

- g) The Port shall seek adoption of the Plan before the Port Board of Commissioners and the City shall seek adoption of the Plan before the City Council upon the completion of the multi-jurisdictional effort to develop the Plan. The Port and the City shall report, to their respective governing bodies regarding the progress made to develop the Plan within 6 months of the first meeting of the entities. Thereafter, the Port and the City shall report at least annually regarding the progress of the Plan, for a period of not less than 5 years, which may be extended at the request of the City Council and/or Board of Commissioners.
- h) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan.
- i) Prior to issuance of certificates of occupancy or building permits for any development of individual projects within the Chula Vista Bayfront Master Plan, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of cumulative freeway impacts within the City's portion of the I-5 South Corridor by participating in the City's Western Traffic Development Impact Fee or equivalent funding program.

The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of the mitigation measure.

**4.2-9** Prior to the issuance of certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall construct a westbound through lane along H Street/~~Gaylord~~ RCC Driveway, which would result in widening H Street west of Marina Parkway to a three-lane Class II Collector. This mitigation would reduce **Significant Impact 4.2-13** to below a level of significance.

**4.2-10** The following mitigation measure would reduce, but not eliminate impacts at intersections of E Street and H Street associated with trolley delays, as identified in **Significant Impact 4.2-19**. Prior to issuance of certificates of occupancy for parcel H-3 or building permits for any development within the City, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of intersection impacts at H Street and E Street within the City's jurisdiction by

participating in the City's Western Traffic Development Impact Fee or equivalent funding program.

The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure.

However, because implementation of the physical improvements needed to reduce the significant impacts to the affected intersections will require funding from other sources in addition to the WTDIF, such as local, state and federal funds, and such funding is not certain or under the control of the Port or the City, the Port and the City cannot assure the necessary improvements will be constructed as needed or that they will be constructed within any known time schedule. Accordingly, the Proposed Project's impacts to the E Street and H Street intersections affected by an at-grade trolley crossing are considered significant and unmitigated.

b. Phase II Mitigation Measures

- 4.2-11** Prior to the issuance of any certificates of occupancy for any development on H-23 in Phase I, the Port or Port tenant, as appropriate, shall construct Street A between H Street to Street C as a two-lane Class III Collector, and shall construct Street C between Marina Parkway and Street A as a two-lane Class II Collector. Implementation of this mitigation measure would reduce Significant Impact 4.2-20 to below a level of significance.
- 4.2-12** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between Street A and I-5 Ramps to a five-lane Major Street, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce **Significant Impact 4.2-21** to below a level of significance.
- 4.2-13** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen J Street between Street A to I-5 Ramps to a six-lane Major Street, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce **Significant Impact 4.2-22** to below a level of significance.

- 4.2-14** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen Street A between Street C and J Street to a four-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce **Significant Impact 4.2-23** to below a level of significance.
- 4.2-15** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal and add an exclusive left-turn lane at each approach at the intersection of H Street and ~~Gaylord~~ RCC Driveway, or secure such construction to the satisfaction of the City Engineer. The traffic signal and left-turn lanes shall be built to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-24** to below a level of significance.
- 4.2-16** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall construct a westbound and eastbound through lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-25** to below a level of significance.
- 4.2-17** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of H Street and Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-26** to below a level of significance.
- 4.2-18** Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the developer shall construct a traffic signal at the intersection of J Street and Marina Parkway. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-27** to below a level of significance.
- 4.2-19** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of J Street and Street A and add an exclusive westbound right-turn lane along J Street and an exclusive southbound right-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal and turning lanes shall operate and be constructed to the satisfaction of the City Engineer.



This mitigation would reduce **Significant Impact 4.2-28** to below a level of significance.

d. Phase III Mitigation Measures

- 4.2-20** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate shall construct the segment of Street A that would continue south from J Street, connecting to the proposed Street B in the Otay District, as a two-lane Class III Collector. In addition, prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, as appropriate shall construct the segment of Street B that would connect to the proposed Street A, bridge over the Telegraph Canyon Creek Channel, and continue south to Bay Boulevard, as a 2-lane Class III Collector. This mitigation would reduce **Significant Impact 4.2-31** to below a level of significance.
- 4.2-21** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall widen Street A between H Street and Street C to a four-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce **Significant Impact 4.2-32** to below a level of significance.
- 4.2-22** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct an exclusive eastbound right-turn lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-33** to below a level of significance.
- 4.2-23** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct an exclusive westbound right-turn lane along J Street at the intersection of J Street and I-5 NB Ramps, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-34** to below a level of significance.
- 4.2-24** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct E Street from the ~~Gaylord~~ RCC Driveway to Bay Boulevard as a two-lane Class III Collector. This mitigation would reduce **Significant Impact 4.2-38** to below a level of significance.

e. Phase IV Mitigation Measures

- 4.2-25** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct a new F Street segment between the proposed terminus of the existing F Street and the proposed E Street extension, ending at the SP-3 Chula Vista Nature Center parking lot, as a two-lane Class III collector street, which shall also contain a Class II bike lane on both sides of the street. This mitigation would reduce **Significant Impact 4.2-39** to below a level of significance
- 4.2-26** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen E Street between F Street and Bay Boulevard to a four-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. Also, the widening of this segment of E Street would facilitate the flow of project traffic on Bay Boulevard between E Street to F Street. This mitigation would reduce **Significant Impacts 4.2-40** and **4.2-41** to below a level of significance.
- 4.2-27** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between I-5 Ramps and Broadway to a 6-lane Gateway Street. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce **Significant Impact 4.2-42** to below a level of significance. The off-site traffic improvements described in this mitigation measure for direct traffic impacts would create secondary traffic impacts. Improvements associated with these secondary impacts would be required as a result of cumulative and growth-related traffic overall, of which the Proposed Project would be a component. The Western Chula Vista TDIF identifies these improvements in a cumulative context and attributes fair share contributions according to the impact. Therefore, the Proposed Project would be responsible for a fair share contribution and would not be solely responsible for implementation of necessary secondary impact improvements.
- 4.2-28** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct an eastbound through lane and an exclusive eastbound right-turn lane along E Street at the intersection of E Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-43** to below a level of significance.

- 4.2-29** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive southbound right-turn lane along Bay Boulevard at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-44** to below a level of significance.
- 4.2-30** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct a dual southbound left-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce **Significant Impact 4.2-45** to below a level of significance.

#### **4.2.6 Significance of Impacts After Mitigation**

Implementation of Mitigation Measure 4.2-8 would not reduce **Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35 through 4.2-37, and 4.2-46 through 4.2-49**, concerning project related impacts along I-5, to below a level of significance because implementation of the physical improvements needed to reduce significant impacts to the affected freeway segments is within the jurisdiction and control of Caltrans and not the Port or the City. The Port and the City cannot assure the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to freeway segments are considered significant and unmitigated.

Implementation of Mitigation Measure 4.2-10 would not reduce **Significant Impact 4.2-19**, concerning project related impacts on H Street and E Street intersections due to trolley delay, to below a level of significance, because implementation of the physical improvements needed to reduce significant impacts are within the jurisdiction and control of other entities and not the Port or City. The Port and the City cannot assure the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to E Street and H Street intersections affected by the trolley crossings are considered significant and unmitigated.

The implementation of the Mitigation Measures 4.2-1 through 4.2-7, 4.2-9, and 4.2-11 through 30 would reduce the remaining direct project related impacts to below a level of significance.

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## 4.3 Parking

This section analyzes the potential impacts of the Proposed Project on parking. The analysis included a comparison between the parking proposed to be provided and the parking required for each phase of the Proposed Project. In addition, a shared parking assessment was conducted within the Harbor District to determine the availability of parking for special events held on site. This section is based on the parking analysis contained in the following traffic analysis:

- Traffic Impact Analysis (March 2008) prepared by Kimley-Horn and Associates, Inc. (*Appendix 4.2-1*).

### 4.3.1 Existing Conditions

This section discusses the existing parking for the project site. Currently, parking is primarily limited to the Harbor District, with the exception of the Chula Vista Nature Center parking lot located just west of the E Street/I-5 intersection in the Sweetwater District. On-street parking is provided on both sides of G Street near the existing South Bay Boatyard. In addition, there is a public parking lot along the south side of Marina Way near its terminus at Marina View Park and also near the boat launch next to the Bayfront Park. Public parking is also available at the Bayside Park, north of the Chula Vista Marina just west of the RV Park. Additional off-street parking is provided in front of the Chula Vista Harbor, which serves existing restaurants and marinas. No public parking is provided in the Otay District.

### 4.3.2 Impact Significance Criteria

According to Appendix G of the CEQA Guidelines and the Port's guidelines and previous policy, the Proposed Project would result in a significant impact if it:

1. Causes the parking supply to be less than the generated demand or if it exacerbates an existing parking shortage
2. Results in parking shortfalls during major events within the Chula Vista Bayfront area
3. Removes and does not replace parking lots designated for public use that are heavily utilized.

### 4.3.3 Impact Analysis

1. **The Proposed Project would have a significant impact if it causes the parking supply to be less than the generated demand or if it exacerbates an existing parking shortage.**

Parking rates and methodologies were obtained from the Port and the City. The Port's Tidelands Parking Guidelines (1991) and the City's Municipal Code (Section 19.85.008) were the primary sources for these parking rates. In addition, a number of unique uses are planned for the site. Based on Port and City standards, *Table 4.3-1* summarizes the parking rates used in the parking analysis and within the Proposed Project.

**TABLE 4.3-1**  
**Parking Rates**

Land Use	Parking Rate
50-Foot Baywalk	4 per acre
Civic/Retail	4 per 1,000 square feet
Conference Center	1.6 per 1,000 square feet
Conference Hotel	1.6 per 1,000 square feet
Cultural	1 per 1,000 square feet
Event Center	0.33 per seat
Existing Bayfront Park	12 per acre
Existing Marina	0.7 per berth
Existing Marina View Park	12 per acre
Ferry Terminal/Restaurant	9.3 per 1,000 square feet
General Office	3 per 1,000 square feet
H Street Pier	12 per acre
Hotel	1 per room
Hotel Restaurant	0.11 per seat
Mixed Use Commercial	4 per 1,000 square feet
Mixed Use Office	3 per 1,000 square feet
Mixed Use Retail	4 per 1,000 square feet
Office	3 per 1,000 square feet
Reconfigured Marina	0.7 per berth
Residential – Studio	1 per dwelling unit
Residential – 1 Bedroom	1.5 per dwelling unit
Residential – 2 Bedroom	2 per dwelling unit
Resort Hotel	1 per room
Restaurant	9.3 per 1,000 square feet
Retail	4 per 1,000 square feet
RV Park	1 per site
Signature Park	12 per acre
South Park	4 per acre
Visitor Hotel	1.04 per room
Yacht Club/Berths	0.7 per berth

SOURCE: Kimley-Horn and Associates 2008.

Rates were provided by the Port of San Diego (Port 1991).

The Proposed Project was designed to provide enough parking to meet the parking demand of the planned uses on or near the affected parcels. Within the Harbor District, Parcel H-18 would provide excess parking that can be shared with other parcels. Parking on H-18 utilized to satisfy parking requirements for other parcels shall be provided by the Port in accordance with appropriate parking rates, fees, or other considerations. Although not required based on the

parking requirements, approximately 500 of the 1,100 parking spaces may be utilized by the Gaylord RCC on Parcel H-3 for its employees, ~~whom it will transport between H-3 and H-18.~~

Parcel H-18 would provide up to 1,100 interim parking spaces in Phases I through III and 3,000 spaces in Phase IV. Parcels H-3, H-12, H-21, and H-23 may use the parking in H-18 as off-site or remote parking (*Figure 4.3-1*). These parcels are near the Bay, while H-18 is along the freeway. Providing remote parking for the properties along the Bay accomplishes a number of important project transportation goals:

- More parking provided near the freeway interchanges, which
  - Allows for properties near the Bay to be used for public uses
  - Reduces vehicular traffic on streets near the Bay, making them more pedestrian friendly
- Encourages walking trips between uses
- Encourages transit use between parcels and other areas of Chula Vista.

The amount of parking needed in Parcel H-18 would be reviewed prior to preparing design plans for the parking garage/lot. All other parcels would be required to have their parking provided for within the parcel, if possible, or within adjacent parcels. Furthermore, on-street parking may occur on many of the streets within the Proposed Project area, including the E Street segment between the new F Street and the H Street Extension, J Street between Marina Parkway and Street A, and H Street between Marina Parkway and E Street. On-street parking has not been assumed in the following parking supply tables. Therefore, on-street parking is considered a surplus to the Proposed Project.

Parking for each parcel is summarized below by development phase to ensure that adequate parking is provided for each phase of the development, including the ultimate build-out of the Proposed Project.

**Phase I.** *Table 4.3-2* summarizes the parking demand and assumed supply in Phase I for the Proposed Project. The Proposed Project would provide a total of about 7,700 parking spaces after the completion of Phase I. This amount would exceed the demand by approximately 1,200 parking spaces.

Parcel H-3 (Hotel/Conference Center) proposes using an on-site parking structure to satisfy its parking demand. H-13/H-14 would provide 2,300 parking spaces to satisfy their parking demand. The need for additional parking may be met off site on Parcel H-18. Parcel H-18 will provide 1,100 interim parking spaces in Phases I through III for use by surrounding development, for appropriate consideration. The parking lot/structure on Parcel H-3 would be

required prior to certificate of occupancy for Parcel H-3. Similarly, parking would be required for each building prior to certificate of occupancy for Parcels H-13/H-14. The 100 parking spaces required for SP-3 and the 216 parking spaces for H-8/HP-1 would be provided on site. Parcel HP-3 is assumed to use Parcels H-8/HP-1 for its 11 required spaces. With the proposed parking constructed/provided, demand will be adequately accommodated. Therefore, no significant impacts to parking would result with development of Phase I.

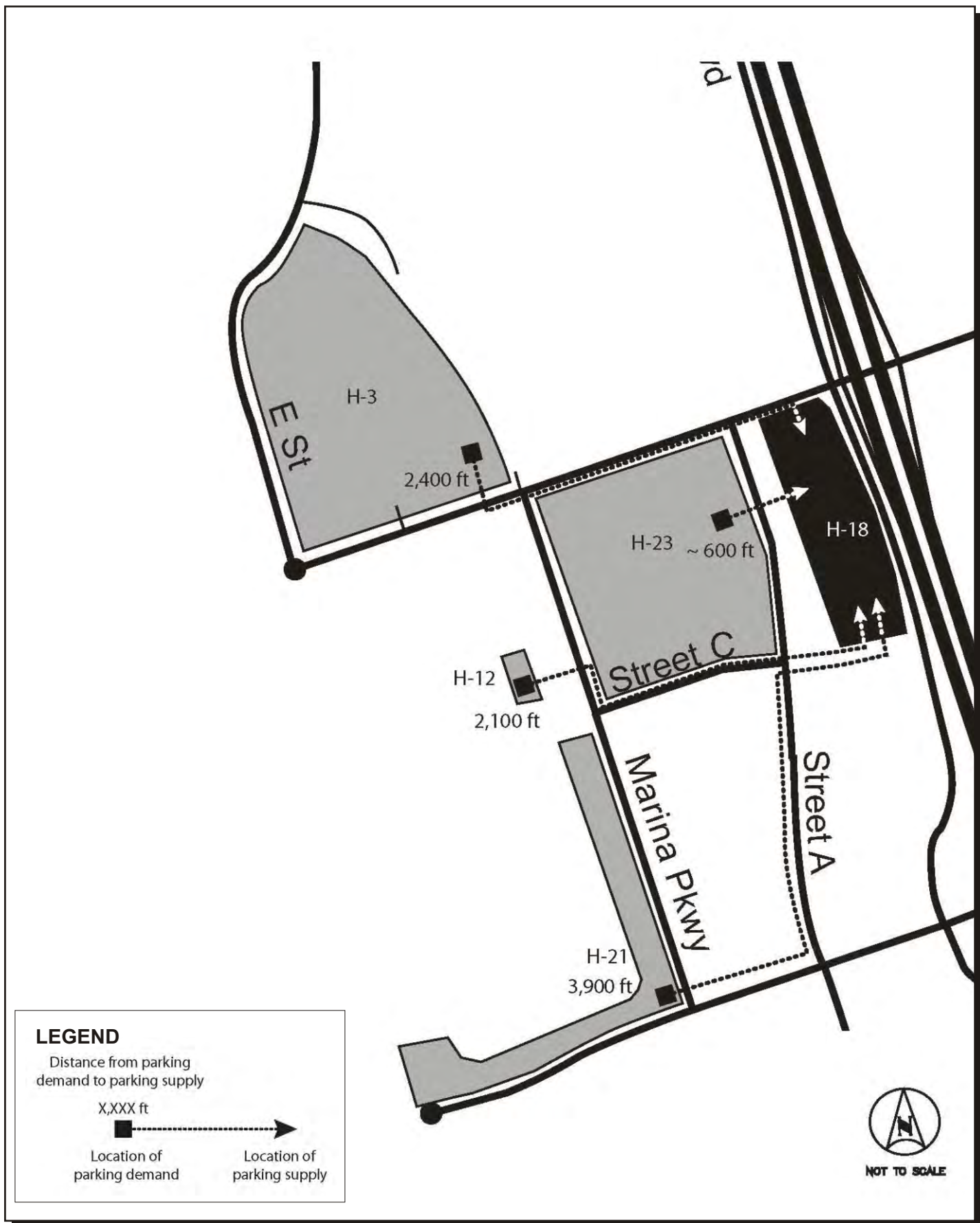
**Phase II.** Table 4.3-3 summarizes the parking demand and assumed supply in Phase II for the Proposed Project. With the completion of Phase II, a total of about 4,600 parking spaces would be provided, which is an excess of approximately 900 parking spaces beyond the number required.

In addition to the development of the Phase I uses, the development of H-23 (Resort Hotel and Cultural/Retail) may utilize parking capacity from the interim surface parking lot on H-18, which would be constructed in Phase I. This use may rely on H-18 to provide 200 off-site parking spaces. As stated above, in Phase I, Parcel H-18 would provide up to 1,100 interim parking spaces, which would be more than the number needed for the planned uses. Therefore, no significant impacts to parking would result with development of Phase II.

**Phase III.** Table 4.3-4 summarizes the parking demand and assumed supply in Phase III for the Proposed Project. All of the new parking spaces provided in Phase III would be located in the Harbor and Otay Districts. The approximately 400 parking spaces required for Parcels O-3A, O-3B, OP-1, and OP-3 in Phase III would be provided on site. The Proposed Project would provide 550 spaces more than the required 1,350 spaces in the Harbor District, and 440 spaces in the Otay District. As referenced above, the need for additional parking may be met off site on Parcel H-18, for appropriate consideration. Therefore, no significant impacts to parking would result with development of Phase III.

**Phase IV.** Table 4.3-5 summarizes the parking demand and assumed supply in Phase IV for the Proposed Project. All of the new parking spaces provided in Phase IV would be located in the Sweetwater District and the Harbor District. The 2,900 parking spaces required for Parcels S-1, S-3, S-4, H-1A, H-12, H-15, H-18, and HP-28 and the boat slips on Parcels H-1, H-9, and H-21 in Phase IV would be provided on site, or the need for additional parking may be met off site on Parcel H-18, for appropriate consideration. As mentioned above, the interim 1,100-space parking lot on Parcel H-18 would be converted into a 3,000-space parking garage in Phase IV. In Phase IV, the Proposed Project would provide approximately 4,900 parking spaces, which is 2,000 spaces more than the required 2,900 spaces. Therefore, no significant impacts to parking would result with development of Phase IV.





SOURCE: Kimley-Horn and Association, Inc.

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan

## Remote Parking Summary

FIGURE

4.3-1

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**2. The Proposed Project would have a significant impact if it results in parking shortfalls during major events within the Chula Vista Bayfront area.**

The Proposed Project area would host special events, particularly within parks and along the harbor, such as “10k”-type races on the weekend, events at the harbor, or cultural fairs. The Port uses a permit process to allow for special events on Port properties. This mechanism allows for proper control over the date, time, and size of an event. It also allows the proper scheduling for multiple, smaller events to occur simultaneously. A key factor in determining when a special event can occur is parking availability.

The Port’s permit process for large events considers the parking required for proposed special events and requires a Parking and Traffic Control Plan to ensure that the potential impacts of special events on parking in the Proposed Project area would be less than significant. Specifically, any organizer planning and conducting an event with expected attendance of 500 people or more is required to provide (an) off-site parking location(s) and/or shuttle service and traffic control personnel for the event. As detailed below, the Proposed Project would result in the availability of excess parking for major events within the Chula Vista Bayfront area, thereby providing parking options to meet the Port’s permit requirements upon build-out. Additional parking spaces for a special event can be reserved for a fee through the Port.

The Proposed Project results in excess parking within the Chula Vista Bayfront area and does not remove public parking lots without replacement.

**3. The Proposed Project would have a significant impact if it removes and does not replace parking lots designated for public use that are heavily utilized.**

As discussed above, the Proposed Project results in excess parking within the Chula Vista Bayfront area and does not remove public parking lots without replacement.

#### **4.3.4 Mitigation Measures**

There were no significant impacts to parking identified for the Proposed Project; therefore, no mitigation measures would be required.

#### **4.3.5 Significance of Impacts After Mitigation**

There were no significant impacts to parking identified for the Proposed Project.

**TABLE 4.3-2  
Phase I Parking Summary**

Phase	Parcel	Land Use	Intensity <sup>1</sup>	Rate <sup>2</sup>	Parking Required	Parking Provided	Provided – Required
<b>Sweetwater District</b>							
I	S-2	Signature Park	18.0 ac	12 : ac	216	216	0
I	SP-3	Nature Center Parking and Access Road	—	—	100	100	0
<b>Subtotal</b>					<b>316</b>	<b>316</b>	<b>0</b>
<b>Harbor District</b>							
I	H-3	Hotel	2,000 rm	1 : rm	2,000	2000	0
I	H-3	Hotel Restaurant	1,600 seats	0.11 : seats	176	200	24
I	H-3	Conference Center	415 ksf	1.6 : ksf	664	700	36
—	H-8/HP-1	Signature Park	18.0 ac	12 : ac	216	237	21
—	H-9	Existing Marina	—	—	241 (c)	241	0
I	H-13/H-14	Residential (d)	1,500 du	1.5 : du	2,250	2,300	50
I	H-17	Fire Station	2.0 ac	—	15	15	0
I	H-18	Interim Surface Parking	9.0 ac	—	0	1100	1100
I	H-21	Existing Marina	—	—	338 (c)	338	0
I	HP-3	50-Foot Baywalk	2.6 ac	4 : ac	11	0	-11
I	HP-7	Existing Marina View Park	6.6 ac	12 : ac	79	79	0
I	HP-15	Existing Bayfront Park (e)	10.1 ac	12 : ac	160	160	0
<b>Subtotal</b>					<b>6,150</b>	<b>7,370</b>	<b>1,220</b>
<b>TOTAL</b>					<b>6,466</b>	<b>7,686</b>	<b>1,220</b>

SOURCE: Kimley-Horn and Associates 2008.

rm = rooms; ac = acres; ksf = thousand square feet; du = dwelling units

<sup>1</sup>The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup>The parking rate was provided by the Port of San Diego (Port 1991).

**TABLE 4.3-3  
Phase II Parking Summary**

Phase	Parcel	Land Use	Intensity <sup>1</sup>	Rate <sup>2</sup>	Parking Required	Parking Provided	Provided – Required
<b>Harbor District</b>							
II	H-9	Retail/Commercial Recreation	50 ksf	4 : ksf	200	203	3
—	H-9	Existing Marina	—	—	241 (c)	241	0
II	H-15	Mixed Use Office	210 ksf	3 : ksf	630	630	0
II	H-15	Visitor Hotel	250 rm	1.04 : rm	260	260	0
II	H-15	Retail	120 ksf	4 : ksf	480	480	0
II	H-15	General Office	90 ksf	3 : ksf	270	270	0
II	H-18	Interim Surface Parking	—	—	0	1,100	1,100
—	H-21	Existing Marina	—	—	338 (c)	338	0
II	H-23	Hotel	500 rm	1 : rm	500	400	–100
II	H-23	Cultural	100 ksf	1 : ksf	100	100	0
II	H-23	Retail	100 ksf	4 : ksf	400	300	–100
II	HP-03	50-Foot Baywalk	0.9 ac	4 : ac	3	0	–3
—	HP-07	Existing Marina View Park	6.6 ac	12 : ac	79	79	0
—	HP-15	Existing Bayfront Park (e)	10.1 ac	12 : ac	160	160	0
II	HP-28	H Street Pier	0.4 ac	12 : ac	5	0	–5
<b>Subtotal</b>					<b>3,666</b>	<b>4,561</b>	<b>895</b>
<b>TOTAL</b>					<b>3,666</b>	<b>4,561</b>	<b>895</b>

SOURCE: Kimley-Horn and Associates 2008.

rm = rooms; ac = acres; ksf = thousand square feet; du = dwelling units

<sup>1</sup>The intensity of each land use was provided by the Port of San Diego.

<sup>2</sup>The parking rate was provided by the Port of San Diego (Port 1991).

**TABLE 4.3-4  
Phase III Parking Summary**

Phase	Parcel	Land Use	Intensity <sup>1</sup>	Rate <sup>2</sup>	Parking Required	Parking Provided	Provided – Required
<b>Harbor District</b>							
—	H-9	Existing Marina	—	—	241(c)	241	0
III	H-18	Interim Surface Parking	9.0 ac	—	0	900	900
III	H-21	Retail/Commercial Recreation	150 ksf	4 : ksf	600	262	-338
—	H-21	Existing Marina	—	—	338 (c)	338	0
III	HP-3	50-Foot Baywalk	3.0 ac	4 : ac	12	0	-12
III	HP-15	Existing Bayfront Park (e)	10.1 ac	12 : ac	160	160	0
<b>Subtotal</b>					<b>1,351</b>	<b>1,901</b>	<b>550</b>
<b>Otay District</b>							
III	O-3A/O-3B	RV Park	236 du	1 : du	236	236	0
III	OP-1/OP-3	South Park/Open Space	51.0 ac	4 : ac	204	204	0
<b>Subtotal</b>					<b>440</b>	<b>440</b>	<b>0</b>
<b>TOTAL</b>					<b>1,791</b>	<b>2,341</b>	<b>550</b>

**TABLE 4.3-5  
Phase IV Parking Summary**

Phase	Parcel	Land Use	Intensity <sup>1</sup>	Rate <sup>2</sup>	Parking Required	Parking Provided	Provided – Required
<b>Sweetwater District</b>							
IV	S-1	Resort Hotel	750 rm	1 : rm	750	750	0
IV	S-3	Mixed Use Commercial	120 ksf	4 : ksf	480	480	0
IV	S-4	Office	120 ksf	3 : ksf	360	360	0
<b>Subtotal</b>					<b>1,590</b>	<b>1,590</b>	<b>0</b>
<b>Harbor District</b>							
IV	H-1A	Signature Park	5.0 ac	12 : ac	60	68	8
IV	H-1/HW-6	Community Boating Center	200 berth	0.7 : berth	180	180	0

TABLE 4.3.-5 (Cont.)

Phase	Parcel	Land Use	Intensity <sup>1</sup>	Rate <sup>2</sup>	Parking Required	Parking Provided	Provided – Required
IV	H-9	Reconfigured Marina	200 berth	0.7 : berth	140	220	80
IV	H-12	Restaurant	25 ksf	9.3 : ksf	233	0	-233
IV	H-12	Ferry Terminal	1 site	22 : site	22	0	-22
IV	H-18	Office/Parking	100 ksf	3 : ksf	300	2,450	2,150
IV	H-21	Reconfigured Marina	500 berth	0.7 : berth	350	350	0
IV	HP-3	50-Foot Baywalk	2.0 ac	4 : ac	8	0	-8
IV	HP-28	H Street Pier	0.4 ac	12 : ac	5	0	-5
<b>Subtotal</b>					<b>1,297</b>	<b>3,268</b>	<b>1,971</b>
<b>TOTAL</b>					<b>2,887</b>	<b>4,858</b>	<b>1,971</b>

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## 4.4 Aesthetics/Visual Quality

This section summarizes the existing visual environment of the Proposed Project site and analyzes the potential impacts of the Proposed Project on visual quality and aesthetics. The discussion in this section is based on the information presented in the following technical studies:

- Visual Impact Assessment, Chula Vista Bayfront Master Plan (June 2006), prepared by KTU+A Consultants (*Appendix 4.4-1*)
- Visual Impact Assessment, Pacifica Project Level Review (May 2008), prepared by KTU+A Consultants (*Appendix 4.4-2*)
- Visual Impact Assessment, Gaylord Project Level Review (May 2008), prepared by KTU+A Consultants (*Appendix 4.4-3*)
- [Shading Study, Pacifica Project \(February 2008\), prepared by Carrier Johnson \(\*Appendix 4.4-4\*\)](#).

[\*Appendix 4.4-3\* was prepared for the RCC proposed by Gaylord on Parcel H-3. Gaylord has withdrawn its proposal to develop Parcel H-3 and is no longer a participant in the project. The technical study provided in \*Appendix 4.4-3\* is still relied upon for the program-level analysis of the proposed RCC on Parcel H-3; therefore, it remains relevant to this section's analysis and is included as an appendix.](#)

### 4.4.1 Existing Visual Environment

This section discusses the existing overall visual character of the project site, as well as the visual quality of various Proposed Project components therein. The character of the Proposed Project site is defined by its existing land uses, which range from commercial, retail, industrial, marine-related visitor uses, parks, and natural open space (see *Section 4.1.1.2, Existing Land Uses*).

#### 4.4.1.1 Visual Definitions

The visual character of a site is defined by its physical characteristics such as landform, vertical relief, type of vegetation, textures and patterns; the presence of clear or cascading water; range of color in the soil, rock, vegetation, or water; variety in landscape; man-made structures visually different from the natural environment; and other visually distinguishing elements discussed in greater detail in *Appendix 4.4-1*.

Visual quality of a site results from the interpretation of physical character features determined by the viewer's perception. Perceptual quality factors include vividness, intactness, unity, visual organization, scarcity, adjacent scenery, and cultural modifications. A high visual quality would

include a balanced composition of line, form, color, and texture; striking visual patterns or the presence of distinct focal points; enhancement from the adjacent scenery; and overall compatibility with the character of the landscape setting. A low visual quality usually has a chaotic appearance; elements that appear random with no perceivable patterns; adjacent scenery that detracts or has little influence on the scenic quality; and cultural modifications that detract from the setting.

Visual character units are areas with a definable boundary that exhibit distinguishing, yet similar, characteristics. Visual character units can have a perceived visual quality (high, moderate, or low) that results in a common visual experience and, based on the composition, usually have similar levels of sensitivity to change.

Views comprise three distinct parts: the viewing scene itself; the viewing location from which an individual sees the viewing scene; and the view corridor, which is the volume of space between the viewing scene and the viewing location.

The viewing distance, or distance between the site and the location from where it is viewed, includes a foreground, middle ground, and background.

#### **4.4.1.2 Visual Character On Site and of Adjacent Lands**

A wide range of land uses occur within the Proposed Project's boundary. These uses range from commercial, retail, industrial, warehousing, natural open space, marinas, active and passive parks, marine/visitor-related uses, bikeways, transit corridors, and roads. The San Diego Gas & Electric (SDG&E) transmission lines run parallel to the Coronado Railroad track, which is within a 40-foot-wide easement that extends the entire length of the project site along its eastern edge. The majority of developed use areas accessible to the public are in the Harbor District. The Otay District is characterized by industrial uses and primarily closed to the public. The Sweetwater District is generally undeveloped.

The Harbor District has the greatest diversity of existing and planned uses. The Marina View, Bayside and Bayfront Parks, existing South Bay Boatyard, Chula Vista harbor, waterfront restaurants, yacht club, RV Park, and former industrial and parking facilities associated with the former Goodrich South Campus are all located in this area, as are the former AFS Industries' warehouses, which are located off Sandpiper Way north of the Marina.

The Otay District is primarily industrial and occupied by various industrial facilities, such as the SDG&E 230 kV power lines and electrical switchyard with associated right-of-ways (ROWs), and South Bay Power Plant (SBPP). The SBPP includes a power block, power islands, air-cooled condensers, parking areas, other ancillary facilities, and fuel storage tanks abutting the south side. At the southernmost end of the Otay District is the former Liquefied Natural Gas (LNG) site. Remnants of aboveground storage tanks (ASTs) still exist at this location.

Photos A through R contained in *Appendix 4.4-1* depict the visual character of the various existing use areas on the project site. Higher visual quality elements are generally located near the waterfront and generally include natural or open space areas. Lower visual quality elements tend to be located in the interior, northern, and southern peripheries of the subject site. Examples include general industrial buildings, the boatyard, the power plant/switchyard, and the RV Park.

The “visual character units” contributing to the visual quality and character of the site are described below. For the purpose of discussion, each visual character unit was identified based on its most distinguishing characteristic. The locations of various units discussed in this report are shown on *Figure 4.4-1, Existing Visual Environment*.

- **Existing Industrial (Unit 4):** Existing buildings have a low visual quality due to their imposing building mass and height, metallic construction, or poor quality fencing and screening materials. Industrial facility buildings are located off site, adjacent to the Harbor District, and in the Harbor and Otay Districts.
- **Open/Undeveloped Land (Unit 5):** Large vacant lots, while open, tend to have a low visual quality stemming from the presence of perimeter chain-link fencing and overgrown weeds. Open/undeveloped parcels of land are located in the Sweetwater, Harbor, and Otay Districts.
- **RV Park (Unit 6):** The RV Park has a low visual quality due to visual clutter and negative contrast with the adjacent waterfront park and open space. The RV Park is located in the Harbor District.
- **Waterfront Parks/Beaches (Units 7A, 7B, 7C):** Waterfront parks and beaches have a high visual quality due to their waterfront location and visibility from open space areas and connections from portions of the project site farther inland. Elements that define the character of this area include large turf areas, benches, tables, armadas, paved walking/jogging paths, and sand for the beach areas. Access is provided to the water’s edge and views of the Bay and Silver Strand/Coronado are unobstructed, providing the viewer with visual continuity of the various elements of the parks and nearby built urban environment. Representative on-site locations include the Bayside Park, Chula Vista Bayfront Park, and Marina View Park. These parks are located in the Harbor District.
- **Chula Vista Harbor and Marina (Unit 8):** This area provides a high visual quality due to its waterfront location and operations, connection to the Bay, and the uniqueness of the elements (boats, boat launch, support facilities, jetties/breakwaters, parks, and public art) that together constitute viewers’ perception of the area as a marina. The harbor and marina are located in the Harbor District.
- **J Street/Marina Parkway (Unit 9):** This entryway provides high visual quality due to the presence of landscaped medians, linear parks, entry monuments, and pedestrian

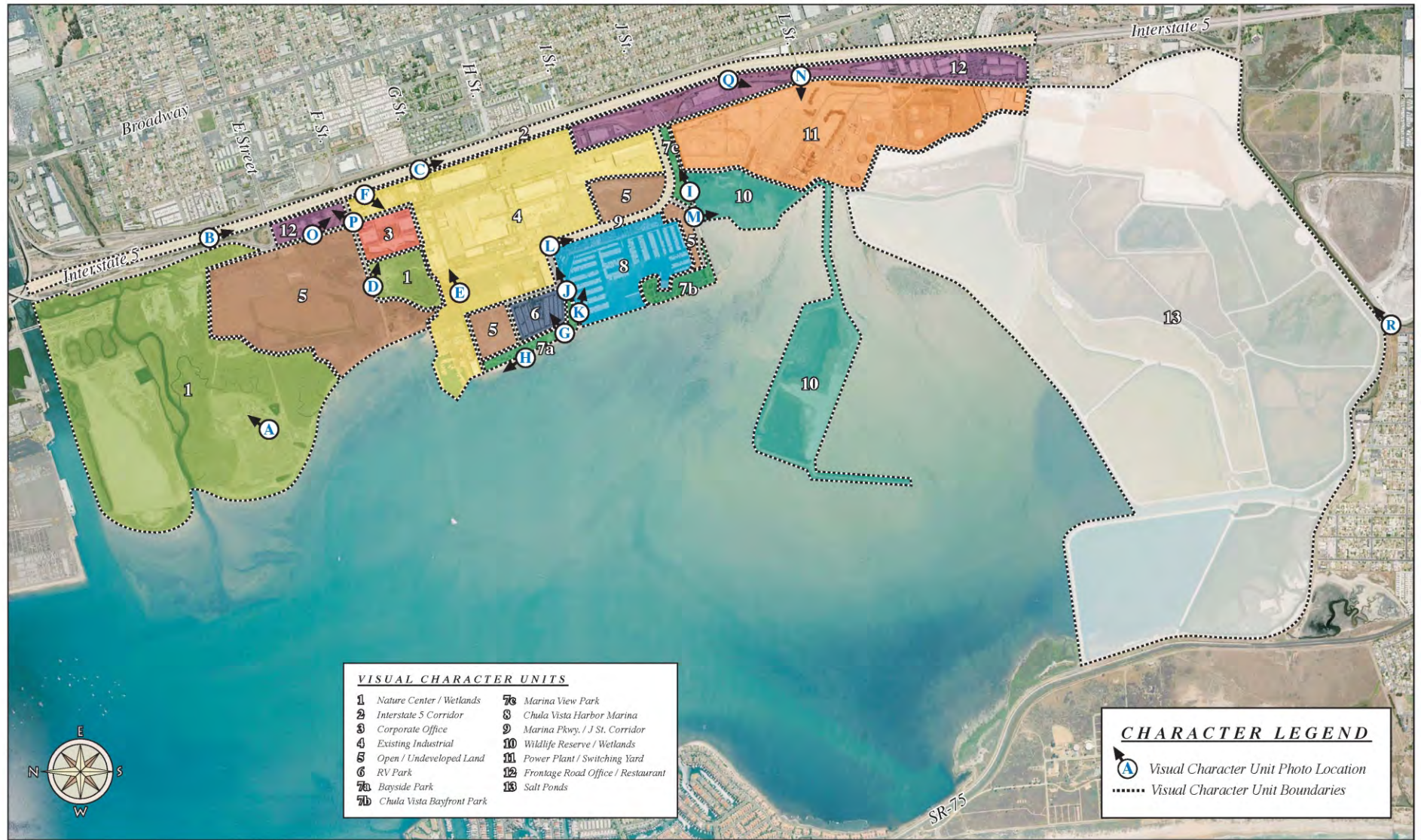
walkways. Views to the water are unobstructed and incorporated into the scene. These streets are located in the Harbor District.

- **Frontage Road Offices/Restaurants (Unit 12):** Views of frontage road offices and restaurants are generally considered neutral or moderate. These areas do not affect much of the viewing scene because they are few in number, small in land area, and generally low-lying. Multistory structures tend to be located in close proximity to the freeway or taller industrial buildings that minimize their height. Frontage Road, including these offices and restaurants, is located off site between the project site and Interstate 5 (I-5).
- **Power Generating Station (Unit 11):** Views of the SBPP and associated facilities in the Otay District are of low visual quality to the public viewer. The area is mostly cleared land with no vegetation and multistory industrial structures. The overall sensitivity to change of this character unit is low.

On the adjacent lands, there are a number of major visual elements with high and moderate visual quality. These include corporate office buildings to the east, the undeveloped wildlife preserve to the north and a series of salt ponds to the south. Low visual quality uses exist on the eastern edge of the Proposed Project site where it is bound by medium-intensity industrial uses; visitor-serving commercial uses; and I-5, a regionally significant thoroughfare.

- **Corporate Office (Unit 3):** Corporate office uses are of moderate visual quality to the public viewer. The size of the structure does not dominate the viewshed due to the larger, more visible industrial buildings on adjacent properties. Corporate office buildings are located off site, adjacent to the Sweetwater and Harbor Districts.
- **Sweetwater Marsh National Wildlife Refuge (NWR) and Chula Vista Nature Center (Unit 1):** This land use is of high visual quality due to its undeveloped nature, which includes saltwater marshes and tidelands. The Nature Center's access road also contributes to the visual character. The Sweetwater Marsh NWR, including the F & G Street Marsh component, is located adjacent to the Sweetwater and Harbor Districts.
- **I-5 Freeway Corridor (Unit 2):** The freeway has a low visual quality due to the wide expanses of pavement; steep, inaccessible landscaped buffers; and either raised or sunken elevations. The I-5 is located east of the entire Proposed Project site.
- **South Bayfront/Salt Ponds (Unit 13):** The south Bayfront and salt ponds/salt works area is of moderate visual quality due the lack of vegetation and unnatural character of the retaining walls and seawalls. In addition, there is little transition from the salt ponds to power generating station. The salt ponds and associated Salt Works are located directly west and south of the Otay District. [A large portion of the Salt Works is located within the boundaries of the South San Diego Bay Unit of the San Diego Bay NWR.](#)





SOURCE: KTU+A

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Visual Character Unit Locations Legend**

**FIGURE**  
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#### 4.4.1.3 Existing Views

There is currently no easily recognizable entrance to the Bayfront. The Bay itself is seldom, if ever, visible from I-5, primarily due to a lack of elevated viewing areas and intervening maritime, industrial, and transportation facilities situated between the freeway and the bayshore. From the project site's E Street entrance, railway features and trees along Bay Boulevard obscure views of the Bay and undeveloped land in the northern portion of the site. Power lines in the area also dominate views to and from the Proposed Project area. Travelers on Lagoon Drive from E or F Streets pass large industrial facilities, including the existing South Bay Boatyard, on their way to the bayshore and parks. Industrial uses in the area are often encircled with chain-link and/or tall barbed-wire fences. Undeveloped or vacant lots and warehouse structures detract from the overall visual experience of visitors to the Marina and bayshore parks. Large-scale development also obstructs views of the Bay from some areas to the east.

Public viewing locations are shown on *Figure 4.4-2a*. Viewing scenes are shown in Photographs 1 through 17 (*Figures 4.4-2b* through *4.4-2d*). Views of the Bay are considered to be regionally significant. Currently, the entire Proposed Project site is physically divided from downtown Chula Vista by I-5. Consequently, views of the project site can only be seen from a few locations east of the freeway. Among these are the F Street corridor, which provides a long-distance view to the Bay from several blocks east of I-5 and Bay Boulevard. The Bay can be viewed from the I-5 overpass at J Street and from the State Route 54 (SR-54) freeway flyover at I-5. Views of the water are limited to views from E and F Streets, H Street, Marina Parkway near J Street, and Bay Boulevard across from the SBPP.

#### 4.4.1.4 Visual Study Methodology

This study of the visual environment was evaluated by describing the visual resources and character of the area, identifying the viewer groups that would see the Proposed Project elements, determining the contrast of the Proposed Project with the setting, and estimating the potential viewer response to these changes in the visual environment. Visual character and quality are important aspects of defining visual resources and the sensitivity to change. Field inspection and photography were used in the analysis of visual resources. Visual character units were mapped to describe areas of similar character and their sensitivity to change. Viewer exposure and sensitivity help to determine viewer response. The assessment of viewer sensitivity to change was based on an evaluation of typical viewer location, activity, and values. Eighteen locations with views of the project site were selected as "Candidate Key Observation Points" (*Figure 4.4-3*). These 18 Candidate Key Observation Points serve to document the viewing scene from many different areas around the project site and provide a group of photos from which visual simulations could be created. Visual simulations of the Proposed Project alternatives were prepared to assist in the evaluation of the degree of change. A determination as to the adversity

of visual changes was then made and methods to mitigate adverse visual impacts were developed.

#### **4.4.1.5 Adopted Plans and Guidelines**

##### **a. Landform and Visual Policies**

The landform and visual policies for the Proposed Project are based upon the Port Master Plan (PMP), the adopted City of Chula Vista General Plan, the Chula Vista Bayfront Local Coastal Plan (LCP) Land Use Plan (LUP), and the Chula Vista Bayfront Specific Plan. For the Proposed Project, the City of Chula Vista General Plan, Chula Vista Bayfront LCP LUP, and the Chula Vista Bayfront Specific Plan apply to the lands under the City's jurisdiction, whereas the PMP applies to the state trust lands under the Port's jurisdiction.

The relevant goals and policies contained in the above plans are listed in *Table 4.4-1*. The elements and policies detailed in the table are located on or near the project site, as shown in *Figure 4.4-4*. These goals, objectives, and policies provide the official planning policies for the physical development of the lands held in trust by the Port and under the City's jurisdiction. They intend to preserve and enhance scenic resources, such as views, and guide the design of features such as entryways, gateways, streetscapes, buildings, parks, and plazas.

##### **b. Chula Vista Gateways and Scenic Roadways**

The City of Chula Vista General Plan identifies E and J Streets as gateway roadways. Gateway roadways are entryways into the City that offer opportunities to establish a strong community image and enhance community pride. Special design treatments, including proper signage and landscape, would signify arrival into the City and progression to key destinations along the gateway streets.

Marina Parkway is a defined scenic roadway corridor. Scenic Roadways are defined by their "unique natural features and roadway characteristics, including enhanced landscaping, adjoining natural slopes, or special design features that make traveling a pleasant visual experience." Development guidelines/goals for scenic corridors provide for the incorporation of "substantial" adjacent open space, appropriate landscaping and/or building setbacks, and coordinated signage.

##### **c. Design Guidelines**

Significant projects submitted for approval to either the Port or City are required to undergo design review.





SOURCE: KTU+A

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Public Viewing Locations Legend**

**FIGURE**  
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**Public View Photo 1**  
Looking south towards project from Pepper Park



**Public View Photo 2**  
Looking south on flyover from SR-54W to I-5 South



**Public View Photo 3**  
Looking south from Chula Vista Nature Center



**Public View Photo 4**  
Looking west from Lagoon Drive & Bay Boulevard



**Public View Photo 5**  
'H' Street at Bay Boulevard looking west  
*Note: Buildings south of 'H' St. have since been demolished.*



**Public View Photo 6**  
Looking north from Bayside Park

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SOURCE: KTU+A

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Photographs 1 through 6**

**FIGURE**

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**Public View Photo 7**  
Looking south from Bayside Park



**Public View Photo 8**  
Looking south from pier at Chula Vista Harbor



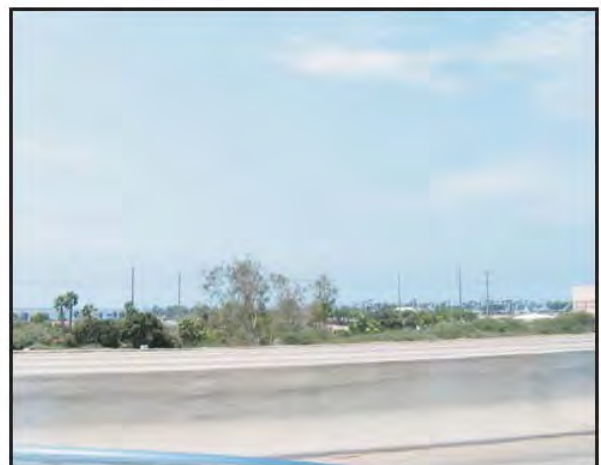
**Public View Photo 9**  
Looking north from Chula Vista Bayfront Park



**Public View Photo 10**  
Looking east from Marina Parkway & 'J' Street



**Public View Photo 11**  
Looking southwest from Marina View Park



**Public View Photo 12**  
Looking west from Interstate 5 North at 'J' Street

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SOURCE: KTU+A

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**Public View Photo 13**  
Looking northwest from Bay Blvd. at 'L' Street



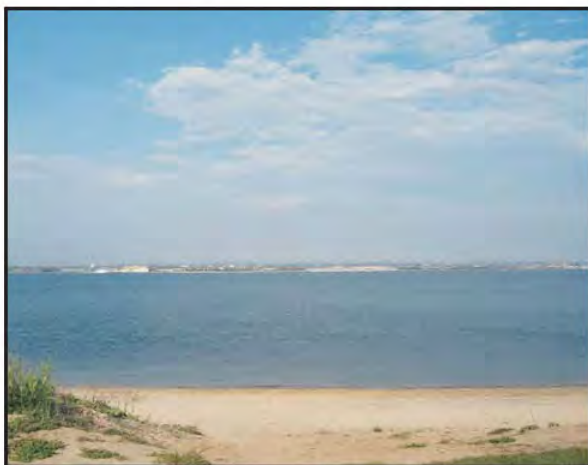
**Public View Photo 14**  
End of 13th Street at Cypress Ave. looking north



**Public View Photo 15** : Lookout at South Bay Biological Study Area looking northeast



**Public View Photo 16**  
Looking northeast from along Silver Strand



**Public View Photo 17**  
Looking east from Grand Caribe Shoreline Park

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SOURCE: KTU+A

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SOURCE: KTU+A

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Key Observation Point Locations Legend**

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SOURCE: KTU+A

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Development Guidelines Map**

**FIGURE**  
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**TABLE 4.4-1**  
**Landform and Visual Goals, Objectives, and Policies**

Objective	Policies
<b>Port Master Plan (PMP)</b>	
<b>Goal VIII</b> The Port will enhance and maintain the Bay and tidelands as an attractive physical and biological entity.	<ul style="list-style-type: none"> <li>• Each activity, development, and construction should be designed to facilitate its particular function, which function should be integrated with and related to the site and surroundings of that activity.</li> <li>• Views should be enhanced through view corridors, the preservation of panoramas, accentuation of vistas, and shielding of the incongruous and inconsistent.</li> <li>• 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.</li> <li>• Establish and foster an artworks program to promote, enhance, and enliven the waterfront experience through the public and private placement of works of art.</li> </ul>
<b>Goal IX</b> The Port will ensure physical access to the Bay, except as necessary to provide for the safety and security, or to avoid interference with waterfront activities.	<ul style="list-style-type: none"> <li>• Provide “windows to the water” at frequent and convenient locations around the entire periphery of the Bay with public ROW, automobile parking, and other appropriate facilities.</li> <li>• Provide access along the waterfront wherever possible with promenades and paths where appropriate and elimination of unnecessary barricades that extend into the water.</li> </ul>
<b>City of Chula Vista General Plan</b>	
<b>Objective LUT 8</b> Strengthen and sustain Chula Vista’s image as a unique place by maintaining, enhancing, and creating physical features that distinguish Chula Vista’s neighborhoods, communities, and public spaces, and enhance its image as a pedestrian-oriented and livable community.	<p><b>LUT 8.1:</b> Develop a program to enhance the identity of special districts and neighborhoods to create variety and interest in the built environment, including such items as signage, monuments, landscaping, and street improvements.</p> <p><b>LUT 8.4:</b> Encourage and require, where feasible, the incorporation of publicly accessible urban open spaces, including parks, courtyards, water features, gardens, passageways, paseos, and plazas, into public improvements and private projects.</p> <p><b>LUT 8.5:</b> Prepare urban design guidelines that help to create pedestrian-oriented development by providing:</p> <ul style="list-style-type: none"> <li>• Pedestrian circulation among parcels, uses, transit stops, and public or publicly accessible spaces</li> <li>• Human-scale design elements</li> <li>• Varied and articulated building facades</li> <li>• Visual (first floor clear glass windows) and physical access for pedestrians</li> <li>• Ground floor residential and commercial entries that face and engage the street</li> <li>• Pedestrian-oriented streetscape amenities.</li> </ul> <p><b>LUT 8.6:</b> Develop a master plan for artwork in public places that would identify the types of art desired and establish appropriate settings for the display of art, including within public ROWs and landscape medians.</p> <p><b>LUT 8.7:</b> Ensure that vacant parcels and parcels with unsightly storage uses, such as auto salvage yards, are appropriately screened from the street to reduce their negative visual affects.</p>

TABLE 4.4-1 (Cont.)

Objective	Policies
<b>Objective LUT 9</b> Create enhanced gateway features for City entry points and important other entries, such as to special districts.	<b>LUT 9.2 and LUT 9.3:</b> Require the City to prepare entryway/gateway master plans for each of the identified entryways/gateways. The master plans shall include design guidelines and standards for public improvements, as well as for private or public development within these designated areas. Examples may include enhanced pavement and/or sidewalk standards, enhanced landscape standards, thematic sign standards, and special architectural standards for buildings or other structures.  The City is also required to prepare a General Plan Implementation Program to ensure establishment of these gateway master plans. The project approval process includes a design guideline conformance check by the City.
<b>Objective LUT 10</b> Create attractive street environments that complement private and public properties, create attractive public ROWs, and provide visual interest for residents and visitors.	<b>LUT 10.1:</b> The City shall create unique landscape designs and standards for medians for each major thoroughfare to distinguish each from the other and to provide a special identity for districts and neighborhoods. <b>LUT 10.2:</b> The landscape designs and standards shall include a coordinated street furniture palette including waste containers and benches, to be implemented throughout the community at appropriate locations. <b>LUT 10.3:</b> Provide a well-designed, comfortable bus stop for use throughout the City. <b>LUT 10.4:</b> Prior to the approval of projects that include walls that back onto roadways, the City shall require that the design achieves a uniform appearance from the street. The walls shall be uniform in height, use of materials, and color, but also incorporate elements that add visual interest, such as pilasters. <b>LUT 10.5:</b> Require undergrounding of utilities on private property and develop a priority based program of utility undergrounding along public ROWs.
<b>Objective LUT 11</b> Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.	<b>LUT 11.1:</b> Promote development that creates and enhances positive spatial attributes of major public streets, open spaces, cityscape, mountain and Bay sight lines, and important gateways into the City. <b>LUT 11.2:</b> Promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista, and create a vital and attractive environment for businesses, residents, and visitors. <b>LUT 11.3:</b> The City shall, through the development of regulations and guidelines, ensure that good project landscape and site design creates places that are well-planned, attractive, efficient, safe, and pedestrian friendly. <b>LUT 11.4:</b> Actively promote architectural and design excellence in buildings, open space, and urban design. <b>LUT 11.5:</b> Require a design review process for all public and private discretionary projects (which includes architectural, site plan, landscape, and signage design) to review and evaluate projects prior to issuance of building permits to determine their compliance with the objectives and specific requirements of the City's Design Manual, General Plan, and appropriate zone or Area Development Plans.
<b>Objective LUT 13</b> Preserve scenic resources in Chula Vista, maintain the City's open space network, and promote beautification of the City.	<b>LUT 13.1:</b> Identify and protect important public viewpoints and viewsheds throughout the planning area, including features within and outside the planning area, such as mountains, native habitat areas, San Diego Bay, and historic resources.  <b>LUT 13.4:</b> Any discretionary projects proposed adjacent to scenic routes, with the exception of individual single-family dwellings, shall be subject to design review to ensure that the design of the development proposal will enhance the scenic quality of the route. Review should include site design, architectural design, height, landscaping, signage, and utilities. Development adjacent to designated scenic routes should be designed to:



TABLE 4.4-1 (Cont.)

Objective	Policies
	<ul style="list-style-type: none"> <li>• Create substantial open areas adjacent to scenic routes through clustering development</li> <li>• Create a pleasing streetscape through landscaping and varied building setbacks</li> <li>• Coordinate signage, graphics and/or signage requirements, and standards.</li> </ul>
<b>Chula Vista Local Coastal Program (LCP) Land Use Plan (LUP)</b>	
<b>Objective VW.1</b> Plan and develop the Bayfront to ensure provision of important views to, from, and within the project area.	<b>Policy VW.1.A</b> focuses on preserving and establishing views from the freeway and major entryways, roadways within the site, perimeters of the Bayfront outward, and high-rise development vistas. This policy confines high-rise within the Midbayfront area, or the area proposed as the Sweetwater District.
<b>Chula Vista Bayfront Specific Plan, Chula Vista Municipal Code 19.85.006</b>	
1. Form and Appearance	c. Improve the visual quality of the shoreline by promoting public and private uses which provide proper restoration, landscaping, and maintenance of shoreline areas.
2. Specific Provisions	g. Architectural Edges: The development shall comply with the following conditions in the specified areas: 4. Firm Edges: Firm edges are required where a strong visual form, generally linear, is necessary to provide either for a terminus of views in certain directions, or a sense of entry or arrival. These edges should be formed by buildings, but also may be achieved by use of earth berms or mass plantings. 5. Irregular Building Edges: Irregular building edges are required where it is visually desirable to soften or de-emphasize the distinction between open space areas and adjoining development. This prevents harsh contrasts between different areas, and allows visual penetration between areas, and variation in the spatial experiences and qualities in these areas. h. View Points: Development of the Bayfront shall ensure provision of three types of views: 1. Views from the Freeway and Major Entry: Ensure a pleasant view onto the site and establish a visual relationship with the Bay, marshes, and Bay-related development. 2. Views from Roadway within the Site (particularly from Marina Parkway, to the marshlands, Bay, parks, and other Bay-related development): Locations shall preserve a sense of proximity to the Bay and marshlands. 3. View from the Perimeters of the Bayfront Outward: Views which are primarily pedestrian-oriented, stationary, and more sustained should be experience from parts of the open space and pathway system and enable viewers to renew visual contact at close range with the Bay and marshlands. (Ord. 2532, 1992; Ord. 2168 Sec. 1 (part), 1986; Res. 11903, 1985.)

i. Port District

Tenant requests for surface or subsurface improvements or new construction, reconstruction, modification, or demolition, must be submitted with plans and specifications to the Port for approval. Plans are reviewed by Port staff for compliance with policies, guidelines, and provisions of the lease. In addition to architectural features, additional design areas addressed include provisions for public art, signage, and tree removal.

**Architectural Review.** Each project design is reviewed individually. For projects costing up to \$500,000 they would receive either an administrative or standard approval after review of plans for conformance to Port design criteria. For projects in excess of \$500,000, or if the project significantly alters the appearance or silhouette of the site, approval of the project's architectural elements, environmental effects, and any additional considerations is required by the Board.

**Public Art Program.** The Port has established a public art program designed to enhance the visual character and quality of the area, and promote a unique identity to the region. The Port's Public Art Program, which is set forth in Board of Port Commissioners Policy No. 609 provides for program operation, collection, maintenance, and seamless inclusion of public artworks on all tideland properties. Each year the Board of Port Commissioners sets aside half of one percent of the Port's projected gross revenues for that year. The money is expended for specific works of art or allocated to an art fund set aside within the Port revenue fund for the acquisition of art for public areas within the Port.

New development valued at more than \$1,000,000 or redevelopment projects valued over \$500,000 are required to incorporate a public art plan in design submittals and provide public artwork(s) equal to one percent of the project's total proposed development budget. Approval by the Board is required for all projects meeting the above criteria (refer to: Public Art Program BPC Policy 609).

**Signage Guidelines.** Tenant signs must comply with Tenant Signage Guidelines. Signs are reviewed for design, background, size, color, fonts, size and coloring of lettering, illumination, and landscaping if applicable.

As noted above, tenants are also required to include artwork in their development or redevelopment projects per Board policy.

ii. City of Chula Vista

**Design Review.** The City's design review process involves a comprehensive evaluation of the site plan, and architectural and landscape design components. All projects within a redevelopment zone, such as the Chula Vista Bayfront Master Plan Area, would be subject to



design review. The City's Design Manual outlines design considerations to be evaluated and addresses elements of site planning such as grading, compatibility, building placement, parking, screening, pedestrian circulation, and design of trash collection areas. Architectural review considers features such as building design, color, scale, lighting, compatibility, and location of windows and mechanical equipment. Each of the above criteria would be applied to proposed residential, commercial recreation/retail, and parking facilities as well as park and open space uses within the City's jurisdiction.

**Public Art Program.** Chula Vista Municipal Code Section 19.91 requires funding and installation of public art. The program is coordinated by the Office of Cultural Arts and promoted by a Cultural Arts Commission, a Public Art Sub-Committee, and the Mayor's Performing and Visual Arts Task Force.

#### 4.4.2 Impact Significance Criteria

According to Appendix G of the CEQA Guidelines, and Professional Guidelines developed by the American Society of Landscape Architects, the Proposed Project would have a significant impact on aesthetics and visual quality if:

1. It has a substantially adverse effect on a scenic vista, public view, or scenic resource (such as a symbol or landmark) (View Quality)
2. It substantially degrades the existing visual character or quality of the site and its surroundings (Visual Quality)
3. It creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area (Light and Glare)
4. It conflicts with urban design guidelines in adopted plans and policies (Visual Character).

#### 4.4.3 Visual Impact Assessment

The visual analysis for the Proposed Project primarily relies on the visual simulations (*Figures 4.4-5a through 4.4-14b*) as discussed below and the methodology previously described in *Section 4.4.1.4*. The visual quality, view quality, and visual character of various components of the Proposed Project were assessed in the technical ~~studies-study~~ for ~~Gaylord, Pacifica,~~ and program level components (see *Appendices 4.4-1 and 4.4-2, and 4.4-3*). Project level impacts were also conducted for the RCC on parcel H-3; however, the specific RCC project proposed by Gaylord has been withdrawn and no specific development proposal currently exists for that parcel. Site specific review of visual impacts will be required pursuant to CEQA Guidelines Section 15168 when a project-specific proposal is received; however, this section retains the visual analysis for the Gaylord RCC to promote informational purposes of CEQA and to describe potential program-level visual impacts of the future RCC on parcel H-3. Impacts on the visual quality,

character, and views specifically related to the Pacifica ~~and Gaylord~~ developments are also included in this section. Viewer groups most affected by proposed uses were identified along with the level of impact. *Table 4.4-2* provides a summary of the impacts associated with the Proposed Project as related to each of the four impact significance criteria described above.

**TABLE 4.4-2**  
**Visual Impact Assessment Summary**

Impact Assessment for Proposed Project	Project Level	Program Level
	Pacific Gateway	
View Quality: The Proposed Project would have a significant impact if it has a substantially adverse effect on a scenic vista, public view, or scenic resource (such as a symbol or landmark).		
1(a): Change the visual quality of a public view scene	ModerateLow	Moderate
1(b): Eliminate an existing publicly accessible viewing location	Neutral or N/ANeutral or N/A	Neutral or N/A
1(c): Substantially block a public view corridor of an important viewing scene	ModerateLow	Moderate
Summary of View Quality Impacts	Moderate Adverse ImpactLow Adverse Impact	Moderate Adverse Impact
Visual Quality: The Proposed Project would have a significant impact if it substantially degrades the existing visual character or quality of the site and its surroundings.		
2(a): Removal of visual resources affecting quality of visual scene	LowNeutral or N/A	Low
2(b): Create a cluttered or distracting appearance resulting in negative aesthetic	ImprovementImprovement	Improvement
Summary of Visual Quality Impacts	Low Adverse ImpactImprovement	Low Adverse Impact
Light and Glare: The Proposed Project would have a significant impact if it creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area.		
3: Light and glare impacts	ModerateModerate	Moderate
Summary of Light and Glare Impacts	Moderate Adverse ImpactModerate Adverse Impact	Moderate Adverse Impact
Visual Character: The Proposed Project would have a significant impact if it conflicts with urban design guidelines in adopted plans and policies.		
4(a): Conflict with the adopted plans of the Port and City of Chula Vista	Neutral or N/ANeutral or N/A	Neutral or N/A
4(b): Exceed typical height or bulk found in the area	ModerateModerate	Moderate
4(c): Have an architectural style or materials contrary to the adjacent area	Neutral or N/ANeutral or N/A	Neutral or N/A
4(d): Have an adverse effect on designated scenic roadway or gateways	LowNeutral or N/A	Low
4(e): Affect a pleasant view/visual relationship between the Bay and development	LowLow	Low
Summary of Visual Character Impacts	Moderate Adverse ImpactModerate Adverse Impact	Moderate Adverse Impact

Source: KTU+A Visual Assessments, 2008.



**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**  
 These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 1A**  
 Pacifica Project Specific  
**Key Observation Point #5:**  
 View from Chula Vista Nature Center

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 1B**

Pacifica Project Specific & Program Level

**Key Observation Point #5:**

View from Chula Vista Nature Center

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 2A**  
**Pacifica Project Specific**  
**Key Observation Point #10:**  
 View from Southbound I-5 at 'J' Street

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**Existing Conditions**



**Proposed Conditions**



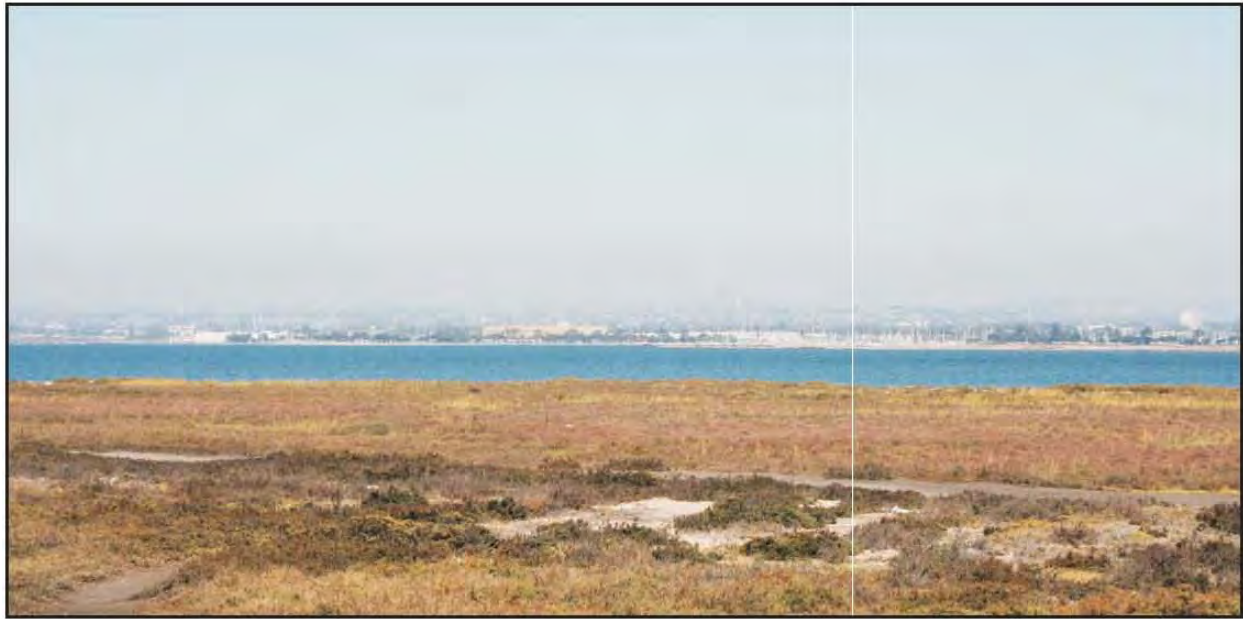
**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 2B**  
**Pacifica Project Specific &**  
**Program Level**  
**Key Observation Point #10:**  
**View from Southbound I-5 at 'J' Street**

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**  
 These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

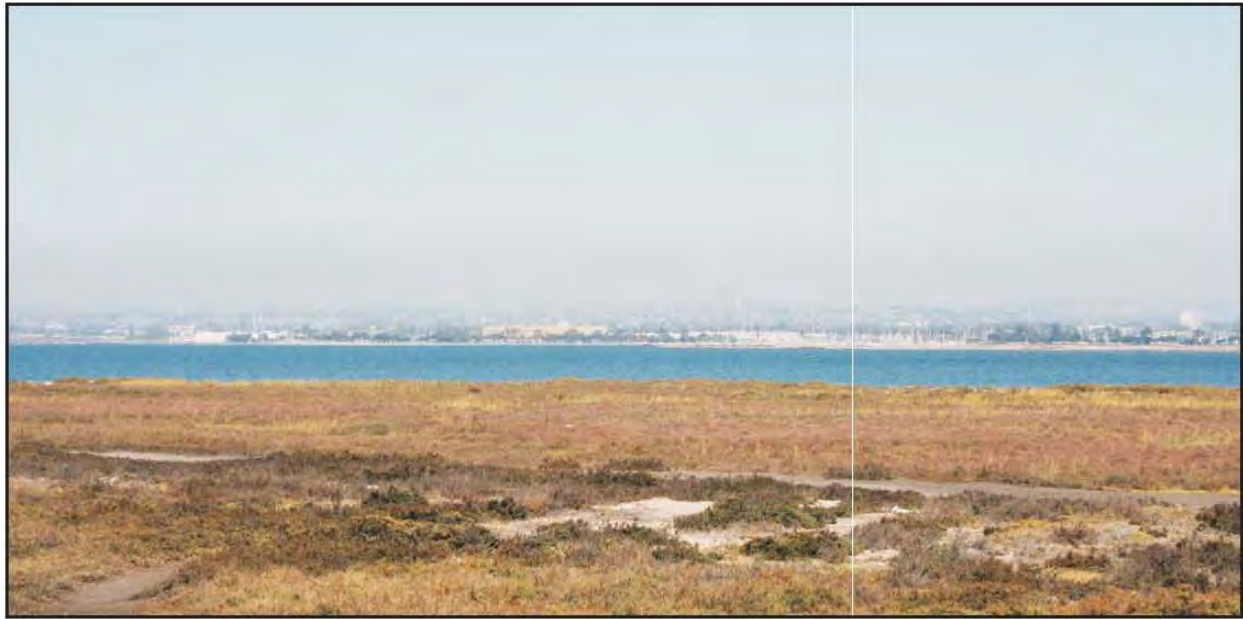
**Visual Simulation 3A**  
 Pacifica Project Specific  
**Key Observation Point #16:**  
 View from South Bay Biological Study Area

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**  
These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 3B**  
Pacifica Project Specific &  
Program Level  
**Key Observation Point #16:**  
View from South Bay Biological Study Area

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 4A**  
**Pacifica Project Specific**  
**Key Observation Point #17:**  
 View from Loews Coronado Bay Resort

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 4B**

Pacifica Project Specific & Program Level

**Key Observation Point #17:**

View from Loews Coronado Bay Resort

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 5A**

RCC

**Key Observation Point #5:**

View from Chula Vista Nature Center

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

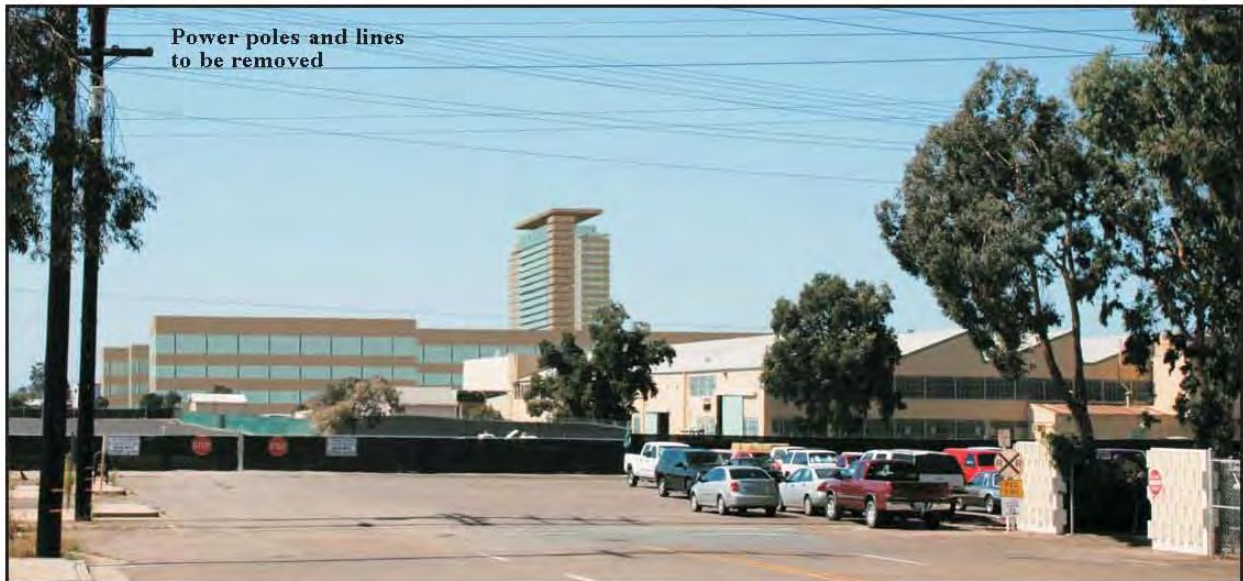
These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 5B**  
RCC & Program Level  
**Key Observation Point #5:**  
View from Chula Vista Nature Center

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 6**

RCC

**Key Observation Point #9:**

View from 'H' Street at Bay Boulevard

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 7**

RCC

**Key Observation Point #10:**

View from Southbound I-5 at 'J' Street

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 8**

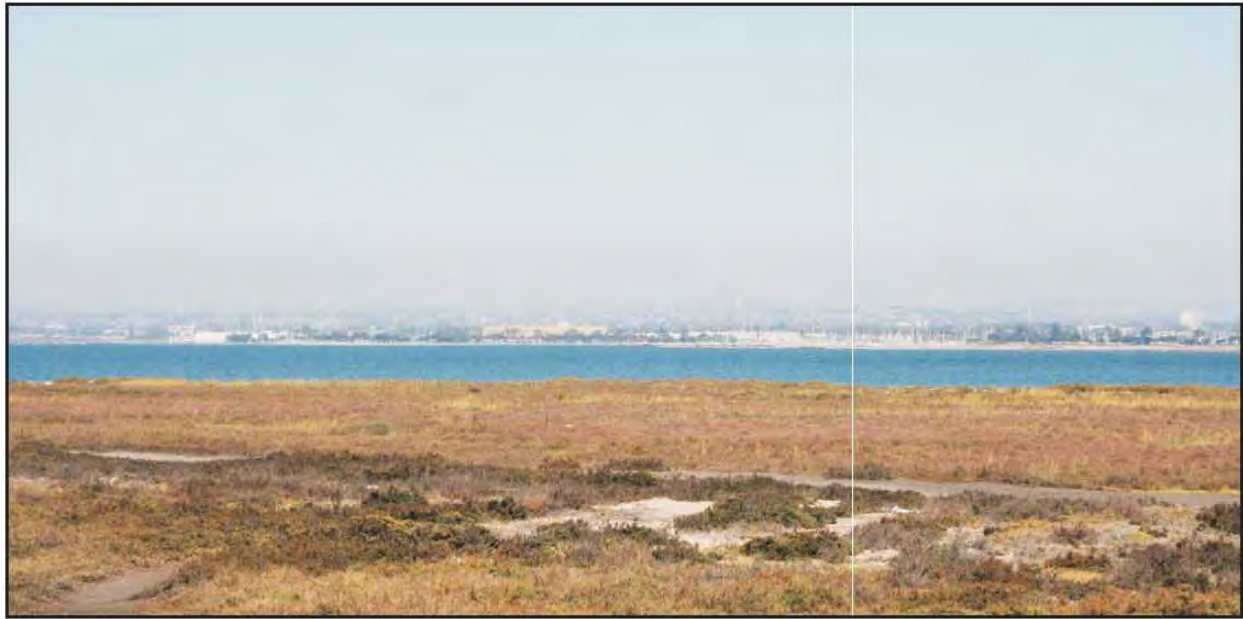
RCC

**Key Observation Point #13:**

View from Chula Vista Bayfront Park

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 9A**

RCC

**Key Observation Point #16:**

View from South Bay Biological Study Area

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SOURCE: KTU+A

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan

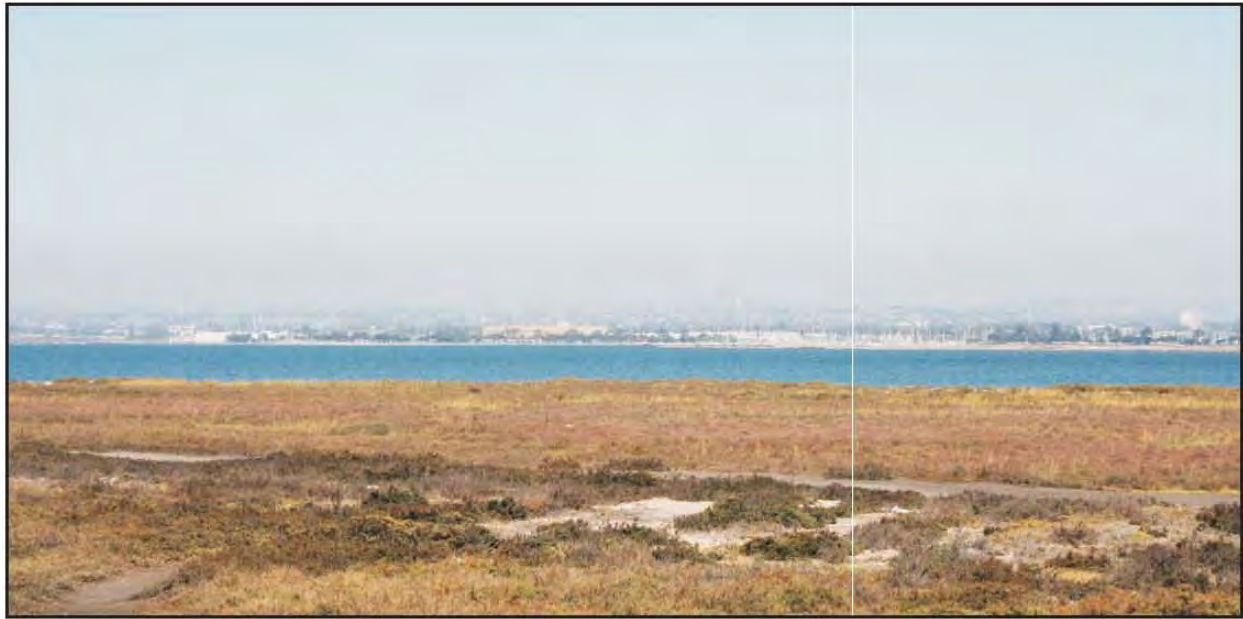
**Visual Simulation 9A (RCC)**

**FIGURE**

**4.4-13A**

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**  
 These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 9B**  
 RCC & Program Cumulative  
**Key Observation Point #16:**  
 View from South Bay Biological Study Area

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 10A**

RCC

**Key Observation Point #17:**

View from Loews Coronado Bay Resort

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**Existing Conditions**



**Proposed Conditions**



**Key Observation Point Photo Location**

**Simulation Notes:**

These simulations represent approximate renderings of project elements based on currently available information. They are shown in mass form since architectural details are not yet known. In general, structures shown in this format appear bigger and bulkier than those showing detailed treatments. In some cases, an assumption has also been made on landscape treatments that reflect the typical minimum required for projects of this type.

**Visual Simulation 10B**  
 RCC & Program Cumulative  
**Key Observation Point #17:**  
 View from Loews Coronado Bay Resort

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#### 4.4.3.1 Visual Simulation Descriptions

“Key Observation Points” are locations surrounding the project site where the viewer would likely notice a prominent change in the visual environment associated with the Proposed Project. There are thousands of locations where the project may be seen from, but the Key Observation Points are those that represent either the greatest number of viewers, the viewers most sensitive to change, those from a public viewing location with important viewing scenes, or from a location where the Proposed Project may block an important viewing scene.

Eighteen locations with views of the project site were selected as Candidate Key Observation Points (see *Figure 4.4-3*). Not all of these locations represent the worst-case viewing location nor all of the views that may be regionally significant. However, they do represent the best combination of visual issues that are being assessed by this study, though all do not require simulation to assess the impact. These 18 Candidate Key Observation Points serve to document the viewing scene from many different areas around the project site and provide a group of photos from which simulations can be selected.

After evaluating the probable visual changes, viewer groups, viewing duration, and viewer sensitivity, Candidate Key Observation Points 5, 9, 10, 13, 16, and 17 were selected for visual simulations. These points were chosen because they allow analysts to assess the broad project changes that will be seen by the viewer. They also represent some of the most important vantage points from which to view the project site. The visual simulations help to determine the affect of the project on existing visual resources and views. The simulation locations, views, and viewers are described below.

##### a. Pacifica Residential and Retail Project

Candidate Key Observation Points 5, 10, 16, and 17 were selected for visual simulations in order to determine the affect of the Pacifica Residential and Retail Project and the cumulative project affect on existing resources and views.

- **Visual Simulation 1 (Pacifica)—Key Observation Point 5:** Taken from Chula Vista Nature Center, west of the Sweetwater District, these simulations focus on the northern portion of the project site. The dominant viewer group would be visitors to the nature center (*Figures 4.4-5a and 4.4-5b*).
- **Visual Simulation 2 (Pacifica)—Key Observation Point 10:** These simulations depict views from the I-5 corridor and focus on the project elements that are located in the middle portion of the site. The dominant viewer group would be freeway drivers (*Figures 4.4-6a and 4.4-6b*).



- **Visual Simulation 3 (Pacifica)—Key Observation Point 16:** Taken from the South Bay Biological Area looking northeast, these simulations focus on the project elements located in the Harbor and Otay Districts of the project site. This vantage point gives a comprehensive look at the proposed buildings. These views are characteristic of views from the San Diego Wildlife Refuge and Bayshore Bikeway regional trail (*Figures 4.4-7a and 4.4-7b*).
- **Visual Simulation 4 (Pacifica)—Key Observation Point 17:** Taken from the west side of San Diego Bay, these simulations focus on project elements in the middle and southern portions of the project site. The dominant viewer groups include resort visitors and property owners on the Silver Strand (*Figures 4.4-8a and 4.4-8b*).

b. ~~Gaylord~~-Resort and ~~Convention-Conference~~ Center (RCC)

Candidate Key Observation Points 5, 9, 10, 13, 16, and 17 were selected ~~for visual simulations~~ in order to determine the affect of the ~~Gaylord~~-Resort and ~~Convention-Conference~~ Center (RCC) and the cumulative project affects on existing resources and views. ~~Project-specific visual simulations were originally prepared for the Gaylord project on parcel H-3; however, Gaylord has since withdrawn its project specific proposal. When a specific development proposal for H-3 is submitted to the Port, a site-specific review of visual impacts will be required pursuant to CEQA Guidelines 15168. The visual impact analysis conducted for the Gaylord RCC has been retained in this section to promote informational purposes of CEQA and includes a program-level description of the anticipated affect of the RCC on the visual environment from these Key Observation Points.~~

- **Key Observation Point 5:** Taken from Chula Vista Nature Center, west of the Sweetwater District, these simulations focus on the northern portion of the project site. The dominant viewer group would be visitors to the nature center (*Figures 4.4-9a and 4.4-9b*).
- **Visual Simulation 6 (~~Gaylord~~RCC)—Key Observation Point 9:** Taken from an existing industrial area adjacent to the I-5, this simulation focuses on the Harbor District. The dominant viewer groups would include local employees, arterial drivers, and visitors to the waterfront (*Figure 4.4-10*).
- **Visual Simulation 7 (~~Gaylord~~RCC)—Key Observation Point 10:** This simulation depicts views from the I-5 corridor and focuses on the project elements that are located in the middle portion of the site. The dominant viewer group would be freeway drivers (*Figure 4.4-11*).
- **Visual Simulation 8 (~~Gaylord~~RCC)—Key Observation Point 13:** Taken from the Chula Vista Bayfront Park looking north, this simulation focuses on the project elements that can be seen from the marina area (*Figure 4.4-12*).

- **Visual Simulation 9 (GaylordRCC)—Key Observation Point 16:** Taken from the South Bay Biological Area looking northeast, these simulations focus on the project elements located in the Harbor and Otay Districts of the Proposed Project site. This vantage point gives a comprehensive view of the proposed buildings. These views are characteristic of views from the San Diego Wildlife Refuge and Bayshore Bikeway regional trail (*Figures 4.4-13a and 4.4-13b*).
- **Visual Simulation 10 (GaylordRCC) — Key Observation Point 17:** Taken from the west side of San Diego Bay, these simulations focus on project elements in the middle and southern portions of the project site. The dominant viewer groups include resort visitors and property owners on the Silver Strand (*Figures 4.4-14a and 4.4-14b*).

The visual simulations were selected to represent a worst-case scenario for evaluating visual impacts of the Proposed Project. Simulations show the maximum site coverage and height for the buildings proposed in each option. Some of the simulated box buildings lack architectural refinement because they have yet to be designed. Other building representations depict more articulated features, based on a preliminary design (i.e., proposed residential) for which the design process has been initiated but not completed. Most importantly, however, none of the building simulations represent a final design. Instead, they are intended to show scale only. Finally, although specific landscaping design plans have not been developed, landscaping would be required as shown in the simulations to provide a visual buffer for structures.

#### 4.4.4.5 Visual Simulation Assessments

**Visual Simulations 1 and 5.** Visual Simulations 1 and 5 focus on the elements located in the central portion of the subject site in the Harbor District. This particular field of view looks back across an open space area toward the development that is closest to the viewer. These simulations demonstrate that the Proposed Project would contrast with the viewing scene, which is dominated by the natural setting. The background is especially important in this viewing location because it forms the horizon of the viewing scene and establishes an important transition between land and sky that contributes to the overall visual character of the scene. Visual Simulations 1 and 5 also show how the proposed arrangement of project elements would retain open natural views of the foreground as viewed from the Chula Vista Nature Center. This natural composition and distinctive visual pattern would be maintained by the area left undeveloped between the existing office/industrial buildings and the viewer, which lowers the contrast between the natural and the built environment. In addition, the untouched portion of the existing horizon would maintain some of the open character of the site.

With the projection of large-scale man-made structures into the existing landscape, the visual character changes from being mostly open and mostly natural to partly enclosed and partly urbanized. Some of the man-made structures can be seen in the middle ground; therefore, the

background scale of the proposed development is not that different, primarily due to perspective differences. If these same structures were located more to the north, closer to the edge of the Bay, they would dominate the view and contrast with the office and marina structures. The combination of the [Gaylord-RCC](#) tower and the other elements of the [resortRCC](#), along with the Pacifica development, will contrast moderately with the scale of man-made elements in the area, as well as the natural setting seen from this view. The vertical nature and the scale of the development contrasts with the horizontal nature of the view. However, the presence of the taller buildings from the Pacifica development and the rest of the Proposed Project serve to lessen the contrast with the taller [Gaylord-RCC](#) building.

Visual impacts relating to unity and visual organization of the site will be less than significant. Although the man-made structures would contrast sharply with the natural elements, each element occupies separate and distinct spaces. Any potentially unharmonious elements, therefore, would be confined to the transition between the two element groupings. The visual organization of the Proposed Project would have a neutral or improved impact on the visual environment as all project elements are being planned and coordinated. In addition, the removal of the transmission lines would improve the aesthetics and visual organization of the setting.

**Visual Simulation 6.** Visual Simulation 6 focuses on the effect of the Proposed Project as seen from H Street. This corridor is an important view corridor that is currently blocked by older warehousing and miscellaneous structures related to the original industrial development in the area. From this vantage point, the [Gaylord-RCC](#) hotel tower would be a prominent element in the view scene, although it would be located to the side of the view corridor. The lower portions of the [Gaylord-RCC](#) are not dominant in this view, although they are substantially taller than the foreground warehouses. Many of the existing elements shown in Visual Simulation 6 will change as a result of the Proposed Project. The lower power lines are likely to be removed, along with the fence across the road and several miscellaneous structures. The street and adjacent streetscape will be improved and the parking lot shown on the right side of the simulation would likely be removed. The visual character of the site would be changed by the establishment of a new thoroughfare, which would also define the edges of two districts of very different character. Without detail on the design intent in this area, it is difficult to simulate a potential view of the roadway.

As most of this portion of the site is already characterized by urban elements (i.e., pavement, sidewalks, parking, and industrial buildings), the addition of more buildings would not adversely impact the character of the site. However, even though the site is characterized by fairly large buildings, the scale of proposed buildings (up to [300-240](#) feet) would create a moderate contrast between the existing condition and the scale proposed. Though the [Gaylord-RCC](#) tower is tall, its detailed design and variety of elements will soften the contrast of the scale. The lower conference center buildings will not be substantially out of scale. The current setting has no view



of the waterfront. When the visual obstructions described above are removed, the Proposed Project is likely to see a narrow view corridor down to the waterfront. The foreground will be cleaned up and the visual quality of the area is likely to improve the aesthetic impression and overall visual organization of the site.

**Visual Simulations 2 and 7.** As shown in Visual Simulations 2 and 7, the visual character of the site would change dramatically with the addition of the proposed buildings. The scale of the proposed buildings does contrast with the existing one and two-story structures of the area. Some of the older warehousing is still visible, but dwarfed by the scale of the proposed structures. The character of the area is not natural or parkland; therefore, the fact that it will consist of buildings is not necessarily a major contrast. Although additional buildings are apparent in these simulations, their distance and form do not dominate the view as the character and scale are already set by the project area. In general, the scale of the ~~Gaylord-RCC~~ tower and buildings in the foreground of the simulations do not create major contrasts to the setting. The cumulative effect is probably less than if the Proposed Project were built only with the ~~Gaylord-RCC~~ buildings and not the Pacifica buildings in the foreground.

In addition, Visual Simulations 2 and 7 depict the improved visual environment resulting from removal of the lower voltage power lines in the area. It is not likely that the upper high-voltage/high-tension power lines will be removed, but the lower ones are feasible for undergrounding.

**Visual Simulation 8.** The view from Visual Simulation 8 focuses on the project elements that can be seen from the marina area, including the proposed ~~Gaylord-RCC~~ and parkland areas. As shown from this vantage point, the views of the waterfront will remain open. The buildings are far enough away from the waterfront so as to not contrast with and dominate over the park setting proposed for this area. The lower buildings of the conference center also serve to lower the height contrast of the main hotel tower. Though substantially larger than adjacent buildings, the scale does not seem excessive.

**Visual Simulations 3 and 9.** The view from Visual Simulations 3 and 9 focuses on the project elements that are located in the Harbor and Otay Districts of the project site, showing several elements of the Proposed Project. The proposed buildings would be much taller than anything else found in this area. To some extent, the natural area intactness will be affected by the construction of the proposed buildings in that it will disrupt the existing horizontal topography. Clustering of the most intense development together will serve to create a somewhat cohesive, unified whole. This massing of structures will help to disperse the scale impact and can use larger buildings to screen other large buildings.

From this distance, the shorter height of the buildings at the north end does not contrast as much as those in the Pacifica development, with the exception of the main ~~Gaylord-RCC~~ tower.

Though the ~~Gaylord~~-RCC tower and adjacent buildings of the proposed conference center depict a contrast with the current character and scale of the waterfront and skyline, they arise out of a moderate height building complex that tends to fit better with the background landforms. The lower buildings form a horizontal band, though much higher than adjacent buildings. The tower stands out as a major vertical element of the Proposed Project. This building, when added to the Pacifica buildings, would cumulatively change this viewing scene. As a result, the perceived view will be one of a high-density, somewhat crowded project with a series of very tall buildings in an area of the Bay that currently has little development. Changes in the visual organization and design character of the site are muted by the distant viewing location, neither improving nor degrading visual quality and character.

**Visual Simulations 4 and 10.** Visual Simulations 4 and 10 show the view location west to northwest of the ~~Gaylord~~-RCC site and west of the Pacifica site, across San Diego Bay from the Proposed Project. Because of its distance from the project site, this view gives a comprehensive view of the proposed buildings. Visible in Visual Simulation 4 are the taller towers of the Pacifica development. Shown in Visual Simulation 10 are the taller towers of the ~~Gaylord~~-RCC, arising out of the conference center buildings. While this view does show a contrast with the current character and scale of the waterfront, it also shows how the stepping of the buildings lowers the contrast to the south. A marked difference in building heights and scale will remain at the north end.

From this distance, the shorter height of the cumulative projects at the north end do not contrast as much as those in the Pacifica development, with the exception of the main ~~Gaylord~~-RCC tower. Although the ~~Gaylord~~-RCC tower is discernable and contrasts against the skyline, it arises out of a building complex of moderate heights that tend to fit better with the background landforms. The taller tower to the south, next to the Pacifica development's north end, contrasts to a greater degree in terms of height than the Pacifica buildings. When added to the Pacifica buildings, the ~~Gaylord~~-RCC tower will cumulatively change the viewing scene from this vantage point.

#### 4.4.4 Visual Impact Analysis

The following provides a discussion of potential visual impacts based on the established significance thresholds:

##### 4.4.4.1 View Quality

- 1. The Proposed Project would have a significant impact if it has a substantially adverse effect on a scenic vista, public view, or scenic resource (such as a symbol or landmark).**

a. Project Level Analysis

i. Pacifica Residential and Retail Project

The Pacifica Residential and Retail project will change the scale and character of the waterfront as the proposed buildings exceed the scale of the existing waterfront development. As shown in Visual Simulations 1 through 4 (*Figures 4.4-5a through 4.4-8b*), the proposed buildings are three to four times taller than the existing structures located to the north along the waterfront. Moreover, the existing structures do not extend beyond the horizontal plane formed by the eastern hillsides, whereas the proposed buildings will exceed beyond this horizontal plane. A moderate impact to the character of the view scene would result and would be considered significant under CEQA guidelines (**Significant Impact 4.4-1**). There is no objective number that can be used to set a height limit in order to ensure compatibility of the Pacifica buildings with existing adjacent structures. The “No L-Ditch option” for the Pacifica development would increase the building footprint by approximately 30 percent over the proposed Pacifica project, which would allow for an overall reduction in height and bulk of the proposed towers. The increased land area and decreased building heights under the No L-Ditch option may potentially reduce the impacts to view quality, although not to below a level of significance.

The Pacifica development will not block any public views listed above, with the exception of views as seen from portions of I-5 and J Street. The public views are unaffected from E Street, Bayside Park, Bayside Park Beach, Bayfront Park, and Marina View Park. The availability of public views from Chula Vista Marina are likely to be increased. Public views of the waterfront as seen from portions of I-5 would be blocked by the Pacifica development for a great number of individuals. These views exist for only a few seconds of travel time, however. It is important to note that the viewing scene observed through this view corridor contains some views of the water and shoreline. These views are not fully open due to existing vegetation blocking a substantial amount of the view of the waterfront. In general, a photo cannot capture the extent of the view due to its dynamic nature. As such, the view does allow for some blockage without having a negative affect. Although the viewing scene observed through this viewing corridor has limited views of the water and shoreline, this corridor does contain existing views of waterfront development such as the marinas and watercraft. The amount of blockage caused by the Pacifica project would be substantial, especially at the south end where views of the water exist. The Pacifica development would result in a moderate impact to view quality, which would be considered significant under CEQA guidelines (**Significant Impact 4.4-2**).

#### b. Program Level Analysis

##### ii. Gaylord Resort and Convention Center (RCC)

The ~~Gaylord~~ RCC development proposes buildings beyond the scale of the existing waterfront development, which would result in a noticeable change in the scale and character of the waterfront. As shown in Visual Simulations 5 through 10 (*Figures 4.4-9a through 4.4-14b*), the proposed buildings are two times greater in height than the large structures located to the north along the waterfront. The hotel tower is several times taller. While the existing structures ~~do are~~ not anticipated to extend beyond the horizontal plane formed by the eastern hillsides, the proposed buildings will slightly exceed this plane by at least one to two floors, or by several floors in the case of the hotel tower. A low impact to the intactness and character of the view scene would occur from the ~~Gaylord~~ RCC project, which would be considered less than significant under CEQA guidelines.

The ~~Gaylord~~ RCC project ~~will is~~ not expected to block any public view corridors listed above and will in fact likely widen the H Street view corridor due to decreased obstructions. ~~The A~~ taller hotel tower would likely block views as seen from the east and west; however, these views are mostly private and occur at such a distance that the view blockage of the corridor is expected to be only a few degrees. For views from the Silver Strand and from the eastern side of Chula Vista, the element actually blocking a view corridor may actually contribute to the viewing scene. The availability of public views from Chula Vista Marina are likely to be increased, as would the availability of public views from new parkland developed along the northwest shoreline of the study area. A low impact to public view corridors would be expected from the RCC project, which would be considered less than significant under CEQA guidelines.

The ~~Gaylord~~ RCC will result in a low impact to the view corridors, intactness, and character of the view scene, which would be considered less than significant under CEQA guidelines.

#### b. Program Level Analysis

The Proposed Project would affect two regionally important public viewing scenes: the view of the western tideland/water's edge from the Sweetwater Marsh NWR, and background views of the Bay from the Silver Strand. The project also alters views of the San Diego Bay, a locally and regionally significant public resource, from within the project boundary. These viewing scenes are discussed below in greater detail.

View corridors to the Bay from the project site and its surroundings primarily occur across and over the local streets and the parcels of developed and undeveloped land. The primary viewing locations currently exist at E Street, near I-5, Bayside Park, Bayside Park Beach, the Chula Vista Marina, Bayfront Park, Marina View Park, portions of J Street, Marina Parkway, and portions of

I-5. View quality for public views from Chula Vista Marina are likely to increase along with public views from new parkland developed along the northwest shoreline of the project site.

Although the Proposed Project will affect the viewing scene, it will not result in the actual removal of any visual resources currently contributing to the quality of the viewing scene. The overall project, including both the Pacifica Development and the Gaylord RCC Development, would result in a moderate cumulative impact to view quality, which would be considered significant under CEQA guidelines (**Significant Impact 4.4-3**).

i. Public Viewing Scenes

**Sweetwater Marsh NWR.** Visitors to the Sweetwater Marsh NWR/Chula Vista Nature Center have the highest sensitivity because they expect the visual environment within the refuge to be “natural.” When viewing the project site from this area, the built environment currently forms the background of the viewing scene, or scenic vista. The focal point of development near the water’s edge is the existing industrial South Bay Boatyard/storage lot, which is generally low in scale but clearly visible. Views of this existing use create a negative aesthetic for the transition between water and land (see Public View Photograph 3 in *Figure 4.4-2b*). The Proposed Project replaces this use with a smaller retail/service structure. However, the building envelope for the much larger RCC on Parcel H-3 would be located significantly closer to the water’s edge than any existing building structures on site. In addition, the overall increase in height and massing of the RCC over the existing structures would dominate the background and would adversely change the existing character of the viewing scene. Implementation of the Proposed Project, with or without the incremental reduction to the overall bulk and mass of the RCC would be significant (**Significant Impact 4.4-4**).

**Silver Strand.** The current viewing scene from the Silver Strand (across the Bay), is dominated by the Bay itself. The background scene is composed of nondescript, relatively low-lying structures viewed against an expansive sky (see Public View Photograph 17 in *Figure 4.4-2d*). The Proposed Project would substantially change existing background views. The built environment would become the major background focal point. Structures that were 30 feet in height would be increased to a maximum height of ~~240~~300 feet, creating an irregular skyline where one did not exist before. Furthermore, the bulk and mass of the RCC on Parcel H-3 would dominate the waterfront. The result would be a dramatic scale imbalance between the existing landform and structures and proposed features such as the RCC and high rise residential and other large-scale elements. The design would not provide smaller interceding structures or an effective stepping back of the building from the wildlife refuge. Implementation of the Proposed Project, with or without the incremental reduction to the overall bulk and mass of the RCC would result in a significant impact (**Significant Impact 4.4-5**).

***On-Site Bay Views.*** As seen from the project site, the Bay is considered a significant scenic vista and public resource within the Chula Vista community (as identified in the City of Chula Vista General Plan and LCP). The adjacent or on-site viewing locations of the Bay include the viewing corridors down streets that extend east–west to the Bay. Important view corridors include E, F, and J Streets; Marina Parkway (north to south); and unobstructed views from the existing parks. Currently, the Bay can be viewed from the I-5 overpass at J Street and from the SR-54 freeway flyover at I-5.

The Proposed Project would maintain the existing Bay views from E Street, near I-5, F Street, Bayside Park, Bayside Park Beach, the Chula Vista Marina, Bayfront Park, and Marina View Park. Views from portions of Marina Parkway would be improved overall because the road would be realigned west of the RCC adjacent to the Bayfront Park. Travelers on the I-5 overpass at J Street would view high-rise development along the Bay and Marina. Since this view corridor is very limited and the duration of the view is short, this impact would be less than significant.

***Off-Site Bay Views from the East.*** Views to the Bay across the Sweetwater District would be enhanced at current viewing locations along E and F Streets. Views along the H Street Corridor would be improved through the Harbor District to provide new views of the Bay and proposed H Street Pier.

Most of the current vistas to the waterfront from public viewing locations outside of the Proposed Project boundary would be maintained, although the viewing scene would be altered. As mentioned above, a view of the water is visible from the freeway flyover from SR-54 at I-5 (see Public View Photograph 2 in *Figure 4.4-2b*). Although this vista is only visible from passing vehicles for a limited time, part of the view to the water would be blocked (see the left side of the photograph), primarily by future buildings on Parcels S-4 and S-3. The distance between this view location and proposed new buildings reduces their perceived size. Views across Parcel S-1 in the Sweetwater District would remain open and unobstructed. New development would be located in limited areas of the northeastern portion of the Sweetwater District and in the Harbor District. Visual quality impacts from this vantage point would be less than significant because open space and views of the Bay would be retained.

***Off-Site Bay Views from the North.*** The waterfront view looking south from Pepper Park (located north of the Sweetwater Marsh NWR and Sweetwater River; see Public View Photograph 1 in *Figure 4.4-2b*) would be maintained; however, the background would be altered by the increased number of buildings in the distance. Although the horizon would be completely defined by buildings, the distance between this view location and new structures would be great enough that the perceived size of the buildings would appear smaller than their actual size. Because the existing views of the water and marsh would not be compromised, the change is less than significant.

Note also that other existing vistas to the waterfront from public viewing locations outside the project boundary are generally already compromised by the presence of large industrial buildings and structures such as the SDG&E transmission towers. These features frame vistas, giving an overall urban character to the existing views (see Public View Photographs 4 and 5 in *Figure 4.4-2b* and Public View Photograph 13 in *Figure 4.4-2d*). As discussed above, the Proposed Project maintains the existing viewing locations at E Street near I-5, Bayside Park, Bayside Park Beach, the Chula Vista Marina, Bayfront Park, Marina View Park, portions of J Street, Marina Parkway, and portions of I-5. Although not depicted in a visual simulation, a portion of the boat trailer parking lot would be converted into a parking lot and boardwalk characterized by paved surfaces. This alteration would not result in an actual loss of a viewing location but would negatively change the visual quality of the viewing location and the foreground of the viewing scene. This impact is offset by the creation of other new publicly accessible viewing locations at South Park, which would be constructed on a portion of the current SBPP site, and by enlarging the Bayside Park to include a portion of the existing South Bay Boatyard. Additional viewing locations would open up as H Street is extended to the water, Marina Parkway is improved, and E Street is realigned. The increase in the overall number of publicly accessible viewing locations would positively affect the visual quality of the project site. Therefore, the impact associated with alteration of the Bayfront Park would not be significant.

***Gateway and Scenic Roadway Views.*** This section addresses the effects of the Proposed Project on view corridors from gateway and scenic roadways. For a discussion of how the proposed structures would affect the visual character, please see the discussion below under significance threshold two.

***Bay Views from the I-5 Overpass at J Street.*** The existing view corridor down J Street from I-5 is not very large and its prominence is further reduced by the fact that viewers are traveling at high speeds, shortening the duration of the view. Only a small portion of the Bay is visible from this location. Currently, views to the Bay are obstructed by trees at the end of the road for viewers traveling west on J Street. There is a limited area along Marina Way (extension of J Street) where the J Street mudflat is visible beyond Marina View Park.

Any buildings proposed on Parcel O-1 (Industrial Business Park Use) and the retail/commercial recreation/marina support buildings proposed on Parcel H-21 would eliminate Bay views that currently exist from the elevated portion on I-5. The loss of this view is not significant because this Bay view is very limited and only visible from the I-5 for a short duration. Furthermore, site-specific design plans would need to be submitted for review and approval prior to any Phase III development of Parcels H-21 and O-1.

***Bay Views from Marina Parkway, H Street, E Street, and F Street.*** The main structures located between the Marina Parkway corridor and the Bay would be the retail and commercial recreation

buildings (maximum 2 stories and 30 feet), parking, and park uses proposed on Parcels H-8 and H-9. Depending on the ultimate design of future structures, existing views of the Marina could be partially blocked by development at H-9; however, provisions for the Signature Park on H-8 and parking facilities provide opportunities to maintain open views to the Bay and Marina.

Conversely, the extension of H Street through to the Bay opens up a previously nonexistent view to the water. Similarly, realignment of E Street to the west of the proposed RCC, east of the Signature Park (Parcel S-2), would increase unobstructed views of the Bay. The realignment of E Street would also provide more open space adjacent to the road than currently exists. The realignment of Marina Parkway would be a less than significant visual change because views of the Bay would be maintained through the Sweetwater District.

View opportunities of the Marina would be provided between new structures in the Harbor District, as they are today, and views of the J Street Marsh area of the Bay would be maintained. Roadway changes to H Street and E Street would represent improvements. The H Street Corridor would be opened to provide views of the Bay and new pier, neither of which currently can be viewed from this corridor due to existing structures. Views along E Street would be enhanced by creation of the Sweetwater Park, as well as street landscaping and roadway improvements that would replace the existing disturbed gateway entrance to the site. The realignment of F Street would not affect the existing view corridor or view of the Bay, thus no impact would occur at this location. Overall, impacts to these view corridors would be less than significant or viewed as an improvement.

***Scenic Landmarks.*** Development of the proposed promenade/boardwalk would substantially change the visual character of the existing Bayside Park, which could be considered a loss of an important landmark. This landmark, however, would be replaced by the creation of additional waterfront green spaces and additional public park areas both inland from the waterfront and to the north and south along the water/wetlands. The proposed plan increases publicly accessible parkland. Although all of it would not be located immediately adjacent to the waterfront, the increase would benefit the overall visual quality of the site. This potential impact would not be significant.



#### 4.4.4.2 Visual Quality

### 2. The Proposed Project would have a significant impact if it substantially degrades the existing visual character or quality of the site and its surroundings.

#### a. Project Level Analysis

##### i. Pacifica Residential and Retail Project

While the Pacifica Residential and Retail Project will alter the cohesiveness of the waterfront character, it will not affect the vividness of the viewing scene. The Pacifica project will not result in the removal of any significant visual resources such as beaches, parks, water bodies, or significant landmark trees and will not directly impact the natural visual resources of wetlands to the north and south of the site. Elements of the Pacifica project will be organized and will not appear cluttered in any way. The coordination of design elements (architecture, site planning, landscape architecture, signage and other circulation elements) will result in an organized aesthetic generally accepted as positive. The Pacifica Residential and Retail Project would result in a low impact to visual quality, which would be considered less than significant under CEQA guidelines. In fact, a potential improvement to the existing visual quality would be expected.

#### b. Program Level Analysis

##### ii. ~~Gaylord Resort and Convention Center (RCC)~~

~~As proposed, the Gaylord Resort and Convention Center (proposed RCC would)~~ adds a series of well-organized, well-designed, and dynamic design elements to the area. The project will not result in the removal of any significant visual resources such as beaches, parks, water bodies, or significant landmark trees, nor will the project alter the visual resources such as the wetlands to the north and south of the project site. Although the changes to the visual quality of the site will be noticeable, the addition of more vivid visual experiences will enhance the visual quality of the project site. The removal of park elements that currently exist may cause a low impact to the existing visual quality of the site; however, new park elements are proposed with the potential to improve the overall visual quality of the area. The impact is therefore considered neutral and would be considered less than significant under CEQA guidelines.

Elements of the RCC development will be organized and will not appear cluttered in any way. The coordination of design elements (architecture, site planning, landscape architecture, signage and other circulation elements) will result in an organized aesthetic generally accepted as positive. A potential improvement to the existing visual quality would be expected.

#### b. ~~Program Level Analysis~~

Portions of the Proposed Project site as it exists today are described in *Section 4.4.1.2* with low and high visual quality due to existing industrial uses and general discontinuity of features. Except for the RCC and residential structure, the Proposed Project, while dramatically different, would not degrade the visual quality of the site any further. In fact, the proposed elements have the potential to improve the overall visual quality by incorporating standards for architectural style and organization for development.

The design guidelines presented in the Bayfront Specific Plan and the Port tenant project submittal process would accommodate a range of architectural styles. The Proposed Project design elements (architecture, site planning, landscape architecture, signage and other circulation elements) will be coordinated so as to result in an organized visual effect. The varied nature of the existing buildings would interface well with new architectural treatments and themes. Architectural compatibility would be ensured through the design review process. In addition, removal of power lines (a separate project), industrial buildings, and storage yards would improve the visual character throughout the project site.

The Proposed Project would result in a low cumulative impact to visual quality, which would be considered less than significant under CEQA guidelines. The Proposed Project is expected to result in a potential improvement to the existing visual quality of the project site.

#### 4.4.4.3 *Light and Glare*

### 3. **The Proposed Project would have a significant impact if it creates a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

#### a. **Program and Project Level Analysis**

Proposed Project elements would likely use significant amounts of artificial light during the evening and nighttime hours. Even though the existing site generates a noticeable amount of light, in the build-out scenario the amount of light produced by the project would likely surpass existing levels. Given the future urban nature of most of the surrounding properties, adjacent development types will not likely be especially sensitive to light changes; however, the potential exists for spill over from artificial lighting sources. In addition, components of the Proposed Project are likely to include reflective materials such as glass and polished metal surfaces. These surfaces, when combined with daytime solar sources, could result in glare that might adversely affect adjacent uses. The potential for glare depends both on the reflective nature of the materials, solar angles, and the location of the sensitive receptor. Sensitive receptors would include those that are driving by the site, users of park and recreation facilities, and users in the

area that are trying to enjoy a natural setting such as the Chula Vista Nature Center and the South Bay Wildlife Refuge. The Proposed Project may have a negative impact on sensitive light receptors or sensitive receptors potentially affected by high levels of glare. The light and glare that may be associated with the project may affect the viewing scene as well as views of the site or of the area. A moderate impact to views associated with light and glare would be expected and the moderate impact would be considered significant under CEQA guidelines (**Significant Impact 4.4-6**).

#### 4.4.4.4 *Visual Character*

### 4. The Proposed Project would have a significant impact if it conflicts with urban visual design guidelines in adopted plans and policies.

#### a. Project Level Analysis

##### i. Pacifica Residential and Retail Project

The Pacifica Residential and Retail Project will highly contrast with the scale of the surrounding development and the existing patterns of development in the surrounding area. The northernmost buildings associated with the Pacifica development will increase the scale issue. Existing structures will most likely be overpowered by the scale of the new buildings, and will have limited ability to blend with the proposed development. A moderate impact to visual character associated with height and massing would be expected for this project and would be considered significant under CEQA guidelines (**Significant Impact 4.4-7**).

The Pacifica project is well distanced from the existing marshes to the north but in close proximity to the marshes located to the south. The project's scale and intensity of development does not allow a positive visual relationship with this setting. A low impact to the view corridor or gateway character of entry gateways and scenic roadways would occur as a result of the Pacifica development. The entry gateway at I-5 and J Street would remain open in its east to west direction. No significant buildings would affect the visual connection from this gateway to the water's edge. The visual extension of J Street along Marina Way and the north to south connection of Tidelands Avenue/Marina Parkway would also remain unaffected.

#### b. Program Level Analysis

##### ii. ~~Gaylord Resort and Convention Center (RCC)~~

Due to the disparity in scale between the proposed ~~Gaylord~~-RCC development and the existing structures on the project site, the project will contrast with the existing patterns of development in the surrounding area. The easternmost building associated with the ~~Gaylord~~-RCC, the ~~Convention-conference C~~center facility next to the RCC hotel tower, is the primary source of

scale differential. As most of the shorter buildings are found to the east of the project area, the abrupt change in height of this particular building increases the appearance of scale issues for the project site. A moderate impact to visual character associated with height and massing would be expected for ~~this~~ the RCC project and would be considered significant under CEQA guidelines (**Significant Impact 4.4-8**).

The ~~Gaylord~~ RCC development is within the visual field of the existing marshes located to the north. The project's scale and intensity of development does not allow a positive visual relationship with this setting. Views from the freeway and other major entry points will be dominated by the overall size and scale of the RCC project, making it difficult to establish a visual relationship with the lower marshlands. Design elements of signage, architectural character, landscape treatments, and other site features such as lighting and street furnishings, can help to establish a visual connection and continuity of the area's visual environment. The RCC project would result in a low impact to the visual relationship of the Bay-related development and the marshes, which would be considered less than significant. Proposed design elements of the project prevent this visual relationship from becoming a moderate or high-level impact.

No impact to the view corridor or gateway character of entry gateways and scenic roadways would occur as a result of the RCC development. The entry gateway at I-5 and J Street would remain open and no significant buildings would affect the visual connection from this gateway to the water's edge. A gateway character could be established, regardless of the buildings related to this project.

#### ~~b.~~ Program Level Analysis

Any degradation of visual character and quality resulting from the Proposed Project would most likely occur in the surrounding properties, either to the adjacent Sweetwater Marsh NWR and Chula Vista Nature Center, or the residences across the Bay. As analyzed above, the level of degradation of the visual character and quality at these two locations would be considered a significant impact.

Even though the Proposed Project would replace many of the existing on-site structures, there would still be a sizeable number of existing buildings remaining after build-out. However, the disparity in scale between existing low-rise structures and future high and mid-rise urban-style structures would be substantial. Existing structures would most likely be overpowered by the scale of the new buildings and would have limited ability to blend with the proposed new development. In addition, the setting to the north, south, east, and west would not allow for much transition of a built area. As there is no existing single or dominant architectural theme or architectural guidelines with which the Proposed Project would be inconsistent, no impact to visual character associated with existing architectural style will result from the Proposed Project.

The Chula Vista General Plan identifies two gateways and one scenic roadway in the project area: E Street, and J Street (gateways), and the Marina Parkway corridor (scenic roadway). No impact to the view corridor or gateway character of entry gateways and scenic roadways would result from the Proposed Project. Once Parcel H-21 is developed, the view corridor along J Street will be affected. In fact, it is likely that new opportunities to frame views, enhance the entry gateways and scenic roadways, and create a gateway at H Street would be increased as a result of the Proposed Project.

***San Diego Unified Port District.*** The Proposed Project would be consistent with approved urban design guidelines and development standards contained within the PMP and Board Policies 355, 357, and 609 described in *Section 4.4.1.5, Adopted Plans and Guidelines, Landform and Visual Policies* (see also *Table 4.4-1*). For the Proposed Project, these measures would apply only to those parcels included in the Port's jurisdictional boundary, including those in the Sweetwater District proposed for acquisition in the land trade. The State Trust lands within the Port's jurisdiction are not subject to the City of Chula Vista's General Plan, LCP (LUP and Specific Plan). The Proposed Project would be consistent with the goals and policies contained in the PMP for the following reasons:

- Bikeways and pathways would be provided to create a pedestrian-oriented Bayfront.
- Physical access to the Bay would be provided at appropriate locations and frequent and convenient "windows to the water" from locations around the periphery of the project would be provided.
- Underutilized and vacant parcels would be developed in accordance with design guidelines that would also provide for coordinated development overall of the various sub-components to ensure organization and an un-cluttered appearance.
- Public art would be required as a condition of approval for all development or redevelopment projects consistent with the Port's public art program (Board of Port Commissioners Policy No. 609).

***City of Chula Vista LCP/LUP and Specific Plan.*** For the purpose of this review, the reader is reminded that City design guidelines and standards would apply only to those parcels under the City's jurisdiction following approval of the proposed land trade. Consequently, guidelines and standards would apply only to Parcels S-4, H-13, H-14, H-15, and H-17, and the gate/entryways of E, H, and J Streets and would not apply to any parcels under the Port's jurisdiction.

The Proposed Project would be consistent with the goals and policies contained in the City of Chula Vista General Plan and LCP for the following reasons:

- Bikeways and pathways would be provided to create a pedestrian-oriented Bayfront.

- Public views of the Bay and access along the waterfront would be provided via a proposed “Baywalk” promenade. This pedestrian path would also connect to the Signature Park, and the pathway system within the Sweetwater District, ultimately linking the two districts and “enabling viewers to experience visual contact at close range with the Bay and marshlands” (LCP LUP).
- Marina Parkway (E Street extension) would be realigned adjacent to substantial open space (east of the Signature Park) through the Sweetwater District (a scenic roadway designated by the City of Chula Vista General Plan). Marina Parkway would extend through the Harbor District south along the commercial harbor where views of the Bay would be extended between retail buildings.
- Building setbacks and coordinated signage would be provided along Marina Parkway (a scenic roadway; City of Chula Vista General Plan).
- Views of the Bay from the F Street and E Street corridors would be preserved and views of the Bay would be created from the H Street corridor (City of Chula Vista General Plan, LCP LUP, Specific Plan).
- Most of the unsightly storage and industrial use buildings and facilities within the plan area would be redeveloped, thereby reducing views of such facilities from main roadways (City of Chula Vista General Plan).
- Landscaping would be planted along Marina Parkway to frame and enhance this scenic corridor, as well as on E Street and Bay Boulevard, adjacent to the project site (City of Chula Vista General Plan).
- The Proposed Project would be required to undergo a design review process (which includes architectural, site plan, landscape, and signage design), prior to the issuance of building permits, to ensure compliance with objectives and specific requirements of the City’s Design Manual, General Plan, and appropriate zone or Area Development Plan.

The PMP, City of Chula Vista General Plan, and LCP amendments reflect the Proposed Project’s intent to revitalize the Bayfront, ultimately creating a destination that draws visitors and residents within the Chula Vista community and the region to the project site. Goals include preserving or enhancing public views of open space, wetlands, and the Bay; creating a pedestrian-oriented community including walkways, bikeways, and park areas to ensure open space access; and developing units with a common usage and/or qualities, which are distinctive but closely interrelated visual entities. Adoption of proposed amendments to the PMP, City of Chula Vista General Plan, and Chula Vista LCP would bring the Proposed Project in conformance with each of these plans.

The Proposed Project would conform to guidelines in the LCP amendments. These requirements would ensure the project’s conformance to the development policies contained in the City of

Chula Vista General Plan. Among other requirements, the amended LCP would require preparation and implementation of a gateway entry master plan for major gateways including E, H, and J Streets (which have freeway on-ramps) to convey an entry character. Implementation would address requirements for roadway design and signing, lighting, landscaping, and the siting and design of adjoining structures.

Detailed landscaping plans would be required to conform to Port and City design guidelines and provide sufficient detail so as to ensure that the plant palette is suitable for this sensitive location, and that proposed trees do not provide perching habitat or introduce invasive species while still meeting visual policy requirements contained in the LCP, as amended. Furthermore, all future plans would be subject to review and approval by the Port or City, as appropriate, prior to implementation.

Development proposed in all phases would be required to undergo design review by the Port to ensure conformance with the planning goals and policies contained in the PMP, including provisions for building design, landscaping, and public art. Likewise, development under the City's jurisdiction would be subject to design review in accordance with the adopted 1985 Bayfront Specific Plan/Coastal Development Application Permit Procedures Manual to ensure conformance with the LCP (LUP and Specific Plan).

#### 4.4.5 Mitigation Measures

##### Mitigation Measure 4.4-1

Mitigation Measure 4.4-1 would reduce **Significant Impacts 4.4-3, 4.4-4, 4.4-5, 4.4-7, and 4.4-8** (associated with adverse impacts on view quality, character, and the public viewing scene):

**Port:**     **A. View Protection:** As a condition for issuance of Coastal Development Permits, buildings fronting H Street shall be designed to step away from the street. More specifically, design plans shall protect open views down the H Street corridor by ensuring that an approximate 100-foot ROW width (curb–curb, building setbacks, and pedestrian plaza/walkway zone) remains clear of buildings, structures, or major landscaping. Visual elements above 6 feet in height shall be prohibited in this zone if the feature would reduce visibility by more than 10 percent. Placement of trees should take into account potential view blockage. This mitigation should not be interpreted to not allow tree masses; however, trees should be spaced in order to ensure “windows” through the landscaping. Trees should also be considered to help frame the views and they should be pruned to increase the views from pedestrians and vehicles, underneath the tree canopy. In order to reduce the potential for buildings to encroach upon view corridors, and to address the scale and massing impact, buildings shall step back at appropriate intervals or be angled to widen the view corridor at the ground plane to the extent

feasible. All plans shall be subject to review and approval by the Port. All future development proposals shall conform to Port design guidelines and standards to the satisfaction of the Port.

**Port: B. *Height and Bulk:*** Prior to issuance of Coastal Development Permits for projects within the Port's jurisdiction, the project developer shall ensure that design plans for any large-scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, stepping back of buildings, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for large project components to diminish imposing building edges, monotonous facades, and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the Port.

**City: C. *Height and Bulk:*** Prior to design review approval for properties within the City's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for the large project components to diminish imposing building edges, monotonous facades, and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the City of Chula Vista Planning Director.

**Port/City: D. *Landscaping:*** Prior to final approval of Phase I infrastructure design plans, the Port and City shall collectively develop a master landscaping plan for the project's public components and improvements. The plan shall provide sufficient detail to ensure conformance to streetscape design guidelines and that future developers/tenants, as applicable, provide screening of parking areas.

Streetscape landscaping shall be designed to enhance the visitor experience for both pedestrians and those in vehicles. Specifically, detailed landscaping plans shall be developed to enhance Marina Parkway, a designated scenic roadway and shall provide, where appropriate, screening of existing industrial uses and parking areas until such time as these facilities are redeveloped.

Street landscaping design shall be coordinated with a qualified biologist or landscape architect to ensure that proposed trees and other landscaping are appropriate for the given location. For instance, vegetation planted adjacent to



open water/shoreline areas must not provide raptor perches. Landscaping shall be drought tolerant or low-water use, and invasive plant species shall be prohibited.

**City: E. *Landscaping:*** Prior to approval of a tentative map or site development plan for future residential development, the project developer shall submit a landscaping design plan for on-site landscaping improvements that is in conformance to design guidelines and standards established by the City of Chula Vista. The plan shall be implemented as a condition of project approval.

**Port/City: F. *Gateway Plan:*** Concurrent with the preparation of Phase I infrastructure design plans for E and H Streets, a Gateway plan shall be prepared for E and H Streets. Prior to issuance of occupancy for any projects within the Port's jurisdiction in Phase I, the E and H Street Gateway plan shall be approved by the Port and City's Directors of Planning and Building. The E and H Street Gateway plan shall be coordinated with the Gateway plan for J Street.

**City: G. *Gateway Plan:*** Concurrent with development of Parcels H-13 and H-14, the applicant shall submit a Gateway plan for J Street for City Design Review consideration. Prior to issuance of any building permits, the J Street Gateway plan shall be approved by the Director of Planning and Building in coordination with the Port's Director of Planning. The J Street Gateway plan shall be coordinated with the Gateway plan for E and H Streets.

#### Mitigation Measure 4.4-2

The following mitigation measure reduces **Significant Impact 4.4-6** (new sources of substantial light or glare which would adversely affect day or nighttime views in the area) to below a level of significance:

**Port/City:** Prior to design review approval, lighting design plans with specifications for outdoor lighting locations and other intensely lighted areas shall be submitted to the Port and City for review and approval. The specifications shall identify the lighting intensity needs and design light fixtures to direct light toward intended uses. Outdoor and parking lot lighting shall be shielded and directed away from adjacent properties, wherever feasible and consistent with public safety. Consideration shall be given to the use of low-pressure sodium lighting or the equivalent. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. The lighting plan shall incorporate specific design features including, but not limited to, the following:

- Where lighting must be used for safety reasons (FAA 2000 Advisory Circular), minimum intensity, maximum off-phased (3 seconds between flashes) white strobes shall be used.
- All event lighting shall be directed downward and shielded, unless directed downward or shielded to minimize light spill beyond the area for which illumination is required.
- Exterior lighting shall be limited to that which is necessary and appropriate to ensure general public safety and navigation, including signage for building identification and orientation.
- Exterior lighting shall be directed downward and shielded to prevent upward lighting and to minimize light spill beyond the area for which illumination is required.
- Office space, residential units, and hotel rooms shall be equipped with motion sensors, timers, or other lighting control systems to ensure that lighting is extinguished when the space is unoccupied.
- Office space, residential units, and hotel rooms shall be equipped with blinds, drapes, or other window coverings that may be closed to minimize the effects of interior night lighting.
- Reflective glass or the application of reflective coatings shall not be used on any glass surface, except as may be required for low emittance (low e) coating for energy efficiency under Title 24 of the California Code of Regulations.

#### 4.4.6 Significance of Impacts After Mitigation

Mitigation Measure 4.4-1 would reduce impacts to view quality associated with two regionally important public viewing scenes (**Significant Impacts 4.4-3** and **4.4-4**) and views of the San Diego Bay, a locally and regionally significant public resource (**Significant Impact 4.4-5**) to below a level of significance. Moreover, with the implementation of design treatments and refinements (step-downs, set-backs, articulation, form variation, building material detailing, landscaping, gateway plans, and scale design treatments), as included in Mitigation Measure 4.4-1, impacts to visual character associated with the height and bulk of the Pacifica Residential and Retail project (**Significant Impact 4.4-7**) and ~~Gaylord~~-RCC buildings (**Significant Impact 4.4-8**) would be reduced to below a level of significance.

Implementation of Mitigation Measure 4.4-2 would reduce impacts resulting from light and glare (**Significant Impact 4.4-6**) to below a level of significance.

Impacts to view quality resulting from a change in scale and character and substantial view blockage associated with the Pacifica Residential and Retail project (**Significant Impacts 4.4-1 and 4.4-2**), however, would not be reduced to below a level of significance. No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce the impacts to view quality associated with the Pacifica Residential and Retail Project (**Significant Impacts 4.4-1 and 4.4-2**). See *Chapter 5, Alternatives*, for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed Pacifica towers.

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## 4.5 Hydrology/Water Quality

This section discusses the Proposed Project's potential impacts on water quality. The discussion is based on the following technical studies prepared for the Proposed Project:

- Water Quality and Sediments Study (June 2006), prepared by MBC Applied Environmental Sciences (*Appendix 4.5-1*)
- Civil Engineering Technical Studies (May 2006), prepared by Kimley-Horn and Associates, Inc. (KHA) (*Appendix 4.5-2*)
- Water Quality Technical Report for Chula Vista Bayfront Master Plan (March 2008); prepared by KHA (*Appendix 4.5-3*)
- Water Quality Technical Report for Chula Vista Bayfront—Gaylord Development (March 2008), prepared by KHA (*Appendix 4.5-4*)
- Water Quality Technical Report for Chula Vista Bayfront—Pacifica Development (March 2008), prepared by KHA (*Appendix 4.5-5*)
- Technical Memorandum—Drainage for the Chula Vista Bayfront Master Plan (January 2008), prepared by KHA (*Appendix 4.5-6*)
- Technical Memorandum—Drainage for the Chula Vista Bayfront, Gaylord Development (October 2007), prepared by KHA (*Appendix 4.5-7*)
- Technical Memorandum—Drainage for the Chula Vista Bayfront, Pacifica Development (October 2007), prepared by KHA (*Appendix 4.5-8*).

Appendices 4.5-4 and 4.5-7 were prepared for the RCC proposed by Gaylord on Parcel H-3. Gaylord has withdrawn its proposal to develop Parcel H-3 and is no longer a participant in the project. The technical studies provided in Appendices 4.5-4 and 4.5-7 are still relied upon for the program-level analysis of the proposed RCC on Parcel H-3; therefore, they remain relevant to this section's analysis and are included as appendices.

Additional documents referenced throughout this section include the following:

- Port of San Diego Jurisdictional Standard Urban Stormwater Mitigation Planning Document (January 2008) (*Appendix 4.5-9*)
- City of Chula Vista Jurisdictional Standard Urban Stormwater Mitigation Plan (November 2002, as amended) (*Appendix 4.5-10*)
- Chula Vista Bayfront Master Plan Grading and Lotting Plan (January 2008), prepared by KHA (*Appendix 4.5-11*)

- County of San Diego Interim Hydromodification Criteria (October 2007), prepared by Brown and Caldwell (*Appendix 4.5-12*)
- Hazardous Materials Technical Study (HMTS April 2005), prepared by Ninyo & Moore (*Appendix 4.12-1*)
- California Climate Change Center (March 2006). *Projecting Future Sea Level* [D. Cayan, P. Bromirski, K. Hayhoe, M. Dettinger and R. Flick]. White Paper. CEC-500-2005-202-SF.

#### 4.5.1 Existing Conditions

The following section discusses the existing Proposed Project area conditions in terms of location, hydrology, surface water, groundwater, water quality, contaminants, and sediment contaminants. The regulatory framework, including plans and policies established to protect water quality, is also discussed.

##### 4.5.1.1 San Diego Bay Watershed

The Proposed Project area is located on San Diego Bay, which originated from the alluvial plains of the Otay, San Diego, and Sweetwater rivers. The Bay watershed encompasses a 415-square-mile area that extends more than 50 miles to the east to the Laguna Mountains. The watershed lies at sea level at the Bay and reaches a maximum elevation of approximately 6,000 feet above sea level at the eastern boundary. The majority of the watershed land area generally lies north of the border with Mexico and south of I-8. The headwaters of the watershed begin in the unincorporated area of San Diego County (the County) and then transect all or portions of seven cities, including Chula Vista.

The Bay covers 10,532 acres of water and 4,419 acres of tidelands. Only 17 to 18 percent of the original Bay floor remains undisturbed by dredge or fill. Ninety percent of the original salt marshes and 50 percent of the original mudflats have been filled or dredged for development. Construction of dams and extensive use of groundwater in the Sweetwater and Otay Rivers has reduced the input from these rivers to the Bay by 76 percent. The majority of freshwater input to the Bay is from surface runoff from urban areas and intermittent flow from rivers and creeks during rain. There are over 200 storm drains that discharge into the Bay. The major watercourses feeding the Bay include the Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

The Bay watershed comprises three sub-watersheds: the Pueblo San Diego, Sweetwater, and Otay Hydrologic Units. According to the Water Quality Control Plan for the San Diego Basin (9), the Proposed Project area is located in the Sweetwater and Otay Hydrologic Units. *Figure 4.5-1* identifies the plan area within the Sweetwater and Otay Hydrologic Units and their corresponding subareas.

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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

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## Hydrologic Units, Areas and Sub-areas

**FIGURE**  
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#### a. Sweetwater Hydrologic Unit

The Sweetwater Hydrologic Unit is the largest of the three encompassing the Bay watershed, with 230 square miles of the approximately 415-square-mile total. Over 86 percent of the watershed is within unincorporated jurisdictions. Major water bodies in the Hydrologic Unit include the Sweetwater River, Sweetwater Reservoir, Loveland Reservoir, and the Bay. The dominant land uses in the Sweetwater River watershed are urban (29 percent), open space/agriculture (22 percent), and undeveloped (49 percent). Approximately two-thirds of the land area categorized as urban is composed of residential communities. The most important watershed issues are related to the protection of municipal water supplies and the preservation and restoration of sensitive wetland and wildlife habitats.

The Sweetwater Hydrologic Unit comprises three hydrologic areas: the Lower Sweetwater, Middle Sweetwater, and Upper Sweetwater Hydrologic Areas. The Proposed Project area is located in the two Hydrologic Subareas of the Lower Sweetwater Hydrologic Area: Telegraph and La Nacion, within the Sweetwater Hydrologic Unit of the San Diego Basin. The Sweetwater Hydrologic Unit contains a variety of habitat types, including oak and pine woodlands, riparian forest, chaparral, coastal sage scrub, and coastal salt marsh. The urbanized lower portion of the Sweetwater watershed contains portions of Chula Vista as well as several other cities.

#### b. Otay Hydrologic Unit

The Otay Hydrologic Unit encompasses approximately 160 square miles in southwest San Diego County. The major water bodies include the Upper and Lower Otay reservoirs, Otay River, and the Bay. The watershed consists largely of unincorporated area but also includes portions of the City of Chula Vista (the City) as well as other cities. The predominant land uses in the watershed are open space (67 percent) and urban/residential (20 percent).

#### 4.5.1.2 *Beneficial Water Uses*

Pursuant to the California Water Code Section 13240 and the Clean Water Act (CWA) Section 303, all surface waters and groundwaters in the San Diego region are assigned beneficial uses by the Regional Water Quality Control Board (RWQCB) in an adopted Basin Plan. The Basin Plan (RWQCB 1994) defines beneficial uses as the uses of water necessary for the survival or well-being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals of mankind. Examples include drinking, swimming, industrial and agricultural water supply, and other support for fresh and saline aquatic habitats.

As listed in *Tables 4.5-1* and *4.5-2*, the beneficial uses of surface water in the Sweetwater and Otay Hydrologic Areas include industrial service supply, agricultural supply, navigation, water

contact recreation, non-contact water recreation, commercial and sport fishing, preservation of biological habitats of special concern, estuarine habitat, wildlife habitat, preservation of rare and endangered species, marine habitat, fish migration, and shellfish harvesting.

**TABLE 4.5-1**  
**Sweetwater Hydrologic Unit Beneficial Uses within the Proposed Project Area**

Beneficial Uses	Hydrologic Area Number	Inland Surface Water	Coastal Waters	Groundwater
Municipal and Domestic Supply	909.11 909.12	+		• •
Agricultural Supply	909.11 909.12			• •
Industrial Service Supply	909.11 SD Bay	•	•	o
Industrial Process Supply	909.12	•		
Navigation	SD Bay		•	
Contact Water Recreation	909.11 909.12 SD Bay	o o	•	
Non-Contact Water Recreation	909.11 909.12 SD Bay	• •	•	
Commercial and Sport Fishing	SD Bay		•	
Biological Habitats of Special Significance	SD Bay		•	
Warm Freshwater Habitat	909.11 909.12	• •		
Cold Freshwater Habitat				
Wildlife Habitat	909.11 909.12 SD Bay	• •	•	
Rare, Threatened, or Endangered	SD Bay		•	
Marine Habitat	SD Bay		•	
Migration of Aquatic Organisms				
Estuarine Habitat	SD Bay		•	
Shellfish Harvesting	SD Bay		•	

SOURCE: Water Quality Control Plan for the San Diego Basin 1994.

SD Bay = Includes the tidal prisms of the Otay and Sweetwater rivers

• = Existing beneficial use

o = Potential beneficial use

+ = Exempted by San Diego RWQCB from municipal use

**TABLE 4.5-2**  
**Otay Hydrologic Unit Beneficial Uses within the Proposed Project Area**

Beneficial Uses	Hydrologic Unit HA Number	Inland Surface Water	Coastal Waters	Groundwater
Municipal and Domestic Supply	910.20	+		•
Agricultural Supply	910.20	•		•
Industrial Process Supply	910.20	o		•
Industrial Service Supply	910.20 SD Bay	o		
Navigation	SD Bay		•	
Contact Water Recreation	910.20 SD Bay	o		
Non-Contact Water Recreation	910.20 SD Bay	•		
Commercial and Sport Fishing	SD Bay		•	
Biological Habitats of Special Significance	SD Bay		•	
Warm Freshwater Habitat	910.20	•		
Wildlife Habitat	910.20 SD Bay	•		
Rare, Threatened, or Endangered	910.20 SD Bay	•		
Marine Habitat	SD Bay		•	
Estuarine Habitat	SD Bay		•	
Shellfish Harvesting	SD Bay		•	

SOURCE: Water Quality Control Plan for the San Diego Basin, 1994 and [www.projectcleanwater.com](http://www.projectcleanwater.com).

SD Bay = Includes the tidal prisms of the Otay and Sweetwater rivers

• = Existing beneficial use

o = Potential beneficial use

+ = Exempted by San Diego RWQCB from municipal use

The beneficial uses of surface waters in the Bay are listed as industrial service supply, navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, preservation of biological habitats of special concern, estuarine habitat, wildlife habitat, preservation of rare and endangered species, marine habitat, fish migration, and shellfish harvesting (California State Water Resources Control Board (SWRCB) 1994).

Contact uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, and fishing. Non-contact uses include but are not limited to picnicking, sunbathing, hiking, beach-combing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

The beneficial uses of groundwater in the Sweetwater and Otay Hydrologic Areas are discussed below in *Section 4.5.1.4, Groundwater*.

#### 4.5.1.3 Drainage and Flood Control

The existing on-site drainage system consists of various storm drain pipes and the J Street and Telegraph Canyon channels. The existing drainage facilities are listed below in *Table 4.5-3*. All of the off-site flows from the City either enter the existing channel that runs parallel to J Street that discharges into the Bay or enter the existing Telegraph Canyon Channel, which is a concrete trapezoidal channel that runs through the Otay District and discharges into the Bay. Refer to *Appendices 4.5-2, 4.5-3, and 4.5-6* for more detailed information regarding peak flows at particular discharge nodes.

**TABLE 4.5-3**  
**Existing Storm Drain Facilities**

Street Name/Location	Size and Type of Drainage Facility
J Street Channel	Riprap Channel (b=30' +/-, Z=3 +/-)
Telegraph Canyon Channel	Concrete Trap. Channel (b=10', Z=2 +/-)
Lagoon Drive	18-inch Storm Drain
E Street	18-inch Storm Drain
G Street	24-inch, 36-inch, 42-inch, and 54-inch* Storm Drain
Marina Parkway	60-inch RCP and 84-inch RCP Storm Drain
Sandpiper	12-inch, 18-inch, and 24-inch Storm Drain
Quay	24-inch and 30-inch Storm Drain

SOURCE: KHA 2006.

\* Goodrich storm drain outfall in F & G Street Marsh

An existing conditions hydrologic analysis was prepared to determine existing runoff throughout the Proposed Project site (*Appendix 4.5-2*). Four small watersheds were analyzed to develop a runoff ratio of flow per unit area and was then applied to the overall site to determine the total runoff for the existing site. The Sweetwater and Otay Districts are primarily undeveloped; therefore, only one analysis was done in each district to determine the runoff ratio. The Harbor District contains both undeveloped and developed land. Two watersheds were analyzed in the Harbor District, using different coefficients for developed and undeveloped conditions. *Table 4.5-4* presents the existing runoff flow ratio for each of the four watersheds analyzed.

**TABLE 4.5-4**  
**Existing Hydrologic Condition**

Representative Area Analyzed	Acres	Percentage of Impervious Groundcover	Coefficient Value	Runoff (cfs)	Runoff per Area (cfs/Acre)
Sweetwater District	27.16	3.4%	0.45	32.17	1.18
Harbor District <i>Undeveloped Areas:</i>	8.13	20.5%	0.65	12.18	1.50
Harbor District <i>Developed Areas:</i>	5.03	95.4%	0.85	11.83	2.35
Otay District	13.10	7.6%	0.65	15.08	1.15

The runoff flow ratios for each of the basins summarized in *Table 4.5-4* were used to compute the existing runoff flow calculations for 50-year and 100-year discharge, summarized below in *Table 4.5-5*. These runoff flows were later compared to the runoff flows under the Proposed Project.

**TABLE 4.5-5**  
**Existing Runoff Flows**

Discharge Area	(Acres)	50-Year Runoff (cfs)	100-Year Runoff (cfs)	50-Year Runoff per Area (cfs/Acre)	100-Year Runoff per Area (cfs/Acre)
Sweetwater District	99.10	132	149	1.33	1.50
Harbor District	326.60	784	899	2.40	2.75

A substantial amount of off-site drainage runs through the Proposed Project site, conveyed by an existing 72-inch storm drain line. The majority of this flow is from I-5 between F Street and J Street.

The City's Drainage Master Plan identifies the 100-year storm flows at the Telegraph Canyon Channel in the Otay District to be in excess of the existing capacity of the channel, although the City has never experienced flooding in this segment of the channel. It should be noted that the City's Drainage Master Plan does not take into account upstream hydraulic constraints, such as street and freeway crossing and undersized existing culverts.

An existing L-shaped drainage ditch (the "L-ditch") located on Parcel HP-5, directly west of Parcel H-15 and east and north of Parcels H-13 and H-14, is connected to the J Street Marsh by a culvert underneath J Street and flushes with the tide and a culvert to Marina Parkway. Currently, runoff from the former Goodrich South Campus site discharges into the existing HP-5 drainage ditch.

Due to the presence of the contamination from the former Goodrich South Campus and Goodrich North Campus, the Regional Water Quality Control Board, San Diego Region (RWQCB) issued a Cleanup and Abatement Order (CAO No. 98-08, revised April 2, 1998) identifying areas requiring remediation and setting standards for post-cleanup conditions. The Cleanup and Abatement Order addresses all current and former property used, leased, or otherwise controlled by Goodrich since its inception on the Chula Vista waterfront as Rohr Aircraft Company. This includes contaminant releases within the former Goodrich South Campus (Parcels H-15, H-18, H-23, and HP-23A), and the Goodrich North Campus (off site), as well as discharges within adjacent parcels such as H-3, HP-1, HP-5, H-8, H-9, H-13/H-14 and H-21. Contaminant removal from the L-Ditch is a requirement under the Cleanup and Abatement Order (CAO) issued by the RWQCB for the Goodrich South Campus remediation, which would be a separate project subject to a separate environmental review process. A Remedial Action Plan (RAP) is being prepared to determine the most appropriate and effective manner by which remediation of the L-Ditch can be achieved to the satisfaction of the RWQCB.

The Federal Emergency Management Agency (FEMA) has mapped zones of anticipated flooding based on base flood elevations for 100-year flood events, as presented on their Flood Insurance Rate Maps. The limited portions of the Proposed Project area potentially subject to flood hazards are shown on *Figure 4.5-2*.

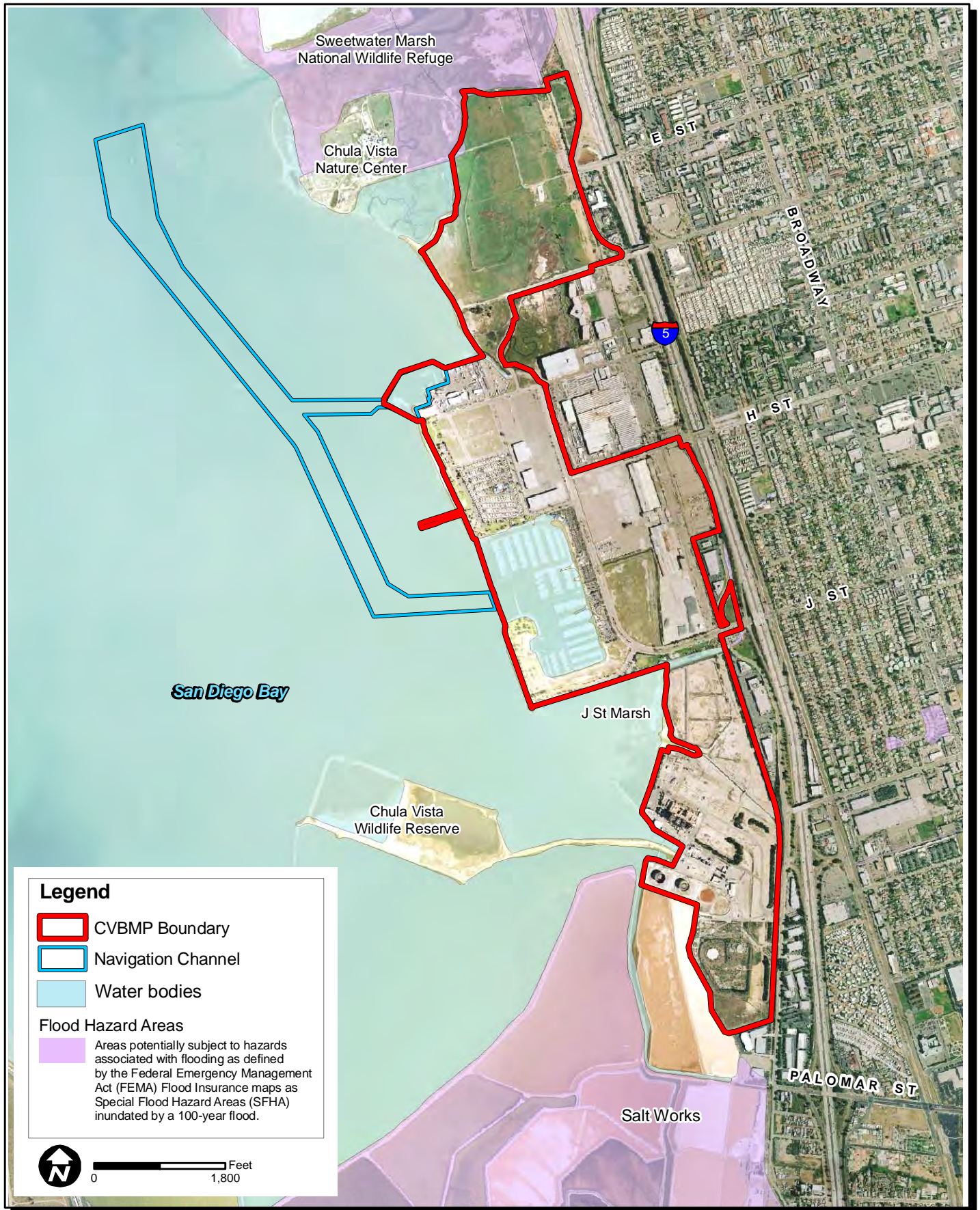
At the eastern end of the Otay River Valley are two reservoirs used for flood control and municipal water storage by the City of San Diego: the Upper and Lower Otay reservoirs. The reservoirs are fed by Proctor Valley Creek, Jamul (Dulzura) Creek, and a number of smaller drainages in the San Miguel and Jamul mountains as well as imported water. The low-lying areas along the floodplains of the Sweetwater and Otay rivers as well as their tributaries can experience flooding during severe rain seasons; however, dams, levees, reservoirs, and drainage channels control the drainage of much of the Proposed Project area.

#### **4.5.1.4 Groundwater**

Regional groundwater flow in the vicinity of the Proposed Project site is to the west, toward the Bay. Groundwater in the Sweetwater and Otay Hydrologic Areas has existing and beneficial uses for municipal, agricultural, and industrial purposes. Based on the location of the Proposed Project adjacent to the Bay, groundwater is expected to be located at or near an elevation of 1 to 4 feet above mean sea level, or roughly 2 to 15 feet below existing surface grades (Ninyo & Moore 2005a). The groundwater table would fluctuate with seasonal variations, tidal influences, groundwater withdrawal or injection, or other factors. Perched water conditions due to irrigation and runoff may also be present.



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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan

## Flood Hazard Areas

**FIGURE**  
4.5-25

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According to the Hazardous Materials Technical Study prepared for this project by Ninyo & Moore, groundwater has been encountered at a depth of approximately 4 feet below ground surface (bgs) at the Goodrich facility, located in the central Harbor District (*Appendix 4.12-1*). Groundwater at this facility is known to exist in two zones: a shallow water aquifer from the water table to approximately 22 feet bgs, and a deeper groundwater zone from approximately 22 feet bgs to approximately 140 feet bgs.

As discussed in *Section 4.12, Hazards and Hazardous Materials/Public Safety*, limited groundwater sampling for hazardous substances was performed on and in the vicinity of the former Goodrich South Campus (which is now a part of the Proposed Project site) and former Liquefied Natural Gas (LNG) site. The sampling revealed chlorinated hydrocarbons, volatile organic compounds, and trichloroethene (TCE) in groundwater monitoring wells. These results represent only a portion of the Proposed Project area and are not indicative of conditions throughout the entire site. A more detailed discussion is contained in *Section 4.12, Hazards and Hazardous Materials/Public Safety* of this report.

Groundwater encountered during the construction of the Proposed Project would be required to be tested prior to disposal. The groundwater can be pumped into storage tanks on site where it can be tested for contaminants. If contaminants are found, a pretreatment system will be required to remove these contaminants prior to discharging the groundwater to the sewer system. A permit will be required from the Industrial Wastewater Control Program and the City of Chula Vista prior to discharging to the sewer system.

#### **4.5.1.5 Water Quality**

Combinations of hydrology, currents, stormwater runoff, industrial activities, boat traffic, and dredging activities affect water quality within the Bay. In addition, climatological parameters, such as solar radiation, humidity, and wind, influence the condition of the water within the Bay.

Efforts made in the mid-1960s to reduce the discharge of large volumes of sewage and industrial wastes successfully improved water quality and available marine habitats in the Bay. By 1969, water quality parameters for turbidity, nutrient levels, salinity, and transparency were greatly improved, and plankton populations grew. Implementation of the federal Water Pollution Control Act in the 1970s further improved water quality.

Salinities recorded throughout the Bay range between 33.4 and 39.8 parts per thousand, and are influenced by evaporation, tidal flushing, and freshwater input. Turbidity in the Bay generally increases with distance from the Bay entrance, with the highest water turbidities found in the South Bay. In addition to persistent winds, activities affecting turbidity include, but are not limited to, dredging, waste discharges, and stormwater runoff.

Nutrients provide the minerals essential for primary production by photosynthetic phytoplankton. High phytoplankton production and lower surface runoff in summer reduce nutrient concentrations, while reduced light (leading to lower primary production) and an increase in runoff in winter cause higher nutrient levels. High nutrient levels can lead to localized algal blooms, or red tides. In the Bay, concentrations of phosphate, nitrate, and ammonia are typically highest in January, corresponding with high chlorophyll concentrations. Primary production is at its peak during this time, and nutrient levels in the South Bay exceed those in the North Bay.

Section 303(d) of the CWA requires that the RWQCB identify water bodies that do not meet, or are not expected to meet, water quality standards or are considered impaired. The affected water body and associated pollutant or stressor is then prioritized in the 303(d) list. The CWA further requires the RWQCB to develop a Total Maximum Daily Load for each listing. The current list includes copper, bacteria, and polychlorinated biphenyls (PCBs) on the 303(d) list. The RWQCB and the State Water Resources Control Board (SWRCB) update the list every 2 years.

Potential sources of these pollutants include urban runoff and storm sewers, marina and recreational boating, boatyards, and boat discharges or vessel wastes. The 2004 Beach Closure and Advisory Report, prepared by the County of San Diego Department of Environmental Health, states that Bayside Park Beach was closed for approximately 11 days in 2004 because of untreated sewage levels. Additionally, Bayside Park Beach was issued an advisory because of bacteria levels for approximately 11 days in 2004. Due to the excessive amount of rainfall in 2004, all beaches in San Diego County were issued a general advisory because of urban runoff for approximately 48 non-consecutive days. The Department of Environmental Health issues a 72-hour general advisory for all coastal water because oceans and bays become contaminated with urban runoff after 0.2 inches or more of rain. An advisory or warning involves placing signs at a public beach warning the public against swimming and/water contact because of the increased risk of illness. An advisory/warning is issued when monitoring data show that bacteria levels exceed state standards. The source of the bacteria is usually unknown but may include domestic pet, wildlife, bird, or human feces; soils; or decaying plant matter (City of Chula Vista and San Diego Unified Port District 2004).

Copper can be found in paints applied to the bottom of boats and is used to repel barnacles. The current list proposes to de-list the Chula Vista Marina for bacteria indicators but to include the area for copper. This recommendation is based on samples taken in 2004 at the north end of the marina. PCBs have been used in the past as coolants and lubricants in electrical equipment. The manufacturing of PCBs ended in the United States in 1977, when its harmful health effects were identified.

#### **4.5.1.6 Contaminants**

Contaminants commonly washed into the Bay during storms include fertilizer and plant control chemicals associated with landscaping activities and oil residues that have accumulated on roads and parking lots within the Proposed Project area. Oil and gasoline combustion releases many substances into the environment, including cadmium, copper chromium, lead, mercury, and zinc. Some metals, such as copper, iron, and zinc, are required by aquatic organisms in small amounts to maintain biochemical functions, but are toxic to these same organisms in higher concentrations. Other metals, such as cadmium, mercury, and lead, may have toxic effects on marine organisms even in low concentrations.

Contaminated groundwater exists at several locations beneath the Proposed Project site (Ninyo & Moore 2005b). Groundwater contaminants include TCE and halogenated volatile organic compounds. More detailed information regarding the contaminated groundwater on site is discussed in *Section 4.12, Hazards and Hazardous Materials/Public Safety*.

#### **4.5.1.7 Sediment**

Sediments through much of the South Bay are composed of coarse to fine sands, with varying amounts of shell and fine-grained sediments (silt and clay) (Tenera and Merkle 2004). In general, sediments at the mouth and along the western edge of the Bay are composed mostly of sandy material, while along the eastern and southern edges sediments are composed of finer material (U.S. Department of the Navy (USDN) 1999). Currents, tidal effects, and freshwater inflow affect grain size characteristics. In the South Bay, finer sediments tend to accumulate in areas of reduced water flow (where finer suspended sediments can settle out of the water column), such as the Chula Vista Marina and in areas of sediment input, such as near the Sweetwater River. Sediments in the Chula Vista Marina are composed of more than 65 percent fine sediments. Outside of the marina, sediments in the Bay near the Proposed Project area are sandier than in the marina, with a general reduction in contribution from fine sediments with distance from the eastern boundary of the Bay (USDN 2005).

#### **4.5.1.8 Sediment Contamination**

San Diego Bay is the terminus of an extensive network of storm drain systems, accepting runoff from surrounding communities. Numerous studies in the 1970s assessed sediment contamination at various locations within the Bay. Since 1990, the Port has removed contaminated sediments from several locations throughout the Bay, including the nearby Tenth Avenue Marine Terminal. As indicated above, sediment in the HP-5 drainage ditch in the Harbor District is contaminated with metals and will be remediated pursuant to the CAO issued by the RWQCB.

Chemicals of concern in marine sediments in the Bay include the pesticide chlordane, metals (chromium, copper, mercury, zinc, and lead), tributyltin (TBT), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH) (OHM Remediation Services Corporation 1998; USDN 1999). Elevated levels of metals and TBT in sediments are generally related to shipyard and Naval activities. Restrictions in the formulation of antifouling paints have reduced the amount of TBT found in the Bay; nevertheless, an estimated 77 percent of the copper load comes from antifouling paint containing copper. PCBs are high in naval shipyards, along the downtown waterfront, and in the small boat harbors. Leaching creosote from wood pier pilings contributes the majority of PAHs in the Bay. As for chlordane contamination, it is highest in the North Bay and in areas receiving stormwater runoff.

Differences in sediment metal concentrations among sites are often directly related to the sediment composition. For example, fine-grained sediments would contain higher amounts of metals due to the greater available surface area. Elevated sediment levels of some metals and chemicals would be toxic to some organisms. The State of Florida has developed toxicity ranges using chemical concentration data associated with both toxic biological effects and no observed effects. The ranges are identified as Threshold Effects Level (TEL) and the Probable Effects Level (PEL).

Sediment and benthic infaunal samples were collected at various locations throughout the Bay in 1998 as part of Southern California Coastal Water Research Projects' Bight 1998 Regional Marine Monitoring Survey (MBC 2005a). These locations included areas within the Chula Vista Marina and near the mouth of the Sweetwater River (just north of the Proposed Project site). The samples were collected to determine potential impacts of pollutants in the Bay. The results revealed concentration levels of copper that exceed the PEL level at two locations within the Chula Vista Marina. Outside of the marina, copper levels in the South Bay exceeded PEL levels at two stations in the mouth of the Sweetwater River, at several locations outside of the river, and at one station south of the river.

Concentrations of zinc in the Proposed Project area, including in the marina, were generally found in levels between the TEL and PEL threshold limits. North of the project area, mercury exceeded the PEL concentration at one station south of the Sweetwater River. Mercury was found in lower levels that still exceeded the TEL limit at one station inside and one station outside the Chula Vista Marina. Mercury levels at two other stations in the marina were found in concentrations below the TEL.

High molecular weight PAHs were generally found in levels below the TEL limit throughout the South Bay except in the vicinity of the Sweetwater River mouth. Low molecular weight PAHs were found in sediments at levels below the TEL throughout the South Bay region. PCBs, while

generally not elevated in the South Bay, were found to exceed the TEL limit at one station in Chula Vista Marina, at a nearshore station north of the marina, and near the mouth of the Sweetwater River. Chlordane was found in levels below the TEL level inside and offshore of the marina, but north of the area exceeded TEL limits offshore of the Sweetwater River and exceeded the PEL limit at some stations in the river mouth.

#### **4.5.1.9 Regulatory Framework**

Federal and state statutory and regulatory requirements have been established and implemented to protect regional waters. Section 402 (p) of the CWA, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), and the California Water Code apply directly to this Proposed Project and require the implementation of a program for development planning. A detailed description of the principal laws pertaining to the regulation of water is presented below.

##### **a. California Water Code**

California's Porter-Cologne Water Quality Control Act (1969), which became Division 7 (Water Quality) of the California Water Code, establishes the responsibilities and authorities of the nine RWQCBs (previously called Water Pollution Control Boards) and the SWRCB. Among other things, it directs each regional board to formulate and adopt a water quality control plan—known as a “Basin Plan”—for all areas within the region.

The water quality objectives used for this study are primarily those set forth in the Basin Plan (San Diego Region 9) adopted by RWQCB in 1994. The Basin Plan defines existing and potential beneficial uses and water quality objectives for coastal waters, groundwater, surface waters, imported surface waters, and reclaimed waters in the basin. The Basin Plan also summarizes drinking water standards as specified by the California Department of Health Services, the California Inland Surface Waters Plan (SWRCB 1994), and Code of Federal Regulations Title 40 Part 131.

##### **b. Clean Water Act—National Pollutant Discharge Elimination System**

The Clean Water Act (CWA) of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the National Pollutant Discharge Elimination System (NPDES) program.

The NPDES program requires permits for discharges of pollutants from certain point sources into waters of the United States. The San Diego RWQCB issues Waste Discharge Requirements along with NPDES permits. Point sources are defined as any discernible or confined establishment, collection system, or vessel from which pollutants are or may be discharged. Point

source wastes can be generated by residential, commercial, industrial, agricultural, certain recreational solid waste disposal activities and/or practices.

The construction, municipal, and industrial permits issued under the NPDES program are described below:

i. Construction Permit

All construction activities must comply with all applicable regulations established by the Environmental Protection Agency (EPA), as set forth in Section 402 of the CWA. An NPDES permit specifies effluent limitations, a compliance schedule, and a reporting requirement. To comply with NPDES, the project applicant must meet the requirements of the General Permit for Stormwater Discharges Associated with Construction Activity (General Construction Permit). In order to be covered under the General Construction Permit, a Notice of Intent must be filed with the RWQCB. Compliance with the permit requires that a stormwater pollution prevention plan (SWPPP) be prepared and implemented for any project within the study area larger than 1 acre in size.

The Post-Construction Stormwater Management Plan requires that permanent Best Management Practices (BMPs) be established to prevent a completed project from discharging sediment and other stormwater pollutants into nearby waters and drainage courses. Locations of construction materials exposed to water, building activity areas, and BMPs to eliminate or reduce discharge of pollutants from the site during construction will be addressed in the SWPPP and may include:

1. EC-1 Scheduling
2. EC-10 Velocity Dissipation Devices
3. EC-2 Preservation of Existing Vegetation
4. EC-4 Hydroseeding
5. EC-5 Soil Binders
6. EC-9 Earth Dikes and Drainage Swales
7. SE-1 Silt Fence
8. SE-10 Storm Drain Inlet Protection
9. SE-4 Check Dams
10. SE-5 Fiber Roles

- 11. SE-7 Street Sweeping and Vacuuming
- 12. SE-8 Sandbag Barrier
- 13. TR-1 Stabilized Construction Entrance/Exist
- 14. TR-2 Stabilized Construction Roadway
- 15. TR-3 Entrance/Outlet Tire Wash
- 16. WE-1 Wind Erosion Control.

ii. The San Diego Region Municipal Stormwater Permit (MS4 Permit)

With the growing concern of urban runoff and stormwater pollution, federal, state, and local agencies have devised regulations requiring development planning and construction controls to treat stormwater related to pollution from new development projects before it reaches any receiving waters. The requirement to implement stormwater BMP requirements for development projects is based on Section 402(p) of the CWA. The federal CWA amendments of 1987 established a framework for regulating stormwater discharges from municipal, industrial, and construction activities under the program of the NPDES. Under the federal CWA, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the stormwater conveyance system and local receiving and coastal waters. In California, the SWRCB (through the nine Regional Boards) administers the NPDES stormwater municipal permitting program.

In 1990, under authority of the CWA but prior to finalization of the NPDES Phase I regulations, the San Diego RWQCB issued its first municipal permit for the San Diego Region (Order 90-42). The “Municipal Stormwater Permit” named the 18 municipalities within San Diego County, including the City of Chula Vista, the County of San Diego, and the San Diego Unified Port District, as co-permittees. More recently, on January 24, 2007, the San Diego RWQCB adopted Order No. R9-2007-0001 for a new Municipal Stormwater Permit (MS4), which represents the second municipal permit issued to the San Diego County co-permittees. Under the Municipal Stormwater Permit, co-permittees must reduce to the maximum extent possible the pollutants discharged from their respective storm drain systems. Pursuant to the Municipal Permit issued by the San Diego RWQCB, the co-permittees are required to develop and implement construction and permanent stormwater BMP regulations addressing stormwater pollution associated with private and public development projects. The Municipal Stormwater Permit outlines the individual responsibilities of the co-permittees including, but not limited to, the implementation of management programs, BMPs, and monitoring programs.

Each co-permittee must implement the requirements of the Municipal Stormwater Permit across two broad levels of responsibility. Co-permittees have responsibility for the water quality impacts of urbanization within their jurisdiction and their watershed(s). The Municipal Stormwater Permit reflects these two broad levels of responsibility, in that it requires implementation of a comprehensive Urban Runoff Management Plan (URMP) at the jurisdictional level and a Watershed Urban Runoff Management Program (WURMP) at the watershed level.

In addition, the RWQCB's Municipal Separate Storm Sewer Systems (MS4) permit requires control of hydromodification. Hydromodification refers to changes in the natural flow pattern (surface flow or groundwater) of an area due to development. Hydromodification can be managed by reducing runoff flow and volume, along with including BMPs that reduce volume. Standards to control hydromodification caused by development are currently being developed and will not be implemented until 2009. From Order No. R9-2007-0001, the Proposed Project is exempt from the Interim Hydromodification Criteria because the only existing channel within the Proposed Project is concrete lined. Other discharge locations into the Bay are from underground storm drains.

In accordance with the URMP, the Port and the City of Chula Vista each produced a Jurisdictional Urban Runoff Management Program (JURMP). These programs are designed to identify and prioritize local water-quality problems that can be attributed to urban runoff and provide solutions to mitigate these problems.

Also, in compliance with the Municipal Stormwater Permit, the Port, County of San Diego, and City of Chula Vista, along with seven other municipalities, have submitted the Bay WURMP to the San Diego RWCQB. WURMPs look at land use as one component of watershed management and have identified impervious surfaces as a major component to water quality degradation. The Bay WURMP provides general information about the Bay watershed and the regulatory context within which the program was developed. It provides an assessment of the quality of the water of receiving bodies within the watershed. In addition, it identifies water quality problems and describes the actions local jurisdictions will take to address them.

The Bay WURMP was developed with input from a diverse set of stakeholders, who will also be an integral part of program implementation. All participating jurisdictions intend to work cooperatively with other agencies, non-governmental organizations, and private citizens at the watershed level in order to positively affect the water resources of the region and achieve compliance with the Municipal Permit.

The Municipal Permit requires permittees to develop and implement a program that addresses urban runoff pollution as part of the planning process for public and private projects. One



component of the Port's JURMP is to prepare and implement a Standard Urban Storm Water Mitigation Plan (SUSMP).

The Port SUSMP addresses post-construction urban runoff pollution from new development and redevelopment projects. The SUSMP policies are designed to ensure, to the maximum extent practicable, that development does not increase pollutant loads from a project site, and the policies consider urban runoff flow rates and velocities. The Port SUSMP identifies appropriate BMPs for certain designated project types to achieve this goal.

Under the Port SUSMP, the Port will approve each project's SUSMP as part of the development plan approval process for discretionary projects, prior to issuing permits for ministerial projects. To allow flexibility in meeting Port SUSMP design standards, structural treatment control BMPs would be located on or off site, used singly or in combination, or shared by multiple developments, provided certain conditions are met.

Concurrent with the re-issuance of the NPDES Municipal Permit for San Diego County, the City of Chula Vista has updated its Development Storm Water Manual (Manual) to address these urban runoff pollution issues within its jurisdiction. The Manual is intended to provide information to applicants for development, redevelopment, and public projects processed through the City on how to comply with the permanent and construction stormwater requirements. The Manual further guides project applicants through the process of selecting, designing, and incorporating stormwater BMPs into their projects. The manual also contains a SUSMP (City SUSMP), which addresses post-construction urban runoff pollution from new development and redevelopment projects meeting the "priority project" classifications. The purpose and goal of the City's SUSMP is the same as the Port's SUSMP and would also be achieved through site-specific controls and/or drainage-area-based or shared structural treatment controls. Under the SUSMP, the City of Chula Vista approves SUSMP project plan(s) as part of the development plan approval process for discretionary projects, prior to issuing permits for ministerial projects.

### iii. Industrial Permit

In addition to the Municipal Permit, the EPA has established application requirements for stormwater permits associated with industrial activity (CA 97-03-DWQ General Industrial Stormwater Permit). Pursuant to these requirements, stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

As with the General Construction Permit described above, the General Industrial Permit requires authorization for continued and future stormwater discharge. If receiving water quality standards are exceeded, facility operators must submit a written report describing additional BMPs that would be implemented to achieve water quality standards.

### c. Best Management Practices

BMPs were developed as part of the NPDES program (described above) to protect water quality by controlling erosion, sedimentation, and the volume and concentration of chemical pollutants at the source and before entering waters of the United States. BMPs include such standard practices as lengthening detention periods, covering bare areas with mulches, constructing infiltration facilities, and providing public education as to the consequences, both legally and environmentally, of illicit discharges to storm drains.

In order to select, design, and implement the most effective and efficient BMPs, the permittee must identify target pollutants, consider the physical and chemical characteristics of those pollutants, calculate anticipated volumes and concentrations of pollutants and stormwater, and account for any regulatory action level (e.g., drinking water standards, non-degradation policies). The Port's SUSMP addresses these issues as they relate to the Proposed Project site.

### d. Coastal Zone Act Reauthorization Amendments of 1990

While stormwater and urban runoff is regulated by the NPDES permitting program, virtually all other nonpoint sources are subject to the Coastal Nonpoint Pollution Control Program under CZARA. Section 6217 of the federal CZARA established the Coastal Nonpoint Pollution Control Program, which requires the U.S. EPA to develop and the states to implement BMPs to control nonpoint source pollution in coastal water. The definition of coastal waters in California was expanded to include the entire state. Pursuant to Section 6217(g) of CZARA, six major categories of nonpoint sources addressed by CZARA include agriculture, forestry, urban areas, marinas, hydromodification projects, and wetlands.

### e. Oil Pollution Act of 1990

The federal Oil Pollution Act of 1990 requires that a state oil spill contingency plan be established and include a marine oil spill response element. The Act also specifies area plans to be capable of removing a "worst case discharge of oil or a hazardous substance, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the geographic area." Area committees are responsible for pre-planning with state and local officials for joint response efforts. This law is enforced the U.S. Coast Guard.

### 4.5.2 Impact Significance Criteria

According to Appendix G of the CEQA Guidelines and the Port's guidelines and previous policy, the Proposed Project would have a significant impact on water quality if:

1. It substantially depletes groundwater, degrades groundwater quality, or interferes substantially with groundwater recharge
2. It alters an existing 100-year floodplain or would place structures within a 100-year flood hazard area which would impede or redirect flood flows
3. It exposes people or structures to a significant risk of loss, injury, or death involving flooding and/or exposes people or structures to inundation by seiche, tsunami, or mudflow
4. It substantially alters the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site
5. It degrades water quality or would violate any water quality standards or waste discharge requirements, resulting from a substantial increase in the rate or amount of polluted surface runoff
6. It creates or contributes runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
7. It results in pollution or contamination that may have an impact on human health and the environment, including the aquatic habitat, or impacts on biological communities
8. It results in erosion and subsequent sedimentation of water bodies.

### 4.5.3 Impact Analysis

The Proposed Project's water quality impacts are discussed below under each significance criterion.

#### **1. The Proposed Project would have a significant impact if it substantially depletes groundwater or interferes substantially with groundwater recharge.**

The RWQCB prohibits permanent dewatering for new construction. The Proposed Project does not propose the direct use of groundwater during any phase of development, and permanent dewatering would be prohibited by on-site operations. Because there would be no permanent pumping of groundwater, the Proposed Project would not deplete groundwater. Development of the overall project (Sweetwater, Harbor, and Otay Districts) would increase the amount of impervious surfaces. Perforated pipes would be placed underneath permeable surfaces to collect

runoff to a cistern or storm drain. Plastic liners would be included below base where infiltration is not desirable due to high groundwater depth. As a result, the Proposed Project would not substantially deplete groundwater or interfere with groundwater recharge, and impacts would be less than significant.

**2. The Proposed Project would have a significant impact if it alters an existing 100-year floodplain or would place structures within a 100-year flood hazard area which would impede or redirect flood flows.**

The Proposed Project site is in an area designated by the Federal Emergency Management Agency as Zone X. This means the land is within an area of a 500-year flood or an area protected by levees from a 100-year flood. As shown on the Flood Hazard Areas map (see *Figure 4.5-2*), the primary areas of potential flood hazards in the project vicinity are the low-lying portions and tributary areas of the Sweetwater and Otay river valleys, located just north and south of the project site. In accordance with this map, the 100-year flood plain occurs on Parcel SP-1 in the Sweetwater District and Parcel OP-2A in the Otay District. These areas are protected by the Sweetwater Dam and channel system in the event of 100-year flood. Furthermore, no buildings are proposed at either of these locations. Accordingly, the Proposed Project would not have a significant impact with respect to an existing 100-year floodplain or flood hazard area.

**Sea Level Rise.** As described in *Section 4.6.3.2* of this report regarding climate change, potential adverse impacts of global warming include a rise in sea levels, which could result in the potential displacement of coastal businesses and residences. According to the California Climate Center's white paper entitled *Projected Future Sea Level* (March 2006), a historical rate of sea level rise approaching 2 millimeters per year (0.08 inches/year) was recorded for California tide gages, similar to the rate estimated for global mean sea level. The Center's white paper concluded that "... sea level rise was likely to exceed that which has been observed during the last 100 years or so at tide gages along the California coast, so that historical coastal structure design criteria would more often be exceeded, the duration of events would increase, and these events would become increasingly frequent as sea level rise continues."

Two climate models and three scenarios were used in the Center's white paper to develop a range of potential long-term sea level rise values. The mean sea level rise values range from approximately 0.10 to 0.72 meter (3.9 to 28 inches) from the year 2000 to the end of the century (2070 through 2100). The midpoint of the range for each of the three scenarios was 0.32 meter (13 inches), 0.38 meter (15 inches) and 0.44 meter (18 inches).

The sea level rise projected by the documented models described above spanned a fairly large range. For the purposes of determining grades for the Chula Vista Bayfront Master Plan, allowances were made to provide reasonable protection from frequent flooding resulting from future sea level rise. A moderately high midpoint value of sea level rise estimates was selected,

0.4 meter (16 inches), which exceeds the midpoint estimate for moderate scenarios of population and economic growth.

Public streets and drainage systems in the Chula Vista Bayfront Master Plan area were checked to verify that a 20-foot-wide section of all streets (two lanes) will not be submerged under the following conditions:

Highest high tide	7.79 Mean Lower Low Water (MLLW)
+ Storm surge (1 foot)	1.00 foot
+ Sea level rise (0.4 meter)	1.33 feet
<b>Selected Maximum Water Line</b>	<b>10.12 MLLW</b>

Building pad elevations in the Chula Vista Bayfront Master Plan area were checked to verify that they would not be submerged under the following conditions:

Highest high tide	7.79 MLLW
+ Storm surge (1 foot)	1.00 foot
+ Sea level rise (0.4 meter)	1.33 feet
+ Freeboard (1 foot)	1.00 foot
<b>Selected Maximum Water Line</b>	<b>11.12 MLLW</b>

Given the sea level rise assumptions for the Chula Vista Bayfront, as well as the road and pad elevations designed for the project, the Proposed Project does not anticipate a substantial increase in exposure to the project from the potential adverse impact of mean sea level rise. Accordingly, impacts from this potential adverse effect of global warming, as identified in the California Global Warming Solutions Act of 2006, would be less than significant.

**3. The Proposed Project would have a significant impact if it exposes people or structures to a significant risk of loss, injury, or death involving flooding and/or exposes people or structures to inundation by seiche, tsunami, or mudflow.**

As indicated on the Flood Hazard Areas map (see *Figure 4.5-2*), the proposed buffer areas in the Sweetwater and Otay Districts are areas of potential inundation during a 100-year flood (Parcels SP-1 and OP-2A). As discussed under Significance Criterion No. 2 above, no structures are proposed at these locations; therefore, the Proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding.

A storm drain hydraulic model was developed to analyze the effects for the high tide on the storm drain system. The largest existing storm drain system that discharges into the Bay was selected to determine the high tide effect occurring during a 50-year storm event. The results of the model indicate that the proposed storm drain system would adequately convey the 50-year storm during a high tide event entirely within the pipes, and no flooding of development parcels would occur. A more detailed model would need to be prepared to verify this conclusion. During final engineering design, a detailed storm drain hydraulic model would be prepared for all proposed storm drain systems to verify that the design capacity would be sufficient to ensure that no flooding would occur on any of the development parcels during a 50-year storm. This would ensure that flooding impacts would be less than significant.

No development is proposed for Phase I in the Otay District adjacent to the Telegraph Canyon Channel, nor is any additional runoff being directed to the channel. As a result, there is no impact from Phase I development to the Telegraph Canyon Channel. Phase I development in the Harbor District proposes to add new storm drain lines to the J Street Channel. The new storm drain lines would connect close to the J Street Channel/Bay interface such that the peak flow from these storm drains will reach the channel and dissipate into the Bay before the peak flows from the City reach the channel. As a result, there will be no significant impact to the capacity of the J Street Channel from the Bayfront storm drain connections.

Phase III development in the Otay District proposes to widen the Telegraph Canyon Channel and connect new storm drain lines from the Proposed Project site to this channel. The new channel design would increase the channel's capacity by increasing the bottom width to 110 feet, of which a 20-foot-wide low-flow vegetated channel would be constructed; the remaining 90-foot width of the channel would be concrete. The channel would have approximately 10-foot-high vertical walls. The existing channel easement would be increased to 130 to 140 feet from 100 feet wide. The easement would include a 20-foot-wide access road on one side for maintenance. Although the new channel design would increase the channel's capacity, a detailed hydrologic and hydraulic analysis that takes into account upstream constraints as well as additional flows from the Proposed Project would be required prior to beginning development of Phase III, to confirm that the channel's future capacity would be sufficient. No development is proposed in the Otay District during Phase IV. No impacts would result.

**Tsunamis.** The Proposed Project's location on the southern edge of the Bay is protected from tsunamis by natural formations such as Coronado, Silver Strand, and Point Loma. Although the force of a tsunami would cause substantial damage, a tsunami has never occurred in the Bay, and the geologic conditions in the region are not conducive to tsunamis. Therefore, it is reasonable to assume there is a low likelihood for a tsunami to occur. Therefore, impacts would be less than significant.

4. **The Proposed Project would have a significant impact if it substantially alters the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site.**

a. Phases I and II

Grading of the site would be required for the Proposed Project. Most of the existing streets would be removed to allow for construction of the new streets and grading of the new parcels. The Sweetwater District and the majority of the Harbor District would be graded during Phases I and II (*Figure 4.5-3*). The resulting volume of import for the Proposed Project is 681,000 cubic yards. *Table 4.5-6* lists the grading quantities required for the Proposed Project and *Figure 4.5-4* shows the required earthwork.

**TABLE 4.5-6**  
**Grading Quantities—Proposed Project (cubic yards)**

District	Cut	Fill	Import/Export
Sweetwater District	203,000	115,000	88,000 export
Harbor District	73,000	510,000	<437,000> import
Otay District	55,000	387,000	<332,000> import
<b>TOTAL</b>	<b>331,000</b>	<b>1,012,000</b>	<b>&lt;681,000&gt; import</b>

The grading design includes grading the pads to follow the natural slope and drain to the street. In areas where this grading design would create large amounts of fill on the pad, the pads would be graded to drain toward the Bay. The minimum storm drain slope would be 0.5 percent and the pads would be graded at a minimum of 0.5 percent. (Note: The majority of the existing pads are graded at less than 0.5 percent.) The minimum street grade would be one percent except on existing roadways adjacent to any existing facilities that would remain. In these cases, the new street would match the existing street elevations in order to match the existing improvements that are to remain. This includes portions of F Street, H Street, and Marina Parkway. No streams or rivers would be altered by grading. Although grading of the site would occur, the Proposed Project would not substantially alter the drainage pattern of the project area, because the drainage would continue to flow toward structural controls before entering the Bay, similar to existing conditions. Therefore, the Proposed Project would have a less than significant impact on the existing drainage pattern of the site.

The Interim Hydromodification Criteria require that post-development flow rates be less than those of pre-developed flow rates, where the increased discharge rates and durations will result in increased potential for erosion. This criterion does not apply when a development project disturbing 50 acres or more discharges flows into channels that are concrete-lined or

significantly hardened downstream to their outfalls in bays or the ocean or into underground storm drains discharging directly to bays or the ocean. The Proposed Project is above the 50 acres of disturbance, and it will discharge to both channels and storm drain systems that discharge directly into the San Diego Bay. Therefore, the Proposed Project is compliant with the Interim Hydromodification Criteria.

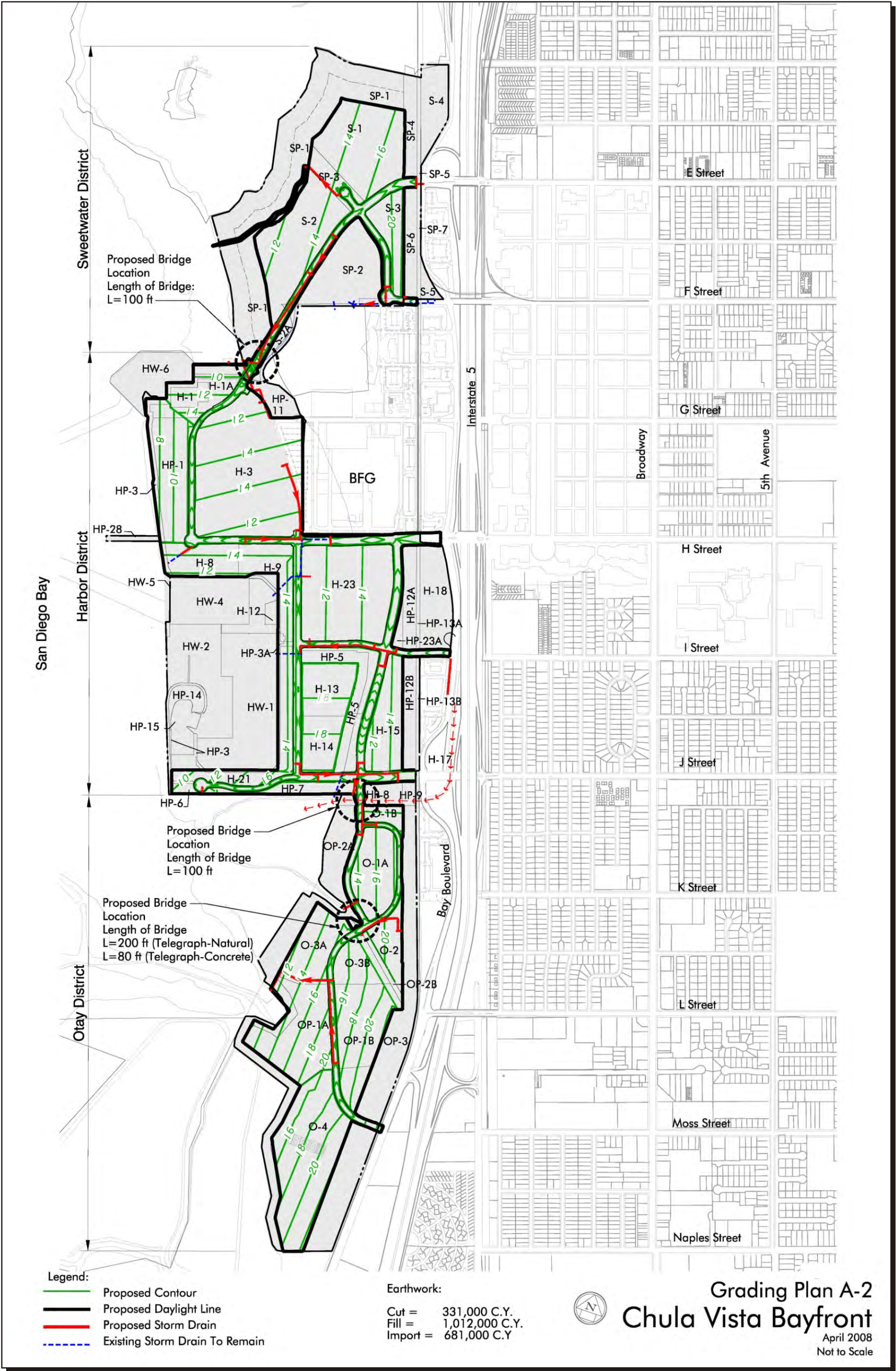
All existing storm drain discharge locations to the Bay will remain and will continue to be used. A new proposed channel in the Sweetwater District will also be constructed to intercept flow from the park area and other uses in the Sweetwater District. This proposed vegetated channel, north of Parcel S-2, will be constructed to meander through the site. The channel outfall will be protected with riprap to reduce the potential for erosion. The proposed channel will eliminate erosion or other impacts to beneficial uses resulting from development.

In the short term, site preparation and grading, including clearing, trenching, and other earthwork, would generate sediment that could result in significant impacts to water quality, including siltation off site. To reduce the potential impacts on water quality, construction activities would comply with all applicable regulations established by the U.S. EPA as set forth in the NPDES permit requirements for urban runoff and stormwater discharge. Compliance with NPDES includes meeting the requirements of the General Permit for Stormwater Discharges Associated with Construction Activity (General Construction Permit). In order to be covered under the General Construction Permit, a Notice of Intent must be filed with the RWQCB. Compliance with the permit requires that a SWPPP be prepared and implemented for the project. The SWPPP will be implemented during project construction to prevent water quality impacts from construction activities. The SWPPP will include erosion and sediment control BMPs, stormwater management controls and other controls such as measures to prevent construction vehicles from tracking sediment off the construction site. A Notice of Intent to discharge stormwater during construction will also be filed with the SWRCB during the final engineering design phase of the project.

Temporary construction sediment basins would be constructed as part of the grading operation for the Proposed Project to intercept sediment during a storm event and prevent it from discharging off a graded site. A sediment basin would be constructed (in accordance with the Chula Vista Subdivision Manual Design Criteria) with each graded parcel and will contain a basin, riser pipe, and discharge pipe that will connect to the public storm drain system in the public right-of-way (ROW). The sediment basins would be removed once final development of a parcel occurs and would be replaced with permanent stormwater BMPs.



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SOURCE: Kimley-Horn and Associates, Inc.

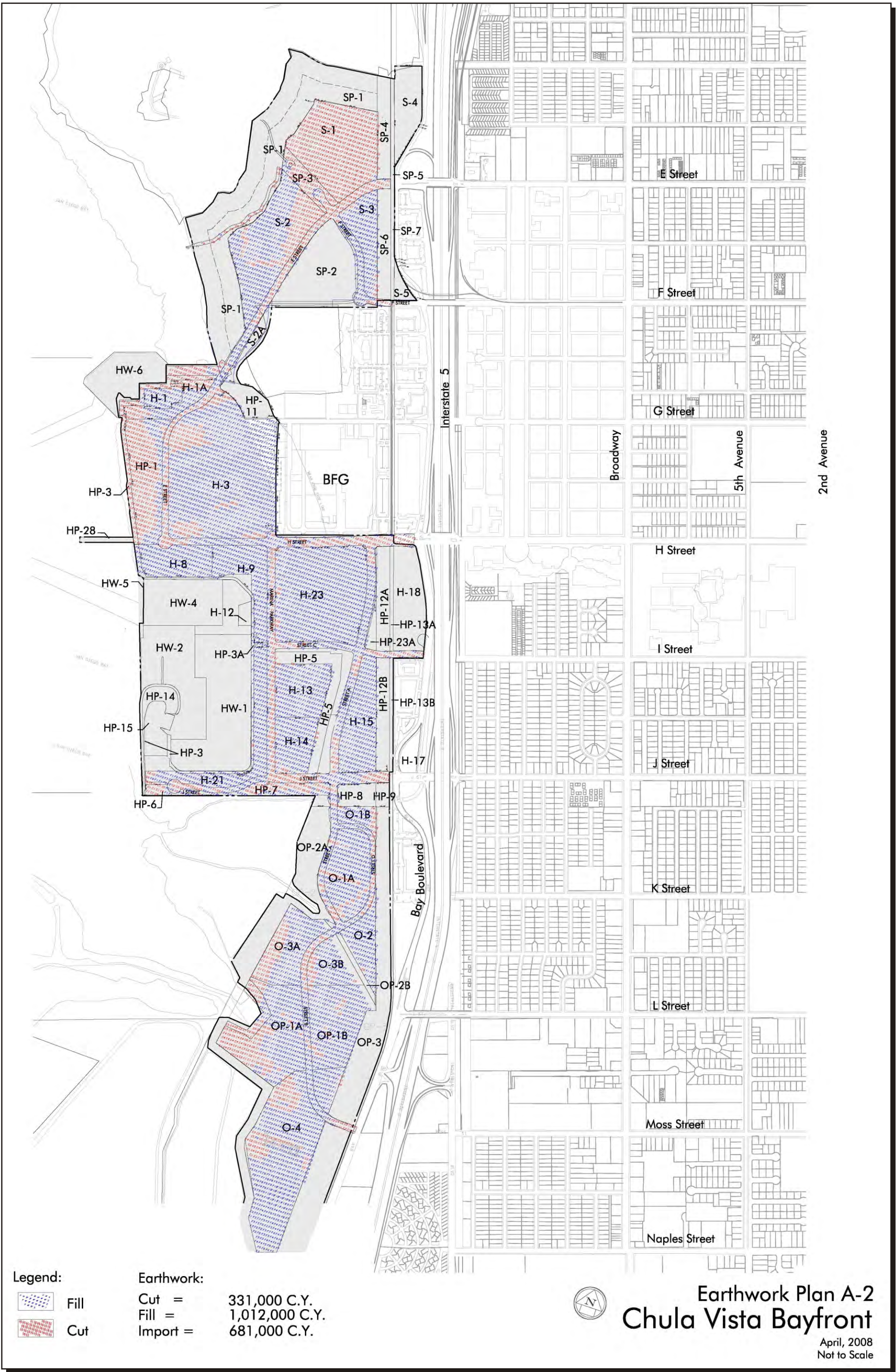
Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Proposed Grading Plan**

**FIGURE**  
**4.5-3**

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SOURCE: Kimley-Horn and Associates, Inc.



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Other temporary construction BMPs would be implemented to prevent pollutants from entering the storm drain system and the Bay. These BMPs would consist of concrete washout areas, stabilized construction entrances, fiber rolls, silt fences, check dams, and hydroseeding and the installation of bonded fiber matrix on slopes, containment for refueling and maintenance of construction vehicle operations, and material delivery and storage containment. The Caltrans Stormwater Quality Handbook will be referenced for more detailed information regarding construction BMPs. The specific locations and types of construction BMPs would be identified in the erosion control plans, which would have to be developed during the final design stage of the Project.

The project would also be subject to the requirements of RWQCB NPDES Permit No. CA 0108758, which consists of wastewater discharge requirements for stormwater and urban runoff, including BMPs for stormwater pollution control and the Municipal Stormwater Permit (MS4) adopted by the RWQCB (RWQCB Order No. R-9-2007-001). The Municipal Permit requires new developments to treat, infiltrate, or filter an amount of runoff from the development site by the implementation of management programs, BMPs and structural controls, and monitoring programs. Water quality control procedures implemented in accordance with the above permits would prevent substantial erosion or siltation from occurring on or off site and would ensure that a less than significant impact would result. The Proposed Project's permanent source control BMPs, treatment control BMPs, and monitoring programs are discussed below in detail under Significance Criterion No. 5.

i. Pacifica Residential and Retail Project

The Pacifica site is divided into two drainage basins, one draining north and the other draining south. Under the Proposed Project, the Pacifica site will discharge runoff from storm drains at two locations: the northwest corner and the southeast corner. Drainage from the northern portion of the site is collected and conveyed in a storm drain to an off-site storm drain in Marina Parkway. Runoff from the southern portion of the site is collected and conveyed in a storm drain to the southeast corner of the site and then connects to the storm drain in J Street. Both storm drains discharge to the Bay.

On-site flows from the development will be collected using roof drains and local area drains. These drains will discharge into vegetated swales around the perimeter of the Proposed Project. The flow will then enter water quality inlets at the end of each vegetated swale and be conveyed to the off-site public storm drain system and eventually discharge into the Bay (see *Appendix 4.5-8*). To reduce the potential for erosion, the outlet to the Bay will be lined with riprap. The runoff for Parcel H-13 will flow from the southeast to the northwest into one of four water inlets. The runoff for Parcel H-14 will flow from the northwest to the southeast into one of three water inlets. In addition, both parcels will collect and convey some surface flows through proposed

vegetated swales. Alteration of drainage on the Pacifica site (Parcels H-13 and H-14) will be minor and is considered less than significant.

ii. ~~Gaylord H-3~~ Resort and Convention Center (RCC)

Runoff from the proposed ~~Gaylord~~-RCC site will enter off-site storm drains in three locations: the northwest corner, the southwest corner, and the southeast corner of the site. Drainage from the northern portion of the site is collected and conveyed in a 36-inch storm drain to an off-site storm drain in the private street just north of the parcel, which then connects to the storm drain in E Street, conveying the flow north and discharging into the Bay. Drainage from the southern portion of the site is divided into two basins and discharged on the southwest and southeast corners of the site. Drainage from the southeast corner is collected and conveyed in a 30-inch storm drain into an off-site storm drain in H Street, which runs across H Street, south along Marina Parkway. South of C Street, the storm drain runs east and discharges into the Bay. Drainage from the southwest corner of the site is collected and conveyed in a 24-inch storm drain into an off-site storm drain in E Street, which runs along E Street and discharges into the Bay.

On-site flows from the development will be collected using roof drains and local area drains. These drains will discharge into vegetated swales around the perimeter of the Proposed Project. The flow will then enter water quality inlets at the end of each vegetated swale and be conveyed through an on-site storm drain system. The on-site storm drain system will connect to the off-site public storm drain system and eventually discharge into the Bay (*Appendix 4.5-7*). To reduce the potential for erosion, the outlet to the Bay will be lined with riprap. Alteration of drainage on the ~~Gaylord~~-RCC site will be minor and is considered less than significant.

b. Phases II through IV

The grading design includes grading the pads to follow the natural slope and drain to the street. In areas where this grading design would create large amounts of fill on the pad, the pads would be graded to drain through structural controls before entering the Bay.

Phases II through IV development would not substantially alter the drainage pattern of the Proposed Project site. In the short term, however, site preparation and grading, including clearing, trenching, and other earthwork, would generate sediment that could result in significant impacts to water quality, including siltation off site. Phases II through IV construction activities would have to comply with all applicable regulations established by the U.S. EPA as set forth in the NPDES permit requirements for urban runoff and stormwater discharge. The temporary construction BMPs designed for Phase I construction would also be implemented during Phases II through IV. Implementation of water quality control procedures, such as those described above for Phase I, would be implemented in accordance with the above permits and would ensure that impacts are less than significant.

The hydrology, water quality, and sediments study prepared by MBC Applied Environmental Sciences concluded that the proposed dredge and fill activities required for Parcels HW-1, HW-2, HW-3, and HW-4 would cause little change in the circulation patterns in the Bay. The dredge and fill activities would not restrict tidal flow, and the tides would remain unchanged in the harbor. Although tidal current velocities could be slightly lower due to the increased water depth in the dredged channel, slightly faster currents in the fill areas would compensate for this. This impact would be less than significant.

**5. The Proposed Project would have a significant impact if it degrades water quality or would violate any water quality standards or waste discharge requirements, resulting from a substantial increase in the rate or amount of polluted surface runoff.**

**a. Pollutants**

The future use of the Bayfront site will include residential development, commercial development, restaurants, hotels, marine, parks, RV parks, office, parking lots, and streets. Anticipated and potential pollutants can be identified based on project category from Table 1 in the City of Chula Vista's SUSMP requirements. The Port of San Diego's SUSMP lists anticipated pollutants and potential pollutants, which are mostly identical to Chula Vista's requirements.

***Residential Development.*** For a residential development, the anticipated pollutants of concern are sediments, nutrients, trash and debris, and pesticides. The potential pollutants of concern include oxygen-demanding substances, oil and grease, and bacteria and viruses.

***Commercial Development.*** For a commercial development, the anticipated pollutants of concern are trash and debris and oil and grease. The potential pollutants of concern include sediments, nutrients, organic compounds, oxygen-demanding substances, bacteria and viruses, and pesticides. Bacteria and viruses are not expected because the land use will not involve human or animal waste products. Oxygen-demanding substances will not enter runoff since solvents are not anticipated on the developed site.

***Restaurant.*** For developments with restaurants, the anticipated pollutants of concern are trash and debris, oxygen-demanding substances, oil and grease, and bacteria and viruses.

***Parks.*** For parks and areas designated as open space, the anticipated pollutants of concern are trash and debris, nutrients, and pesticides.

***Parking Lots.*** For developments including surface parking lots, the anticipated pollutants of concern are heavy metals, trash and debris, and oil and grease with potential sediments, nutrients,

and oxygen-demanding substances. The parking lots will have minimal sediment discharge since natural areas will be landscaped and maintained. Plants will be chosen to minimize or eliminate the use of fertilizer or pesticides, and excess irrigation from landscaped areas will be prevented by choosing native or drought tolerant plants.

**Streets.** Street development may include sediment, heavy metals, organic compounds, trash and debris, and oil and grease with potential nutrients and oxygen-demanding substances. All streets will be paved, reducing sediment transported in runoff.

b. Hydrology

i. Proposed Runoff Flows

The existing runoff calculations summarized in *Table 4.5-5* were determined so that a comparison of the Proposed Project could be made with existing conditions. *Table 4.5-7* summarizes the Proposed Project's runoff flow for 50-year and 100-year discharge, prior to implementation of site design BMPs and Low-Impact Development (LID) measures designed to control the amount and quality of the runoff. As discussed below, the Proposed Project would control the amount and quality of the runoff through implementation of permanent source control and treatment control BMPs, LIDs, and monitoring programs.

**TABLE 4.5-7**  
**Proposed Runoff Flows (before BMPs and LIDs)**

Discharge Area	(Acres)	50-Year Runoff (cfs)	100-Year Runoff (cfs)	50-Year Runoff per Area (cfs/Acre)	100-Year Runoff per Area (cfs/Acre)
Sweetwater District	99.10	186	214	1.88	2.16
Harbor District	326.60	848	974	2.60	2.98

Proposed development of the Sweetwater District would increase impervious surface area; however, the majority of the site would not be hardscape. As shown in *Table 4.5-7*, the runoff flow for the Sweetwater District would be approximately 1.88 cubic feet per second (cfs) per acre under the 50-year runoff scenario and 2.16 cubic feet per second (cfs) per acre under the 100-year runoff scenario. This translates to increases of 0.55 cfs per acre and 0.66 cfs per acre over existing runoff flows for the 50-year and 100-year scenarios, respectively.

Although the Harbor and Otay Districts are both developed, impervious surfaces occur primarily in the Harbor District. The majority of the Harbor District is already developed with parking lots, large roadways, parks, and miscellaneous building structures. While some paved roads exist in the Otay District, the majority of this area is unpaved. Redevelopment of the Harbor and Otay



Districts would increase the amount of impervious surface area. As shown in *Table 4.5-7*, the runoff flow for the Harbor District would be approximately 2.60 cubic feet per second (cfs) per acre under the 50-year runoff scenario and 2.98 cfs per acre under the 100-year runoff scenario. This translates to increases of 0.20 cfs per acre and 0.23 cfs per acre over existing runoff flows for the 50-year and 100-year scenarios, respectively.

ii. Proposed Control Measures

In compliance with the Municipal Separate Storm Systems (MS4) Permit, the overall Chula Vista Bayfront Master Plan will incorporate small-scale controls to mimic the pre-development hydrology of the Proposed Project site. This will be achieved by using vegetated swales, high-rate filtering, rain collection systems, green roofs, and permeable pavement and materials. While exact locations for source BMPs cannot be identified as site plans have not yet been developed (except for the Pacifica ~~and Gaylord~~ projects), *Figure 4.5-5* illustrates the anticipated locations for BMPs in the developed areas of the Sweetwater and Harbor Districts, as described below.

LID techniques are required in the MS4 permit and will be incorporated into project design to reduce the generation of runoff and to further reduce pollution from entering the Bay. *Figure 4.5-6* illustrates a site design concept for LID techniques. The first goal of LID is to reduce the generation of stormwater runoff. The second goal is to treat pollutants at the source by evenly distributing the management of stormwater throughout the site. The discussion below outlines LIDs and site design BMPs that will be incorporated on each site to the maximum extent practical, in order to absorb and filter runoff and slow the rate of flow to achieve stormwater treatment for the anticipated pollutants of concern.

iii. Proposed Storm Drain System

All existing storm drain discharge locations to the Bay will remain except for a proposed channel in the Sweetwater District. In pre-project conditions, runoff sheet flows to the Bay. Proposed conditions will collect and discharge runoff to the Bay in a single location. This proposed vegetated channel will be constructed to meander through the site and will improve water quality for runoff entering the Bay. Street runoff and parcel runoff entering this channel will be treated by stormwater BMPs prior to reaching this channel. The vegetation will improve water quality by slowing runoff and filtering pollutants through the soil. Outfalls to the vegetated channel will be protected with riprap to reduce erosion. This channel will be designed to handle the post-project hydromodification. Since the channel is proposed, there will be no erosion or other impacts to beneficial uses from the effects of land development.

The other channel on the Proposed Project site will also have minimal potential for erosion or other impacts to beneficial uses from the effects of land development. The existing Telegraph Canyon Channel is concrete lined and is in the Otay District. The Proposed Project will not contribute a significant impact to the capacity of the channel from the additional flow, since the

peak flow from these storm drains will reach the channel and discharge into the Bay before the peak flow from the City of Chula Vista reaches the channel.

The storm drain system required for the Sweetwater District would be developed during Phase I. The majority of the storm drain system required for the Harbor District would also be constructed during Phase I and completed during Phase III, concurrent with the storm drain system required for the Otay District. *Figure 4.5-7* shows the existing and proposed storm drain system required for the entire project. The new storm drain system would create new outfalls to the Bay. The storm drain systems proposed for each district are described below by phase.

c. Phase I

i. Sweetwater District

Runoff from Parcels S-1, SP-1, and SP- 2 would be collected and conveyed through a naturally lined meandering channel that discharges to the Bay. The natural channel, proposed to be constructed in Phase I, would be designed to meander through the mounds and depressions proposed on Parcel SP-1, a limited use zone. The channel would act as a bioswale, filtering pollutants and slowing the velocity of the water to allow sediment to settle, thereby improving water quality.

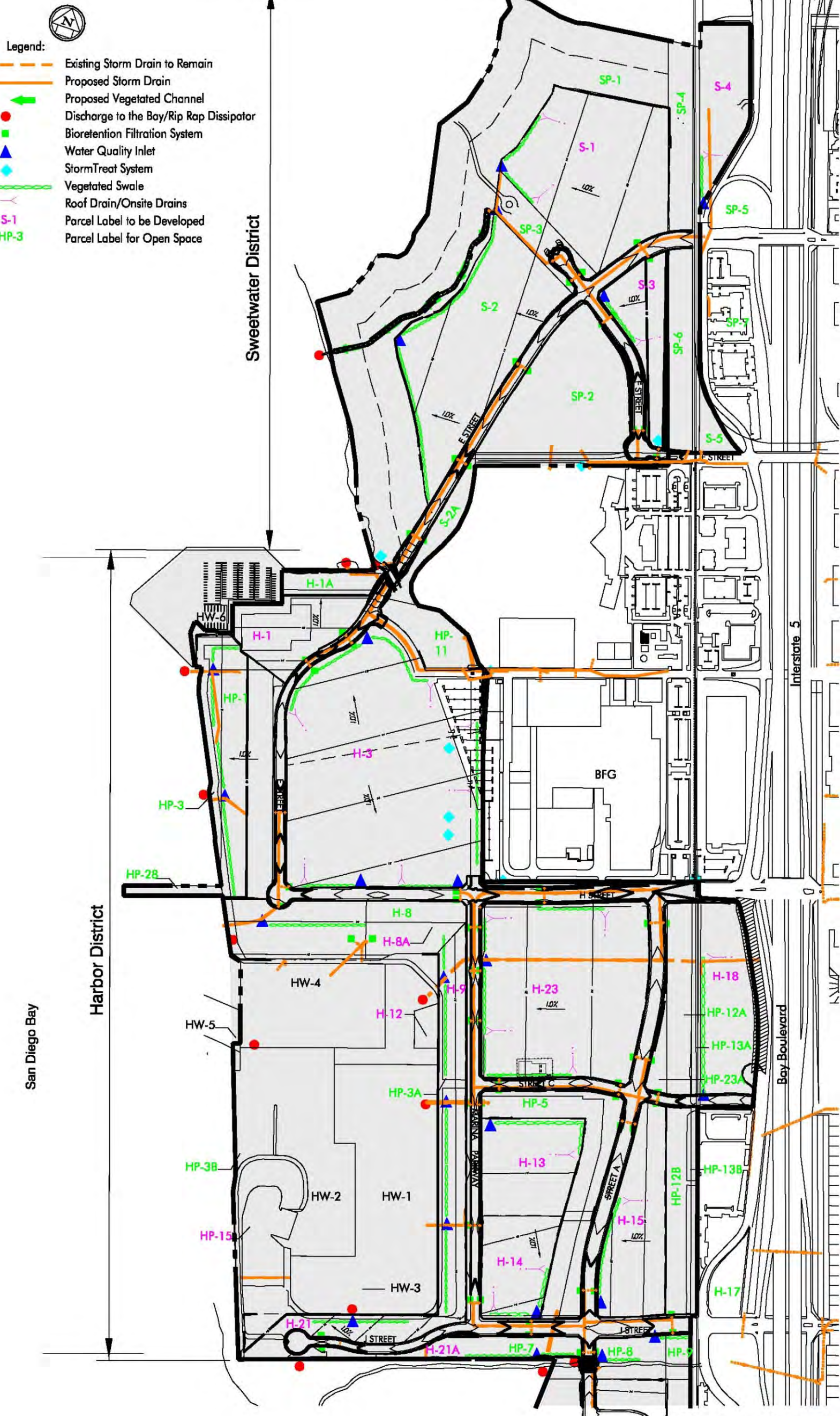
The runoff generated from Parcels S-4, SP-4, and SP-5 would continue to flow from north to south along the existing railroad ROW, collecting and entering the existing drainage system in E Street.

The remaining portion of the Sweetwater District includes Parcels S-2, SP-3, and SP-2, located south and east of E Street. The runoff from these parcels would continue to be collected in the storm drain system located in E Street Extension and discharged into the wetlands north of the Goodrich site. The runoff entering the wetlands flows along a meandering channel and merges with the existing channel that flows under the E Street Bridge finally discharging into the Bay.

The ultimate building location and parking for these parcels has not been finalized; however, site design BMPs and LID measures described in this section will be required and will include minimizing impervious areas, increasing rainfall infiltration, maximizing rainfall interception, and minimizing directly connected impervious areas. Impervious areas will be minimized by using minimum sidewalk widths, placing pervious material for sidewalks, and not including any impervious decorative concrete. Additionally, buildings on Parcels S-1, S-3, and S-4 will be placed in clusters. Rainfall infiltration will be increased by directing rooftop runoff to vegetated swales, using green roofs where practical, building permeable sidewalks, and including permeable parking areas. Rainfall interception will be achieved by preserving and planting native trees and shrubs.



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BMP Locations Plan A-2  
Chula Vista Bayfront Master Plan

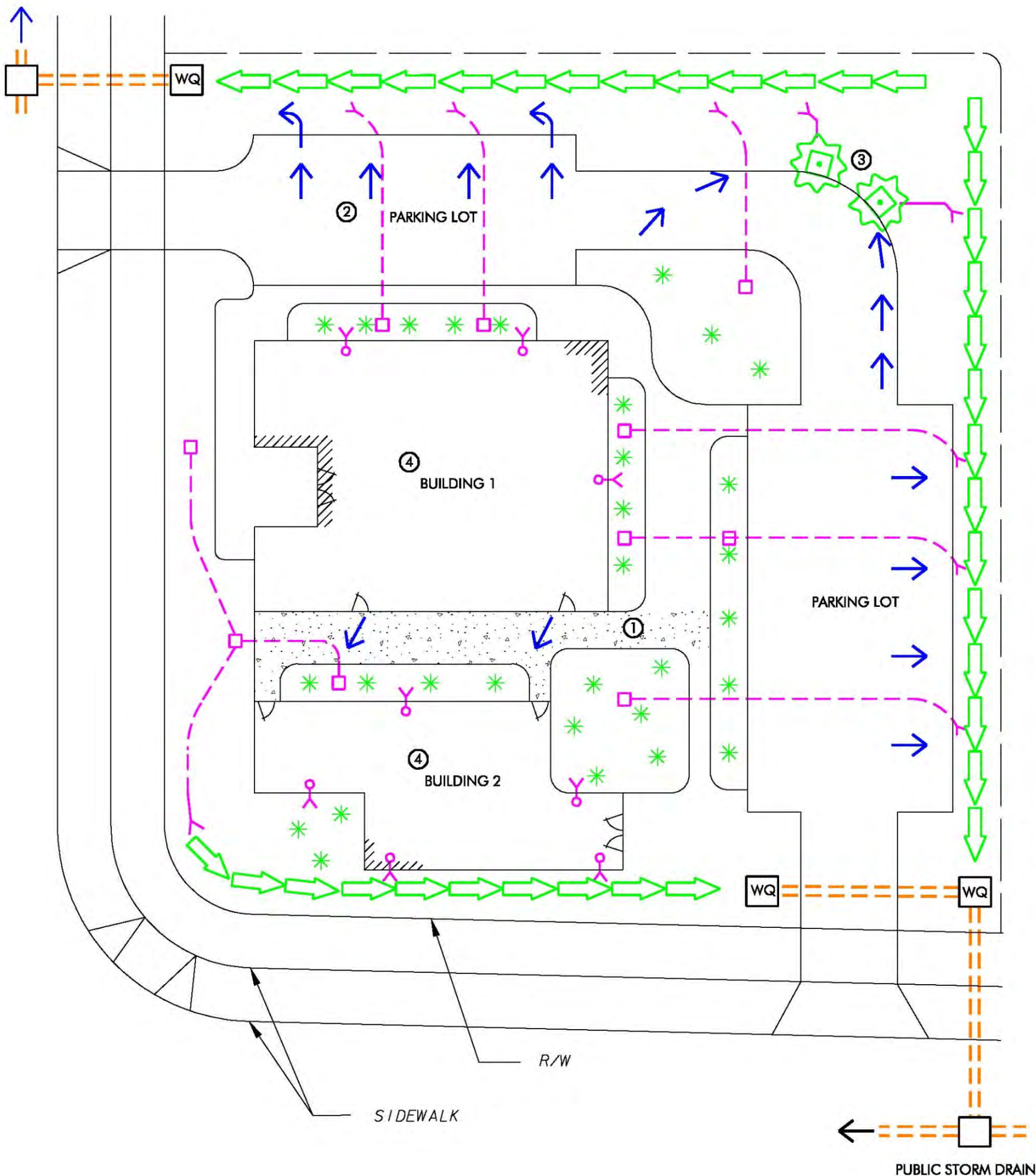
March 2008

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







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**LEGEND**

-  VEGETATED BIOSWALE
-  ROOF DRAIN AND OUTLET INTO LANDSCAPING
-  POROUS PAVEMENT ON WALKWAYS
-  LANDSCAPE DRAIN TO BIOSWALE
-  WATER QUALITY INLET FOR DEBRIS & TRASH REMOVAL
-  FLOW PATH
-  SHEET FLOW FROM PARKING LOT DIRECTED INTO BIOSWALE
-  BIORETENTION FOR SUMPS NOT DIRECTLY DISCHARGING TO BIOSWALE
-  GREEN ROOF AS AN OPTION

N.T.S.  
March 2008

SOURCE: Kimley-Horn and Associates, Inc.

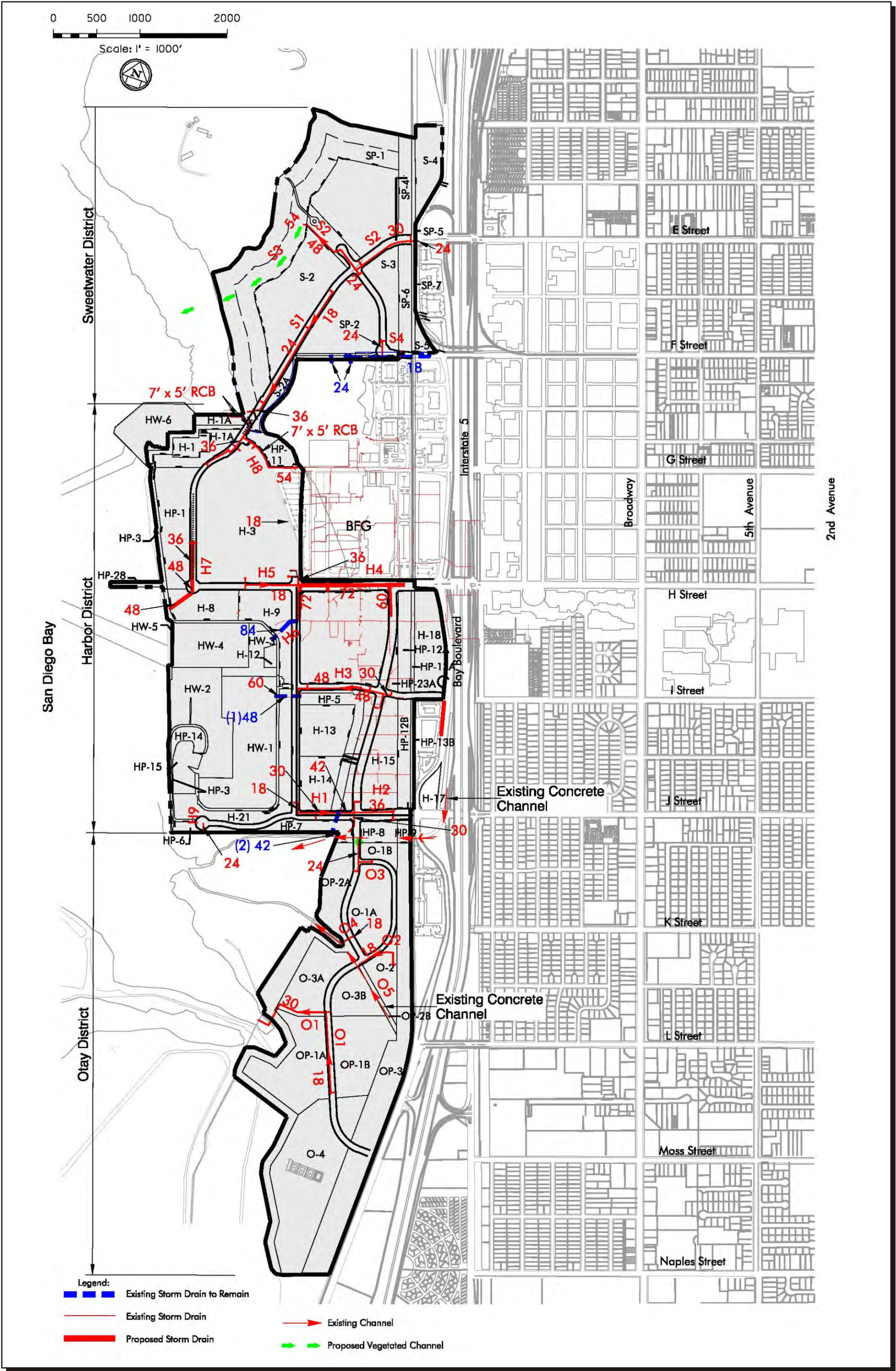
Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Low-Impact Development (LID) Site Design Concept**

**FIGURE**  
**4.5-6**

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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Existing and Proposed Storm Drain System for All Phases**

**FIGURE**  
**4.5-<sup>56552</sup><sub>827</sub>**

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A rain collection system will be used consisting of roof drains directing runoff to vegetated swales and noticed curbs directing parking lot runoff to vegetated swales, which will be located on the downstream side of each parcel. Wherever possible, engineered swales will be used in place of curbs and gutters. Maintenance yards and outdoor work areas must be covered to limit pollutants contacting stormwater. The development of the Sweetwater District will conserve natural areas. The natural habitat buffer on the north side of Parcel S-4 will remain. The rest of the parcels in the Sweetwater District are designated for open space. Native plants or drought tolerant vegetation will be placed on slopes, and riprap will be required for storm drains discharging into the vegetated channel to minimize erosion at the outfall.

ii. Harbor District

Runoff from Parcel HP-11 would be introduced into the channel and discharged into the Bay through the existing channel.

Parcel H-1 would be graded to slope north toward the Bay, to a central discharge location that would discharge directly into the Bay.

Parcels HP-1 and HP-3 would be graded to the west, where runoff would be discharged into the Bay at the existing discharge outlet.

A portion of the runoff from Parcel H-9 would be collected in the newly proposed storm drain system and would discharge into the Bay through an existing 21-inch storm drain outfall. Runoff from the remaining portion of Parcel H-9 as well as Parcel H-12 would discharge through a newly proposed storm drain outlet into the Bay at their own discharge locations.

Parcel H-3 would be graded toward E Street, where it would be collected and conveyed through the proposed storm drain system. Runoff from H Street and Street A merge with flows from Parcel H-3 in the storm drain system at the intersection of H Street and E Street. The combined flows would be routed south on Marina Parkway and be joined by runoff collected from two-thirds of Parcel H-23 collected by the proposed storm drain system in Marina Parkway. The proposed storm drain system in Marina Parkway would be connected to the existing 84-inch storm drain pipe that discharges into the Bay.

Runoff generated east of Street A from ungraded Parcels H-18, HP-12A, HP-13A, HP-23A, Street C and Street A, and portions from Parcel H-15, would be collected by a proposed inlet connected to the storm drain system in Street C. Flows from these parcels would be conveyed and joined with runoff from one-third of Parcel H-23, collected at the intersection of Marina Parkway and Street C. Flows would continue down Marina Parkway, tying into the existing 48-inch storm drain system, where flows would merge with additional flows generated from parcel H-13. Runoff from Parcel H-13 would be conveyed through the existing drainage swale/channel

adjacent to Street C and collected in the existing 48-inch storm drain system, where it would combine with the above mentioned flows at the connection of both existing and proposed storm drain pipes. The existing 48-inch storm drain pipe would convey all generated and collected flows mentioned above, into the Bay.

Two discharge locations are located near the end of the J Street Channel, just downstream of the Street A Bridge. The furthest downstream discharge is an existing storm drain system to be used to convey runoff generated from Parcel H-14. This flow would be collected by the drainage swale/channel located adjacent to Street A and discharged through the existing dual 48-inch pipes into the J Street Channel. The most upstream discharge into the J Street Channel would be a proposed storm drain system located in Street A and J Street, which would collect, convey, and discharge flows generated from Street A and J Street and Parcel H-15.

The western portion of J Street and the cul-de-sac at the end of the street would be collected in a proposed inlet and connected to the existing 21-inch storm drain system.

Site design BMPs and LID measures described in this section will be required and will include minimizing impervious areas, increasing rainfall infiltration, maximizing rainfall interception, and minimizing directly connected impervious areas.

The site design for Parcel H-1 will have minimum-width sidewalks in the marine sales/service area and permeable sidewalks in the park. The marine sales/service will include a landscape buffer between sidewalk and trees, a proper loading dock, and a covered area and rooftop runoff will be directed to vegetated landscape. A natural buffer between the development and the Bay will remain.

Land uses for Parcels H-3 and H-8 are retail and commercial recreation. These parcels will have permeable sidewalks, covered outdoor work areas, and rooftop runoff directed to landscaped areas. A vegetated swale will be located at the downslope perimeter of H-3. Parcel H-12 will have permeable sidewalks, landscape buffer between sidewalk and trees, and rooftop runoff directed to landscaped areas.

Parcel H-18 may include site BMPs by constructing sidewalks and overflow parking with permeable material, placing a landscape buffer between sidewalk trees, and collecting rooftop runoff to landscaped areas. A vegetated swale lines the west perimeter of this parcel. Bioretention filtration devices (Filterra or approved equivalent) will be used in surface parking areas.

### iii. Pacifica Residential and Retail Project

Phase I includes the Pacifica Residential and Retail Project on Parcels H-13 and H-14. The existing topography for Parcels H-13 and H-14 is a graded dirt pad with little or no slope to drain. Parcel HP-5 currently consists of an L-shaped ditch that drains to the south and west. As part of the Proposed Project, Parcel HP-5 will be maintained as a ditch/open space with a 50-foot buffer on both sides. The Pacifica sites will discharge runoff from storm drains at two locations: the northwest corner and the southeast corner.

The Pacifica development will be mixed-use with residential development, retail development, and surface parking. For a residential development, the anticipated pollutants of concern are sediments, nutrients, trash and debris, and pesticides. The potential pollutants of concern include oxygen-demanding substances, oil and grease, and bacteria and viruses. For a commercial development, the anticipated pollutants of concern are trash and debris and oil and grease. The potential pollutants of concern include sediments, nutrients, organic compounds, oxygen-demanding substances, bacteria and viruses, and pesticides. The residential development will not contribute significant oil and grease to the runoff because proposed parking areas will be underground; only the driveways and entrances will contribute oil and grease, and these areas will discharge to vegetated swales prior to entering the storm drain system. This residential area will be high density; therefore, all areas will be paved, which greatly reduces the amount of sediment entering the storm drain system. Bacteria and viruses from food are also not expected because the land use will not involve food products. Oxygen-demanding substances will not enter runoff since solvents are not anticipated on the developed site. A series of stormwater BMPs will be incorporated into the Proposed Project where necessary to reduce the impacts of urban runoff resulting from development. For the Pacifica project, a series of bioswales and water quality inlets will provide filtering for runoff prior to entering off-site storm drain systems. Only medium- and high-efficiency BMPs are proposed. The BMP locations proposed for the Pacifica project are shown on *Figure 4.5-8*.

The pollutants expected from both residential and commercial development are trash and debris and nutrients. Pollutants from the residential and commercial development are oxygen-demanding substances from landscape and some bacteria and viruses from pet feces. Residents will be expected to clean up after their pets, and appropriate signage/notices will be used to accomplish this.

The proposed development will change the hydrologic regime of the site. Pre-project runoff flows to the north, west, and east of Parcel H-13, whereas all proposed flows are directed to the north. Parcel H-14 has pre-project runoff flowing to the south, west, and east. Under proposed conditions, the flow is directed to the southeast. Changes in downstream runoff rates are summarized in *Table 4.5-8* below.

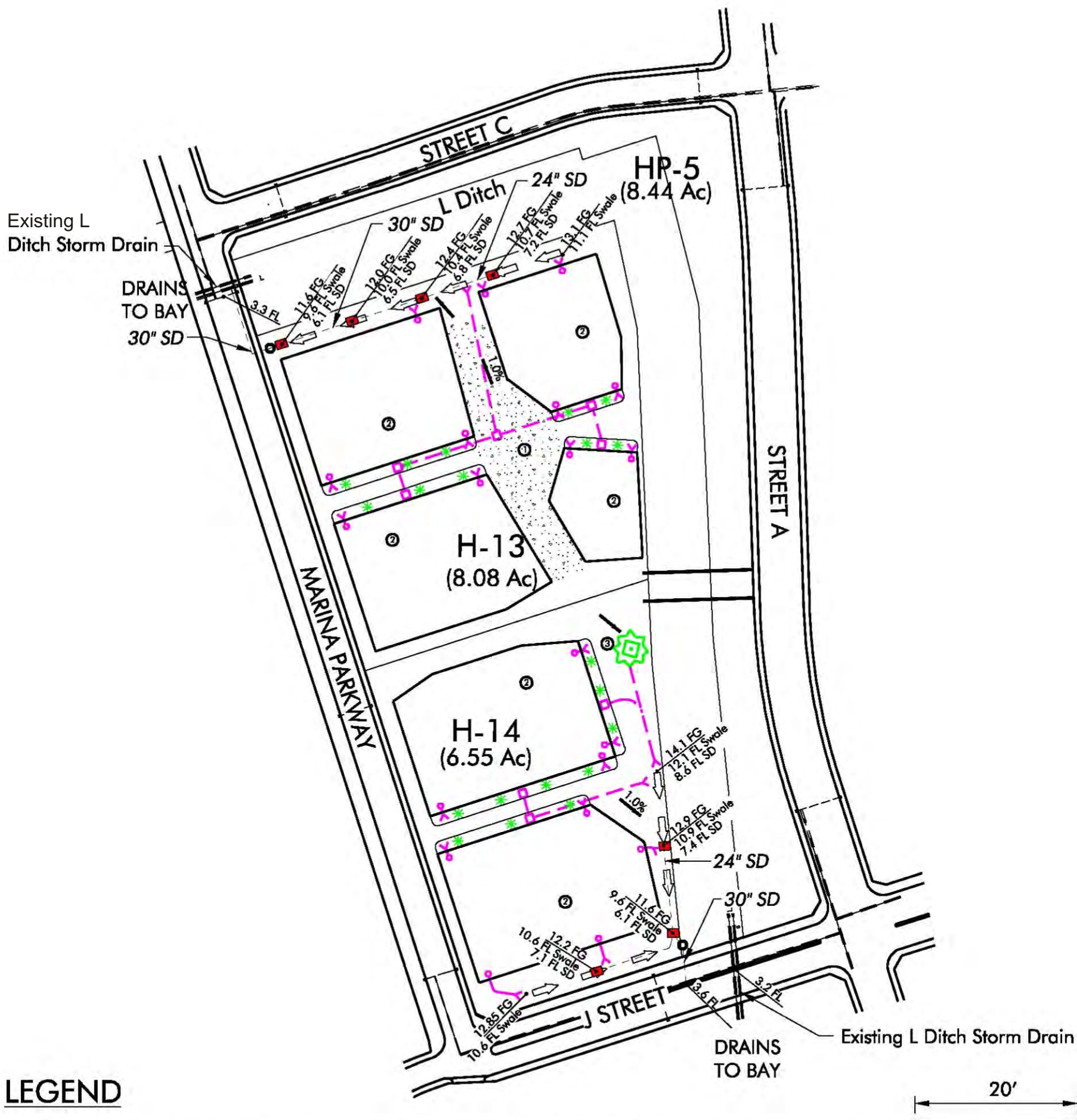
**TABLE 4.5-8**  
**Downstream Peak Discharge Pre- and Post-Project (Pacifica)**

Parcel	Tributary Area (Acres)	Existing		Proposed	
		2-Year Peak Flow (cfs)	10-Year Peak Flow (cfs)	2-Year Peak Flow (cfs)	10-Year Peak Flow (cfs)
H-13	8.0	5.4	8.0	7.13	11.08
H-14	6.2	4.2	6.2	5.83	9.09


The Pacifica site will be designed to minimize the pollutants of concern from entering into the stormwater conveyance system and ultimately the Bay. Site design BMPs, source control BMPs, and treatment control BMPs will be implemented to the maximum extent practical to ensure that pollutants do not come into contact with stormwater by reducing or eliminating the pollutants. In addition, the Proposed Project will be required to implement LID design, source control, and treatment control measures to the maximum extent practical prior to discharging stormwater into vegetated swales. The combination of vegetated swales and water quality inlets will treat and filter runoff prior to entering the storm drain system. Site design BMPs and LID measures will include minimizing impervious areas, increasing rainfall infiltration, maximizing rainfall interception, and minimizing directly connected impervious areas. *Appendix 4.5-5* outlines appropriate BMP and LID design, source control measures, and treatment control measures for the Pacifica site. Design, source control BMPs, and treatment control BMPs in compliance with the Port and City SUSMPs are described below in greater detail. Use of these BMP and LID control measures complies with the NPDES permit.

Impervious areas will be minimized by clustering buildings and using minimum sidewalk widths. The Proposed Project site will disconnect impervious areas with permeable surfaces. Where permeable surfaces cannot be incorporated, parking lots, sidewalks, and patio runoff will be directed toward landscaped areas. Rainfall infiltration will be increased by directing rooftop runoff to vegetated swales and building permeable sidewalks where feasible. Rainfall interception will be achieved by preserving and planting native trees and shrubs. A rain collection system will be used, consisting of roof drains directing runoff to vegetated swales and notched curbs directing parking lot runoff to grass swales. The grass swales are located on the downstream side of each parcel. Wherever possible, engineered swales will be used in place of curbs and gutters. When building roof drains cannot be directed to grass swales, rooftop drains will be directed to flow-through planters in impervious boxes.

Construction fencing and silt fencing will be placed around the natural L-ditch to ensure protection during construction. Native plants or drought-tolerant vegetation will be placed on slopes, and riprap will be required for roof drains discharging into the vegetative swale to minimize erosion at the outfall.



# LEGEND

- ➡ ➡ Grass Lined Swale (Sediment, Nutrients, Trash, Metals, Bacteria, Oil&Grease, and Organics)
- Water Quality Inlet (Sediment, Nutrients, Trash, Metals, Bacteria, Oil&Grease, and Organics)
- Junction Box to Storm Drain
- Parcel Line
- - - Onsite Storm Drain
- ✂ Roof Drain and Outlet into Landscaping
- ➡ Onsite Flow Direction
- === Existing Offsite Storm Drain
- - - Proposed Offsite Storm Drain
- ① Porous Pavement on Walkways
- ② Green Roof as an Option
- ③  Bioretention



Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**BMP Locations for Pacifica Residential and Retail Project**

**FIGURE**  
**4.5-8**

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Treatment control BMPs are designed to filter or treat runoff prior to discharging into an on-site or off-site storm drain system. The site runoff flows into an off-site storm drain at two points. Vegetated swales will function as a treatment design BMP (see *Figure 4.5-8* for locations). Runoff drains to the vegetated swales along three edges of the property, leaving the frontage along Marina Parkway clear. The water quality flow rate for sizing the vegetated swales are produced from a rainfall intensity of 0.2 inches per hour (85th percentile). Runoff is slowly conveyed through the vegetated swales with a minimum contact time of 10 minutes to allow pollutants to settle. The vegetated swale on Parcel H-13 slopes at 0.5 percent for approximately 800 feet. Parcel H-14 requires two 400-foot-long vegetated swales.

Water quality inlets are proposed on Parcels H-13 and H-14 in combination with the vegetated swales. Water quality inlets will be placed in the middle of the two vegetated swales on parcel H-14, with another inlet prior to the junction with the off-site storm drain.

Bioretention filtration systems will be utilized in areas with heavy vehicle activities, such as the parking lot. The majority of the parking lot will be treated with a Filterra unit prior to discharging into the bioswales. Areas where the parking lot cannot be graded toward a Filterra unit in a parking lot median will sheet flow into the bioswale.

iv. ~~Gaylord H-3~~ Resort and Convention Center (RCC)

Phase I also includes the ~~Gaylord~~ RCC development in the Harbor District on Parcel H-3. The parcel will be developed into a Resort Conference Center (RCC) with the main entrance fronting H Street. The majority of parking for the RCC will be underground; however, surface parking will also be provided along with a truck delivery area. The total developed area is 39.0 acres. The existing topography for Parcel H-3 consists of flat undeveloped area and a portion of an existing RV Park. The entire site lies within the San Diego Bay watershed; therefore, the site drains to the San Diego Bay. The ~~Gaylord~~ RCC site will discharge runoff from storm drains at three locations: the northernmost corner of the parcel, the southwest corner, and the southeast corner.

The ~~Gaylord~~ RCC development will be a hotel with mixed-use commercial areas and surface parking areas. The anticipated pollutants of concern for commercial developments are trash and debris and oil and grease. The potential pollutants of concern include sediments, nutrients, organic compounds, oxygen-demanding substances, bacteria and viruses, and pesticides. Bacteria and viruses are also potential pollutants from restaurants. The anticipated pollutants for parking lots are heavy metals, trash and debris, and oil and grease. The potential pollutants for parking and delivery areas are sediments, nutrients, oxygen-demanding substances, and pesticides. Copper is anticipated from the parking lot due to vehicle braking, making copper a primary pollutant of concern.

The majority of the site will be developed, which decreases the amount of sediment and nutrients entering the storm drain system. Oxygen-demanding substances will not enter runoff because solvents are not anticipated on the developed sites. Furthermore, the parking lot will have minimal sediment discharge because parkway areas will be landscaped and maintained. As with the Pacifica project, the ~~Gaylord~~RCC development will include a series of vegetated swales and water quality inlets to provide filtering for runoff prior to entering off-site storm drain systems. Filterra units will be utilized in areas with heavy vehicular traffic, such as truck delivery areas. Bioretention filtration systems will also be utilized for surface parking lots in order to remove potential pollutants such as copper. Only medium and high efficiency BMPs are proposed. ~~The~~ Conceptual BMP locations proposed for the ~~Gaylord~~RCC are shown on *Figure 4.5-9*.

The proposed development will change the hydrologic regime of the site. Pre-project runoff flows to the north, west, and east of Parcel H-3. In proposed conditions, a grade break that runs east to west in the middle of the parcel directs flows to the north and the south. There are no channels downstream of the Proposed Project site; flows in that area discharge directly to the Bay. Changes in runoff rates for the downstream discharge are summarized in *Table 4.5-9* below.

**TABLE 4.5-9**  
**Runoff Summary Pre- and Post-Project (~~Gaylord~~RCC)**

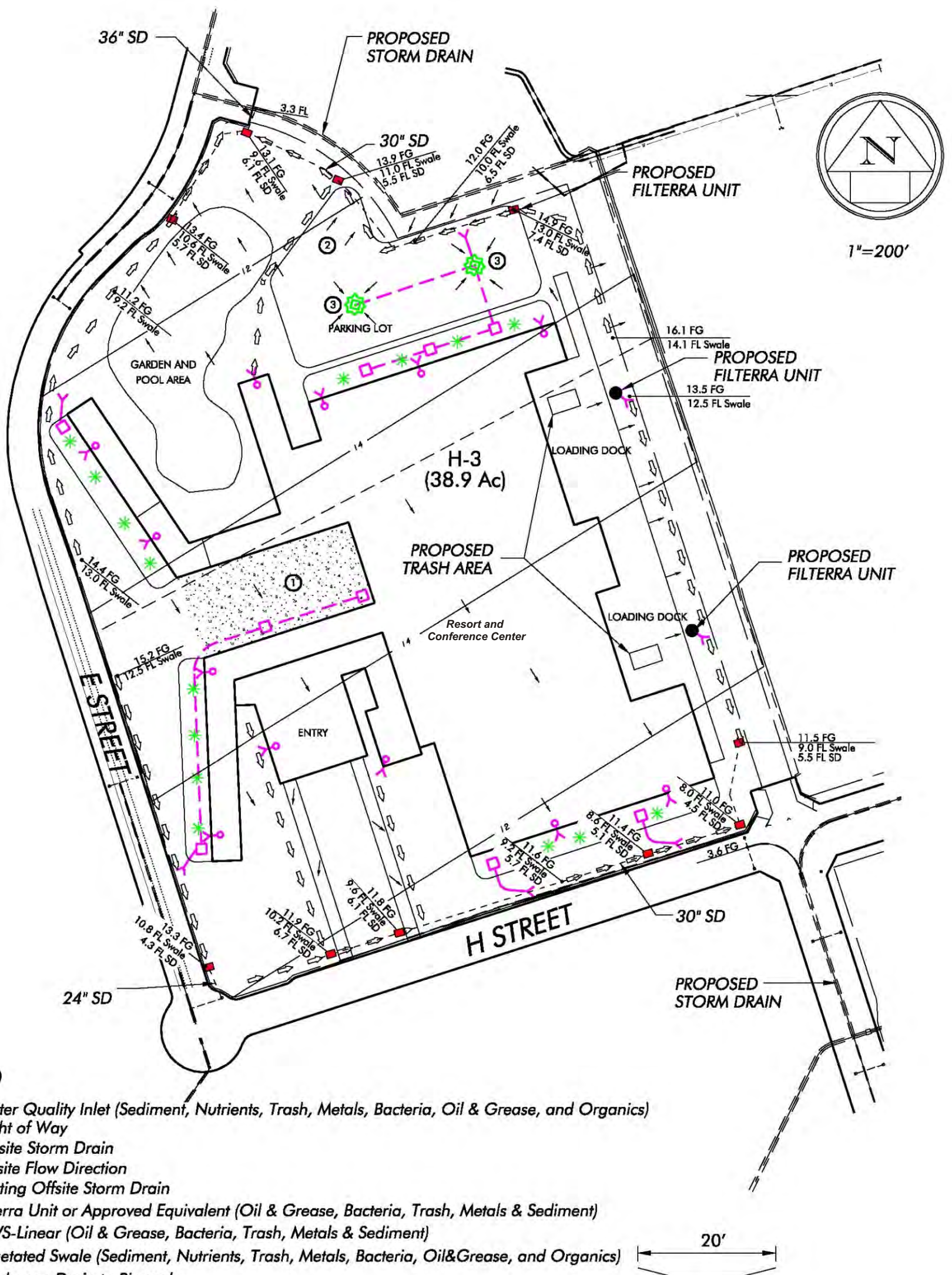
Basin	Tributary Area (Acres)	Existing		Proposed	
		2-Year Peak Flow (cfs)	10-Year Peak Flow (cfs)	2-Year Peak Flow (cfs)	10-Year Peak Flow (cfs)
1	4.5	3.0	4.5	6.8	10.4
2	18.8	12.7	18.7	20.8	34.2
3 & 4	15.6	10.6	15.5	17.5	26.3



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## LEGEND

- Water Quality Inlet (Sediment, Nutrients, Trash, Metals, Bacteria, Oil & Grease, and Organics)
- Right of Way
- Onsite Storm Drain
- Onsite Flow Direction
- Existing Offsite Storm Drain
- Filterra Unit or Approved Equivalent (Oil & Grease, Bacteria, Trash, Metals & Sediment)
- MWS-Linear (Oil & Grease, Bacteria, Trash, Metals & Sediment)
- ⇄ Vegetated Swale (Sediment, Nutrients, Trash, Metals, Bacteria, Oil&Grease, and Organics)
- ✂ Landscape Drain to Bioswale
- ✂ Roof Drain and Outlet Into Landscaping
- Porous Pavement on Walkways
- Sheet Flow From Parking Lot Directed Into Bioswale
- Bioretention for Parking Lot
- Green Roof as an Option
- ✱ Landscape



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Conceptual BMP Locations for RCC**

**FIGURE**  
4.5-9

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The ~~Gaylord-RCC~~ site will be designed to minimize the pollutants of concern from entering into the stormwater conveyance system and ultimately the Bay. Site design BMPs, source control BMPs, and treatment control BMPs will be implemented to the maximum extent practical to ensure that pollutants do not come into contact with stormwater by reducing or eliminating the pollutants. In addition, the Proposed Project will be required to implement LID design, source control measures, and treatment control measures to the maximum extent practical prior to discharging stormwater into vegetated swales. The combination of vegetated swales and water quality inlets will treat and filter runoff prior to entering the storm drain system. Site design BMPs and LID measures will include minimizing impervious areas, increasing rainfall infiltration, maximizing rainfall interception, and minimizing directly connected impervious areas. *Appendix 4.5-4* outlines appropriate BMP and LID design, source control measures, and treatment control measures for the ~~Gaylord-RCC~~ site. Design, source control BMPs, and treatment control BMPs in compliance with the Port and City SUSMPs are described below in greater detail. Use of these BMP and LID control measures complies with the NPDES permit.

The ~~Gaylord-RCC~~ site will minimize impervious areas by clustering buildings and using pervious materials for sidewalks where feasible. The Proposed Project site will disconnect impervious areas with permeable surfaces. Where permeable surfaces cannot be incorporated, parking lots, sidewalks, and patio runoff will be directed toward landscaped areas. Rainfall infiltration will be increased by directing rooftop runoff to vegetated swales, building permeable sidewalks, and including permeable sidewalk areas. Rainfall interception will be achieved by preserving and planting native trees and shrubs. A rain collection system will be used, consisting of roof drains directing runoff to vegetated swales and notched curbs directing parking lot runoff to grass swales. The grass swales are located on the downstream side of each parcel. Wherever possible, engineered swales will be used in place of curbs and gutters. When building roof drains cannot be directed to grass swales, rooftop drains will be directed to flow-through planters in impervious boxes.

Open landscaped spaces ~~are will be~~ proposed on the ~~Gaylord-RCC~~ site. Native plants or drought-tolerant vegetation will be placed on slopes and riprap will be required for roof drains discharging into the vegetative swale to minimize erosion at the outfall.

Treatment control BMPs are designed to filter or treat runoff prior to discharging into an on-site or off-site storm drain system. The site runoff flows into an off-site storm drain at two points. Vegetated swales will function as a treatment design BMP (see *Figure 4.5-9* for conceptual locations). Runoff drains to the vegetated swales along the north and south edge of the property. The water quality flow rate for sizing the vegetated swales are produced from a rainfall intensity of 0.2 inches per hour (85th percentile). Runoff is slowly conveyed through the vegetated swales with a minimum contact time of 10 minutes to allow pollutants to settle. Two vegetated swales are located on the northern edge of the parcel. Each swale slopes at 0.5 percent for approximately

400 feet. The swales on the southern edge also slope at 0.5 percent for approximately 400 feet each. These swales are not connected to allow the RCC an open front for a water feature/fountain. The vegetated swale requires approximately 2 percent of the site area.

Water quality inlets are proposed in combination with the vegetated swales. Water quality inlets will be evenly placed at intervals between the vegetated swales to capture high flows. An additional water quality inlet will be placed in the system at the junction of the off-site storm drain.

The preliminary site design includes surface parking and loading areas for truck deliveries on the east side of the parcel. Additional treatment for this area is necessary to prevent oil and grease and trash and debris into the storm drain system. Bioretention filtration systems will be utilized in areas with heavy vehicular traffic, such as truck delivery areas and parking lots. The loading dock will be designed to flow to bioretention areas which will treat runoff and discharge into a vegetated swale. During high flows, runoff will drain directly into the vegetated swale.

d. Phases II through IV

The storm drain system required for Parcels H-21 and HP-7 would not be constructed until Phase II. Runoff from a portion of Parcel H-21 on the north side of J Street would be collected and conveyed through a proposed storm drain pipe proposed for Phase I that would discharge into the Bay. Specific plans for the remaining portions of H-21 and HP-7 would require the construction of additional storm drains. The number and location of the additional storm drains needed to serve Parcels H-21 and HP-7 would be determined when plans for the development of those parcels are submitted and would be subject to environmental review pursuant to CEQA Guidelines Section 15168 prior to the commencement of development during Phase II. The construction of the additional storm drains and the installation of landscape elements that filter and slow runoff would ensure that potential impacts would be less than significant.

Parcel H-12 (ferry terminal/second-story restaurant) will have permeable sidewalks, landscape buffer between sidewalk and trees, and rooftop runoff directed to landscaped area. Site BMPs for Parcel H-15 (mixed-use office/commercial recreation/hotel) will be permeable sidewalks and overflow parking, increased building height to minimize footprint, and rooftop drainage directed to vegetated areas.

Parcel H-21 is designated for retail, marina support, and parking land use. Permeable sidewalks will be constructed throughout the site. The retail and marine support area must consider increasing building height to minimize impervious footprint. All rooftop drainage will be directed to vegetated areas. The surface parking area will include permeable surfaces for overflow parking, and bioretention filtration devices will be placed in medians.



H-23 land uses consist of resort hotel, cultural, retail, and parking. The site will have permeable sidewalks and permeable overflow parking. Rooftop drainage from the hotel, cultural, and retail buildings will be directed to a vegetated swale. These building heights can also be increased to minimize impervious footprint while maintaining necessary footage. Any surface parking lots will have bioretention devices in medians.

The rest of the parcels in the Harbor District conserve natural areas with open space and water recreation. Native plants or drought tolerant vegetation will be placed on slopes, and riprap will be required for storm drains discharging into vegetated channel.

i. Otay District

As indicated above, the Proposed Project would increase the impervious surface area in the Otay District, which may result in a significant impact due to the increased runoff. To reduce the potential impacts to water quality, the Proposed Project would implement the following improvements to the storm drain system in the Otay District in addition to the installation of permanent source control and treatment control BMPs during Phase III. Runoff from portions of Parcels O-1 and OP-2A would be conveyed via Street A and Street B and collected in the proposed storm drain systems at the intersection of these streets. The flows would discharge through a proposed 24-inch pipe into the J Street Channel and be conveyed to the Bay approximately 400 feet downstream.

Additional flows from Street A and Parcel O-1 would be collected in a proposed 18-inch storm drain system that would discharge into the Telegraph Canyon Channel and be conveyed to the Bay, approximately 650 feet upstream from the Bay.

Runoff flow generated from Parcel O-1 would be captured and conveyed through the proposed storm drain system in Street B and would discharge into the Telegraph Canyon Channel, approximately 850 feet upstream from the Bay.

All other flows generated from the Otay District from Parcels O-3B, O-3A, OP-1A, and O-4 would be collected and conveyed through the proposed storm drain system in Street B. This storm drain system would discharge into the Bay through a 30-inch discharge pipe.

The storm drain system improvements for Phase III described above are designed to avoid or minimize significant impacts.

e. Construction Activities

Pollutants from construction activities include excessive erosion, sedimentation, metals, nutrients, soil additives, pesticides, construction chemicals, and other construction wastes. Locations of construction materials exposed to water, building activity areas, and BMPs to

eliminate or reduce discharge of pollutants from the site during construction will be addressed in the SWPPP. The SWPPP will indicate where materials would be directly exposed to stormwater. Designated construction activity areas for materials and waste storage as well as hazardous materials storage and equipment fueling and cleaning will be required for the SWPPP. Construction fencing will be placed around the legal site boundary to ensure off-site resources are not disturbed. The NPDES permit will also require advanced treatment for sediment at construction sites determined to be an exceptional threat to water quality.

**f. Runoff from Parking Lots and Streets (All Districts)**

An increase in vehicle traffic and large surface parking areas (including multiple-story parking structures) would potentially increase surface runoff carrying oils and other vehicle-related contaminants, ultimately increasing the potential to impact the water quality of the Bay during storm events. However, parking lots will have minimal sediment discharge since natural areas will be landscaped and maintained. Additionally, streets will be paved with landscaping in the parkway areas where feasible, thus reducing the potential for sediment transported in runoff. The on-site streets drain directly to the Bay; therefore, treatment is necessary to prevent pollutants, such as copper, from entering the Bay. A bioretention filtration system will be used upstream of every proposed curb inlet. Bioretention filtration systems will also be utilized in areas with heavy vehicular activities, such as truck delivery areas and parking lots, or where vegetated swales are not feasible due to area constraints. Although pollutants still have the potential to enter waterways, there would be an incremental reduction in runoff after storm events, which would not result in an increase in impacts to water quality.

**g. Design, Source Control BMPs, and Treatment Control BMPs**

Erosion/Siltation Control Plans and an SWPPP, in accordance with NPDES permit requirements for specific developments, would be implemented to reduce impacts associated with the increase in human use and impervious surfaces. The SWPPP would address the following topics:

- Scheduling of treatment and decontamination
- Source identification of discharge
- Erosion and sediment control
- Non-stormwater management
- Post-construction stormwater management
- Waste management and disposal
- Maintenance, inspection, and repair needed
- Educational training sessions for assigned personnel.

The Proposed Project would provide source control and treatment control facilities in compliance with existing regulations and specific Port and City SUSMP requirements to avoid significant water quality impacts. Source control emphasizes the prevention and reduction of non-point pollution by eliminating the opportunity for pollutants on the land surface to enter surface runoff. Treatment control BMPs are designed to filter or treat runoff prior to discharging into an on-site or off-site storm drain system. The Port SUSMP applies to Port properties and the City SUSMP applies to parcels under the City's jurisdiction. The Port SUSMP and City SUSMP are contained in *Appendix 4.5-9* and *Appendix 4.5-10*, respectively, to this document.

The SUSMP documents identify three management approaches for controlling pollutant runoff:

1. Implementation of site design BMPs include reducing imperviousness, conserving natural resources and areas, providing runoff storage, and implementing on-lot hydrologically functional landscape design and management practices.
2. Source control BMPs include storm drain system stenciling and signage, outdoor material storage areas and trash storage areas to reduce pollution introduction, the use of efficient irrigation systems and landscaping design, and requirements applicable to the project. The requirements to be incorporated into the Port projects during the stormwater BMP selection and design process are included in Table 2-6 of *Appendix 4.5-9* and the source control BMPs are listed in Table 2-7 of *Appendix 4.5-9*. The development on property under the City's jurisdiction shall incorporate the City requirements for site design and source control stormwater BMPs, as listed in Table 2 of *Appendix 4.5-10*.
3. Treatment control BMPs include the installation of a single or combination of stormwater BMPs to remove anticipated pollutants of concern in site runoff to the maximum extent practicable. The acceptable stormwater treatment BMPs for the Port and City and are listed in Appendix A to this report's *Appendix 4.5-9* and Attachment B2 to this report's *Appendix 4.5-10*.

The source design BMPs for the Proposed Project will include prohibition of dumping waste materials with notices regarding discharge prohibitions adjacent to storm drain inlets. Storm drain signs and stencils with the message "No Dumping—Drains to Bay" will be used to alert the public against dumping waste into the storm drain conveyance system. The stenciling will be required on all public and private inlets. Additional signage to prevent pet wastes and use of trash receptacles will be placed throughout the development to encourage the public to pick up after pets. In addition, appropriate signage describing the function of the vegetated swales will be placed to increase public awareness.

Vegetated swales will function as a treatment design BMP. The removal effectiveness of vegetated swales is medium for sediment, metals, oil and grease, and organics and low for nutrients, trash, and bacteria. The water quality flow rate for sizing the vegetated swale was

produced from a rainfall intensity of 0.2 inches per hour (85th percentile) and a runoff coefficient “c” of 0.95.

Water quality inlets will be placed in conjunction with the vegetated swales. Inlets placed at intervals between the vegetated swale can capture pollutants during high flows over the water quality flow rate. Water quality inlets have a medium removal efficiency for trash and debris and oil and grease and low efficiency for sediment, nutrients, metals, bacteria, and organic compounds. These inlets can be inserted in curb openings or catch basins. Inlet filter inserts are devices that are installed in each curb inlet of a storm drain system. The inserts include a basket and filter media to intercept trash and debris, oil and grease, and bacteria.

Environmentally sensitive areas will incorporate a secondary treatment BMP. Discharge from F and G Street will first be treated with a bioretention filtration system and then a sand filter prior to discharging into the marsh. The sand filter will not contain standing water to avoid vector issues.

Pollution removal is maximized when a combination of BMPs are used. The Proposed Project would implement the BMPs described above to increase the pollutant removal efficiency. These BMPs are approved by the Port and City SUSMP documents. *Table 4.5-10* describes the Treatment BMP Efficiency for each measure.

**TABLE 4.5-10**  
**Treatment BMP Efficiency**

Pollutant	Filtration	Vegetated Swale	Water Quality Inlet	Multiple System
(Sediment)	H	M	L	H
Nutrients	L	L	L	—
Heavy Metals	H	L	L	H
Organic Compounds	H	M	L	H
Trash & Debris	H	L	M	H
Bacteria	M	L	L	M
Oil & Grease	H	M	M	H

H: High removal efficiency

M: Medium removal efficiency

L: Low removal efficiency

The NPDES permit process and BMPs described above would reduce impacts associated with potential polluted surface water runoff, groundwater, and Bay contamination from fertilizers to below a level of significance.

The Proposed Project also falls into the individual priority project categories and must adhere to source control BMP requirements set forth in the Port of San Diego’s SUSMP. The individual



priority project categories consist of dock areas, maintenance bays, vehicle wash areas, outdoor processing areas, and surface parking areas, which are subject to the following requirements:

1. Loading and unloading dock areas shall have an acceptable method of containment and pollutant removal, such as shut-off valve and containment area. There will be no direct connections to storm drains from depressed loading docks (truck wells).
2. Maintenance bays shall be designed to preclude urban run-on and runoff and shall include a repair/maintenance bay drainage system to capture all wash water, leaks, and spills. Drains shall be connected to a sump for collection and disposal. There will be no direct connection of the repair/maintenance bays to the stormwater conveyance system.
3. Areas for washing out vehicles and areas for outdoor equipment/accessory washing shall be self-contained to preclude run-on and runoff, covered with a roof or overhang, and equipped with a clarifier or other pre-treatment facility and properly connected to a sanitary sewer.
4. Outdoor processing areas shall cover or enclose areas that would be the most significant source of pollutants and slope the area toward a dead-end sump. The processing area shall be graded or bermed to prevent run-on from surrounding areas. There will not be installation of storm drains in areas of equipment repair.
5. Overflow surface parking areas (parking in excess of the project's minimum parking requirements) may be constructed with permeable paving.

In addition, the NPDES permit is currently being updated to reflect the RWQCB MS4 Permit, Order number R9-2007-0001. LID techniques are required in the MS4 permit, which will be incorporated to further reduce pollution from this Proposed Project entering the Bay. The first goal of LID is to reduce the generation of stormwater runoff. The second goal is to treat pollutants where they are generated by evenly distributing the management of stormwater throughout the site. The principles of LID can be characterized by the following practices:

1. Conserve natural resources that provide valuable natural functions associated with controlling and filtering stormwater
2. Minimize and disconnect impervious surfaces
3. Direct runoff to natural and landscaped areas conducive to infiltration
4. Use distributed small-scale controls on Integrated Management Practices (IMPs) to mimic the site's pre-project hydrology:
  - a. Bioretention
  - b. Vegetated/rock swales
  - c. Filter strips

- d. Vegetative roof systems
  - e. Rain collection systems
  - f. Permeable pavement and materials
5. Provide stormwater education, which leads to pollution prevention.

The mixture of land uses proposed by the Proposed Project will require a combination of LID techniques. The following section lists LID solutions based on the development category. Incorporating multiple LID practices for a treatment train will maximize the effectiveness of LID design. The ultimate precise locations of the following LID strategies will be determined during the on-site plan development. The following are potential BMPs that could be incorporated on each site. Soil condition and groundwater elevation must be considered for some of the following devices:

- Multifamily residential
  1. Turf block fire access road (with fire sign)
  2. Multiuse lawn play area, fire access, and biofiltration
  3. Roof downspout to landscaping
  4. Vegetation for water retention (deep-rooted trees)
  5. Herbaceous vegetation at drip line of roof
  6. Covered trash enclosures
  7. Porous sidewalks.
- Commercial (shopping)
  1. Vegetated/rock swale along perimeter
  2. Infiltration bed to divide parking aisles
  3. Permeable pavement parking stalls
  4. Notched curb to direct runoff from parking area into swale
  5. Collected runoff directed from impervious area to infiltration area
  6. Covered maintenance yard/service areas/trash enclosures
  7. Porous sidewalks.
- Commercial (office)
  1. Collected runoff directed from impervious area to infiltration area
  2. Vegetated swale
  3. Landscaped “parking reserve”

4. Concave landscape areas to infiltrate runoff
  5. Pervious overflow parking stalls
  6. Roof drainage directed to landscape
  7. Porous sidewalks.
- Commercial (restaurant)
    1. Permeable pavement patio or covered outdoor eating areas
    2. Collected runoff directed from impervious area to infiltration area
    3. Hybrid parking lot
    4. Herbaceous vegetation at drip line
    5. Concave landscape areas to infiltrate runoff
    6. Covered outdoor work area (trash, food waste, storage, equipment wash)
    7. Porous sidewalks
    8. Runoff directed to landscape areas.
  - Park
    1. Porous sidewalk
    2. Vegetated swale on downstream side
    3. Trash enclosures.
  - Industrial
    1. Vegetated/rock swale along perimeter
    2. Collected runoff directed from impervious area to infiltration area
    3. Permeable pavement fire lane
    4. Notched curb to direct runoff from parking area into swale
    5. Proper loading dock design
    6. Covered maintenance yard/service areas
    7. Porous sidewalks.
  - Parking lot
    1. Landscape detention areas
    2. Permeable surfaces (porous pavement and sidewalks).

The increased pedestrian activity and debris-generating businesses on the waterfront, such as carry-out food, would increase the potential for wind-blown litter entering the Bay. In addition to pollutants carried in runoff, wind-blown litter has the potential to result in a significant impact on Bay water quality (**Significant Impact 4.5-1**).

In addition, there are seasonal wetlands located north of Lagoon Drive in the Sweetwater District on Parcel SP-2 that are considered environmentally sensitive. USACE, CDFG, and the California Coastal Commission (CCC) consider these to be jurisdictional wetlands. Another environmentally sensitive area, the F & G Street Marsh, is located adjacent to the Proposed Project site on the south side of Lagoon Drive. The project proposes protection of these resources from urban runoff by the design and implementation of permanent BMP facilities on parcels adjacent to these sensitive areas.

**6. The Proposed Project would have a significant impact if it creates or contributes runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**

**a. Phase I**

Much of the storm drain system for the Sweetwater District and most of the Harbor District would be constructed during Phase I. The Sweetwater District would have a total discharge unit of 1.04 cfs per acre, and the Harbor District would have a total discharge unit of 1.74 cfs per acre. The projected Phase I runoff flows per parcel are included in *Appendix 4.5-2*. In general, the proposed storm drain system is designed to accommodate the projected stormwater discharge.

The proposed storm drain system would consist of a storm drain line in street ROWs with connections to development parcels. Curb inlets would be installed in the streets to intercept street runoff and convey it in the storm drain system that discharges directly into the Bay. The existing storm drains that discharge into the HP-5 drainage ditch (Parcel HP-5) would be removed, and the runoff from these sites would be redirected to the new storm drain facilities in the streets. The flows would enter the new public storm drain system in the street that would be constructed with a stormwater BMP located at the downstream location prior to entering the Bay. This public system would be maintained by the City. Some of the existing storm drain connections to the Bay would be used for the proposed development. *Figure 4.5-7* shows the existing and proposed storm drain system required for the entire project.

Off-site drain lines from the City, Caltrans, railroad, and Goodrich pass through the Proposed Project area and would be maintained. There are currently no upstream storm drains that connect directly to the project site. Currently the City's off-site runoff flows into the Bay through the existing J Street Channel and Telegraph Canyon Channel. For the most part, the project site's

runoff would remain separated from upstream storm drain systems. There is no downstream capacity constraint for this scenario, as the Bay is at the end of the stormwater conveyance system.

The project does, however, propose to connect the storm drains in J Street and Street A (in the Harbor District) to the J Street Channel approximately 300 feet upstream from the channel/Bay interface. Using the City of Chula Vista's drainage standards, it was determined that the peak flow from these storm drains would reach the channel and dissipate into the Bay before the peak flow from the City of Chula Vista reaches the channel (see analysis in *Appendix 4.5-2*). As a result, flows from this storm drain would result in a less than significant impact on the capacity of the J Street Channel. Therefore the Proposed Project's runoff would not increase runoff flows or exceed the capacity of the existing stormwater system during Phase I.

b. Phases II through IV

The storm drain system, including improvements to the Telegraph Canyon Channel within the Proposed Project boundaries, for the Otay District would be constructed during Phase III. The proposed storm drains in Street A and Street B in the Otay District would connect directly to the Telegraph Canyon Channel approximately 500 feet upstream from the channel/Bay interface. Although the peak flow from these storm drains would most likely reach the widened channel and dissipate into the Bay before the peak flow from the City reaches the channel, a detailed hydrologic and hydraulic analysis that takes into account upstream constraints as well as additional flows from the Proposed Project would be required prior to beginning development of Phase III, to confirm that the future capacity of the channel would be sufficient.

**7. The Proposed Project would have a significant impact if it results in pollution or contamination that may have an impact on human health and the environment, including the aquatic habitat, or impacts on biological communities.**

c. Construction Impacts on All Phases

The installation of major infrastructure for the Sweetwater and Harbor Districts would occur in Phase I, and the major infrastructure for the Otay District would be constructed during Phase III. Construction for each phase can be divided into two main categories: site preparation and building construction. Phase I site preparation would include the grading of a majority of the Sweetwater and Harbor Districts, the construction of the major access roads, and sewer and water infrastructure. Grading in subsequent phases would be limited to modifying the rough grading that occurred during the first phase. While it is anticipated that the development of all phases of the Proposed Project could take 24 years, it is expected that site preparation in any given phase would last for a year or less.

Contaminated soils are present on future development project parcels within the plan area, particularly in many of the former industrial use locations such as the former Goodrich South Campus site (Parcel H-23). In addition, historic industrial uses in the area have contaminated surface water and groundwater. Drilling for the placement of building footings, clearing, brushing, and grading activities during site preparation and future operations could increase the potential for spills or the spread of contamination via surface water or groundwater. The majority of the Proposed Project would be constructed in the first five years (Phases I and II). Development would continue to occur during Phases III and IV based on demand, but the amount of development would be proportionately less than in Phases I and II.

Construction-related dewatering (as required during the construction of utilities, excavation of the wet wells, and excavation for emergency storage vaults for the sewer lift stations; see *Section 4.14.2.3, Public Utilities*) would withdraw water from the aquifer, which may be contaminated, depending on the location in the plan area. The potential to contaminate runoff conflicts with the Basin Plan and the water quality objectives for the Bay. The Proposed Project's potential to disturb contaminated soils and groundwater during construction activities would be a significant impact (**Significant Impact 4.5-2**).

The discharge of groundwater is regulated by the NPDES permit adopted by the RWQCB. The permit allows discharges to surface water in conformance to the standards in the NPDES permit. Due to the close proximity to the Bay and the potential for contaminants in the groundwater, it is possible that the Proposed Project would be required to discharge to the municipal sewer system. A permit must be obtained from the Industrial Wastewater Control Program, which is responsible for regulating discharges to the Metropolitan Wastewater Department (MWWD) sewer system and tributary sewer systems of adjacent agencies, including the City of Chula Vista. In addition, a permit would be required from the City of Chula Vista. Testing of the discharge for pollutants would also be required.

Adverse temporary impacts to water quality could result during accidents and unintentional discharges resulting from spills of fuel, lubricants, or hydraulic fluid from the equipment used during construction, including dredge and fill activities and construction of the H Street Pier. Potential impacts would depend on the amount and type of material spilled as well as specific conditions (e.g., currents, wind, temperature, waves, and vessel activity) at the site of the spill. In most cases, such spills would be small and could be cleaned up immediately, causing less than significant impacts in the short term. In addition, implementation of BMPs would reduce water quality impacts from pollutants carried by runoff. Although not expected to occur, a spill in a worst-case scenario would result in significant impacts on water quality (**Significant Impact 4.5-3**).

The San Diego Bay within the Chula Vista Marina is listed on the 303(d) List as impaired for PCBs and copper. Permanent stormwater BMPs must be incorporated into future projects where necessary to mitigate the impacts of urban runoff as a result of the development. The Proposed Project would not include industrial uses or uses, such as boat washing facilities, that would create a new source of contamination. Furthermore, no net increase of boat slips would result in the Harbor District because the increase of slips at the existing South Bay Boatyard site would be offset by the reduction of slips in the Chula Vista Marina, and, therefore, no change to the existing condition with regard to potential contamination of copper would result.

The assessment of dredge and fill impacts from realignment of the navigation channel is based on regulatory controls and the requirement to obtain Section 401 and 404 (of the CWA) Permits from the RWQCB and USACE for dredging and filling activities. The permitting conditions would include standard Waste Discharge Requirements.

The potential exists for contaminants contained in the bottom sediment of the Bay to be released into the water column during the dredge and fill operations and the construction of docks, the ferry terminal, the H Street Pier, the existing South Bay Boatyard Marina, Chula Vista Marina, and the realignment of the navigation channel. Significant impacts to water quality and biological communities could result if contaminated sediments are exposed or redistributed as a result of dredge and fill operations and construction activities within and outside the Chula Vista Harbor and at the existing South Bay Boatyard site. The process of driving in the piles during Phase I construction of the H Street Pier would itself cause temporary direct impacts to water quality and marine resources. Excavated sediments and water may be released unintentionally, increasing turbidity and stirring up potentially contaminated soils. Advanced treatment systems, such as Baker Tanks, and coagulation agents for the removal of sediment and suspended solids from runoff during the construction phase would be implemented to reduce the potential for contaminated sediment entering the Bay. The potential impacts from contaminants to be released during dredge and fill operations and in-water construction would remain significant (**Significant Impact 4.5-4**).

**8. The Proposed Project would have a significant impact if it results in substantial erosion and subsequent sedimentation of water bodies.**

Phase I grading activities would last up to 12 months in duration and have the potential to expose soil surfaces. This would result in increased sedimentation of the Marina and Bay through runoff during a storm event. This would be a short-term impact on water quality, which would cease at the completion of construction activities.

The Proposed Project would be required to comply with and implement the NPDES permit; City grading ordinances; and other relevant BMPs, LIDS, and codes during the planning, construction, and maintenance phases of the project, which would mitigate impacts generated

from erosion and sedimentation. These various ordinances and regulations ensure that erosion and sedimentation would be minimized by addressing effluent limitations, the preparation and implementation of an SWPPP, and monitoring program and record keeping requirements.

Temporary construction sediment basins would be implemented as part of construction BMPs to intercept sediment during a storm event and prevent it from discharging off a graded site. Sediment basins would be constructed as part of the grading operation for the Proposed Project. A sediment basin would be constructed (in accordance with the Chula Vista Subdivision Manual Design Criteria) with each graded parcel and would contain a basin, riser pipe, and discharge pipe that would connect to the public storm drain system in the public ROW. In areas of high groundwater, a modified shallow sediment basin would be used. This basin would consist of a graded basin and weir discharge structure made of gravel bags. The sediment basins would be removed once final development of a parcel occurs and will be replaced with permanent stormwater BMPs as required by the Port and the City SUSMPs. Other temporary construction BMPs would consist of concrete washout areas, stabilized construction entrances, fiber rolls, silt fences, check dams, hydroseeding and the installation of bonded fiber matrix on slopes, containment for refueling and maintenance of construction vehicle operations, and material delivery and storage containment.

Three bridges would be constructed as part of the Proposed Project that would require work at or near the Bay. Impacts related to construction on the bridges is discussed in *Section 4.8, Terrestrial Biological Resources*. In addition, construction of the proposed storm drain system would require work in the Bay. The work adjacent to the Bay would be limited to the vicinity of the storm drain outfalls and bridges. The storm drain system would include 20 storm drain outfalls that would connect to the Bay, including five existing connections that would remain for the project. The storm drain outfalls would consist of a headwall and would include riprap to dissipate (reduce the velocity to reduce erosion potential) the energy of the conveyed stormwater as it discharges into the Bay, minimizing sediment disturbance. Certain construction activities would only occur during low tide to reduce the potential for sediment entering the Bay. Because the time of day when low tide occurs would vary during the construction period, appropriate erosion control measures, such as silt curtains in the water, silt fences, and sand bags at the top of the slopes, would be used to prevent the migration of disturbed soils into the Bay. In addition, work during high tide would be unlikely and would not be anticipated, due to the increased dewatering that would be required.

The storm drain system for the Proposed Project would be designed to function in a free outfall condition, thereby minimizing the tidal effect on the hydraulics of the storm drain system and reducing the potential for flooding upstream. The technical report contained in *Appendix 4.5-2* describes the hydraulic calculations for the storm drain outfalls and details of the storm drain



outfalls such as exact size, location (alignment and elevation) which would reduce impacts to a less than significant level.

No fill would be placed in the Bay for all pad grading, and all pad grading would take place outside of the inundation limits of the natural tides. Sediment basins would be constructed as part of the grading operation. The purpose of sediment basins is to intercept sediment during a storm event and prevent it from running off of a mass-graded site. One sediment basin will be constructed with each graded parcel and would have a basin, riser pipe, and discharge pipe that would be connected to the public storm drain system in the street. The sediment basins would be removed once final development of a parcel takes place with elements such as a building, parking lot, or landscaping.

Construction activities for in-water work in subsequent phases would need to be evaluated pursuant to CEQA Guidelines Section 15168 at the time that design plans became available. Construction for the community boat center in Phase IV would be approximately 18 months. The marina improvements would last approximately 14 months and would include dredging, removing riprap, constructing docks and bulkhead, reconfiguring slips, and creating a new commercial harbor with seawall and modified navigation channel within the marina basin. Completion of the H Street Pier in Phase IV would last up to 12 months, and the navigation channel in Phase IV would take approximately 2 years to construct.

As for in-water construction, the dredge and fill activities and pile driving necessary for navigation channel realignment and harbor construction as well as removal/placement of riprap, bulkheads, sheet pile, and construction of the H Street Pier would temporarily suspend bottom sediments in the water column. Suspension of sediments reduces water clarity, increases nutrients, and decreases dissolved oxygen available to marine organisms. Water clarity and dissolved oxygen concentrations would return to pre-construction conditions upon completion of these construction activities. These temporary impacts would be significant (**Significant Impact 4.5-5**).

#### 4.5.4 Mitigation Measures

All phases of development of the Proposed Project are required to comply with federal, state, and local regulations, laws, and permitting requirements related to urban stormwater runoff. In addition, the following mitigation measures are required to reduce potential impacts to below significant:

**Mitigation Measure 4.5-1**

The following mitigation measure reduces **Significant Impact 4.5-1** (the potential for litter to enter the Bay and cause potential significant impacts to Bay water quality):

**Port/City:** As a condition of approval of a Tenant Design Plan for projects within the Port's jurisdiction and a condition of the approval of a Final Map for projects within the City's jurisdiction, the project applicant shall include trash control measures that include animal-proof, covered and self-closing trash containers ~~with attached lids~~ and trash control enclosures, with frequent servicing, to prevent litter from being wind blown off-site to the satisfaction of the Port/City as appropriate pursuant to their water quality technical reports.

**Mitigation Measure 4.5-2**

The following mitigation measure reduces **Significant Impact 4.5-2** (impacts to surface water and groundwater contamination resulting from construction activities):

**Port/City: A.** Prior to the issuance of a grading permit, the applicant shall notify the RWQCB of dewatering of contaminated groundwater during construction. If contaminated groundwater is encountered, the project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting requirements, which includes obtaining a permit from the Industrial Wastewater Control Program to the satisfaction of the RWQCB.

**B.** Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils, and other pollutants exist on site, a pretreatment system shall be installed to pre-treat the water to the satisfaction of the RWQCB before it can be discharged into the sewer system.

**Mitigation Measure 4.5-3**

The following mitigation measure would reduce **Significant Impact 4.5-3** (water quality impacts that could result from accidental spills and unintentional discharges of fuel, lubricants, or hydraulic fluid from the equipment used during land-side and water-side construction activities):

**Port/City:** Prior to the issuance of a grading, excavation, dredge/fill, or building permit for any parcel, the applicant shall submit a Spill Prevention/Contingency Plan for approval by the Port or City as appropriate. The plan shall:

- Ensure that hazardous or potentially hazardous materials (e.g., cement, lubricants, solvents, fuels, other refined petroleum hydrocarbon products,

wash water, raw sewage) that are used or generated during the construction and operation of any project as part of the Proposed Project shall be handled, stored, used, and disposed of in accordance with NPDES permitting requirements and applicable federal, state, and local policies

- Include material safety data sheets
- Require 40 hours of worker training and education as required by the Occupational Safety and Health Administration
- Minimize the volume of hazardous or potentially hazardous materials stored at the site at any one time
- Provide secured storage areas for compatible materials, with adequate spill contaminant
- Maintain all required records, manifest and other tracking information in an up-to-date and accessible form or location for review by the Port or City
- Demonstrate that all local, state, and federal regulations regarding hazardous materials and emergency response have been or will be complied with.

#### **Mitigation Measure 4.5-4**

The following mitigation measure reduces **Significant Impact 4.5-4** (impacts resulting from the disturbance of contaminated sediment during in-water construction activities, including dredge and fill, on Parcels HW-1, HW-4, and HW-7):

- Port:**
- A.** Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of Bay sediment that requires remediation and develop a specific work plan to remediate Bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, analyzing the nature and extent of any contamination, and allowing it to drain. Pending the outcome of the analytical results, the RWQCB and the Port/City shall prescribe the appropriate method for disposition of any contaminated sediment.
  - B.** Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top

with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity from traveling outside the immediate project area. Once the impacted region resettles, the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.

#### **Mitigation Measure 4.5-5**

The following mitigation measure reduces **Significant Impact 4.5-5** (impacts resulting from the suspension of sediments into the water column during in-water construction activities):

**Port:** Prior to the commencement of in-water construction for all phases of development, the Port or Port tenants shall adhere to regulatory requirements including the use of BMPs, which shall include use of silt curtains during all sediment suspension activities.

#### **4.5.5 Significance of Impacts After Mitigation**

Implementation of the Mitigation Measures 4.5-1 through 4.5-5 would reduce each of the significant impacts (**Significant Impacts 4.5-1** through **4.5-5**) to hydrology and water quality identified above to below a level of significance.

## 4.6 Air Quality

This section analyzes the potential impacts of the Proposed Project on air quality in the project area. Air quality impacts are analyzed at a project level for development on Parcels H-13, H-14, HP-5 and H-17 in Phase I, while impacts for all other development in Phases II through IV are analyzed at the program level.

The following technical studies prepared for the Proposed Project serve as the main information and data sources for this section:

- Air Quality Technical Report for the Pacifica Residential and Retail Project (January 2008), prepared by Scientific Resources Associated (SRA) (*Appendix 4.6-1*)
- Air Quality Technical Report for the Gaylord Resort and Conference Center (RCC) (February 2008), prepared by SRA (*Appendix 4.6-2*).

Appendix 4.6-2 was prepared for the RCC proposed by Gaylord on Parcel H-3. Gaylord has withdrawn its proposal to develop Parcel H-3 and is no longer a participant in the project. The technical study provided in Appendix 4.6-2 is still relied upon for the program-level analysis of the proposed RCC on Parcel H-3; therefore, it remains relevant to this section's analysis and is included as an appendix.

The technical analysis of potential air quality impacts was performed using the URBEMIS, CALINE4, CL4, and Emfac2007 air models. These modeling results are outlined in the following appendices:

- URBEMIS 2002 Modeling Results (June 2006), prepared by RECON (*Appendix 4.6-3*)
- CALINE4: California Line Source Dispersion Model, prepared by RECON (*Appendix 4.6-4*).

### 4.6.1 Existing Conditions

The following section provides information about the existing air quality regulatory framework, climate, air pollutants and sources, and sensitive receptors.

#### 4.6.1.1 Regulatory Framework

##### a. Federal Regulations

Ambient Air Quality Standards (AAQS) represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public's health and welfare. The federal Clean Air Act was enacted in 1970 and amended in 1977 and 1990 (42 U.S.C.

7506(c)) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity.

In 1971, in order to achieve the purposes of Section 109 of the Clean Air Act, the Environmental Protection Agency (EPA) developed primary and secondary National Ambient Air Quality Standards (NAAQS). Six pollutants of primary concern were designated: ozone (O<sub>3</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), lead (Pb), and suspended particulates (PM<sub>10</sub> and PM<sub>2.5</sub>). The primary NAAQS must “protect the public health with an adequate margin of safety,” and the secondary standards must “protect the public welfare from known or anticipated adverse effects (aesthetics, crops, architecture, etc.)” (EPA 1990: Section 109). The primary standards were established with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The current state and federal AAQS are presented in *Table 4.6-1*. A brief summary of the principal sources of each criteria pollutant is presented in *Table 4.6-2*. Also shown in *Table 4.6-2* are the potential health effects associated with exposure to elevated concentrations of the original six criteria pollutants. It is in consideration of these potential health effects that the pollutant concentration thresholds identified in the AAQS were established. Project conformance to the AAQS and health risks due to specific emitters are presented and discussed in the Impact Analysis, *Section 4.6.3*, of this report.

While emission-control programs have created a substantial improvement in regional air quality within the last several decades, clean air standards are still often exceeded in parts of the San Diego Air Basin (SDAB). If an air basin is not in federal attainment for a particular pollutant, the basin is classified as marginal, moderate, serious, severe, or extreme.

In order to meet federal air quality standards in California, the California Air Resources Board (CARB) required each air district to develop its own strategy for achieving the NAAQS. The San Diego Air Pollution Control District (APCD) prepared the 1991/1992 Regional Air Quality Strategy (RAQS) in response to the requirements set forth in Assembly Bill (AB) 2595. The draft was adopted, with amendments, on June 30, 1992 (County of San Diego 1992). Attached as part of the RAQS are the Transportation Control Measures (TCM) for the air quality plan, which were prepared by the San Diego Association of Governments (SANDAG) in accordance with AB 2595 and were adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The required triennial updates of the RAQS and corresponding TCM were adopted in 1995, 1998, 2001, and 2004. The RAQS and TCM plan set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The San Diego APCD has also established a set of rules and regulations initially adopted on January 1, 1969, and periodically reviewed and updated. The rules and regulations define requirements

regarding stationary sources of air pollutants and fugitive dust. These rules and regulations are available for review on the agency's website (<http://www.sdapcd.co.san-diego.ca.us>).

Local agencies can control neither the source nor the transportation of pollutants from outside the SDAB. The San Diego APCD's policy, therefore, has been to control local sources effectively enough to reduce locally produced contamination to clean air standards. Through the use of air pollution control measures outlined in the RAQS, the San Diego APCD has effectively reduced air pollutant levels in the SDAB.

**TABLE 4.6-1**  
**Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O <sub>3</sub> )	1 hour	0.09 ppm (180 µg/m³)	Ultraviolet photometry	—	Same as primary standard	Ethylene chemiluminescence
	8 hour	0.070 ppm (137 µg/m³)		0.075 ppm (147 µg/m³)		
Respirable particulate matter (PM <sub>10</sub> )	24 hour	50 µg/m³	Gravimetric or beta attenuation	150 µg/m³	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	20 µg/m³		—		
Fine particulate matter (PM <sub>2.5</sub> )	24 hour	No separate state standard		35 µg/m³	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	12 µg/m³	Gravimetric or beta attenuation	15 µg/m³		
Carbon monoxide (CO)	8 hour	9.0 ppm (10 mg/m³)	Non-dispersive infrared photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-dispersive infrared photometry (NDIR)
	1 hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
Nitrogen dioxide (NO <sub>2</sub> )	Annual arithmetic mean	0.030 ppm (56 µg/m³)	Gas phase chemiluminescence	0.053 ppm (100 µg/m³)	Same as primary standard	Gas phase chemiluminescence
	1 hour	0.18 ppm (338 µg/m³)		—		
Lead (Pb)	30 days average	1.5 µg/m³	AIHL method 54 (12/74) atomic absorption	—	—	High volume sampler and atomic absorption
	Calendar quarter	—		1.5 µg/m³	Same as primary standard	

TABLE 4.6-1 (Cont.)

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Sulfur dioxide (SO <sub>2</sub> )	Annual arithmetic mean	—	Fluorescence	0.030 ppm (80 µg/m <sup>3</sup> )	—	Pararosaniline
	24 hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (365 µg/m <sup>3</sup> )	—	
	3 hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )	
	1 hour	0.25 ppm (665 µg/m <sup>3</sup> )		—	—	
Sulfates	24 hour	25 µg/m <sup>3</sup>	Ion chroma-tography	No federal standards		
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet fluorescence	No federal standards		
Vinyl chloride <sup>9</sup>	24 hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas chroma-tography	No federal standards		

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter. (Source: California Air Resources Board 2007)

**TABLE 4.6-2**  
**Criteria Pollutants – Sources and Health Effects**

Pollutant	Characteristics	Major Sources	Health Effects
Ozone (O <sub>3</sub> )	A highly reactive photochemical pollutant that is formed at ground level from emissions of reactive organic gases (ROGs) and nitrogen oxides (NO <sub>x</sub> ) in the presence of sunlight. Ozone is a major component of photochemical smog.	Combustion sources, such as engines in automobiles and factories, and evaporation of solvents and fuels.	<ul style="list-style-type: none"> <li>• Eye irritation</li> <li>• Respiratory function impairment.</li> </ul>
Carbon monoxide (CO)	An odorless, colorless and poisonous gas. It is formed during the incomplete combustion of fuels.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.	<ul style="list-style-type: none"> <li>• Increase of carboxyhemoglobin—Impairment of oxygen transport in the bloodstream</li> <li>• Aggravation of cardiovascular disease</li> <li>• Impairment of central nervous system function</li> <li>• Fatigue, headache, confusion, dizziness</li> <li>• Can be fatal in the case of very high concentrations in enclosed places.</li> </ul>



TABLE 4.6-2 (Cont.)

Pollutant	Characteristics	Major Sources	Health Effects
Sulfur dioxide (SO <sub>2</sub> )	A colorless gas with a pungent, irritating odor.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.	<ul style="list-style-type: none"> <li>• Aggravation of chronic obstruction lung disease</li> <li>• Increased risk of acute and chronic respiratory disease.</li> </ul>
Nitrogen dioxide (NO <sub>2</sub> )	Reddish-brown gas that discolors the air. It is formed during combustion.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.	<ul style="list-style-type: none"> <li>• Increased risk of acute and chronic respiratory disease.</li> </ul>
Particulate matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	Solid and liquid particles of dust, soot, aerosols, and other matter that are small enough to remain suspended in the air for a long period of time.	Combustion, automobiles, diesel engines, field burning, factories, and unpaved roads. Also a result of photochemical processes.	<ul style="list-style-type: none"> <li>• Aggravation of respiratory effects like asthma and emphysema</li> <li>• May cause heart and lung problems</li> <li>• May carry toxic materials deep into the respiratory system.</li> </ul>
Lead (Pb)	A toxic heavy metal found in dust and soils.	Lead gasoline additives (these have primarily been phased out), metal refineries, manufacture of lead storage batteries, paint.	<ul style="list-style-type: none"> <li>• Brain and other nervous system damage</li> <li>• Carcinogenic</li> <li>• Digestive and other health problems.</li> </ul>

Source: California Air Resources Board 2007.

## b. State Regulations

### i. California Clean Air Act

The California Clean Air Act was signed into law on September 30, 1988, and became effective on January 1, 1989. The Act requires that local air districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures. The California Clean Air Act required the SDAB to achieve a five percent annual reduction in ozone precursor emissions from 1987 until the standards are attained. If this reduction cannot be achieved, all feasible control measures must be implemented. Furthermore, the California Clean Air Act required local air districts to implement a Best Available Control Technology rule and to require emission offsets for non-attainment pollutants.

The CARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain air quality in the state. The CARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the California Ambient Air Quality Standards (CAAQS). The CARB also reviews operations and programs of the local air districts and requires each air district with jurisdiction over a non-attainment area to develop its own strategy for achieving the NAAQS and CAAQS. The California Clean Air Act allows states to adopt ambient air quality standards and other

regulations, provided they are at least as stringent as federal standards. The CARB has established the more stringent CAAQS for the six criteria pollutants through the California Clean Air Act and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The SDAB is currently classified as a non-attainment area under the CAAQS for ozone, particulate matter less than 10 microns in aerodynamic diameter (PM<sub>10</sub>), and PM<sub>2.5</sub>.

ii. Toxic Air Contaminants

In 1983, the California Legislature enacted a program to identify the health effects of Toxic Air Contaminants (TACs) and to reduce exposure to these contaminants to protect the public health (AB 1807: Health and Safety Code sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The State of California has identified diesel particulate matter as a TAC. Diesel particulate matter is emitted from on- and off-road vehicles that utilize diesel as fuel. Since identification of diesel particulate matter as a TAC in 1998, the CARB has worked on developing strategies and regulations aimed at reducing the emissions and associated risks from diesel particulate matter. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter from Diesel-Fueled Engines and Vehicles* (CARB 2000). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter by 75 percent by 2010 and by 85 percent by 2020. A number of programs and strategies to reduce diesel particulate matter are in place or are in the process of being developed.

As an ongoing process, the CARB reviews air contaminants and identifies those that are classified as TACs. The CARB also continues to establish new programs and regulations for the control of TACs, including diesel particulate matter, as appropriate.

c. Local Regulations

The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The APCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County (the County).

The APCD and the SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the AAQS in the SDAB. The San Diego RAQS is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, and most recently in

2004. The RAQS outlines APCD's plans and control measures designed to attain the state air quality standards for ozone. The APCD has also developed the air basin's input to the State Implementation Plan (SIP), which is required under the federal Clean Air Act for areas that are out of attainment of air quality standards. The SIP includes the APCD's plans and control measures for attaining the ozone NAAQS. The SIP is also updated on a triennial basis. The APCD has prepared its *Eight-Hour Ozone Attainment Plan for San Diego County* (APCD 2007), which serve as the SDAB's portion of the SIP for the 8-hour ozone NAAQS.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County as part of the development of the County's General Plan. As such, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project would propose development which is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project might be in conflict with the RAQS and SIP, and might have a potentially significant impact on air quality.

The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. The SIP also includes rules and regulations that have been adopted by the APCD to control emissions from stationary sources. These SIP-approved rules may be used as a guideline to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the NAAQS for ozone.

The Proposed Project site is located in the City of Chula Vista, along the San Diego Bay waterfront. The City of Chula Vista has developed a number of strategies and plans aimed at improving air quality. The City is part of the Cities for Climate Protection Program headed by the International Council of Local Environmental Initiatives. In November 2002, Chula Vista adopted the Carbon Dioxide (CO<sub>2</sub>) Reduction Plan in order to lower the community's major greenhouse gas (GHG) emissions, strengthen the local economy, and improve the global environment. The CO<sub>2</sub> Reduction Plan focuses on reducing fossil fuel consumption and decreasing reliance on power generated by fossil fuels for City activities (City of Chula Vista 2002). A reduction in the usage of power generated by fossil fuels would result in a decrease in the total amount of air pollutants that are emitted into the atmosphere.

The City of Chula Vista's Growth Management Program is a component of the City's effort to create a comprehensive system to manage future growth (City of Chula Vista 1991). Air quality is one of eleven approved public facility and service topics with related "quality-of-life" indicator thresholds and implementation measures. The goal of the air quality portion of the program is to improve the ambient air quality of Chula Vista. In addition, the City's Growth Management Ordinance and Growth Management Program require an Air Quality Improvement Plan (AQIP) to be prepared for all major development projects. A major development project is defined as a project that would develop 50 or more dwelling units and commercial or industrial projects with equivalent air quality impacts to a residential project of 50 or more dwelling units. The purpose and role of the AQIP is to reduce air emissions and energy use resulting from major development projects through improved project design and construction of structures that exceed mandated energy code requirements.

Individual projects that would develop 50 or more dwelling units or nonresidential projects with equivalent air quality impacts to a residential project of 50 or more dwelling units are required to prepare an AQIP for their development. Preparation and implementation of an AQIP for each major development project ensures that the development would fulfill the requirements of the City's Growth Management Ordinance. The AQIP Guidelines establish the process for AQIP compliance. AQIPs provide an analysis of air pollution impacts that would result from a project and to require the best available design to reduce vehicle trips, improve traffic flow, reduce emissions by other means. To meet the AQIP requirement, developers must ~~either participate in the City's Greenstar Program or evaluate the project using the CO<sub>2</sub> INDEX model as~~ through the computer modeling procedures outlined in the AQIP Guidelines.

d. Climate Change—Regulatory Framework

i. International and Federal Regulations

In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC) to assess "the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation" (AEP 2007).

On March 21, 1994, the United States joined other countries around the world in signing the United Nations Framework Convention on Climate Change (UNFCCC). Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change (AEP 2007).

The Kyoto Protocol is a treaty made under the UNFCCC. Countries can sign the treaty to demonstrate their commitment to reduce their emissions of GHGs or engage in emissions trading. More than 160 countries, or 55 percent of global emissions, are under the protocol. U.S. Vice President Al Gore symbolically signed the Protocol in 1998. However, in order for the Protocol to be formally adopted or ratified, it must be adopted by the U.S. Senate, which was not done by the Clinton Administration. ~~The current President, George W. Bush, has indicated that he does not intend to submit the treaty for ratification.~~

The Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere (chlorofluorocarbons (CFCs), halons, carbon tetrachloride, and methyl chloroform) were to be phased out by 2000 (2005 for methyl chloroform).

The federal government began studying the phenomenon of global climate change as early as 1978 with the National Climate Protection Act, 92 Stat. 601, which required the President to establish a program to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.” The 1987 Global Climate Protection Act, Title XI of Pub. L. 100-204, directed the U.S. EPA to propose a “coordinated national policy on global climate change” and ordered the Secretary of State to work “through the channels of multilateral diplomacy” to coordinate efforts to address global warming. Further, in 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric GHGs. In October 1993, President Clinton announced his Climate Change Action Plan, which had a goal to return GHG emissions to 1990 levels by the year 2000. This was to be accomplished through 50 initiatives that relied on innovative voluntary partnerships between the private sector and government, aimed at producing cost-effective reductions in GHG emissions.

More recently, in *Massachusetts v. EPA* (April 2, 2007), the U.S. Supreme Court held that GHGs fall within the Clean Air Act’s definition of an “air pollutant” and directed the EPA to consider whether GHGs are causing climate change. If so, the EPA must regulate GHG emissions from automobiles under the Clean Air Act. As of this writing, EPA has yet to begin rulemaking proceedings to consider whether GHGs are contributing to climate change.

In addition, Congress has increased the corporate average fuel economy (CAFÉ) of the U.S. automotive fleet. In December 2007, President Bush signed a bill raising the minimum average miles per gallon for cars, sport utility vehicles, and light trucks to 35 miles per gallon by 2020. This increase in CAFÉ standard will create a substantial reduction in GHG emissions from automobiles, which constitutes the largest single GHG-emitting sector in California.

However, as of this writing, there are no adopted federal plans, policies, regulations, or laws setting a mandatory limit on GHG emissions. Further, the EPA has not finalized its evaluation in the wake of *Massachusetts v. EPA*.

## ii. State Regulations

Although not originally intended to reduce GHG emissions, California's Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new technologies and methods. The latest amendments were made in October 2005. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. The regulations adopted by CARB are intended to apply to 2009 and later model vehicles; however, the EPA recently denied California's request for a Clean Air Act waiver to implement its regulations. As of this writing, California and other states that seek to adopt California's GHG emissions standards for automobiles are challenging EPA's denial in federal court. CARB estimates that the regulations would reduce GHG emissions from the light duty passenger vehicle fleet by 18 percent in 2020 and 27 percent in 2030 (AEP 2007).

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, GHG emission reduction targets as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. Executive Order S-3-05 prescribes goals for the state to meet in order to reduce that contribution to aid the avoidance of catastrophic global climate change, based on the IPCC scientific data. Executive Order S-3-05 applies to both existing and new GHG emission sources.

In 2006, the California State Legislature adopted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 requires the CARB, the state agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. AB 32 establishes a multiyear timeline for the development and implementation of GHG reporting and mitigation policy. As with Executive Order S-3-05, AB 32 prescribes goals for the state to meet in order to reduce that contribution to aid the avoidance of catastrophic global climate change, based on the IPCC scientific data. AB 32 applies to both existing and new GHG emission sources. In general, AB 32 directs the CARB to do the following:

- On or before June 30, 2007, publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010

- By January 1, 2008, establish the statewide GHG emissions cap for 2020, based on CARB's calculation of statewide GHG emissions in 1990
- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that "contribute the most to statewide emissions" (Health & Safety Code §38530)
- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020
- On January 1, 2012, GHG emissions regulations become operative
- On January 1, 2020, achieve 1990 levels of GHG emissions.

AB 32 defines GHGs as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) (Health & Safety Code §38505(g)).

California took its first step under AB 32 on June 21, 2007, by approving so-called "early action" measures. CARB originally approved three "early action" measures, including (1) a low carbon fuel standard, which will reduce the carbon-intensity in California fuels, thereby reducing total CO<sub>2</sub> emissions (this measure follows Governor Schwarzenegger's January 2007 Executive Order S-01-07, which sets a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 and requires that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California); (2) reduction of refrigerant losses from motor vehicle air conditional system maintenance through the restriction of "do-it-yourself" automotive refrigerants; and (3) increased CH<sub>4</sub> capture from landfills through the required implementation of the state-of-the-art capture technologies. CARB later proposed several additional "early action" measures, including (4) a potential ban on SF<sub>6</sub> in non-utility, non-semiconductor applications and (5) reduction of high global warming potential (GWP) GHGs in consumer products. CARB also proposed a redesignation of a series of other strategies as "early action" measures, including (6) retrofitting trucks and trailers with "SmartWay Transport" approved technology, (7) implementation of a tire inflation program, (8) reduction of PFCs in the semiconductor industry, and (9) implementation of the "Green Ports" program. Finally, CARB recommended a series of entirely new "early action" measures, including (10) implementation of a refrigerant tracking, reporting, and recovery program; (11) a series of related GHG-reducing measures for cement manufacturing facilities, focused on energy efficiency and cement blending; (12) enforcement of

anti-idling regulations; and (13) collaborative research regarding reduction of GHG emissions from nitrogen land application (CARB 2007).

Under AB 32, CARB was required to determine the level of statewide GHG emissions in 1990, and approve the 2020 statewide GHG emissions limit based on 1990 emissions before January 1, 2008. In a December 2006 report, CARB estimated that California emitted between 425 and 468 million metric tons of CO<sub>2</sub>-equivalent emissions (CO<sub>2</sub> Eq.) in 1990. In December 2007, ARB finalized 1990 emissions at 427 million metric tons of CO<sub>2</sub> Eq. In 2004, the emissions were estimated at 492 million metric tons CO<sub>2</sub> Eq. (CEC 2006). Using CARB's 1990 emissions figure, a 13 percent reduction would be needed to reduce 2004 levels to 1990 levels.

Also in December 2007, CARB propounded regulations to govern mandatory GHG emissions reporting for certain sectors of the economy. CARB's regulations address approximately 94 percent of the industrial and commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tons of CO<sub>2</sub> from stationary source combustion.

As the policy making process continues, CARB will consider a broader set of GHG reduction measures, including carbon sequestration projects and best management practices (BMPs) that are technologically feasible and cost effective.

As described above, AB 32 did not set a CEQA significance threshold for GHGs. However, in August 2007, California enacted Senate Bill 97 (SB 97), which directs the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the State Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions by July 1, 2009. The Resources Agency will then be required to certify and adopt the guidelines by January 1, 2010. OPR will be required to periodically update these guidelines as CARB implements AB 32. In addition, SB 97 states that the failure to include a discussion of GHG emissions in any CEQA document for a project funded under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 shall not be a cause of action under CEQA. This last provision will be repealed on January 1, 2010.

In addition to Governor Schwarzenegger's Executive Orders, AB 32 and SB 97, California has also taken aggressive action to control and reduce GHG emissions in many other areas as well.

***Senate Bill 1368 (2006) (Public Utilities Code §8340-41).*** SB 1368 required the California Public Utilities Commission (PUC) to establish a "greenhouse gas emission performance standard" by February 1, 2007, for all electricity providers under its jurisdiction, including the state's three largest privately owned utilities (California Public Resources Code Section 8341(d)(1)). These utilities provide approximately 30 percent of the state's electric power. After



the PUC acted, the California Energy Commission (CEC) adopted a performance standard “consistent with” the PUC performance standard and applied it to local publicly owned utilities on May 23, 2007 (over one month ahead of its June 30, 2007, deadline) (Cal. Pub. Res. Code § 8341(e)(1)). However, the California Office of Administrative Law (OAL) found four alleged flaws in the CEC’s rulemaking. The CEC overcame these alleged flaws and adopted reformulating regulations in August 2007.

***Senate Bill 107 (2006).*** Senate Bill 107 (SB 107) requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison and San Diego Gas and Electric, to generate 20 percent of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017.

***Senate Bill 97 Chapter 185, (2007).*** [SB 97 requires the OPR to prepare guidelines to submit to the California Resources Agency regarding feasible mitigation of GHG emissions or the effects of GHG emissions as required by CEQA. The California Resources Agency is required to certify and adopt these revisions to the State CEQA Guidelines by January 1, 2010. The guidelines will apply retroactively to any incomplete EIR, negative declaration, mitigated negative declaration, or other related document. The amended State CEQA Guidelines will take effect on March 18, 2010.](#)

***Western Regional Climate Action Initiative (Arizona, California, New Mexico, Oregon, Utah, Washington) (2007).*** Acknowledging that the western states already experience a hotter, drier climate, the governors of the foregoing states have committed to three time-sensitive actions: (1) by August 26, 2007, to set a regional goal to reduce emissions from the states collectively, consistent with state-by-state goals; (2) by August 26, 2008, to develop “a design for a regional market-based multisector mechanism, such as a load-based cap and trade program,” to achieve the regional GHG reduction goal; and (3) to participate in a multistate greenhouse gas registry, “to enable tracking, management, and crediting for entities that reduce GHG emissions, consistent with state GHG reporting mechanisms and requirements.”

***California’s Renewable Energy Portfolio Standard Program (2005).*** In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state’s electricity mix to 20 percent by 2017. The state’s most recent 2005 Energy Action Plan raises the renewable energy goal from 20 percent by 2017 to 33 percent by 2020.

***Title 24, Part 6, California Code of Regulations (2005).*** In 2005, California adopted new energy efficiency standards for residential and nonresidential buildings in order to reduce California’s energy consumption. This program has been partially responsible for keeping California’s per capita energy use approximately flat over the past 30 years.

***Climate Action Registry (2001).*** California Senate Bills 1771 and 527 created the structure of the California Climate Action Registry (the Registry), and former Governor Gray Davis signed the final version of the Registry’s enabling legislation into law on October 13, 2001. These bills established the Registry as a non-profit entity to help companies and organizations establish GHG emissions baselines against which future GHG emission reduction requirements could be applied. Using any year from 1990 forward as a base year, participants can record their annual GHG emissions with the Registry. In return for this voluntary action, the State of California promises to offer its “best efforts” to ensure that participants receive consideration for their early action if they are subject to any future state, federal, or international emissions regulatory scheme.

iii. Local Regulations

The San Diego APCD, the City of Chula Vista, and the Port of San Diego (the Port) do not regulate GHG emissions and have not yet established CEQA significance thresholds for GHG emissions.

As part of the international, multicity International Council for Local Environmental Initiatives (ICLEI) Cities for Climate Protection Campaign, the City of Chula Vista adopted a CO<sub>2</sub> Reduction Plan in order to reduce the City’s GHG emissions and address the community’s impact on climate change. The CO<sub>2</sub> Reduction Plan outlines baseline and future CO<sub>2</sub> emission estimates and includes a reduction strategy with estimated potential CO<sub>2</sub> savings. The plan goes further to outline specific reduction goals and policies and to design an action plan to implement the policies and achieve the reduction goal.

The goal of the CO<sub>2</sub> Reduction Plan is to reduce Chula Vista’s CO<sub>2</sub> emissions to 80 percent of 1990 levels by the year 2010. This is equivalent to a savings of approximately 400,000 tons/year in 2010 compared to projected emission levels without any municipal action. In order to achieve this goal, the CO<sub>2</sub> Reduction Plan describes an action plan composed of ongoing CO<sub>2</sub> reduction projects and a set of 20 action measures recommended for implementation following adoption of the CO<sub>2</sub> Reduction Plan. By 2010, these measures are estimated to produce about 100,000 tons/year of CO<sub>2</sub> savings, which is approximately one-quarter of the savings needed to achieve the international reduction goal. The highest priority CO<sub>2</sub> action area under the CO<sub>2</sub> Reduction Plan is transportation due to its high CO<sub>2</sub> emissions, significant potential for savings, and major environmental and economic improvement opportunities. The CO<sub>2</sub> Reduction Plan identifies these 20 action measures, in addition to CO<sub>2</sub> reduction projects already being implemented by the City, as the key components of the City’s overall reduction strategy and action plan. Additional reduction measures were included in the CO<sub>2</sub> Reduction Plan as measures suitable for Chula Vista. The Port has a sustainability policy (#736) and is developing several plans and programs, including a Green Port program and a Clean Air program.

The Chula Vista Climate Change Working Group is tasked with identifying climate protection actions to help meet the ICLEI/Kyoto commitment of reducing citywide GHG emissions to 20 percent below 1990 levels. In April 2008, the working group submitted a final report to the City Council, recommending seven measures for the City to implement in order to reduce Chula Vista's GHG emissions over the next several years. On April 1, 2008, the Chula Vista City Council adopted the recommendations of the Chula Vista Climate Change Working Group. In July 2008, the City Council approved the Climate Change Working Group implementation plans in July 2008 for all seven Climate Change measures. For the past 2 years, the City has been implementing the seven measures based on available funding. and directed staff to return to the City Council with a more detailed plan for implementation of the seven measures (Resolution No. 2008-089). The Proposed Project will be required to comply with the City's newly adopted increased energy efficiency standards (EER)

One of the recommended measures (No. 4) would include adoption of a mandatory community-wide green building standard. If implemented, this action would require new and substantially remodeled structures to be built to Leadership in Energy and Environmental Design (LEED) silver certification or an equivalent third party certified green building program, with the effect of having an energy efficiency impact of at least 20 percent over Title 24. A second measure (No. 6) would facilitate "Smart Growth" around the H Street, E Street and Palomar Street Trolley Stations. At this time, an implementation plan has not been adopted for any of the recommended measures, including the two described above; however, City staff has been directed to return to the City Council in 90 days to report on a more detailed implementation plan. Both of the above-referenced measures, if implemented, would be applicable to the Proposed Project and would fit into the development proposed for the Bayfront Master Plan area. The Proposed Project is striving for LEED certification and has incorporated Smart Growth measures that include connections to the trolley thoroughfare.

#### 4.6.1.2 *Climate*

Air quality is a function of both the rate and location of pollutant emissions and how meteorological conditions and topographic features influence these pollutants. Atmospheric conditions, such as wind speed and direction and air temperature gradients, interact with the physical features of the landscape to determine the movement and dispersal of air pollutants and, consequently, affect air quality.

The climate of coastal Southern California, including Chula Vista, is determined largely by an area of high pressure that is almost always present off the west coast of North America. High-pressure systems are characterized by an upper layer of dry air that warms as it descends. This warm, dry air acts as a lid, restricting the mobility of the cool, ocean-modified air located near

the surface, creating an inversion or a reversal of the typical decreasing temperature with height structure of the atmosphere.

Moisture trapped in the cool, lowest layer of the atmosphere forms clouds that make up what is referred to as the “marine layer.” The marine layer is the prominent weather feature in the SDAB, an area that is defined roughly by the boundary of San Diego County. The temperature inversion associated with the marine layer also plays an important role in determining the quality of the air in the SDAB. During the summer and fall, emissions generated in the region combine with abundant sunshine under the restraining influences of topography and an inversion to create conditions that are conducive to the formation of photochemical pollutants, such as ozone and secondary particulates, such as sulfates and nitrates. As a result, the quality of the air in the SDAB is often poorest during the warm summer and fall months.

According to the Western Regional Climate Center, over 90 percent of the yearly total precipitation in Chula Vista occurs between November and April. During these months, the area of high pressure in the eastern Pacific is occasionally displaced allowing for storms to spread unsettled weather including precipitation into Southern California. The increase in the mixing of the atmosphere and the rainfall associated with these storms provides Chula Vista with better air quality than is experienced during the summer months.

The prevailing winds in Chula Vista are from the west. As a result, the temperature and moisture content of the air near the ground is strongly influenced by the cool waters of the Pacific Ocean to the west. Occasionally, when high pressure is centered near the Great Basin, hot, dry winds called Santa Ana winds develop over Southern California. These winds blow from the east or offshore and can bring some of the warmest temperatures of the year to Chula Vista. Santa Ana wind events occur most often during winter months and can allow pollutant-laden air from the Los Angeles area to be drawn southward into the SDAB as the Santa Ana condition breaks down. Santa Ana conditions can also produce some of the poorest air quality days of the year in Chula Vista.

#### **4.6.1.3     *Background Air Quality***

In response to the federal Clean Air Act of 1970, the EPA developed primary and secondary NAAQS for six pollutants of primary concern (criteria pollutants): ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and suspended particulates (PM<sub>10</sub> and PM<sub>2.5</sub>). The primary national standards were established to “protect the public health with an adequate margin of safety.”

Criteria pollutants and other meteorological conditions are measured by the San Diego APCD at 10 monitoring stations within the SDAB. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California

AAQS and the NAAQS. The closest monitoring station to the Proposed Project is the Chula Vista monitoring station, located at 80 East J Street in Chula Vista, approximately 2 miles east of the eastern project boundary. Ambient concentrations of pollutants over the last 3 years are presented in *Table 4.6-3*.

**TABLE 4.6-3**  
**Ambient Background Concentrations (ppm unless otherwise indicated)**

Pollutant	Averaging Time	2004	2005	2006	Most Stringent Air Quality Standard	Monitoring Station
Ozone	8 hour	0.087	0.081	0.068	0.070	Chula Vista
	1 hour	0.097	0.093	0.084	0.090	Chula Vista
PM <sub>10</sub>	Annual	25.8 µg/m <sup>3</sup>	26.5 µg/m <sup>3</sup>	25.7 µg/m <sup>3</sup>	20 µg/m <sup>3</sup>	Chula Vista
	24 hour	44 µg/m <sup>3</sup>	52 µg/m <sup>3</sup>	51 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>	Chula Vista
PM <sub>2.5</sub>	Annual	12.2 µg/m <sup>3</sup>	11.8 µg/m <sup>3</sup>	11.2 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>	Chula Vista
	24 hour	32.7 µg/m <sup>3</sup>	34.3 µg/m <sup>3</sup>	30.2 µg/m <sup>3</sup>	35 µg/m <sup>3</sup>	Chula Vista
NO <sub>2</sub>	Annual	0.016	0.016	0.017	0.030	Chula Vista
	1 hour	0.072	0.071	0.074	0.180	Chula Vista
CO	8 hour	2.480	2.130	2.200	9.000	Chula Vista
	1 hour	2.900	2.800	2.700	20.000	Chula Vista
SO <sub>2</sub>	Annual	0.003	0.003	0.003	0.030	Chula Vista
	24 hour	0.016	0.005	0.006	0.014	Chula Vista
	3 hour	0.021	0.009	0.013	0.500 <sup>1</sup>	Chula Vista
	1 hour	0.042	0.016	0.017	0.250	Chula Vista

<sup>1</sup>Secondary NAAQS

Source: [www.arb.ca.gov/aqd/aqd.htm](http://www.arb.ca.gov/aqd/aqd.htm) (Measurements of all pollutants at Chula Vista station)  
[www.epa.gov/air/data/monvals.html](http://www.epa.gov/air/data/monvals.html) (1-hour and 3-hour SO<sub>2</sub> and 1-hour CO).

Air quality has shown improvement in the SDAB, such that, from 2004 through 2006, the 8-hour federal ozone standard was only exceeded once at the Chula Vista monitoring station. The California 24-hour PM<sub>10</sub> standard was exceeded twice in 2005 and twice in 2006 at the Chula Vista monitoring station. The PM<sub>2.5</sub> standard has not been exceeded in the past 3 years. The data from the monitoring station indicates that air quality is in attainment of all other air quality standards. There are two major stationary sources of pollution within the Bayfront Proposed Project area: Rohr Industries/Goodrich and South Bay Power Plant (SBPP). The SBPP is a point source emitter of combustion pollutants from its power generation facilities and holds air permits for various on-site sources. Rohr Industries/Goodrich also holds air permits for various on-site sources and is an emitter of both criteria and toxic air pollutants.

*Table 4.6-4* presents the attainment status of the SDAB with respect to both the state and federal standards for each of the criteria pollutants. With the phase-out of leaded gasoline in the United States, lead is not monitored within San Diego County and is not considered to be an air quality issue.

**TABLE 4.6-4**  
**San Diego County's Federal and State Designations**  
**for Each of the Criteria Pollutants**

Criteria Pollutant	Federal Designation	State Designation
Ozone (1 hour)	Attainment	Non-attainment
Ozone (8 hour)	Non-attainment	No state standard
Carbon monoxide	Attainment (maintenance)	Attainment
Nitrogen dioxide	Attainment	Attainment
Sulfur dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No federal standard	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Visibility	No federal standard	Unclassified
PM <sub>10</sub> <sup>1</sup>	Unclassifiable	Non-attainment
PM <sub>2.5</sub> <sup>2</sup>	Attainment	Non-attainment

<sup>1</sup> Particulate matter of 10 microns or less in diameter.

<sup>2</sup> Particulate matter of 2.5 microns or less in diameter.

SOURCE: County of San Diego Air Pollution Control District, February 2005.

#### **4.6.1.4 Background Climate Change**

##### **a. Global Climate Change—Overview**

Global climate change is currently one of the most important and widely debated scientific, economic, and political issues in the United States. Global climate change is a change in the average weather of the earth which can be measured by wind patterns, storms, precipitation, and temperature. Historical records have shown that temperature changes have occurred in the past, such as during previous ice ages. Some data indicated that the current temperature record differs from previous climate changes in rate and magnitude.

The United Nations IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. Based on models, the IPCC concluded that a stabilization of GHGs at 400 to 450 parts per million (ppm) CO<sub>2</sub>-equivalent concentration is required to keep global warming below 2° Celsius (C), avoiding dangerous climate change (AEP 2007).

##### **b. Greenhouse Gases (GHG)**

GHGs are gases that trap heat in the atmosphere. GHGs are emitted by natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without these natural GHGs, the earth's surface would be about 61° Fahrenheit (F)

cooler (CEC 2006). Emissions from human activities such as electricity production and vehicles have elevated the concentration of these gases in the atmosphere.

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the “cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas” (AEP 2007). The reference gas for GWP is carbon dioxide (CO<sub>2</sub>); CO<sub>2</sub> has a GWP of one. For example, methane has a GWP of 21m which means that it has a global warming effect 21 times that of CO<sub>2</sub> on a molecule per molecule basis. One teragram of CO<sub>2</sub> equivalent (Tg CO<sub>2</sub> Eq.) is the emissions of the gas multiplied by the GWP. One teragram is equal to one million metric tons. The CO<sub>2</sub> equivalent is a good way to assess emissions because it gives weight to the varying GWP of the GHGs. CO<sub>2</sub> equivalent factors for methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), two common GHGs, are 21 and 310, respectively.

#### c. Greenhouse Gas Inventory

In 2004, total global GHG emissions were 20,135 Tg CO<sub>2</sub> Eq., excluding emissions/removals from land use, land use change, and forestry (UNFCCC 2006). In 2004, the United States contributed the most GHG emissions (35 percent of global emissions). In 2004, GHG emissions in the United States were 7,074.4 Tg CO<sub>2</sub> Eq., which is an increase of 15.8 percent from 1990 emissions (AEP 2007).

California is a substantial contributor of global GHGs as it is the second largest contributor in the United States and the sixteenth largest in the world (AEP 2007). In 2004, California produced 492 Tg CO<sub>2</sub> Eq. (AEP 2007), which is approximately 7 percent of U.S. emissions. The major source of GHG in California is transportation, contributing 41 percent of the state’s total GHG emissions (AEP 2007). Electricity generation is the second largest source, contributing 22 percent of the state’s GHG emissions.

#### d. Existing On-Site Conditions

The Chula Vista Bayfront Proposed Project site has been utilized by the former Goodrich South Campus, which included 63 industrial buildings totaling approximately 870,000 square feet of industrial space. The facility was involved in the manufacture of aviation and aerospace components, which and has historically been a source of GHG emissions. There has been no manufacturing activity on this site in over five years and the buildings are no longer present; therefore, nNo GHG emissions inventory is currently available for the site.

Living vegetation stores carbon; however, it is difficult to assess net changes in carbon storage associated with the Chula Vista Bayfront Proposed Project. The key issue is the balance between the loss of natural vegetation and future carbon storage associated with landscaping and

residential development. For example, the community's landscaping palette will feature shrubs and trees which may provide equal or greater carbon storage on a per acre basis. The situation is further complicated by changes in fire regime. Carbon in natural vegetation is likely to be released into the atmosphere through wildfire every 20 to 150 years. Carbon in landscaped areas will be protected from wildfire. The balance between these factors will influence the long-term carbon budget on the site.

The majority of carbon within the site is stored in the soil. Soil carbon accumulates from inputs of plant and animal matter, roots, and other living components of the soil's ecosystem (e.g., bacteria and worms). Soil carbon is lost through biological respiration, erosion, and other forms of disturbance. Overall, soil carbon moves more slowly through the carbon cycle, and it offers greater potential for long-term carbon storage. Field observations suggest that urban soils can sequester relatively large amounts of carbon, particularly in residential areas where management increases input to the soil and reduces disturbance. Observations from across the United States suggest that cities in warmer and drier climates (such as San Diego) may have slightly higher soil organic matter level when compared to equivalent areas before development.

#### **4.6.1.5 Air Pollutants**

##### **a. Ozone**

Ozone represents one of the primary air pollution problems in the SDAB. Ozone, or smog, is mainly a concern during the daytime in summer months because sunlight plays an important role in its formation. Nitrogen oxides and hydrocarbons (reactive organic gases) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. The SDAB is currently designated a state "serious" non-attainment area for ozone as well as a federal non-attainment area for the 8-hour ozone standard. Ozone concentration measurements recorded in the SDAB dating back to the late 1970s show a distinctive downward trend with occasional peaks due primarily to meteorological influences (County of San Diego 2001).

About half of smog-forming emissions in the SDAB are generated by motor vehicles. Population growth in the San Diego region has resulted in a large increase in the number of automobiles operating on area roadways. In addition, the occasional transport of smog-filled air from Los Angeles only adds to the SDAB's ozone problem. More strict automobile emission controls, including more efficient automobile engines, have played a large role in the steady decrease in ozone levels. Ozone concentrations in the SDAB have shown a slight decline during the past 5 years, as can be seen in the data presented in *Table 4.6-3*.

On April 30, 2004, the U.S. EPA listed the final designations for the 8-hour ozone standard in the Federal Register (EPA 2004a), which became effective June 15, 2004. San Diego County



was considered a non-attainment area for ozone based on this new standard. The San Diego APCD had 3 years (by 2007) to formulate a strategy for attaining the 8-hour ozone standard, and recently issued its *Eight-Hour Ozone Attainment Plan for San Diego County* (APCD 2007). The strategy must now be approved by the EPA. Using the discretion provided by Section 172(a)(1) of the Clean Air Act, the EPA has chosen not to classify the basin (e.g., moderate, serious). For areas subject to Subpart 1, consistent with Section 172(a)(2)(A) of the Clean Air Act, the period of attainment would be no more than 5 years from the effective date of designation (EPA 2004b). Consequently, the SDAB must demonstrate attainment by June 15, 2009. If warranted, the EPA may grant an extension of the attainment date to no more than 10 years after designation, which would be June 15, 2014.

Also, per the EPA's final rule for implementing the 8-hour ozone standard, the 1-hour ozone standard was to be revoked "in full, including the associated designations and classifications, one year following the effective date of the designations for the eight-hour NAAQS [for ozone]" (69 FR 23951). As such, the 1-hour ozone standard was revoked in the SDAB on June 15, 2005. Requirements for transitioning from the 1-hour to 8-hour ozone standard are described in the final rule.

#### b. Carbon Monoxide

The SDAB is classified as a state attainment and federal maintenance area for carbon monoxide (County of San Diego 1998). Until 2003, no violations of the state standard for CO had been recorded in the SDAB since 1991, and no violations of the national standard had been recorded in the SDAB since 1989. As seen in *Table 4.6-3*, both the federal and state 8-hour CO standards were exceeded in San Diego County on one day in 2003. This exceedance occurred on October 28, 2003, at a time when major wildfires were raging throughout the county. Consequently, this exceedance was likely caused by the wildfires and would be considered beyond the control of the San Diego APCD.

Small-scale, localized concentrations of carbon monoxide above the state and national standards have the potential to occur at intersections with stagnation points, such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as "CO hot spots" and are a concern at congested intersections when automobile engines burn fuel less efficiently and their exhaust contains more CO.

#### c. Particulates (PM<sub>10</sub>)

Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Sources of PM<sub>10</sub> emissions in the SDAB consist mainly of urban activities, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. Ten microns is about one-seventh the diameter of a human hair. In general,

particulate concentrations near residential sources are typically greater during the coldest months of the year, when more fireplaces are in use and when meteorological conditions, such as inversions, prevent the dispersion of directly emitted contaminants.

Until 2003 the national standards for  $PM_{10}$  had never been exceeded in the SDAB since the standards were established. The EPA has designated the SDAB unclassifiable for  $PM_{10}$ . The unclassifiable designation is given to areas that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant.

In 2003 the measured federal  $PM_{10}$  standard was exceeded twice. These exceedances were likely caused by or were a subsequent result of the wildfires that were raging throughout the county at that time. Wildfires would be considered beyond the control of the San Diego APCD. As such, these events likely would be covered under the EPA's Natural Events Policy that permits, under certain circumstances, the exclusion of air quality data attributable to uncontrollable natural events (e.g., volcanic activity, wildland fires, and high wind events).

State  $PM_{10}$  standards set by the CARB in 1983 were 50 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) for a 24-hour average and 30  $\mu\text{g}/\text{m}^3$  for an annual average. In 2002, pursuant to the Children's Environmental Health Protection Act, the CARB revised the annual average standard for  $PM_{10}$  to 20  $\mu\text{g}/\text{m}^3$  (State of California 2003). The Children's Environmental Health Protection Act required a review of all of California's health-based ambient air quality standards to determine if they adequately protect public health, especially the health of infants and children. In addition to the two federal exceedances in 2003, the more strict state standards for  $PM_{10}$  historically have not been met. As a result, the SDAB is designated a state non-attainment area for  $PM_{10}$ .

The EPA revised the federal standards for  $PM_{10}$  on September 21, 2006. Due to a lack of evidence linking health problems to long-term exposure to coarse particle pollution, the agency revoked the annual  $PM_{10}$  standard effective December 17, 2006.

#### d. Fine Particulates ( $PM_{2.5}$ )

In 1997, the EPA established a new federal air quality standard for fine particulate matter, or  $PM_{2.5}$ . These standards originally included an annual arithmetic mean of 15  $\mu\text{g}/\text{m}^3$  and a 24-hour concentration of 65  $\mu\text{g}/\text{m}^3$ . On September 21, 2006, the EPA revised the NAAQS for particulate matter. The 24-hour  $PM_{2.5}$  standard has been strengthened from 65  $\mu\text{g}/\text{m}^3$  to 35  $\mu\text{g}/\text{m}^3$ . The existing standard for annual  $PM_{2.5}$  of 15  $\mu\text{g}/\text{m}^3$  will remain the same. States have until November 2007 to make recommendations for areas to be designated attainment and non-attainment. The EPA will make the final designations by November 2009 and those designations will become effective in April 2010. State Implementation Plans for meeting the new standard will be due 3

years after the designations. States must meet the standards by April 2015, with a possible extension to April 2020.

Although the state has not established a separate 24-hour standard for  $PM_{2.5}$ , it has established an annual arithmetic mean of  $12 \mu\text{g}/\text{m}^3$ .  $PM_{2.5}$  particles measure 2.5 microns or less in diameter. As a result of their small size,  $PM_{2.5}$  particles can be inhaled deeply into the lungs.  $PM_{2.5}$  is predominantly produced from combustion sources such as gasoline and diesel engines and industrial facilities. Emissions of organic gases, nitrogen oxides ( $\text{NO}_x$ ), sulfur oxides ( $\text{SO}_x$ ), and ammonia produced at these sources react in the atmosphere and form such tiny particles.  $PM_{2.5}$  can remain suspended in the air for long periods and can travel great distances (County of San Diego 2001).

On January 5, 2005, the EPA listed the final designations in the Federal Register (EPA 2004c). The SDAB containing the Proposed Project site has been designated as an attainment area for the federal  $PM_{2.5}$  standard (EPA 2004c), but is designated a state non-attainment area for  $PM_{2.5}$ .

e. Nitrogen Dioxide

As seen in *Table 4.6-3*, the AAQS standards for  $\text{NO}_2$  are being met in the SDAB, and the latest pollutant trends suggest that these standards would not be exceeded in the foreseeable future. Because of increasing concern of the effect that elevated  $\text{NO}_2$  concentrations have on asthmatics and on infants and children, on February 23, 2007, the CARB lowered the 1-hour  $\text{NO}_2$  standard to 0.18 ppm and adopted a new annual average standard of 0.030 ppm (State of California 2007). These new standards are not expected to affect the attainment status of the SDAB.

f. Sulfur Dioxide and Lead

The national and state standards for  $\text{SO}_2$  and lead are being met in the SDAB, and the latest pollutant trends suggest that these standards would not be exceeded in the foreseeable future.

g. Odors

Odors are one of the most obvious forms of air pollution to the general public. While offensive odors seldom cause physical harm, they can present a significant problem for both the source and the surrounding community. Offensive odors may cause agitation, anger, and concern to the public about the possibility of health effects, especially in residential neighborhoods located near sources. Most people respond to offensive odors as objectionable if they are sensed over the duration of a single human breath, typically 2 to 5 seconds. Nuisance odors are subject to APCD Rule 51, Nuisance, which prohibits the release of air contaminants which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public.

#### **4.6.1.6 Sensitive Receptors**

Sensitive receptors are facilities where sensitive receptor population groups (children, the elderly, athletes, and the acutely and chronically ill) are likely to be located. These land uses are considered more sensitive to changes in air quality than others and include residential areas, schools, retirement homes, convalescent homes, hospitals, and medical clinics. The major sensitive receptors located in the Proposed Project area would be the proposed residential neighborhoods.

#### **4.6.1.7 Pollution Sources**

The San Diego APCD has permit authority over most types of stationary emission sources in the SDAB. The San Diego APCD exercises permit authority through its Rules and Regulations. Permits are the primary means for the APCD to assure that polluting operations are controlled to the maximum degree technically and economically feasible and do not interfere with the attainment and maintenance of healthful air quality.

Since 1990, the San Diego APCD has monitored air toxics at sampling sites in the Cities of Chula Vista and El Cajon. These locations are considered to be the most appropriate in the San Diego region for toxic sampling because they are nearby and downwind of large, concentrated areas of industrial, transportation, and other air pollutant sources. Results from the monitoring show that overall emissions of air toxics have been declining, with a 75 percent reduction in estimated industrial air toxic emissions since the early 1990s (County of San Diego 2004).

Information about facilities in the San Diego region that release the largest amount of toxic air contaminants is available from the San Diego APCD. The San Diego APCD provides the information on their website and in an annual report titled “Air Toxics ‘Hot Spots’ Program Report for San Diego County.” The CARB lists more than 700 compounds to be assessed under the Air Toxics “Hot Spots” program. The list includes potentially carcinogenic substances as well as compounds that may cause health problems, such as respiratory irritation or central nervous system depression.

### **4.6.2 Impact Significance Criteria**

#### **4.6.2.1 Air Quality**

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the State CEQA Guidelines. Based on Appendix G and the adopted General Plan for the City of Chula Vista, the following significance criteria were used to determine the significance of air quality impacts.

Would the Proposed Project:

1. Conflict with or obstruct implementation of the applicable air quality plan (e.g., RAQS)?
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard? (In the SDAB, the project region is in non-attainment for the federal or state standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.)
4. Expose sensitive receptors to substantial pollutant concentrations?
5. Locate residential housing within 1,000 feet of a plant or any other toxic air emitting facility, for which a significant health risk assessment has not been conducted?
6. Create objectionable odors affecting a substantial number of people?

The Port has not set forth specific emission thresholds by which to evaluate significance. However, the City of Chula Vista has adopted the significance thresholds set forth by the South Coast Air Quality Management District (SCAQMD) in their CEQA Air Quality Handbook (CEQA Handbook) (SCAQMD 1999). These thresholds provide a conservative means of evaluating the potential for a significant impact, as they are based on standards for an air basin that is classified as an extreme O<sub>3</sub> non-attainment area, a serious PM<sub>10</sub> non-attainment area, and a non-attainment area for the NAAQS for PM<sub>2.5</sub> and CO. The SCAQMD significance thresholds are shown in *Table 4.6-5*.

**TABLE 4.6-5**  
**Air Quality Significance Thresholds**

Pollutant	Project Construction	Project Operation
Carbon monoxide	550 pounds/day	550 pounds/day
Reactive organic compounds	75 pounds/day	55 pounds/day
Oxides of nitrogen	100 pounds/day	55 pounds/day
Oxides of sulfur	150 pounds/day	150 pounds/day
PM <sub>10</sub>	150 pounds/day	150 pounds/day
PM <sub>2.5</sub>	55 pounds/day	55 pounds/day

SOURCE: SCAQMD thresholds (SCAQMD 1999).

As demonstrated in *Table 4.6-5*, SCAQMD's CEQA Handbook sets separate significance thresholds for construction and operational emissions. The CEQA Handbook also directs that construction and operational emissions be analyzed, considered, and reported separately.

In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the Proposed Project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels. For non-attainment pollutants (ozone, with ozone precursors NO<sub>x</sub> and volatile organic compounds) and PM<sub>10</sub>, if emissions exceeded the thresholds shown in *Table 4.6-5*, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or Hazardous Air Pollutants (HAPs). In San Diego County, APCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1200, permits will be granted to a source with a risk of 10 in a million or less provided the source implements Toxics-Best Available Control Technology. Under Rule 1210, emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP which result in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (Preschool through 12th Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within 1 mile and results in a health risk greater than 10 in 1 million would be deemed to have a potentially significant impact.

APCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

The impacts associated with construction and operation of the Proposed Project were evaluated for significance based on these significance criteria.

#### 4.6.2.2 *Climate Change*

As noted above, neither CEQA nor the CEQA Guidelines Environmental Checklist Form in Appendix G provide [quantitative significance](#) thresholds for determining the significance of a project's GHG emissions. ~~Whatever guidance the OPR will provide pursuant to SB 97 will not be available until at least July 1, 2009.~~ Furthermore, AB 32 acknowledges that it is within the

CARB's discretion to determine how best to reach the GHG emissions reduction targets it establishes.

The Port of San Diego has indicated that the Proposed Project would have a significant impact on or from global warming if it would:

1. Conflict with or obstruct the goals or strategies of the California Global Warming Solutions Act of 2006 (AB 32) or related Executive Orders
2. Result in substantially increased exposure of the project from the potential adverse effects of global warming identified in the California Global Warming Solutions Act of 2006 (AB 32).

At this time, AB 32 requires California to reduce its GHG emissions to:

- 2000 levels by 2010 (11 percent below “business as usual”)
- 1990 levels by 2020 (25 percent below “business as usual”).

In addition to the AB 32 goals above, the related Executive Order S-3-05 directs State Executive Agencies to consider methods to reduce GHG emissions to 80 percent below 1990 levels by 2050 and report such methods to the State Legislature and the Governor.

AB 32 and Executive Order S-3-05 apply to existing and new GHG emission sources. To account for growth and prevent inhibition of future development, reductions below “business as usual” are quantified. For the purposes of the Proposed Project, “business as usual” is considered to be development in compliance with the energy efficiency standards established by Title 24 and other applicable regulations, including water conservation requirements.

The project-level components would have a significant impact on global warming if they do not reduce GHG emissions by 20 percent or more compared to development under a “business as usual” condition. The reduction by 20 percent below “business as usual” is calculated for project-level components because the anticipated completion of the Phase I components coincides with an approximate mid-point between the 2010 and 2020 goals of AB 32.

Program-level components range in anticipated completion times from close to 2020 to beyond 2030. For purposes of this EIR, the program-level components would need to comply with the 20 percent below business as usual and while recognizing that changes in state GHG reduction strategies—substantially greater reductions—may be required.

Those emissions within the operational control of the Proposed Project are attributed to the project. The concept of operational control is embodied in the California Climate Action Registry Protocol (Protocol), the State of California's GHG emissions accounting tool designed

to help government and business leaders understand, quantify, and manage GHG emissions. The Protocol provides the accounting framework for quantifying GHG emissions from organizations within California.

The Protocol provides standards and guidance for companies and other organizations preparing a GHG emissions inventory. The standard is written primarily from the perspective of a business developing a GHG inventory.

The Protocol identifies both direct and indirect sources of emissions. Direct emissions include the following:

- Mobile combustion sources (i.e., from cars, trucks, rail, air, and other transport) owned or leased by your organization and used for moving raw materials, finished products, supplies, or people
- Stationary combustion sources used for the production of electricity, steam, or district heating and cooling
- Process emissions that occur during the production of cement, adipic acid, and ammonia as well as emission from agricultural processes
- Fugitive sources; for example, methane leaks from pipeline systems or leaks of HFCs from air conditioning systems.

Indirect sources include purchased electricity and purchased heating/cooling. The Protocol also encourages organizations to report GHGs from other activities including employee commuting and business travel, off-site waste disposal, and other emissions from demand for goods and services. However, the Protocol does not require the reporting of these indirect emissions.

For purposes of analysis, the concept of operational control has been adopted as the one that most applies to the Proposed Project. The developers/builders will have operational control over certain project factors that generate GHG emissions. These include natural gas, purchased electricity, and energy embodied in water. The developers/builders do not have direct operational control over emissions standards for vehicles or vehicle purchase choices or driving habits of guests. However, the applicant does have control over transportation emissions in that they control the size of the Proposed Project, which directly relates to the number of traffic trips the project will generate. Accordingly, transportation emissions are included as part of this analysis.



### 4.6.3 Impact Analysis

#### 4.6.3.1 Air Quality

##### 1. Would the Proposed Project conflict with or obstruct the applicable air quality plan?

As noted earlier, the SIP is the document that sets forth the state's strategies for achieving air quality standards. The San Diego APCD is the agency that regulates air quality in the SDAB and is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The RAQS and TCM plan developed by the San Diego APCD and SANDAG sets forth the steps needed to accomplish attainment of state and federal ambient air quality standards. The San Diego APCD adopts rules, regulations, and programs to attain state and federal air quality standards and appropriates money (including permit fees) to achieve these objectives.

In order to meet federal air quality standards in California, the CARB required each air district to develop its own strategy for achieving the NAAQS. The San Diego APCD prepared the 1991/1992 RAQS in response to the requirements set forth in AB 2595. The RAQS includes the TCM plan prepared by SANDAG. The RAQS and TCM plan sets forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

This impact threshold is assessed with respect to conformance with these plans. The basis for these plans is the distribution of population in the region as projected by SANDAG. Growth forecasting is based in part on the land uses established by the General Plan.

In order to meet federal air quality standards in California, the CARB required each air district to develop its own strategy for achieving the NAAQS. The San Diego APCD prepared the 1991/1992 RAQS in response to the requirements set forth in the California Clean Air Act. The RAQS set forth the steps needed to accomplish attainment of state and federal ambient air quality standards.

The RAQS addresses air effects from industrial sources, area-wide sources, and mobile sources. It also considers transportation control measures and indirect source review. Industrial sources are stationary air pollution sources for which APCD has control responsibility. Area-wide sources include such things as consumer products, small utility engines, hot water heaters, and furnaces. Both the CARB and the APCD have authority to regulate these sources. Mobile sources are principally emissions from motor vehicles. The CARB establishes emission standards for motor vehicles, and regulates other motor-vehicle-related activities, such as aftermarket parts certification and fuel standards.

For projects like the Proposed Project, the components of the RAQS that are most directly related fall within the transportation control measures and indirect source control. Transportation control measures include measures to reduce vehicle trips, use, miles traveled, and traffic congestion. Indirect sources are those facilities that generate or attract mobile sources that can result in emissions of pollutants for which there is a state ambient air standard. These uses include shopping centers, schools, and residential uses. These measures involve actions by the City and the Port as they pertain to planning, zoning, and development activities.

In 1992, SANDAG adopted TCM for the Air Quality Plan which set forth 11 tactics aimed at reducing traffic congestion and motor vehicle emissions in the SDAB. For each of these tactics, the TCM evaluated the potential emissions reduction on a region-wide basis. These tactics include:

1. Commute travel reduction program
2. High school, college, and university travel reduction program
3. Goods movement/truck operation program
4. Non-commute travel reduction program
5. Transit improvements and expansion
6. Vanpool program
7. High-occupancy vehicle lanes
8. Park and ride facilities
9. Bicycle facilities
10. Traffic flow improvements
11. Indirect source control program.

The tactic that is most applicable to the current proposal is the Indirect Source Control Program. However, the TCM plan indicated that the total emissions reductions could not be estimated with confidence at the time they were established.

The TCM plan identified job-housing balance, mixed-use, and transit corridor development as criteria for indirect source control. As part of job-housing balance, SANDAG indicates that land use policies and programs shall be established to attract appropriate employers to residential areas and to encourage appropriate housing in and near industrial and business areas. Mixed-use development should be designed to maximize walking and minimize vehicle use by providing housing, employment, education, shopping, recreation, and any support facilities within convenient proximity. Finally, transit corridor development specifies that the City and the Port land use plans and development policies shall be designed to foster transit ridership. Further,

high residential development densities shall be encouraged within walking distance of major transit routes with development having convenient access to transit.

The Proposed Project meets these criteria, along with objectives outlined in such tactics as bicycle facilities. The Proposed Project includes mixed-use and places high-density residential uses within walking distance of the H Street transit center. High-density residential use is also within walking distance to parks and civic use areas as well as the marina and other recreational activities.

While the Proposed Project would meet several of the criteria set by the TCM plan, it does not conform to the planning assumptions that were used to generate the forecast of the region's ability to achieve the NAAQS. As noted, the current RAQS are based on the former General Plan. The current adopted General Plan accounted for development at the Chula Vista Bayfront. While the proposed land use changes would be different from the former General Plan (upon which growth projections used for the RAQS and SIP were based), the RAQS and SIP do account for air emissions associated with the current adopted General Plan. Emissions from area sources and energy use would be similar to the uses proposed in the former General Plan. The main source of emissions associated with the Proposed Project would be from vehicles. According to the *Analysis of Intersections with Significant Chula Vista Bayfront Traffic* (KHA 2008), land uses in the existing Chula Vista General Plan Update for the CVBMP area were projected to generate 152,654 units of Average Daily Traffic (ADT). The Proposed Project, as currently proposed, would generate 79,317 ADT, a reduction in ADT of 73,337 ADT. Given that the amount of traffic and associated vehicular emissions assumed in the Chula Vista General Plan Update are higher than the current Proposed Project traffic and emissions, the Proposed Project would not be inconsistent with either the General Plan that served as the basis of the RAQS or with the growth assumptions in the RAQS and, therefore, would not result in a significant impact.

**2. Would the Proposed Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

There are currently no air quality violations on or near the Proposed Project site. The project does not propose a use that would represent a major source of air pollution. As noted above, the region is not in compliance with the standards for criteria pollutants for (state and federal) ozone, (state) PM<sub>10</sub> and (state) PM<sub>2.5</sub>. Contributions to these pollutants are analyzed in accordance with Significance Criterion No. 3 below. There are two major sources of pollution within the Bayfront Proposed Project area: Rohr Industries/Goodrich and SBPP. The environmental effects of these facilities are evaluated in accordance with Significance Criterion No. 5 below.

**3. Would the Proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?**

The region is in attainment for all federal criteria pollutants except for the 8-hour ozone standard. The basin is also non-attainment for the state ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> standards. Because ozone is not emitted directly but forms in the atmosphere, it is more a regional concern than it is a direct effect of an individual project. As noted earlier, ozone pollution, or smog, is mainly a concern during the daytime in summer months because sunlight plays an important role in its formation. Nitrogen oxides and hydrocarbons (reactive organic gases) are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone. For PM<sub>10</sub>, the region has a federal designation of unclassifiable and is in non-attainment of the state standard, while the region is designated non-attainment for the state PM<sub>2.5</sub> standard.

Air quality impacts would result from the construction of the proposed facilities and their operation. In order to assess the air impacts from construction and operation of the Proposed Project, a URBEMIS air model was completed. Construction includes grading the site, paving the roads, and building the buildings, along with the associated worker trips and equipment use. Operations include vehicle trips related to proposed uses, and area emission includes natural gas use, landscaping activities, and architectural coatings. In completing the URBEMIS model, those features that are part of the Proposed Project, such as mixed-use development, transit, proximity of local serving retail, and pedestrian-/bicycle-friendly development were included, as was the assumption that the site would be watered at least twice per day during grading and construction.

Construction, area, and operation emissions were calculated using the using the URBEMIS 2007 Version 9.2.2 computer program (Rimpo and Associates 2007). URBEMIS calculates construction emissions resulting from grading of the project site and building the proposed structures. Default grading equipment includes dozers, tractors, loaders, and backhoes. Building calculations include use of building equipment, architectural coatings, and associated worker trips. For each phase of the Proposed Project, the analysis considered grading occurring within 1 year. As mentioned, emissions during mass grading were calculated assuming no mitigation would be applied to reduce fugitive dust and PM<sub>10</sub> emissions. Because the URBEMIS model, Version 9.2.2 does not contain San Diego-specific emission factors, default emissions of volatile organic compounds (VOCs) during architectural coatings application were estimated based on state-wide average VOC content of coatings. Otherwise, the default URBEMIS parameters were used for equipment and other emissions. Emissions from construction of the ~~Gaylord Resort and Convention Center proposed (RCC)~~ and the Pacifica Residential and Retail Project were calculated for ~~those specific projects in~~ Phase I. The URBEMIS model was run separately for the park and shoreline promenade developments.

Phase I construction was assumed to occur at the same time as Phase II construction, starting in 2010. Phase III and IV construction were assumed to occur after completion of Phase I and II construction, during which time these phases would be in operation.

Area source emissions are available for five categories, including natural gas, wood stoves, fire places, landscape maintenance, and consumer products. Four of these are fuel-combustion related, and the consumer product category only includes reactive organic compound emissions released through the use of products such as hair sprays and deodorants. For this analysis, consumer products were not included in the analysis, nor were wood burning stoves or wood burning fireplaces. Natural gas fireplaces were included in the calculations.

a. Phase I

i. Construction Impacts

Tables 4.6-6, 4.6-7, and 4.6-8 show the projected maximum daily emission levels for each pollutant resulting from each segment of construction of Phase I of the Proposed Project. Emission factors are not available for lead and, consequently, lead emissions are not calculated. The SDAB is currently in attainment of the state and federal lead standards. Furthermore, diesel fuel is not leaded.

As indicated in Table 4.6-6, emissions of criteria pollutants during construction associated with the ~~Gaylord~~ RCC would be above the significance thresholds for all criteria pollutants except CO and SO<sub>2</sub>.

**TABLE 4.6-6**  
**~~Gaylord~~ Resort and Conference Center**  
**Projected Maximum Daily Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2010 – Grading	37.50	342.98	150.72	0.01	292.13	71.59
2011 – Construction	52.62	286.98	277.50	0.12	20.10	18.14
2012 – Paving/Coatings	318.48	149.79	110.89	0.02	10.62	9.72
Significance threshold	75	100	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As indicated in Table 4.6-7, emissions of criteria pollutants during construction associated with the Pacifica Residential and Retail Project would be above the significance thresholds for reactive organic gases and PM<sub>10</sub>.

**TABLE 4.6-7**  
**Pacifica Residential and Retail Project**  
**Projected Maximum Daily Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Phase 1 Grading (2010)	3.86	37.69	17.82	0.02	191.00	41.13
Phase 1 Building (2010–2011)	274.31	41.91	67.34	0.06	3.23	3.52
Phase 2 Grading (2011)	4.66	42.29	21.72	0.02	218.95	47.22
Phase 2 Building (2011–2012)	249.25	42.29	57.95	0.06	2.97	2.58
Phase 3 Grading (2013)	4.15	36.39	19.79	0.02	203.50	43.74
Phase 3 Building (2013–2014)	129.16	36.39	43.48	0.04	2.41	2.10
Phase 4 Grading (2014)	2.52	20.18	11.93	0.00	194.94	41.37
Phase 4 Building (2014–2015)	112.70	48.39	51.47	0.04	2.31	2.01
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	No	No	No	Yes	No

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As indicated in *Table 4.6-8*, emissions of criteria pollutants during construction associated with the Bayfront Parks and Shoreline Promenade would be above the significance thresholds for NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

**TABLE 4.6-8**  
**Bayfront Parks and Shoreline Promenade**  
**Projected Maximum Daily Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction	49.30	408.52	242.65	0.01	245.99	66.27
Significance threshold	75	100	550	150	150	55
Above threshold?	No	Yes	No	No	Yes	Yes

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As can be seen from *Tables 4.6-6* through *4.6-8*, construction activities would result in significant air quality impacts for each criteria pollutant except sulfur dioxide (SO<sub>2</sub>) and carbon monoxide (CO) for Phase I of the Proposed Project. Unmitigated PM<sub>10</sub> and PM<sub>2.5</sub> emissions are projected to exceed the standard during mass grading operations for each project phase. Construction emissions are projected to exceed the standards for NO<sub>x</sub> and reactive organic gases during some years of construction but not during others. [Please refer to Table 4.6-2, which](#)

identifies the potential health effects associated with exposure to these elevated concentrations of pollutants. These impacts would be potentially significant (**Significant Impact 4.6-1**).

Infrastructure associated with Phase I would include site preparation and grading required for the ~~Gaylord~~ RCC and Pacifica Projects (addressed under those projects) as well as grading and utility construction and road construction and paving for the H Street Extension and other internal roadways. *Table 4.6-9* presents an estimate of the maximum daily construction emissions associated with infrastructure improvements. The H Street Extension would be constructed in 2010. Grading and utility construction was anticipated to occur during 2011, with additional road construction and paving occurring in 2012.

As indicated in *Table 4.6-9*, emissions of criteria pollutants during construction associated with infrastructure construction would be above the significance threshold for NO<sub>x</sub>.

**TABLE 4.6-9**  
**Phase I Infrastructure**  
**Projected Maximum Daily Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Grading (2010)	3.04	25.05	13.56	0.00	51.26	11.60
H Street extension (2010)	2.91	15.97	10.80	0.00	1.34	1.22
Grading (2011)	2.86	23.49	12.98	0.00	51.18	11.52
Utility construction (2011)	3.97	24.37	16.19	0.00	2.15	1.97
Internal road construction and paving (2012)	2.76	14.64	10.35	0.00	1.23	1.12
Significance threshold	75	100	550	150	150	55
<b>Above threshold?</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

ii. Total Construction Impacts

*Table 4.6-10* presents the total maximum daily construction emissions estimated from Phase I construction for the period from 2010 through 2015.

**TABLE 4.6-10**  
**Phase I Total Construction**  
**Projected Maximum Daily Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>2010</b>						
<del>Gaylord</del> Resort and Conference Center	37.50	342.98	150.72	0.10	292.13	71.59
Pacifica Residential and Retail Development	278.17	79.60	85.16	0.08	194.23	44.65
Bayfront Parks and Shoreline Promenade	49.30	408.52	242.65	0.01	245.99	66.27
Infrastructure	5.95	41.02	24.36	0.00	52.60	12.82
<b>Total 2010</b>	<b>370.92</b>	<b>872.12</b>	<b>502.89</b>	<b>0.10</b>	<b>784.95</b>	<b>195.33</b>
<b>2011</b>						
<del>Gaylord</del> Resort and Conference Center	52.62	286.98	277.50	0.12	20.10	18.14
Pacifica Residential and Retail Development	253.91	84.58	79.67	0.08	221.92	49.80
Infrastructure	6.83	47.86	29.17	0.00	53.33	13.39
<b>Total 2011</b>	<b>313.36</b>	<b>419.42</b>	<b>386.34</b>	<b>0.20</b>	<b>295.35</b>	<b>81.43</b>
<b>2012</b>						
<del>Gaylord</del> Resort and Conference Center	318.48	149.79	110.89	0.02	10.62	9.72
Pacifica Residential and Retail	249.25	42.29	57.95	0.06	2.97	2.58
Infrastructure	2.76	14.64	10.35	0.00	1.23	1.12
<b>Total 2012</b>	<b>570.49</b>	<b>206.72</b>	<b>179.19</b>	<b>0.08</b>	<b>14.82</b>	<b>13.42</b>
<b>2013</b>						
Pacifica Residential and Retail Development	133.31	72.78	63.27	0.06	205.91	45.84
<b>Total 2013</b>	<b>133.31</b>	<b>72.78</b>	<b>63.27</b>	<b>0.06</b>	<b>205.91</b>	<b>45.84</b>
<b>2014</b>						
Pacifica Residential and Retail Development	131.68	56.57	55.41	0.04	197.35	43.47
<b>Total 2014</b>	<b>131.68</b>	<b>56.57</b>	<b>55.41</b>	<b>0.04</b>	<b>197.35</b>	<b>43.47</b>
<b>2015</b>						
Pacifica Residential and Retail Development	112.70	48.39	51.47	0.04	2.31	2.01
<b>Total 2015</b>	<b>112.70</b>	<b>48.39</b>	<b>51.47</b>	<b>0.04</b>	<b>2.31</b>	<b>2.01</b>
Significance threshold	75	100	550	150	150	55



### iii. Operational Impacts

The significance of operational impacts was assessed in terms of the Air Quality Significance Thresholds established by the SCAQMD. Operational impacts stem primarily from emissions from vehicular sources, although area emissions (e.g., natural gas combustion) also contribute. *Table 4.6-11* provides the projected area and operational emissions in pounds per day for Phase I. As can be seen from this table, emissions projected for this phase of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub> and PM<sub>2.5</sub>. [Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.](#) The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub>) would be a significant impact for Phase I development (**Significant Impact 4.6-2**).

**TABLE 4.6-11**  
**Projected Daily Area and Operations Emissions – Phase I (Pounds/Day)**

Operational Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions – <del>Gaylord</del> RCC	3.95	16.02	15.04	0.00	0.03	0.03
Area Source Emissions – Pacifica Residential and Retail Development	84.86	18.92	8.12	0.05	0.62	0.62
Area Source Emissions – Parks	0.13	0.02	1.60	0.00	0.00	0.00
Operation – <del>Gaylord</del> RCC	135.25	244.99	1512.80	1.29	125.32	27.69
Operation – Pacifica Residential and Retail Development	60.25	93.40	651.24	0.70	67.15	14.73
Operation – Parks	0.94	0.91	6.55	0.00	0.71	0.14
<b>Total</b>	<b>285.38</b>	<b>374.26</b>	<b>2195.35</b>	<b>2.04</b>	<b>193.83</b>	<b>43.21</b>
Significance threshold	55	55	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

### b. Phase II

#### i. Construction Impacts

*Table 4.6-12* provides the projected maximum daily construction emissions by year for Phase II. Emissions projected for this phase of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>. [Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.](#) The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) would be a significant impact for Phase II development (refer to **Significant Impact 4.6-1**).

**TABLE 4.6-12**  
**Projected Maximum Daily Construction Emissions by Year – Phase II (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2010	52.77	436.99	253.15	0.01	342.99	87.66
2011	202.41	1745.52	787.71	0.11	341.76	86.53
2012	206.56	1718.03	791.31	0.12	73.64	67.36
2013	191.74	1583.42	754.19	0.12	67.12	61.36
2014	369.77	1463.96	724.84	0.12	64.84	59.26
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	Yes	Yes

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As discussed above, Phase I and Phase II construction would occur simultaneously. Accordingly, the maximum daily emissions from both Phase I and Phase II were added together based on the estimated construction schedules. *Table 4.6-13* presents the estimated construction emissions based on the simultaneous construction anticipated for both phases.

**TABLE 4.6-13**  
**Projected Maximum Daily Construction Emissions by Year – Phase I and Phase II (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2010	423.69	1309.11	756.04	0.11	1127.93	282.99
2011	515.77	2164.94	1174.05	0.31	637.11	167.96
2012	777.05	1924.75	970.50	0.20	88.46	80.78
2013	325.05	1656.20	817.46	0.18	273.03	107.20
2014	501.45	1520.53	780.25	0.16	262.19	102.73
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	Yes	Yes

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As shown in *Table 4.6-13*, total maximum simultaneous daily emissions during construction of Phase I and Phase II would be above the significance criteria for all construction years for all pollutants except SO<sub>2</sub>.

ii. Operational Impacts

*Table 4.6-14* provides the projected area and operational emissions for Phase II. Emissions projected for this phase of development are anticipated to exceed the standard for each

criteria pollutant except SO<sub>2</sub> and PM<sub>2.5</sub>. [Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.](#)

The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub>, CO, and PM<sub>10</sub>) would be a significant impact for Phase II development (**Significant Impact 4.6-3**).

**TABLE 4.6-14**  
**Projected Daily Area and Operations Emissions – Phase II (Pounds/Day)**

Operational Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions	8.66	11.41	22.30	0.00	0.06	0.06
Operation	183.94	287.01	1980.54	1.24	241.83	47.44
<b>Total</b>	<b>192.60</b>	<b>298.42</b>	<b>2002.84</b>	<b>1.24</b>	<b>241.89</b>	<b>47.50</b>
Significance threshold	55	55	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

c. Phase III

i. Construction Impacts

Table 4.6-15 provides the projected maximum daily construction emissions by year for Phase III. Emissions projected for this phase of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>. [Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.](#) The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) would be a significant impact for Phase III development (refer to **Significant Impact 4.6-1**).

**TABLE 4.6-15**  
**Projected Maximum Daily Construction Emissions by Year – Phase III (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2013	165.02	1340.66	768.04	0.31	543.42	124.71
2014	165.75	1268.23	779.28	0.32	53.72	48.48
2015	155.12	1136.92	756.33	0.32	47.56	42.81
2016	221.01	1013.05	735.76	0.32	45.60	41.01
2017	211.42	910.37	715.90	0.32	38.73	34.68
Significance threshold	75	100	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

Because construction of Phase III would occur at the same time as operational emissions would occur for Phases I and II as well as final construction of some of the Phase I and II projects, the emissions from construction of Phase III and operations were added together. Emissions from simultaneous construction and operation are presented in *Table 4.6-16*. As the maximum construction with Phase III would occur during 2013, emissions from Phase I and II operations and construction during 2013 were added to the construction emissions for that year.

**TABLE 4.6-16**  
**Projected Maximum Simultaneous Daily Construction and Operational Emissions**  
**Phase I and Phase II Operation, Phase III Construction (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Phase III Construction	165.02	1340.66	768.04	0.31	543.42	124.71
Phase I and II Construction	325.05	1656.20	817.46	0.18	273.03	107.20
Phase I Operations	285.38	374.26	2195.35	2.04	193.83	43.21
Phase II Operations	192.60	298.42	2002.84	1.24	241.89	47.50
<b>Total</b>	<b>968.05</b>	<b>3669.54</b>	<b>5783.69</b>	<b>3.77</b>	<b>1252.17</b>	<b>322.62</b>
Significance threshold	75	100	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As shown in *Table 4.6-16*, emissions would be above the significance thresholds for all pollutants except SO<sub>2</sub>.

## ii. Operational Impacts

*Table 4.6-17* provides the projected area and operational emissions for Phase III. Emissions projected for this phase of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Please refer to *Table 4.6-2*, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants. The exceedance of the standard for criteria pollutants (ROG, NO<sub>x</sub>, and CO) would be a significant impact for Phase III development (**Significant Impact 4.6-4**).

**TABLE 4.6-17**  
**Projected Daily Area and Operations Emissions – Phase III (Pounds/Day)**

Operational Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions	9.17	3.69	3.10	0.00	0.04	0.04
Operation	56.69	93.07	620.30	0.64	125.18	24.21
<b>Total</b>	<b>65.86</b>	<b>96.76</b>	<b>623.40</b>	<b>0.64</b>	<b>125.22</b>	<b>24.25</b>
Significance threshold	55	55	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

## d. Phase IV

i. Construction Impacts

Table 4.6-18 provides the projected maximum daily construction emissions by year for Phase IV. Emissions projected for this phase of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>. Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants. The exceedance of the standard for criteria pollutants (reactive organic gases, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) would be a significant impact for Phase IV development (refer to **Significant Impact 4.6-1**).

**TABLE 4.6-18**  
**Projected Maximum Daily Construction Emissions by Year – Phase IV (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2018	117.84	731.39	573.72	0.11	299.28	69.63
2019	109.40	652.65	562.49	0.11	24.55	22.24
2020	101.24	581.28	556.45	0.11	24.02	21.75
2021	250.47	623.12	583.59	0.11	27.48	24.91
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	Yes	Yes

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

Because construction of Phase IV would occur at the same time as operational emissions would occur for Phases I through III, the emissions from construction of Phase IV and operations for Phases I through III were added together. Emissions from simultaneous construction and operation are presented in Table 4.6-19.

**TABLE 4.6-19**  
**Projected Maximum Simultaneous Daily Construction and Operational Emissions**  
**Phase I through Phase III Operation, Phase IV Construction (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Phase IV Construction	250.47	731.39	583.59	0.11	299.28	69.63
Phase I Operations	285.38	374.26	2195.35	2.04	193.836	43.21
Phase II Operations	192.60	298.42	2002.84	1.24	241.89	47.50
Phase III Operations	65.86	96.76	623.40	0.64	125.22	24.25
<b>Total</b>	<b>794.31</b>	<b>1500.83</b>	<b>5405.18</b>	<b>4.03</b>	<b>860.22</b>	<b>184.59</b>
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	Yes	Yes

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

As shown in *Table 4.6-19*, emissions would be above the significance thresholds for all pollutants except SO<sub>2</sub>.

ii. Operational Impacts

*Table 4.6-20* provides the projected area and operational emissions for Phase IV. Emissions projected for this phase of development are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Please refer to *Table 4.6-2*, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants. The exceedance of the standard for criteria pollutants (ROG and NO<sub>x</sub>) would be a significant impact for Phase IV development (**Significant Impact 4.6-5**).

**TABLE 4.6-20**  
**Projected Daily Area and Operations Emissions – Phase IV (Pounds/Day)**

Operational Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions	6.87	9.60	20.77	0.00	0.06	0.06
Operation	54.08	74.48	482.19	0.66	130.77	25.18
<b>Total</b>	<b>60.95</b>	<b>84.08</b>	<b>502.96</b>	<b>0.66</b>	<b>130.83</b>	<b>25.24</b>
Significance threshold	55	55	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

e. All Phases

*Table 4.6-21* provides the projected daily area and operation emissions for the all phases of the Proposed Project. Emissions projected for all development phases are anticipated to exceed the standard for each criteria pollutant except SO<sub>2</sub>.

**TABLE 4.6-21**  
**Projected Daily Area and Operations Emissions – All Phases (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source Emissions	186.96	50.48	56.77	0.00	0.15	0.15
Operation	274.94	383.17	2772.04	4.00	778.52	149.62
<b>Total</b>	<b>461.90</b>	<b>433.65</b>	<b>2828.81</b>	<b>4.00</b>	<b>778.67</b>	<b>149.77</b>
Significance threshold	55	55	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;

PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

#### **4. Would the Proposed Project expose sensitive receptors to substantial pollutant concentrations?**

Sensitive receptors are associated with land uses that are considered more sensitive to changes in air quality than others and include residential areas, schools, retirement homes, convalescent homes, hospitals, and medical clinics. Those that would exist if the Proposed Project is approved include the proposed residences.

The Proposed Project does not propose a use that would generate substantial pollutant concentrations at a location within or adjacent to the Proposed Project. There are no heavy industrial uses proposed as part of the project, and the proposed residential, commercial, light industrial, research and development, and business park and office uses are not substantial point source producers of pollutants. Sensitive receptors would be exposed to pollutant concentrations in excess of the CAAQS and NAAQS due to regional air pollutant concentrations, to which the project contributes.

There is the potential that sensitive receptors adjacent to intersections could be exposed to substantial pollutant concentrations from traffic. Small-scale, localized concentrations of CO above the state and national standards have the potential to occur near stagnation points of heavily traveled intersections. Localized, high concentrations of CO are referred to as “CO hot spots.” CO hot spots can occur when projects contribute traffic to area intersections.

A micro-scale CO hot spot screening analysis was performed at select intersections as demonstrated in *Table 4.6-22* and *Table 4.6-23* in order to assess potential exposure of sensitive receptors to CO concentrations above the state and national standards. The Transportation Project-Level Carbon Monoxide Protocol developed at the University of California at Davis (Garza et al. 1997) was used to conduct the CO hot spot screening analysis. The traffic volumes and intersection configuration were provided by Kimley-Horn and Associates (KHA). Concentrations were calculated for 20 receptors for each intersection.

Following the EPA’s established policy described in the Protocol, a receptor distance of 3 meters was used. The 3-meter distance reflects the concentration in the “mixing zone” above and surrounding the traveled way and is the closest distance for which modeled concentrations are considered valid (Garza et al. 1997). The 3-meter distance provides worst-case CO concentration estimates.

The highest 1-hour measured non-fire concentration was 5.8 ppm (on November 28, 2000, CARB), while the highest 8-hour CO non-fire concentration was 4.64 ppm (on December 20, 2001, CARB). The maximum 1-hour and 8-hour CO concentrations were measured at the Chula Vista station for the last 5 years for the summer months (June, July, and August). The highest 1-hour measured non-fire concentration was 2.7 ppm (on August 16, 2000, CARB), while the

highest 8-hour CO non-fire concentration was 1.94 ppm (on August 11, 2000, CARB). Background CO concentrations are expected to fall over time. Therefore, these maximum CO concentrations were used in the winter and summer CO hot spot analysis, respectively, as the worst-case background CO concentrations. It is noted that the worst-case background concentrations occur in the winter. *Tables 4.6-23 and 4.6-24* below present estimates of worst-case CO concentrations at these intersections for winter and summer conditions, respectively.

**TABLE 4.6-22**  
**Winter CO Concentrations (ppm)**

Receivers	Broadway and H Street		Broadway and Woodlawn Avenue		J Street and Bay Boulevard	
	1-Hour CO Concentration Due to Traffic*	8-Hour CO Concentration Due to Traffic	1-Hour CO Concentration Due to Traffic*	8-Hour CO Concentration Due to Traffic	1-Hour CO Concentration Due to Traffic*	8-Hour CO Concentration Due to Traffic
1	6.3	5.0	6.2	5.0	6.2	5.0
2	6.5	5.2	6.4	5.1	6.3	5.0
3	6.5	5.2	6.5	5.2	6.3	5.0
4	6.6	5.3	6.5	5.2	6.3	5.0
5	6.6	5.3	6.5	5.2	6.3	5.0
6	6.3	5.0	6.3	5.0	6.2	5.0
7	6.3	5.0	6.1	4.9	6.1	4.9
8	6.5	5.2	6.2	5.0	6.2	5.0
9	6.5	5.2	6.3	5.0	6.2	5.0
10	6.5	5.2	6.2	5.0	6.2	5.0
11	6.5	5.2	6.3	5.0	6.3	5.0
12	6.3	5.0	6.1	4.9	6.1	4.9
13	6.3	5.0	6.2	5.0	6.2	5.0
14	6.5	5.2	6.4	5.1	6.4	5.1
15	6.5	5.2	6.4	5.1	6.4	5.1
16	6.5	5.2	6.4	5.1	6.3	5.0
17	6.5	5.2	6.4	5.1	6.3	5.0
18	6.3	5.0	6.2	5.0	6.2	5.0
19	6.4	5.1	6.2	5.0	6.2	5.0
20	6.4	5.1	6.2	5.0	6.2	5.0

\*Assumes 5.8 ppm background hourly concentration



**TABLE 4.6-23**  
**Summer CO Concentrations (ppm)**

Receivers	Broadway and H Street		Broadway and Woodlawn Avenue		J Street and Bay Boulevard	
	1-Hour CO Concentration Due to Traffic*	8-Hour CO Concentration Due to Traffic	1-Hour CO Concentration Due to Traffic*	8-Hour CO Concentration Due to Traffic	1-Hour CO Concentration Due to Traffic*	8-Hour CO Concentration Due to Traffic
1	3.3	2.6	3.3	2.6	3.2	2.6
2	3.6	2.9	3.5	2.8	3.3	2.6
3	3.6	2.9	3.5	2.8	3.3	2.6
4	3.6	2.9	3.5	2.8	3.3	2.6
5	3.6	2.9	3.5	2.8	3.3	2.6
6	3.4	2.7	3.3	2.6	3.2	2.6
7	3.2	2.6	3.1	2.5	3.1	2.5
8	3.5	2.8	3.3	2.6	3.2	2.6
9	3.5	2.8	3.3	2.6	3.2	2.6
10	3.5	2.8	3.3	2.6	3.2	2.6
11	3.5	2.8	3.3	2.6	3.3	2.6
12	3.3	2.6	3.1	2.5	3.1	2.5
13	3.3	2.6	3.2	2.6	3.2	2.6
14	3.6	2.9	3.5	2.8	3.4	2.7
15	3.6	2.9	3.5	2.8	3.4	2.7
16	3.5	2.8	3.5	2.8	3.4	2.7
17	3.5	2.8	3.5	2.8	3.4	2.7
18	3.3	2.6	3.2	2.6	3.2	2.6
19	3.5	2.8	3.3	2.6	3.2	2.6
20	3.5	2.8	3.3	2.6	3.2	2.6

\*Assumes 2.7 ppm background hourly concentration

These tables show that estimates of winter 1-hour CO concentrations at the intersections range from 6.1 to 6.6 ppm and the summer CO concentrations range from 3.1 to 3.6 ppm, well below the 20 ppm state standard and the 35 ppm national standard. The winter 8-hour CO concentrations range from 5.3 to 4.9 ppm and the summer 8-hour CO concentrations range from 2.9 to 2.5 and are below the state's 9 ppm standard. State and federal mandates will cause exhaust emissions per vehicle to continue to improve in the future. As a result, CO concentrations at these intersections will likely decline in the future.

In addition to operational and construction impacts, the City of Chula Vista has a General Plan policy EE6.10 that states:

The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the CEQA review of the project. Attendant health risks

identified in the Health Risk Assessment (HRA) shall be feasibly mitigated to the maximum extent practicable in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

a. Phase I

The entire Proposed Project area needs to be graded to permit the construction identified in Phase I. The Bayfront Park would be in use during grading of the site. Construction includes grading the site, paving the roads, and building the buildings, along with the associated worker trips and equipment use. During grading, particulate matter would be emitted.

There are no sensitive receptors proposed within 500 feet of I-5 ~~within-during construction of~~ Phase I project-level components of the Proposed Project. Therefore, Phase I project-level development would not expose sensitive receptors to substantial pollutant concentrations and therefore is a less than significant impact.

Once Phase I project-level development has concluded, additional sensitive receptors will be located on site as the residential uses would be completed. Construction of Phase I program-level components, therefore, would have the potential to affect these additional receptors. Because construction emissions during Phase I would exceed the significance thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, impacts to sensitive receptors during construction would be significant but temporary. Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.

b. Phase II

Once Phase I is complete, additional sensitive receptors will be located on site. Residential uses would be completed. Construction of Phase II, therefore, would have the potential to affect these additional receptors. Because construction emissions during Phase II would exceed the significance thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, impacts to sensitive receptors during construction would be significant but temporary. Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.

c. Phase III

The projects in Phase III would not site new sensitive receptors within 500 feet of the I-5 freeway. The land uses proposed in Phase III are not considered sensitive uses. Once Phases I through II are complete, additional sensitive receptors will be located on site. Construction of Phase III, therefore, would have the potential to affect those receptors. Because construction emissions during Phase III would exceed the significance thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>,

and PM<sub>2.5</sub>, impacts to sensitive receptors during construction would be significant but temporary. Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.

d. Phase IV

The Proposed Project does not site new sensitive receptors within 500 feet of the I-5. The land uses proposed in Phase IV are not considered sensitive uses. Once Phases I through III are complete, additional sensitive receptors will be located on site. Construction of Phase IV, therefore, would have the potential to affect those receptors. Because construction emissions during Phase IV would exceed the significance thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, impacts to sensitive receptors during construction would be significant but temporary. Please refer to Table 4.6-2, which identifies the potential health effects associated with exposure to these elevated concentrations of pollutants.

At the program level for the Proposed Project, therefore, impacts to sensitive receptors during construction of Phases I, II, III, and IV would be a significant impact (**Significant Impact 4.6-6**).

**5. Would the project locate residential housing within 1,000 feet of a plant or any other toxic air emitting facility, for which a significant health risk assessment has not been conducted?**

There are two major sources of pollution within the Bayfront Proposed Project area: Rohr Industries/Goodrich and SBPP. In December 2004, the San Diego APCD published the 2003 Air Toxics “Hot Spots” Program Report for San Diego County. This report demonstrates the San Diego APCD’s compliance with the California Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) that was enacted in 1987. The law requires that larger industrial facilities provide information regarding emission inventories and health risk assessments. If adverse health impacts exceeding public notification levels are identified, the facility must provide public notice and, if the facility poses a potentially significant public health risk, the facility must submit a risk reduction audit and plan to demonstrate how the facility would reduce health risks. Rohr Industries/Goodrich and SBPP were required to provide information regarding their emission inventories and to prepare health risk assessments. This information is available at the San Diego County APCD (10124 Old Grove Road, San Diego CA 92131-1649).

Table 4.6-24 provides the results of the Rohr Industries/Goodrich and SBPP health risk assessments. This table presents the maximum lifetime cancer risk, cancer burden, and chronic and acute Total Health Hazards Index (THI) for each facility. Public notification and risk reduction requirements are based on these levels. Public notification is required if the maximum incremental cancer risk is 10 in 1,000,000 or greater and a significant risk is defined as 100 in

1,000,000. In addition, public notification is required and a significant risk is determined if the cancer burden, chronic THI, or acute THI is 1.0 or greater.

**TABLE 4.6-24**  
**Health Risk Assessment Results**

Facility	Maximum Lifetime Cancer Risk (Per Million)	Lifetime Cancer Burden	Chronic THI*	Acute THI*
Rohr Industries/Goodrich	7.7	<0.1	<0.1	<0.1
SBPP	2.1	<0.1	<0.1	0.34

\*THI = total health hazards index

Neither of the Chula Vista facilities addressed in the Program Report is required to perform Public Notification or Risk Reduction. Both are below the Public Notification and Risk Mitigation levels.

The health risk potential for the existing SBPP was also addressed in the Mitigated Negative Declaration and Initial Study issued by the California Public Utilities Commission for the San Diego Gas & Electric (SDG&E) divestiture of property in 1998. That report indicated that:

The results of the 1992 HRA were adjusted to reflect current (1996) emissions estimates to provide a basis for updating the estimated health risks associated with the SBPP. The current estimated cancer risk for a maximum exposed individual at the location of highest impact and caused by existing plant emissions was lower than one in a million (0.72 in a million).

The HRA for Rohr Inc./Goodrich, prepared in 1997, identifies the 10 in 1,000,000 isopleth for the facility. (An isopleth is a line drawn on a map connecting points having the same numerical value. The 10 in 1,000,000 isopleth is the line illustrating the location of 10 in 1,000,000 cancers due to emissions from Rohr/Goodrich as determined in the health risk assessment.) While emission sources were identified throughout the facility, this 10 in 1,000,000 contour is centered on emissions sources that were located in the Goodrich South Campus.

The Goodrich South Campus area is no longer operational. Goodrich has consolidated its operations north of H Street and west of Bay Boulevard. The location of the isopleths provided in the 1997 HRA, therefore, will have changed. The emissions from the Goodrich South Campus influencing the 10 in 1,000,000 isopleth have either been moved to the existing operation or have ceased to be produced. Assuming that the emissions from the Goodrich South Campus have been moved to the existing operation, the location of the 10 in 1,000,000 isopleth will have similarly moved. No new health risk assessment has been prepared that addresses the new configuration of the sources.

An assessment of the potential for the existing Goodrich facility to result in a health risk at a residential receptor on the Proposed Project was based upon the published isopleth, with the recognition that the source of any emission would be located at the existing plant rather than the Goodrich South Campus. Based on the published isopleths, residential receivers in the Harbor District would not be exposed to a cancer risk greater than 10 in 1,000,000.

There are no residential uses proposed within 1,000 feet of the existing Goodrich facility. Because proposed residential uses for the Proposed Project are further than 1,000 feet from the existing Goodrich facility, there would not be a significant effect caused by permitting sensitive receivers within 1,000 feet of a toxic emitter. Because there are no residential receivers proposed within 1,000 feet of the existing Goodrich facility, no significant air quality impacts would occur in accordance with Significance Criterion No. 5.

**6. Would the project create objectionable odors affecting a substantial number of people?**

The types of uses proposed would not generate objectionable odors. Objectionable odors are possible from construction emissions, but they would be temporary and would dissipate quickly and, therefore, would not affect substantial numbers of people. Impacts would not be significant.

**4.6.3.2 Climate Change**

~~Although Pursuant to SB 97, requires OPR to adopt~~ guidelines concerning GHG emissions ~~by January 1 in February 2010, which become effective March 18, 2010. The new, CEQA does not currently provide any~~ guidelines do not provide quantitative thresholds for determining the significance of a project's potential impact on global climate change. Because AB 32 and Executive Order S-3-05 have established goals for the reduction of GHG emissions in California, the Port has determined that application of the air quality threshold set forth in Appendix G of the CEQA Guidelines, section III(a) (Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?), is appropriate. Accordingly, the threshold used in this ~~Recirculated Master Plan~~-EIR for determining whether the Proposed Project may have a significant impact on global climate change is twofold: whether the Proposed Project would conflict with or obstruct the goals or strategies of AB 32 or related Executive Orders, or whether the Proposed Project would result in substantially increased exposure of the Proposed Project to the potential adverse effects of global warming identified in AB 32.

**7. Would the project conflict with or obstruct goals or strategies of the California Global Warming Solutions Act of 2006 (AB 32) or related Executive Orders?**

The analysis in this section is based on the January 2008 Air Quality Technical Report prepared for the Pacifica Residential and Retail Project (*Appendix 4.6-1*), and the February 2008 Air

Quality Technical Report prepared for the ~~Gaylord~~ Resort and Conference Center (*Appendix 4.6-2*), both prepared by SRA. Although Gaylord's proposal to develop an RCC on parcel H-3 has been withdrawn and is no longer part of the Proposed Project, this technical study is still relied upon for the general program-level analysis of the proposed RCC on Parcel H-3. Additional studies for the remainder of the Chula Vista Bayfront Master Plan were conducted by SRA (2008).

a. ~~Gaylord~~ Resort and Conference Center (RCC)

As a program-level component of the Proposed Project, the RCC has not reached the design stage that enables a project-specific calculation of GHG emissions; however, GHG emissions were estimated for the proposed RCC as described below in order to evaluate potential global warming impacts. The nature and extent of additional environmental review, which may be required for the RCC project, will be determined pursuant to State CEQA Guidelines Section 15168.

i. Construction Impacts

GHG emissions associated with the construction phase of the Proposed Project would occur through the use of heavy equipment and worker vehicle trips. Construction-related GHG emissions would be temporary. Construction-related GHG emissions were estimated for each year of construction using the URBEMIS model Version 9.2.2. The URBEMIS model does not calculate emissions of CH<sub>4</sub> and N<sub>2</sub>O from construction equipment, as it assumed that these emissions are insignificant in comparison with emissions of CO<sub>2</sub> from construction equipment. *Table 4.6-25* presents a summary of construction GHG emissions.

**TABLE 4.6-25**  
**Construction GHG Emissions Tons/Year**

Construction Year	CO <sub>2</sub> Emissions (Tons)
2010	3,553
2011	4,751
2012	709

ii. Operational Impacts

***Greenhouse Gas Emissions Estimate.*** GHG emissions associated with the ~~Gaylord~~ RCC were estimated separately for three categories or sources of emissions: emissions associated with energy use (including electricity and natural gas), emissions associated with obtaining and consuming potable water, and vehicle use. As noted above, the analysis presented herein is the “business as usual” approach.

**Energy Use.** GHG emissions associated with energy use would arise from the combustion of fossil fuels to provide energy for the hotel and conference center, retail, and restaurant uses proposed. GHG emissions from the commercial retail development were projected based on estimated annual energy use of 13.55 kWh per square foot for retail space (SCAQMD 1999). Emissions were based on emission factors from the California Climate Action Registry General Reporting Protocol (CCAP 2007).

As described in the project description, the ~~Gaylord~~-RCC would include a 2,000-room hotel and a 415,000 (net)-square-foot conference center and other related uses. Emissions associated with natural gas usage were calculated based on the SCAQMD's estimated natural gas usage per square foot (SCAQMD 1999).

**Water Consumption.** Water use and energy use are often closely linked. The provision of potable water to commercial consumers requires large amounts of energy associated with five stages: source and conveyance, treatment, distribution, end use, and wastewater treatment. It is anticipated that the ~~Gaylord~~-RCC would require approximately 0.6 million gallons per day (MGD) of water.

The California Energy Commission (Wilkinson and Wolfe 2005) estimates that, in Southern California, water usage will have an embodied energy of 10,000 kWh per million gallons. CO<sub>2</sub> emissions were calculated on the maximum basis of an additional 0.6 million gallons per day times 12,700 kWh per million gallons. GHG emissions were calculated based on the California Climate Action Registry General Reporting Protocol (CCAR 2007).

**Vehicle Use.** Mobile source emissions were estimated based on the projected ADTs from the traffic analysis (KHA 2007). Average trip lengths in San Diego County would be 5.8 miles. Emissions of CO<sub>2</sub> and CH<sub>4</sub> were obtained from the EMFAC2007 model. Emissions of N<sub>2</sub>O were estimated based on EPA emission factors, assuming vehicles, on average, would meet typical emission standards for on-road vehicles without additional controls. Based on the maximum of 20,000 ADT projected for the Proposed Project, vehicular emissions of CO<sub>2</sub> equivalent GHGs were estimated at 23,544 metric tons per year.

Table 4.6-26 presents a summary of the estimated operational GHG emissions that would result from the ~~Gaylord~~-RCC under business as usual conditions, above existing conditions.



**TABLE 4.6-26**  
**Summary of Estimated Operational “Business As Usual”**  
**Greenhouse Gas Emissions**

Emission Source	Annual Emissions (Metric Tons/Year)		
	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
Electricity use emissions	24,702	0.114	0.206
Natural gas use emissions	4,159	0.0079	0.46
Water consumption emissions	609	0.0028	0.0051
Vehicular use emissions	17,427	1.78	1.29
<b>Total</b>	<b>46,897</b>	<b>1.90</b>	<b>1.96</b>
Global warming potential factor	1	310	21
CO <sub>2</sub> equivalent emissions	46,897	589	41
<b>Total CO<sub>2</sub> equivalent emissions</b>	<b>47,528</b>		

*Anticipated Emissions Reductions with Project Design Features.* ~~As a program level component of the Proposed Project, the RCC has not reached the design stage that enables the development of specific Project Design Features (PDFs). A discussion of potential PDFs that may be incorporated by the RCC applicant to reduce GHG emissions by 20 percent below business as usual is provided below.~~

~~Although specific Project Design Features (PDFs) will be determined at a later date, a selection of potential Project Design Features (PDFs) that may be~~ proposed by the ~~RCC~~ project applicant are presented in ~~Table 4.6-27, along with certain requirements for energy and water efficiency.~~ As shown in ~~Table 4.6-27~~, a wider range of PDFs ~~are may be~~ incorporated in the ~~P~~proposed ~~RCC P~~project, ranging from water use efficiency to building energy efficiency and landscaping, to smart growth land use patterns, solid waste diversion, and education. The project ~~will may~~ also ~~pursue~~ LEED certification~~ed~~ and will be energy and water efficient. The project is ~~designed-expected~~ to achieve a 20 percent reduction in water use compared to Title 24 requirements, ~~which may and~~ includes using grey water.

**TABLE 4.6-27**  
**~~Proposed-Potential~~ Project Design Features to Reduce GHG Emissions for ~~Gaylord~~ RCC**

Strategy to Reduce GHG Emissions	<del>Proposed</del> Project Design Features
Alternative transportation	The Project includes access to mass transit and will be located within a mixed-use, high-density project that provides work and shopping opportunities for visitors at the Resort and Conference Center.
Water use efficiency	The Project shall achieve a 20 percent reduction in water use, <del>which may include. The Project shall achieve a 10 percent reduction in water use through</del> the use of “grey water” for internal irrigation and secondary plumbing, <del>and The project is designed to reduce water use through</del> low flow plumbing fixtures such as double flush toilets. The project’s



TABLE 4.6-27 (Cont.)

Strategy to Reduce GHG Emissions	<del>Proposed</del> Project Design Features
	<p>landscaping shall use native and adapted plants and high-efficiency irrigation technology including efficient drip irrigation heads to reduce water consumption. Additional water conservation measures <u>may</u> include the following:</p> <ul style="list-style-type: none"> <li>• Urinals – waterless or 1/8 gallon per flush</li> <li>• Water closets – dual flush 1.6/1.1 or 1.28 gallons per flush</li> <li>• Guest room water closets – tank type dual flush 1.6/0.8 or 1.28 gallons per flush</li> <li>• Public area lavatory faucets – sensor activated 0.5 gallons per minute</li> <li>• Guest room sinks – 1.0 gallons per minute</li> <li>• Guest room showers – 2.0 gallons per minute</li> <li>• Kitchen sinks – 1.8 gallons per minute</li> <li>• Janitor sinks – 2.5 gallons per minute.</li> </ul>
Building energy efficiency	<p>The Project shall be designed with sustainable design features within the building that will result in energy efficiency to the extent <del>possible</del><u>provided in Mitigation Measures 4.16-2</u>. This shall be incorporated into the building design phase. <del>Gaylord</del> <u>The project applicant</u> shall achieve energy efficiency that exceeds Title 24 standards by 15 percent. The Project <del>shall</del> <u>may also pursue</u> LEED certification. The following design measures <del>shall</del> <u>may</u> be included to meet the energy efficiency requirements:</p> <ul style="list-style-type: none"> <li>• Over two-thirds of the building <del>shall</del> <u>to</u> be enclosed using a solid or non-glazed system to reduce potential solar gain.</li> <li>• On south- and west-facing facades, sun screen elements <del>shall</del> <u>to</u> be used to reduce the amount of direct light that reaches the glazed surface.</li> <li>• All glazed systems <del>shall</del> <u>to</u> be dual pane, low-E with a solar heat gain coefficient less than 0.30.</li> <li>• Wall and ceiling insulation R-value <del>shall</del> <u>to</u> be optimized.</li> <li>• <del>Coatings such as low E and applied frit shall to be employed on the most critical surfaces to maintain the prescribed level of performance.</del></li> <li>• Architectural louvers, slats, and screens <del>shall</del> <u>to</u> be employed where additional shading is needed.</li> <li>• Architectural projections, such as roof lines and window lintels, <del>shall</del> <u>to</u> be exaggerated on south and west facades for additional shading.</li> <li>• Wall insulation <del>shall</del> <u>to</u> be R-11 at a minimum, with R-19 preferred.</li> <li>• Roof insulation <del>shall</del> <u>to</u> be R-19 at a minimum.</li> <li>• Cool roofing system <del>shall</del> <u>to</u> be employed.</li> <li>• Lighting <del>shall</del> <u>to</u> be at least 30 percent better than code. The code allowance varies for each occupancy type. This can be achieved with a combination of a reduced installed wattage through high efficiency design, fixtures, lamps, and ballasts as well as occupancy, daylighting, and peak demand reduction.</li> <li>• Natural ventilation <del>shall</del> <u>to</u> be used to reduce the load on the heating, ventilation, and air conditioning systems. Natural air flow will be created by drawing hot air out of the top of the Atrium while introducing fresh outdoor air at the lower ground levels. The fresh air supply shall be filtered and controlled.</li> <li>• Natural daylight <del>shall</del> <u>to</u> be utilized to reduce energy consumption and provide a more natural indoor atmosphere.</li> <li>• Engineering design system <del>shall</del> <u>to</u> include variable speed motor control</li> </ul>

TABLE 4.6-27 (Cont.)

Strategy to Reduce GHG Emissions	<del>Proposed</del> Project Design Features
	<p>drives on chillers, large fans, and/or pump motors; building energy management system equipment control; enhanced boiler and chiller controls; heat recovery for room air conditioning units; fresh outside air economizers; guest room 'smart' auto-thermostats; sensors for convention room stats; and under-floor air distribution for administrative areas.</p> <ul style="list-style-type: none"> <li>The majority of the roof surface <del>shall to</del> be white reflective (elastomeric) surface to reduce heat gain.</li> </ul>
Land use patterns	The Project is part of a mixed-use development that utilizes smart growth land use patterns designed to reduce the number of trips and encourage use of local services.
Vehicle climate change standards and other light duty vehicle technology	This measure applies to motor vehicles. As noted above, California is currently litigating EPA's denial of the Clean Air Act waiver necessary for California to implement AB 1493 regulations to achieve the maximum feasible, cost-effective, and technologically achievable reductions of GHG pollution emitted by new passenger vehicles. Implementation of AB 1493 would reduce fleet-wide vehicles GHG emissions by 20 percent in 2020 and 27 percent in 2030.
Low carbon fuel standards	This measure applies to motor vehicle fleets. By 2020, motor fuels sold in California shall have 10 percent low carbon intensity when compared to equivalent fuel sold in 2007. This standard will reduce GHG emissions from vehicles (and other gasoline power engines) associated with the project.

The potential PDFs identified in *Table 4.6-27* above shall be considered by the Port when a project-specific development is proposed for the RCC on Parcel H-3, and ~~the~~ The project applicant's duty to reduce GHG emissions 20 percent below business as usual shall be considered and implemented as conditions of approval. The proposed ~~Gaylord~~ RCC project is designed as a multi-use resort and conference center complex with retail and restaurant space. The nature of the Proposed Project provides incentives to eliminate off-site vehicle trips and encourage pedestrian use. In addition, the project is located in the vicinity of transit, including the San Diego Trolley system, which provides mass transit access to points throughout the area. According to the URBEMIS model, Version 9.2.2, reductions in emissions from vehicles would total approximately 12 percent due to the proximity of the development to existing mass transit, the mixed-use nature of the development, availability of retail in the local area, and bicycle and pedestrian access. With the implementation of federal CAFÉ standards, vehicle fuel efficiency will improve from an average of 27 miles per gallon to 35 miles per gallon. These emission reductions are projected to amount to an overall reduction of 20 percent.

With implementation of GHG emission reduction measures and Mitigation Measures 4.16-1 and 4.16-2 as discussed in Section 4.16, Energy, the project will ~~that~~ achieve a 20 percent reduction in water use and exceed Title 24 energy efficiency standards by 15 percent, emissions associated with the RCC development are anticipated ~~would to~~ be reduced below

“business as usual” level<sup>ss</sup>. ~~E~~Estimated emissions with GHG reduction measures are shown in Table 4.6-28.

**TABLE 4.6-28**  
**Summary of Estimated Operational Greenhouse Gas Emissions with Emission**  
**Reduction Measures for ~~Gaylord~~ RCC**

Emission Source	Annual Emissions (Metric Tons/Year)		
	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
Electricity use emissions (less a 15 percent reduction for exceedance of Title 24 standards by 15 percent)	17,423	0.0801	0.145
Natural gas use emissions (less a 15 percent reduction for exceedance of Title 24 standards by 15 percent)	3,535	0.0067	0.40
Water consumption emissions (20 percent below “business as usual” due to water conservation measures)	548	0.0025	0.0045
Vehicular use emissions (reductions assumed due to improvements in federal CAFÉ standards by 2020, mixed-use project, and proximity of the project to mass transit)	13,818	1.23	0.89
<b>Total</b>	<b>35,324</b>	<b>1.32</b>	<b>1.44</b>
Global warming potential factor	1	310	21
CO <sub>2</sub> equivalent emissions	35,324	409	30
<b>Total CO<sub>2</sub> equivalent emissions</b>	<b>35,763</b>		

A comparison of the total CO<sub>2</sub>-equivalent emissions of approximately 47,523 metric tons per year under “business as usual” conditions with approximately 35,763 metric tons per year upon implementation of PDFs and improved vehicle efficiency conditions is shown in Tables 4.6-27 and 4.6-28. The level of GHG emissions generated by the project above existing conditions would be reduced by 24.7 percent below that which would be generated under “business as usual” conditions. GHG emissions would be further reduced by compliance with the energy reduction measures outlined in Mitigation Measures 4.16-1 and 4.16-2 discussed in Section 4.16, Energy. In addition, the project shall recycle all materials accepted by local recycling centers consistent with the City’s recycling requirements and consistent with the Integrated Waste Management Board thresholds for diverting 50 percent of waste (inclusive of construction waste), as discussed in Section 4.14, *Public Utilities* of this report. Waste disposal and in particular landfill operations have been identified as notable proportion of GHG emission from developments such as commercial and residential ventures.

iii. Summary of Impacts

The ~~proposed-conceptual~~ ~~Gaylord~~ RCC ~~project~~ would generate GHG emissions associated with natural gas, purchased electricity, and energy embodied in water. PDFs incorporated in the project to reduce GHG emissions at least 20 percent below business as usual will be required as

conditions of approval under the operational control of the project applicant. GHG emissions would be further reduced by compliance with the energy reduction requirements of Mitigation Measures 4.16-1 and 4.16-2, which are discussed in Section 4.16, Energy.

iv. Direct GHG Impacts

Global climate change is caused by GHGs emitted all over the world. In general, project contributions to global GHG emissions are so small that, if viewed in isolation from the world's emissions, they would not have a substantial effect on global climate change. For example, the entire sum of California's GHG emissions only accounts for approximately two percent of the world's GHG emissions. The Proposed Project's GHG emissions represent approximately 0.0073 percent of California's GHG emissions (based on estimated 2004 emissions). Even when compared to California's GHG emissions, the Proposed Project's individual contribution is very small. Implementation of the ~~Gaylord~~ RCC Project wouldis expected to result in approximately 35,763 metric tons of GHG emissions per year above existing conditions. This represents at least 20 percent less GHG emissions than the "business as usual" condition, which would result in approximately 47,528 metric tons of GHG emissions per year above existing conditions. ~~Therefore, t~~The Pproposed ~~PRCC~~ project would not be considered to result in a significant global warming impact because it will be required to incorporate as conditions of approval PDFs that will result in a reduction in GHG emissions from "business as usual" of at least 20 percent. Therefore, the RCC, as it would not conflict with or obstruct the goals or strategies of AB 32 or related Executive Orders.

The selection of PDFs discussed above have been included in this EIR in order to provide a menu of potential options that may be considered by the RCC applicant to reduce GHG emissions by 20 percent below business as usual. Program-level developments, including the RCC, will be required as conditions of approval to adopt such GHG emission reduction measures. New, more effective design features which may become available in the future would be identified and evaluated in subsequent environmental analysis pursuant to CEQA Guidelines Section 15168 (refer to Significant Impact 4.6-7).

v. Project Program Level Cumulative GHG Impacts

As stated above, the ~~Gaylord~~ RCC development will be required to Project includes a ~~wide~~ range of PDFs, including energy efficiency, water conservation and efficiency, recycling, and development of mixed uses that are intended to be consistent in line with ~~sustainability and efficiency concepts that are also inherent in~~ the goals and strategies of AB 32 and related Executive Orders. ~~An~~The Pproposed ~~RCC p~~Project ~~wouldis expected to~~ result in approximately 35,763 metric tons of GHG emissions a year above existing conditions, ~~compared to approximately 47,528 metric tons of GHG emissions a year above existing conditions~~ that would result from implementation under business as usual. ~~These PDFs result in a reduction in GHG~~

~~emissions from “business as usual” of at least 20 percent. Therefore, the Proposed RCC~~  
~~Pproject would not be considered to contribute substantially to a cumulatively significant global~~  
~~climate change impact because the implementation of PDFs required as conditions of approval~~  
~~would result in a reduction in GHG emissions from “business as usual” by at least 20 percent.~~  
~~Therefore, the RCC, because it~~ would not contribute to a conflict with or the obstruction of AB  
 32 or related Executive Orders.

b. Pacifica Residential and Retail Project

i. Construction Impacts

GHG emissions would be associated with the construction phase of the Proposed Project through the use of heavy equipment and vehicle trips. GHG emissions would be temporary. GHG emissions were estimated for each year of construction using the URBEMIS model, Version 9.2.2. As stated above, the URBEMIS model does not calculate emissions of CH<sub>4</sub> and N<sub>2</sub>O because it assumes these emissions are insignificant in comparison with emissions of CO<sub>2</sub>. Table 4.6-29 presents a summary of construction-related GHG emissions. These emissions would be temporary.

**TABLE 4.6-29**  
**Construction GHG Emissions Tons/Year for Pacifica**

Construction Phase/Year	CO <sub>2</sub> Emissions (Tons)
Phase 1 – 2010	773.31
Phase 1 – 2011	445.83
Phase 2 – 2011	343.73
Phase 2 – 2012	781.28
Phase 3 – 2013	610.75
Phase 3 – 2014	352.53
Phase 4 – 2014	341.87
Phase 4 – 2015	531.79

ii. Operational Impacts

**Greenhouse Gas Emissions Estimate.** GHG emissions associated with the Pacifica Residential and Retail Project were estimated separately for three categories or sources of emissions: emissions associated with energy use (including electricity and natural gas) at the retail and residential developments, emissions associated with obtaining and consuming potable water, and vehicle use. As noted earlier, the analysis presented herein is the “business as usual” approach.

**Energy Use.** Emissions associated with energy use would arise from the combustion of fossil fuels to provide energy for the retail and residential uses proposed. Emissions of GHGs from the

commercial retail development were projected based on the estimated annual energy use of 13.55 kWh per square foot for retail space (SCAQMD 1993). Emissions were estimated based on emissions factors from the California Climate Action Registry General Reporting Protocol (CCAR 2007).

The Pacifica Residential and Retail Project would include 1,500 condominium residential units. Residences are assumed to use purchased electricity for cooling, appliances, and plug-loads and natural gas for cooking and water heating. Baseline energy use was calculated as a function of kWh per square foot based on average performance for Southern California residences compliant with Title 24 (2005) standards. According to the California Energy Commission (2004), the average annual residential energy use rate is 5,914 kWh per residential unit. Emissions associated with natural gas were calculated based on the SCAQMD's estimated natural gas usage per foot (SCAQMD 1999).

**Water Use.** Water use and energy use are often closely linked. The provision of potable water to commercial and residential consumers requires large amounts of energy associated with five stages: source and conveyance, treatment, distribution, end use, and wastewater treatment. It is anticipated that the residential development would require 473,000 gallons per day of water consumption.

The California Energy Commission (2006b) estimates that, in Southern California, water usage will have an embodied energy of 12,700 kWh per million gallons. CO<sub>2</sub> emissions were calculated on a maximum basis of an additional 473,000 gallons per day times 12,700 kWh per million gallons. GHG emissions were calculated based on the California Climate Action Registry General Reporting Protocol (CCAR 2007).

**Vehicle Use.** Mobile source GHG emissions were estimated based on the projected ADTs from the traffic analysis (KHA 2007). Average trip lengths in San Diego County would be 5.8 miles. Emissions of CO<sub>2</sub> and CH<sub>4</sub> were obtained from the EMFAC2007 model. Emissions of N<sub>2</sub>O were estimated based on EPA emission factors, assuming vehicles, on average, would meet Tier 0 emission standards. Based on the maximum of 9,000 ADT projected for the Proposed Project, vehicular emissions of CO<sub>2</sub>-equivalent GHG emissions were estimated at 10,595 metric tons per year.

Table 4.6-30 presents a summary of the estimated operational GHG emissions that would result from the Pacifica Residential and Retail development under business as usual conditions, above existing conditions.

**TABLE 4.6-30**  
**Summary of Estimated Operational**  
**“Business as Usual” Greenhouse Gas Emissions for Pacifica**

Emission Source	Annual Emissions (Metric Tons/Year)		
	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
Electricity use emissions	3,311	0.015	0.0276
Natural gas use emissions	1,776	0.0034	0.20
Water consumption emissions	630	0.0029	0.0052
Vehicular use emissions	12,624	0.98	0.71
<b>Total</b>	<b>18,341</b>	<b>1.00</b>	<b>0.94</b>
Global warming potential factor	1	310	21
CO <sub>2</sub> equivalent emissions	18,341	310	20
<b>Total CO<sub>2</sub> equivalent emissions</b>	<b>18,671</b>		

***Anticipated Emissions Reductions with Project Design Features.*** Project Design Features (PDFs) proposed by the Project Applicant are presented in *Table 4.6-31*. As shown in *Table 4.6-31*, a wide range of PDFs are incorporated in the Proposed Project ranging from water use efficiency to building energy efficiency and landscaping, to smart growth land use patterns, solid waste diversion, and education. The project will be LEED certified and will be energy and water efficient.

**TABLE 4.6-31**  
**Proposed Project Design Features to Reduce GHG Emissions for Pacifica**

Strategy to Reduce GHG Emissions	Proposed Project Design Features
Alternative transportation	The Pacifica Project includes access to mass transit and shall be located within a mixed-use, high-density project that provides work and shopping opportunities for residents.
Water use efficiency	The Pacifica Project shall strive for 50 percent reduction in residential water use through features such as low-flow appliances (incl. toilets, showerheads, and washing machines), a drought-tolerant landscape palette, weather-based irrigation controllers, and other water conservation measures. For the purpose of calculating emissions, no credit was taken for water use efficiency.
Building energy efficiency	Buildings at the Pacifica Project shall achieve energy performance equivalent to 20 percent better than current Title 24 standards. This shall be achieved through building energy efficiency standards that shall be incorporated into the design of the buildings, and shall include some or all of the following building design features: <ul style="list-style-type: none"> <li>• Minimum R-19 wall insulation</li> <li>• Minimum R-30 roof insulation</li> <li>• Low emissivity dual pane glazing</li> <li>• Maximum 0.4 U factor glazing</li> <li>• Maximum 0.5 solar heat gain coefficient glazing</li> <li>• Window overhang for all southern-facing glass</li> <li>• Cool roof or green roof</li> </ul>



TABLE 4.6-31 (Cont.)

Strategy to Reduce GHG Emissions	Proposed Project Design Features
	<ul style="list-style-type: none"> <li>• High-efficiency condenser water variable flow</li> <li>• High-efficiency variable-speed-drive fluid coolers</li> <li>• Shut off two-way control valves on each unit</li> <li>• Premium efficiency motors</li> <li>• Carbon monoxide sensors for garage ventilation</li> <li>• Direct digital control building automation system</li> <li>• The project shall achieve LEED certification</li> <li>• Solar heating/power generation for common areas.</li> </ul>
Appliance energy efficiency	Residents at the Pacifica Project shall be offered a choice of energy efficient appliances (including washer/dryers and refrigerators) and no wood-burning fireplaces, and appliances installed by builders shall be Energy Star (including dishwashers). For purposes of calculating emissions, no specific credit was taken for use of Energy Star appliances.
Smart growth land use patterns	Smart growth land use patterns that reduce the amount of land being developed shall reduce GHG emissions and encourage use of locally-serving retail.
Vehicle climate change standards and other light duty vehicle technology	This measure applies to motor vehicles. As noted above, California is currently litigating EPA's denial of the Clean Air Act waiver necessary for California to implement AB 1493's regulations to achieve the maximum feasible, cost-effectiveness, and technologically achievable reductions of GHG pollution emitted by new passenger vehicles. Implementation of AB1493 would reduce fleet-wide vehicles GHG emissions by 20 percent in 2020 and 27% in 2030.
Low-carbon fuels standard	This measure applies to motor vehicle fleets. By 2020, motor fuels sold in California shall have 10 percent lower carbon intensity when compared to equivalent fuel sold in 2007. This standard shall reduce GHG emissions from vehicles (and other gasoline power engines) associated with the project.
Telework	All residential units shall have access to high-speed internet connections suitable for telecommuting (CARB Early Action Measure 2-21).

The PDFs identified in *Table 4.6-31* above and the project applicant's duty to reduce GHG emissions 20 percent below business as usual shall be considered and implemented as conditions of approval.

Building energy efficiency measures include overall building energy performance equivalent to 20 percent below current Title 24 standards. This will be achieved through a variety of measures in the design of the residences, as shown in *Table 4.6-31*. The residents at the Pacifica development will be offered a choice of energy efficient appliances (including washer/dryers and refrigerators), and appliances installed by builders shall be Energy Star (including dishwashers). No credit has been taken in GHG emission calculations for this Energy Star appliance measure.

The use of smart growth land use patterns that reduce the amount of land being developed will reduce GHG emissions. In addition, the Proposed Project includes 15,000 square feet of local-serving retail establishments, which provide incentives to eliminate vehicle trips traveled.



Finally, the project is located in the vicinity of transit, including the San Diego Trolley system, which provides mass transit access to points throughout the area.

With implementation of GHG emission reduction measures, emissions would be reduced below “business as usual” levels. Emissions with GHG reduction measures are shown in *Table 4.6-32*. A comparison of the total CO<sub>2</sub>-equivalent emissions of approximately 18,671 metric tons per year under “business as usual” conditions with approximately 14,675 metric tons per year upon implementation of PDFs and improved vehicle efficiency conditions is shown in *Table 4.6-30* and *Table 4.6-32*. The level of GHG emissions generated by the project above existing conditions would be reduced by 21.4 percent below that which would be generated under business as usual conditions. In addition, the project shall recycle all materials accepted by local recycling centers consistent with the City or Chula Vista’s recycling requirements and consistent with the Integrated Waste Management Board thresholds for diverting 50 percent of waste (inclusive of construction waste), as discussed in *Section 4.14, Public Utilities* of this report. Waste disposal and in particular landfill operations have been identified as notable contribution of GHG emission from developments such as commercial and residential ventures.

**TABLE 4.6-32**  
**Summary of Estimated Operational Greenhouse Gas Emissions with Emission**  
**Reduction Measures for Pacifica**

Emission Source	Annual Emissions (Metric Tons/Year)		
	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
Electricity use emissions (20 percent reduction)	2,649	0.012	0.022
Natural gas use emissions(20 percent reduction)	1,421	0.0027	0.16
Water consumption emissions	630	0.0029	0.0052
Vehicular use emissions	9,720	0.75	0.55
<b>Total</b>	<b>14,420</b>	<b>0.77</b>	<b>0.74</b>
Global warming potential factor	1	310	21
CO <sub>2</sub> equivalent emissions	14,420	239	16
<b>Total CO<sub>2</sub> equivalent emissions</b>	<b>14,675</b>		

iii. Summary of Impacts

The Pacifica Project would generate GHG emissions associated with natural gas, purchased electricity, and energy embodied in water. PDFs incorporated in the project to reduce GHG emissions are under the operational control of the project applicant.

iv. Direct GHG Impacts

Implementation of the Pacifica Project would result in approximately 14,675 metric tons of GHG emissions per year above existing conditions. This represents at least 20 percent less GHG emissions than the “business as usual” condition, which would result in approximately 18,671

metric tons of GHG emissions per year above existing conditions. Therefore, the Proposed Project would not be considered to result in a significant global warming impact as it would not conflict with or obstruct the goals or strategies of AB 32 or related Executive Orders.

v. Project Level Cumulative GHG Impacts

As stated above, the Pacifica Project includes a wide range of PDFs including energy efficiency, water conservation and efficiency, recycling, and development of mixed uses that are intended to be in line with sustainability and efficiency concepts that are also inherent in the goals and strategies of AB 32 and related Executive Orders. The Proposed Project would result in approximately 14,675 metric tons of GHG emissions a year above existing conditions, compared to approximately 18,671 metric tons of GHG emissions a year above existing conditions that would result from implementation under business as usual. These PDFs result in a reduction in GHG emissions from business as usual of at least 20 percent. Therefore, the Proposed Project would not be considered to contribute substantially to a cumulatively significant global climate change impact, because it would not contribute to a conflict with or the obstruction of the goals or strategies of AB 32 or related Executive Orders.

Another way to consider the Pacifica Project's GHG emissions is by comparing its emissions per resident to the per capita 2020 GHG emissions target of 427 million metric tons of CO<sub>2</sub> equivalents embodied in AB 32. The California Department of Finance (DOF) estimates that the state's population will have grown from 29,758,213 in 1990 to 44,135,923 in 2020. Using these population figures and CARB's 1990 baseline GHG emissions of 427 million metric tons of CO<sub>2</sub> equivalents, it is possible to calculate per capita emission figures for 1990 and 2020. In 1990, Californians emitted approximately 14.35 metric tons per person. Accordingly, using the DOF population estimate for 2020, Californians must reduce their per person CO<sub>2</sub> equivalent emissions to 9.67 metric tons in order to meet AB 32's 2020 target.

Using the latest SANDAG population forecast for Chula Vista of 2.97 residents per household, the Pacifica Residential and Retail Development will generate 4,464 residents at build-out, with a per capita emissions rate of 3.29 metric tons per year as soon as the project is completed. In contrast, under AB 32, California must reduce its per capita CO<sub>2</sub> equivalent emissions rate to 9.67 metric tons per year by 2020.

c. Bayfront Master Plan Developments

In addition to the GHG emissions from the ~~Gaylord~~ RCC and the Pacifica Residential and Retail Development, the remainder of the proposed development associated with the Chula Vista Bayfront Master Plan would result in both construction and operational GHG emissions. *Table 4.6-33* presents a summary of the anticipated GHG emissions by project phase. The emissions presented in *Table 4.6-33* take into account GHG reduction measures for the ~~Gaylord~~ RCC and

Pacifica projects, but they do not take into account emission reductions for the remainder of the Bayfront Master Plan developments that will be required under AB 32.

**TABLE 4.6-33**  
**Summary of Estimated Construction and Operational Greenhouse Gas Emissions**  
**Chula Vista Bayfront Master Plan Development**

Emission Source	Annual Emissions (Metric Tons/Year)		
	CO <sub>2</sub>	N <sub>2</sub> O	CH <sub>4</sub>
Phase I	—	Negligible	Negligible
Construction	—	Negligible	Negligible
2010	5219	Negligible	Negligible
2011	5,541	Negligible	Negligible
2012	1,490	Negligible	Negligible
2013	611	Negligible	Negligible
2014	694	Negligible	Negligible
2015	532	Negligible	Negligible
<b>Operations</b>			
<del>Gaylord</del> Resort and Conference Center	35,324	1.32	1.44
Pacifica Residential and Retail Development	14,420	0.77	0.74
Bayfront Park and Shoreline	81	0.00	0.01
<b>Total</b>	<b>49,825</b>	<b>2.09</b>	<b>2.19</b>
Global warming potential factor	1	310	21
CO <sub>2</sub> equivalent emissions	49,825	648	46
Total Phase I CO <sub>2</sub> equivalent emissions	50,519	—	—
<b>Construction</b>			
Phase II	28,441	Negligible	Negligible
Phase III	31,209	Negligible	Negligible
Phase IV	27,600	Negligible	Negligible
<b>Operations</b>			
Phase II	35,732	2.17	1.77
Phase III	15,142	1.12	0.84
Phase IV	17,931	1.17	0.89
<b>Total all phases</b>	<b>118,630</b>	<b>6.55</b>	<b>5.69</b>
Global warming potential factor	1	310	21
Total CO <sub>2</sub> equivalent emissions	118,630	2,031	119
<b>Total all phases CO<sub>2</sub> equivalent emissions</b>	<b>120,780</b>		

Through the implementation of PDFs, Phase I of the Proposed Project as a whole (~~Gaylord~~ RCC, Pacifica Residential and Retail Development) would emit at least 20 percent less GHGs than “business as usual.” Therefore, Phase I of the Proposed Project would not result in a significant global climate change impact because it would not conflict with or obstruct the State of

California's ability to achieve the goals and strategies of AB 32 or related Executive Orders. Furthermore, for the same reasons, Phase I of the Proposed Project would not be considered to contribute to a cumulatively significant global climate change impact because it would not contribute to a conflict with or obstruction of the goals or strategies of AB 32 or related Executive Orders.

Although no guidelines for determining significant impacts to climate change are identified in the City of Chula Vista CO2 Reduction Plan, measures are identified to reduce GHG emissions within the City in order to achieve the plan's overall reduction goals. The Proposed Project does not impede or conflict with any of the reduction goals, policies or action measures outlined in the City's CO2 Reduction Plan. Instead, the Proposed Project will help to achieve the City's CO2 reduction goals through incorporation of various project design features consistent with the City's preferred action measures. Proposed Project provides a variety of land uses, locating increased housing density, employment, and pedestrian connections near transit options, including the H Street and E Street stations, San Diego Trolley system, and freeway access. The Pacifica Residential and Retail project and ~~Gaylord~~ RCC provide multi-use opportunities designed to reduce vehicle trips, enhance pedestrian access, and encourage use of on-site facilities. Other project design features intended to reduce GHG emissions include active and passive solar strategies, such as proposed solar pool heating and solar water heating systems for all common area facilities within the Pacifica project, depending on solar panel locations.

~~Program level components of the Proposed Project have not reached the design stage that enables the development of PDFs. As such, no Specific~~ PDFs have ~~not~~ been assigned to Phase I through Phase IV components of the Master Plan ~~(other than the Pacifica Residential and Retail Development)~~. The Program Master Plan developments will be required as conditions of approval to adopt GHG emission reduction measures similar to those adopted by the ~~Gaylord RCC and the Pacifica Residential and Retail Development~~ and to reduce anticipated consumption of energy pursuant to Mitigation Measures 4.16-1 and 4.16-2. New, more effective design features may become available prior to the initiation of the program phases, and these would be required of the project and would be identified in subsequent environmental analyses. **(Significant Impact 4.6-7).**

The discussion above presents a conservative analysis of the Proposed Project's GHG emissions which does not quantify many of the GHG emissions reductions that can be expected over the implementation of the Proposed Project. In particular, the Proposed Project does not quantify GHG emissions reductions associated with the implementation of: (1) the state's 20 percent renewable energy standard under SB 107 (to be implemented by 2010); (2) the 33 percent renewable energy goal from California's 2005 Energy Action Plan (to be implemented by 2020); (3) future GHG emissions reductions through developing energy efficiency standards under Title 24; (4) California's low carbon fuel standard, called for by both Executive Order S-01-07 and

CARB's "early action measures," which will reduce the carbon intensity in fuels by 10 percent by the year 2020; (5) AB 1493's GHG emissions reductions for new vehicles, which is currently subject to litigation before the Ninth Circuit Court of Appeals as California and numerous other states fight the U.S. EPA's decision not to grant California a Clean Air Act waiver; and (6) carbon sequestration based on the project's landscaping. Accordingly, the calculation above is a conservative analysis, based on current information and the science available.

**8. Would the project result in substantially increased exposure of the project from the potential adverse effects of global warming identified in the California Global Warming Solutions Act of 2006 (AB 32)?**

According to the California Global Warming Solutions Act of 2006, potential adverse impacts of global warming include the exacerbation of air quality problems; a reduction in the quality and supply of water to the state from the Sierra snowpack; a rise in sea levels resulting in the potential displacement of coastal businesses and residences; damage to marine ecosystems and the natural environment; and an increase in the incidences of infectious diseases, asthma, and other human health-related problems. Potential impacts to air quality are discussed in greater detail earlier in this section, based upon the determinations of significance set forth in Appendix G of the CEQA Guidelines and the adopted General Plan for the City of Chula Vista. (See *Section 4.6.3.1*). Potential impacts to the quality and supply of water, as well as an analysis of sea level rise, are discussed in *Section 4.5, Hydrology and Water Quality*, and *Section 4.15, Public Utilities*, respectively, of this report. Therefore, based on the analysis in these sections, the Proposed Project would not experience a substantial increase in risk from potential adverse effects of global warming beyond those addressed in the sections of this report listed above.

#### **4.6.4 Mitigation Measures**

##### **Mitigation Measure 4.6-1**

The following mitigation measure is required to mitigate **Significant Impacts 4.6-1** and **4.6-6** that would result during construction of the Proposed Project in all phases:

**Port/City:** Prior to the commencement of any grading activities, the following measures shall be placed as notes on all grading plans and shall be implemented during grading of each phase of the project to minimize construction emissions. These measures shall be completed to the satisfaction of the Port and the Director of Planning and Building for the City of Chula Vista (These measures were derived, in part, from Table 11-4 of Appendix 11 of the SCAQMD CEQA Air Quality Handbook, and from SCAQMD Rule 403):

Best Available Control Measures for Specific Construction Activities

- a) Backfilling activities:
  - i. Stabilize backfill material when not actively handling
  - ii. Stabilize backfill material during handling
  - iii. Stabilize soil at completion of backfilling activity.
- b) Clearing and grubbing activities:
  - i. Maintain stability of soil through pre-watering of site prior to clearing and grubbing
  - ii. Stabilize soil during clearing and grubbing activities
  - iii. Stabilize soil immediately after clearing and grubbing activities.
- c) Clearing forms:
  - i. Use water spray to clear forms
  - ii. Use sweeping and water spray to clear forms
  - iii. Use vacuum system to clear forms.
- d) Crushing activities:
  - i. Stabilize surface soils prior to operation of support equipment
  - ii. Stabilize material after crushing.
- e) Cut and fill activities:
  - i. Pre-water soils prior to cut and fill activities
  - ii. Stabilize soil during and after cut and fill activities.
- f) Demolition activities – mechanical/manual:
  - i. Stabilize wind erodible surfaces to reduce dust
  - ii. Stabilize surface soil where support equipment and vehicles will operate
  - iii. Stabilize loose soil and demolition debris.
- g) Disturbed soil:
  - i. Stabilize disturbed soil throughout the construction site
  - ii. Stabilize disturbed soil between structures.
- h) Earth-moving activities:
  - i. Pre-apply water to depth of proposed cuts

- ii. Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction
  - iii. Stabilize soils once earth-moving activities are complete.
- i) Importing/exporting of bulk materials:
  - i. Stabilize material while loading to reduce fugitive dust emissions
  - ii. Stabilize material while transporting to reduce fugitive dust emissions
  - iii. Stabilize material while unloading to reduce fugitive dust emissions
  - iv. Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling
  - v. Comply with Vehicle Code Section 23114.
- j) Landscaping activities:
  - i. Stabilize soils, materials, slopes
- k) Road shoulder maintenance:
  - i. Apply water to unpaved shoulders prior to clearing
  - ii. Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.
- l) Screening activities:
  - i. Pre-water material prior to screening
  - ii. Limit fugitive dust emissions to opacity and plume length standards
  - iii. Stabilize material immediately after screening.
- m) Staging areas:
  - i. Stabilize staging areas during use
  - ii. Stabilize staging area soils at project completion.
- n) Stockpiles/bulk material handling:
  - i. Stabilize stockpiled materials by covering/watering
  - ii. Stockpiles within 100 yards of off-site occupied buildings must not be greater than 8 feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.
- o) Traffic areas for construction activities:

- i. Stabilize all off-road traffic and parking areas
  - ii. Stabilize all haul routes
  - iii. Direct construction traffic over established haul routes.
- p) Trenching activities:
  - i. Stabilize surface soils where trencher or excavator and support equipment will operate
  - ii. Stabilize soils at the completion of trenching activities.
- q) Truck loading activities:
  - i. Pre-water material prior to loading
  - ii. Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling.
- r) Turf overseeding activities:
  - i. Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards
  - ii. Cover haul vehicles prior to exiting the site.
- s) Unpaved roads/parking lots:
  - i. Stabilize soils to meet the applicable performance standards
  - ii. Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.
- t) Vacant land:
  - i. In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees, or other effective control measures.

Other General Best Available Control Measures:

- u) Minimize idling time
- v) Maintain properly tuned equipment
- w) Regular maintenance—keep equipment well maintained
- x) Where practicable, use low pollutant-emitting equipment



- y) Use of ultra-low-sulfur diesel fuel
- z) Use construction equipment that is CARB-certified or that meets Tier 3 emissions or better, if available
- aa) Use alternative diesel formulations (e.g., aqueous diesel), if available
- bb) Where practicable, use catalytic reduction for gasoline-powered equipment
- cc) Use injection timing retard for diesel-powered equipment
- dd) Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry
- ee) Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads
- ff) Remove any visible track-out into traveled public streets within 30 minutes of occurrence
- gg) Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred
- hh) Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads
- ii) Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 miles per hour
- jj) Enforce a 15 mile-per-hour speed limit on unpaved surfaces
- kk) On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce re-suspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.
- ll) Disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the City or Port to reduce dust generation.
- mm) Electrical construction equipment shall be used to the extent feasible.
- nn) Low-VOC coatings will be used during application of architectural coatings. Coatings must meet the VOC content limitations set forth in APCD Rule 67.0.

With addition of controls assumed during construction, emissions of reactive organic gases during application of architectural coatings and of PM<sub>10</sub> and PM<sub>2.5</sub> during site grading activities would be reduced for each development phase during construction. *Tables 4.6-34 through 4.6-40* present emissions with application of mitigation measures. Changes in significance after mitigation are indicated in the tables. Although these measures will reduce air quality impacts of

the Proposed Project, they would not bring construction emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.

**TABLE 4.6-34**  
**~~Gaylord~~ Resort and Conference Center**  
**Projected Maximum Daily Mitigated Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2010 – Grading	37.50	342.98	150.72	0.01	29.98	15.66
2011 – Construction	52.62	286.98	277.50	0.12	20.10	18.14
2012 – Paving/Coatings	318.48	149.79	110.89	0.02	10.62	9.72
Significance threshold	75	100	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

**TABLE 4.6-35**  
**Pacifica Residential and Retail Project**  
**Projected Maximum Daily Mitigated Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Phase 1 Grading (2010)	3.86	37.69	17.82	0.02	13.22	4.00
Phase 1 Building (2010–2011)	274.31	41.91	67.34	0.06	3.23	3.52
Phase 2 Grading (2011)	4.66	42.29	21.72	0.02	32.80	8.34
Phase 2 Building (2011–2012)	249.25	42.29	57.95	0.06	2.97	2.58
Phase 3 Grading (2013)	4.15	36.39	19.79	0.02	30.31	7.57
Phase 3 Building (2013–2014)	129.16	36.39	43.48	0.04	2.41	2.10
Phase 4 Grading (2014)	2.52	20.18	11.93	0.00	28.37	6.59
Phase 4 Building (2014–2015)	112.70	48.39	51.47	0.04	2.31	2.01
Significance threshold	75	100	550	150	150	55
<b>Above threshold?</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

**TABLE 4.6-36**  
**Bayfront Parks and Shoreline Promenade**  
**Projected Maximum Daily Mitigated Construction Emissions (Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction	49.30	408.52	242.65	0.01		22.12
Significance threshold	75	100	550	150	150	55
Above threshold?	No	Yes	No	No	No	No

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

**TABLE 4.6-37**  
**Phase I Infrastructure Projected Maximum Daily**  
**Mitigated Construction Emissions**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Grading (2010)	3.04	25.05	13.56	0.00	4.28	1.78
H Street extension (2010)	2.91	15.97	10.80	0.00	1.34	1.22
Grading (2011)	2.86	23.49	12.98	0.00	4.20	1.71
Utility construction (2011)	3.97	24.37	16.19	0.00	2.15	1.97
Internal road construction (2012)	2.76	14.64	10.35	0.00	1.23	1.12
Significance threshold	75	100	550	150	150	55
Above threshold?	No	Yes	No	No	No	No

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

**TABLE 4.6-38**  
**Projected Maximum Daily Mitigated Construction Emissions by Year – Phase II**  
**(Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2008	52.77	436.99	253.15	0.01	41.94	24.79
2009	202.41	1745.52	787.71	0.11	73.10	66.89
2010	206.56	1718.03	791.31	0.12	73.64	67.36
2011	191.74	1583.42	754.19	0.12	67.12	61.36
2012	369.77	1463.96	724.84	0.12	64.84	59.26
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	No	Yes

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

**TABLE 4.6-39**  
**Projected Maximum Daily Mitigated Construction Emissions by Year – Phase III**  
**(Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2013	165.02	1340.66	768.04	0.31	54.85	49.53
2014	165.75	1268.23	779.28	0.32	53.72	48.48
2015	155.12	1136.92	756.33	0.32	47.56	42.81
2016	221.01	1013.05	735.76	0.32	45.60	41.01
2017	211.42	910.37	715.90	0.32	38.73	34.68
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	No	No

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

**TABLE 4.6-40**  
**Projected Maximum Daily Mitigated Construction Emissions by Year – Phase IV**  
**(Pounds/Day)**

Construction Activity/Time	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2018	117.84	731.39	573.72	0.11	30.92	28.10
2019	109.40	652.65	562.49	0.11	24.55	22.24
2020	101.24	581.28	556.45	0.11	24.02	21.75
2021	250.47	623.12	583.59	0.11	27.48	24.91
Significance threshold	75	100	550	150	150	55
Above threshold?	Yes	Yes	Yes	No	No	No

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide;  
 PM<sub>10</sub> = suspended particulates of 10 microns or less in diameter; PM<sub>2.5</sub> = suspended particulates of 2.5 microns or less in diameter.

### Mitigation Measure 4.6-2

The following mitigation measure would be required to mitigate **Significant Impact 4.6-2** regarding emissions that are above the significance thresholds and have the potential to contribute to a violation of an air quality standard that would result during operation of Phase I of the Proposed Project.

- City:**      **A.** For development within the City’s jurisdiction, applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City. This plan shall demonstrate “the

best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled.” There are two options to meet the AQIP requirement. The applicant shall ~~either~~ evaluate the project in accordance with the computer modeling procedures outlined in the City’s AQIP Guidelines~~using the Chula Vista CO<sub>2</sub> Index Model~~, including any necessary site plan modifications,~~5~~ ~~or participate in the GreenStar Building Energy Program.~~

**Port/City: B.** Prior to the issuance of building permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards ~~for~~ for Residential and Nonresidential buildings. These requirements, along with the following measures, shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:

- Use of low NO<sub>x</sub> emission water heaters
- Installation of energy efficient and automated air conditioners when air conditioners are provided
- Energy efficient parking area lights
- Exterior windows shall be double paned.

Although these measures will reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.

### Mitigation Measure 4.6-3

The following mitigation measure would be required to mitigate **Significant Impact 4.6-3** regarding emissions that are above the significance thresholds and have the potential to contribute to violation of an air quality standard that would result during operation of Phase II of the Proposed Project.

**City:** **A.** For development within the City’s jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate “the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled.” There are two options to meet the AQIP requirement. The applicant shall ~~either~~ evaluate the

project in accordance with the computer modeling procedures outlined in the City's AQIP Guidelines~~using the Chula Vista CO<sub>2</sub> Index Model~~, including any necessary site plan modifications,~~or participate in the GreenStar Building Energy Program.~~

**Port/City: B.** Prior to the issuance of building permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:

- Use of low NO<sub>x</sub> emission water heaters
- Installation of energy efficient and automated air conditioners when air conditioners are provided
- Energy efficient parking area lights
- Exterior windows shall be double paned.

Although these measures would reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.

#### **Mitigation Measure 4.6-4**

The following mitigation measure would be required to mitigate **Significant Impact 4.6-4** regarding emissions that are above the significance thresholds and have the potential to contribute to a violation of an air quality standard that would result during operation of Phase III of the Proposed Project.

**City:** **A.** For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled." There are two options to meet the AQIP requirement. The applicant shall ~~either~~ evaluate the project in accordance with the computer modeling procedures outlined in the City's AQIP Guidelines~~using the~~

~~Chula Vista CO<sub>2</sub> Index Model~~, including any necessary site plan modifications, ~~or participate in the GreenStar Building Energy Program.~~

**Port/City: B.** Prior to the issuance of building permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:

- Use of low NO<sub>x</sub> emission water heaters
- Installation of energy efficient and automated air conditioners when air conditioners are provided
- Energy efficient parking area lights
- Exterior windows shall be double paned.

Although these measures would reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.

#### Mitigation Measure 4.6-5

The following mitigation measure would be required to mitigate **Significant Impact 4.6-5** regarding emissions that are above the significance thresholds and have the potential to contribute to a violation of an air quality standard that would result during operation of Phase IV of the Proposed Project.

**City: A.** For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled." There are two options to meet the AQIP requirement. The applicant shall ~~either~~ evaluate the project in accordance with the computer modeling procedures contained in the City's AQIP Guidelines ~~using the Chula Vista CO<sub>2</sub> Index Model~~, including any necessary site plan modifications, ~~or participate in the GreenStar Building Energy Program.~~

- Port/City:** **B.** Prior to the issuance of building permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:
- Use of low-NO<sub>x</sub> emission water heaters
  - Installation of energy efficient and automated air conditioners when air conditioners are provided
  - Energy efficient parking area lights
  - Exterior windows shall be double paned.

Although these measures would reduce air quality impacts of the Proposed Project, they would not bring area and operations emissions to a level below the standard established by the SCAQMD and used in this document by the City and Port. Therefore, air quality impacts remain significant and unmitigated.

#### **Mitigation Measure 4.6-6**

The following mitigation measure is required to mitigate **Significant Impact 4.6-7** that would result from potential conflict with the goals or strategies of AB 32 or related Executive Orders:

**Port/City:** Development of Program-level components of the Chula Vista Bayfront Master Plan (Phases I through IV) shall implement measures to reduce GHG emissions. Specific measures may include, but are not limited to the following:

##### Energy Efficiency

- Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping, and sun screens to reduce energy use.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
- Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.
- Provide information on energy management services for large energy users.
- Install energy-efficient heating and cooling systems, appliances and equipment, and control systems.
- Install light emitting diodes (LEDs) for traffic, street, and other outdoor lighting.
- Limit the hours of operation for outdoor lighting.



- Use solar heating, automatic covers, and efficient pumps and motors for pools and spas.
- Provide education on energy efficiency.

#### Renewable Energy

- Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.
- Install solar panels on carports and over parking areas.
- Use combined heat and power in appropriate applications.

#### Water Conservation and Efficiency

- Create water-efficient landscapes.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- Use reclaimed water for landscape irrigation in new developments and on public property where appropriate. Install the infrastructure to deliver and use reclaimed water.
- Design buildings to be water efficient. Install water-efficient fixtures and appliances.
- Use gray water. (Gray water is untreated household wastewater from bathtubs, showers, bathroom wash basins, and water from clothes washing machines.) For example, install dual plumbing in all new development allowing gray water to be used for landscape irrigation.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.
- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage stormwater and protect the environment. (Retaining stormwater runoff on site can drastically reduce the need for energy-intensive imported water at the site.)
- Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.
  - Provide education about water conservation and available programs and incentives.

#### Solid Waste Measures

- Reuse and recycle construction and demolition waste (including but not limited to soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- Recover byproduct methane to generate electricity.
- Provide education and publicity about reducing waste and available recycling services.

#### Transportation and Motor Vehicles

- Limit idling time for commercial, non-refrigerated vehicles, including delivery and construction vehicles. Refrigerated delivery trucks may remain idling while at loading docks.
- Use low or zero-emission vehicles, including construction vehicles.
- Promote ride sharing programs; e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).
- Provide public transit incentives, such as free or low-cost monthly transit passes.
- For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, e.g., locked bicycle storage or covered or indoor bicycle parking.
- Institute a telecommuter work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.
- Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.

The increased efficiency demands associated with completion years beyond 2020 are not specified in terms of business as usual reductions, but would demand substantially greater reductions than 20 percent below business as usual. While the measures listed above would

substantially reduce projects GHG emissions, the level to which they would achieve these reductions cannot be ascertained as they may be modified by any applicable standards that are adopted in the future. Furthermore, because of the increased demand for greater reductions for developments beyond the 2020 horizon year and the rapid development of better technology, the mechanism and technological applications that may be available and necessary to avoid conflict with the goals or strategies of AB 32 or related Executive Orders identification of adequate and effective measures is not feasible at this time.

#### **4.6.5 Significance of Impacts after Mitigation**

Compliance with City requirements and implementation of Mitigation Measure 4.6-1 would reduce air quality impacts from construction activities. Because of the extent of the grading required, construction emissions would still exceed the criteria and would remain significant and unmitigated.

Mitigation Measures 4.6-2 through 4.6-5 would mitigate air quality impacts from operations, including area sources and vehicles. However, operational emissions would still exceed the criteria and would remain significant and unmitigated.

Implementation of Mitigation Measure 4.6-6 would reduce impacts to climate change associated with potential conflicts with the goals or strategies of AB 32 or related Executive Orders. Impacts to climate change associated with potential conflicts with the goals or strategies of AB 32 or related Executive Orders would, therefore, be less than significant.

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## 4.7 Noise

This section analyzes the potential noise impacts of the Proposed Project. The analysis in this section is based on the following technical studies:

- Noise Technical Report for the Chula Vista Bayfront Master Plan (June 2006), prepared by RECON Environmental, Inc. (*Appendix 4.7-1*)
- Chula Vista Bayfront Programmatic Traffic Volumes, Roadway Noise Analysis (April 2008), prepared by Kimley-Horn and Associates, Inc. (KHA) (*Appendix 4.7-2*)
- Noise Analysis Report for Chula Vista Bayfront Gaylord Resort and Convention Center (April 2008), prepared by KHA (*Appendix 4.7-3*)
- Noise Analysis Report for Chula Vista Bayfront Pacifica Development (April 2008), prepared by KHA (*Appendix 4.7-4*).

Appendix 4.7-3 was prepared for the RCC proposed by Gaylord on Parcel H-3. Gaylord has withdrawn its proposal to develop Parcel H-3 and is no longer a participant in the project. The technical study provided in Appendix 4.7-3 is still relied upon for the program-level analysis of the proposed RCC on Parcel H-3; therefore, it remains relevant to this section's analysis and is included as an appendix.

In addition, the following document is referenced throughout this section and attached to this EIR as an appendix:

- Chula Vista Bayfront Master Plan Traffic Impact Analysis (March 2008), prepared by KHA (*Appendix 4.2-1*).

Noise is generally defined as loud, unexpected, or undesired sound that is typically associated with human activity and that interferes with or disrupts normal activities. The human environment is characterized by a certain constant noise level which varies with each area. This is called ambient noise. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance. The response of individuals to similar noise events is diverse and is influenced by the type of noise; perceived importance of the noise and its appropriateness in the setting, time of day, and type of activity during which the noise occurs; and sensitivity of the individual.

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and intensity. Frequency describes the sound's pitch and is measured in cycles per second, or hertz (Hz), whereas intensity describes the sound's loudness and is measured in decibels (dB). Decibels are measured using a logarithmic scale. A sound level

of 0 dB is approximately the threshold of human hearing. Normal speech has a sound level of approximately 60 dB. Sound levels above about 120 dB begin to be felt inside the human ear as discomfort and eventually as pain at slightly higher levels. The minimum change in the sound level of individual events that an average human ear can detect is about 3 dB. The average person perceives a change in sound level of about 10 dB as a doubling (or halving) of the sound's loudness; this relation holds true for sounds of any loudness.

The normal human ear can detect sounds that range in frequency from about 20 to 20,000 Hz. However, all sounds in this wide range of frequencies are not heard equally well by the human ear, which is most sensitive to frequencies in the range of 1,000 to 4,000 Hz. This frequency dependence can be taken into account by applying a correction to each frequency range to approximate the human ear's sensitivity within each range. This is called "A-weighting" and is commonly used in measurements of community environmental noise. The A-weighted sound pressure level (abbreviated as dB(A)) is the sound level with the A-weighting frequency correction. In practice, the level of a noise source is conveniently measured using a sound level meter that includes a filter corresponding to a dB(A) curve.

Because community noise fluctuates over time, a single measurement called the Equivalent Sound Level (Leq.) is often used to describe the time-varying character of community noise. The Leq. is the energy-averaged A-weighted sound level during a measured time interval, and is equal to the level of a continuous steady sound containing the same total acoustical energy over the averaging time period as the actual time-varying sound. Additionally, it is often desirable to know the acoustical range of the noise source being measured. This is accomplished through the Lmax and Lmin indicators, which represent the root-mean-square maximum and minimum noise levels obtained during the measurement interval. The Lmin value obtained for a particular monitoring location is often called the "acoustical floor" for that location.

To describe the time-varying character of environmental noise, the statistical noise descriptors L10, L50, and L90 are commonly used. They are the noise levels equaled or exceeded during 10, 50, and 90 percent of a stated time. Respectively, sound levels associated with L10 typically describe transient or short-term events, whereas levels associated with L90 describe the steady-state (or most prevalent) noise conditions.

Another sound measure known as the Community Noise Equivalent Level (CNEL) is an adjusted average A-weighted sound level for a 24-hour day. It is calculated by adding a 5 dB adjustment to sound levels during evening hours (7:00 p.m. to 10:00 p.m.) and a 10 dB adjustment to sound levels during nighttime hours (10:00 p.m. to 7:00 a.m.). These adjustments compensate for the increased sensitivity to noise during the typically quieter evening and nighttime hours. The CNEL is used by the State of California and the City of Chula Vista to evaluate land-use compatibility with regard to noise.

### 4.7.1 Existing Noise Environment

This section describes noise standards for development within the City of Chula Vista as well as the existing noise environment. Noise standards and regulations are discussed at the state, city, and wildlife habitat level.

#### 4.7.1.1 *Applicable Standards and Regulations*

##### a. State of California

California Code of Regulations Title 24: Noise Installation Standards requires an acoustical analysis for multifamily dwellings located in an area exceeding 60 dB(A) CNEL. The analysis must show that the proposed design would limit interior noise in habitable rooms to 45 dB(A) CNEL or below. This analysis must be conducted prior to obtaining a building permit.

The interior noise analysis should identify sound transmission loss requirements for building elements exposed to exterior noise levels exceeding 60 dB(A) CNEL. If the interior 45 dB(A) CNEL limit can be achieved only with the windows closed, the residence design must include mechanical ventilation that meets applicable Uniform Building Code (UBC) requirements.

Worst-case levels, whether existing or future, must be used. Future noise level predictions must be for a date at least 10 years from the time of the building permit application.

##### b. City of Chula Vista

##### i. Chula Vista General Plan

The City of Chula Vista requires new projects to meet exterior noise level standards as established in the Exterior Land Use/Noise Compatibility Guidelines of the City's General Plan (Chula Vista, City of 1995). This table displays a traffic noise goal of 65 dB(A) CNEL or less at outdoor use areas of residential development. The City applies this goal to common areas included in open space calculations only; mitigation is not required for common exterior use areas not included in these calculations. However, it is a City policy (Chula Vista, City of 2007) that "ground-floor private outdoor use areas, such as patios, are subject to the 65 CNEL standard regardless of their exclusion from open-space calculations." *Table 4.7-1* summarizes the exterior land use/noise compatibility guidelines as identified in the City of Chula Vista General Plan.

**TABLE 4.7-1**  
**Exterior Land Use/Noise Compatibility Guidelines**

Land USE	Annual CNEL <sup>1</sup> in Decibels					
	50	55	60	65	70	
Residential						
Schools, Libraries, Daycare Facilities, Convalescent Homes, Outdoor Use Areas, and Other Similar Uses Considered Noise Sensitive						
Neighborhood Parks, Playgrounds						
Community Parks, Athletic Fields						
Office and Professional						
Places of Worship (Excluding outdoor use areas)						
Retail and Wholesale Commercial, Restaurants, Movie Theaters						
Industrial, Manufacturing						

<sup>1</sup> The CNEL is a 24-hour A-weighted decibel average sound level (dB(A) Leq.) from midnight to midnight obtained after the addition of 5 dB to sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB to the sound levels occurring between 10:00 p.m. and 7:00 a.m. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise. Adding 5 dB and 10 dB to the evening and nighttime hours accounts for the added sensitivity of humans to noise during these time periods.

ii. Municipal Code and Noise Ordinance

Construction activities must comply with the hours set by the City of Chula Vista Municipal Code. Section 17.24.040(c)(8) states that, in regard to power machinery, tools, and equipment, the following activities (among others) are declared to cause disturbing, excessive, offensive, or unreasonable noises in violation of this section and therefore constitute a public nuisance:

The use of any tools, power machinery, or equipment or the conduct of construction and building work in residential zones so as to cause noises disturbing to the peace, comfort, and quiet enjoyment of property of any person residing or working in the vicinity between the hours of 10:00 p.m. and 7:00 a.m., Monday through Friday, and between the hours of 10:00 p.m. and 8:00 a.m., Saturday and Sunday, except when the work is necessary for emergency repairs for the health and safety of any member of the community.

Therefore, construction is allowed only between the hours of 7:00 a.m. and 10:00 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m., Saturday and Sunday.

Exterior noise is also limited by the City's noise ordinance. Section 19.68.030 states:

No person shall operate, or cause to be operated, any source of sound at any location within the city or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level to exceed the environmental and/or nuisance interpretation of the applicable limits given in Table III.



Table 4.7-2 summarizes the exterior noise limits as described in Table III of Section 19.68.030 (a)(4). Where two or more dissimilar land uses occur on a single property, the more restrictive limits apply.

**TABLE 4.7-2**  
**Exterior Noise Limits**

Receiving Land Use Category	Noise Level (dB(A))	
	10:00 p.m. to 7:00 a.m. (Weekdays) 10:00 p.m. to 8:00 a.m. (Weekends)	7:00 a.m. to 10:00 p.m. (Weekdays) 8:00 a.m. to 10:00 p.m. (Weekends)
All residential (except multiple dwelling)	45	55
Multiple dwelling residential	50	60
Commercial	60	65
Light industry – I-R and I-L zone	70	70
Heavy industry – I zone	80	80

Environmental Noise – Leq. in any hour.

Nuisance Noise – Not to be exceeded at any time.

Environmental noise generated by light industrial land uses cannot exceed 70 dB(A) Leq. at other light industrial land uses at any time, 65 dB(A) Leq. at commercial land uses during the daytime (7:00 a.m. to 10:00 p.m. weekdays, 8:00 a.m. to 10:00 p.m. weekends), or 60 dB(A) Leq. at all other property lines.

iii. Chula Vista Subarea Plan

Section 7.5.2 of the Chula Vista Subarea Plan (Chula Vista, City of 2003a), Priority 1, Section 4(d): Noise states:

Uses in or adjacent to the [Sweetwater Marsh National Wildlife Refuge] Preserve should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. Excessively noisy areas or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species, consistent with Table 3-5 of the MSCP Subregional Plan.

Where noise associated with clearing, grading, or grubbing will negatively impact an occupied nest for the least Bell's vireo during the breeding season (from March 15 to September 15), noise levels should not exceed 60 Leq. If an occupied least Bell's vireo nest is identified in a pre-

construction survey, noise reduction techniques, such as temporary noise walls or berms, shall be incorporated into the construction plans to reduce noise levels to below 60 Leq.

Where noise associated with clearing, grubbing, or grading will negatively impact an occupied raptor nest between January 15 and July 31 or the coastal California gnatcatcher between February 15 and August 15 (during the breeding season), clearing, grubbing, or grading activities will be modified if necessary, to prevent noise from negatively impacting the breeding success of the pair. If an occupied raptor or coastal California gnatcatcher nest is identified during a pre-construction survey, noise reduction techniques shall be incorporated into the construction plans.

Outside the bird breeding season(s), no restrictions shall be placed on temporary construction noise.

#### **4.7.1.2 Existing Noise Environment**

##### **a. Pacifica Residential and Retail Project**

The existing noise environment at the Pacifica project site is dominated by vehicular traffic on Marina Parkway and J Street. Marina Parkway has an existing Average Daily Traffic (ADT) volume of 896 vehicles (see *Appendix 4.2-1*). J Street has an existing ADT volume of 8,617 vehicles. The posted speed limits for Marina Parkway and J Street are 35 miles per hour. In addition, Interstate 5 (I-5) is located approximately 800 feet east of the Pacifica project site. The existing industrial buildings to the east on Parcel HP-15 would be removed as part of the Proposed Project. The Goodrich facility is located more than 1,200 feet north of the Pacifica site. The South Bay Power Plant (SBPP) is located approximately 2,000 feet south of the Pacifica site.

##### **i. Sound Level Measurements**

Three half-hour sound level measurements (ST1–ST3) were conducted during the afternoon peak traffic period on Wednesday, September 19, 2007, to quantify the existing on-site acoustical environment due to vehicle traffic and to calibrate the noise model. The measurement results are summarized in *Table 4.7-3* and correspond to the locations depicted on *Figure 4.7-1*. As seen in *Table 4.7-3*, the measured noise levels range from approximately 45 to 76 dB(A) Leq., with the loudest levels occurring nearer to high traffic locations.

**TABLE 4.7-3**  
**Sound Level Measurements for Pacifica (dB(A))**

ID	Location	Date	Time	Leq.	Lmin	Lmax	L10	L50	L90
ST1	East property line	09/19/2007	16:00-16:30	49.1	44.4	63.3	48.9	46.8	45.7
ST2	Northwest property line	09/19/2007	16:35-17:05	61.6	44.0	74.5	65.7	57.0	46.3
ST3	Southeast property line	09/19/2007	17:15-17:45	64.5	45.5	76.2	69.0	60.2	49.8

b. ~~Gaylord~~ Resort and Convention Center (RCC)

The existing noise environment at the H-3 project site is dominated by vehicular traffic on Sandpiper Way and G Street. Sandpiper Way has an existing ADT volume of 896 vehicles (KHA 2007). The ADT for G Street is not available. The posted speed limits for Sandpiper Way and G Street are 25 and 35 miles per hour, respectively. In addition, I-5 is located approximately 1,000 feet east of the project site. The Goodrich facility located east of the project site and west of I-5 also generates noise at the project site, and the existing South Bay Boatyard located northwest of the project site generates occasional noise at the project site.

i. Sound Level Measurements

Three half-hour sound level measurements (ST1–ST3) were conducted during the afternoon peak traffic period on Thursday, September 20, 2007, to quantify the existing on-site acoustical environment due to vehicle traffic and to calibrate the noise model. A 1-hour sound level measurement (ST4) was conducted between 11:00 a.m. and 12:00 p.m. on Monday, September 24, 2007, to approximate the existing noise levels from the Goodrich facility. The measurement results are summarized in *Table 4.7-4* and correspond to the locations depicted on *Figure 4.7-2*.

**TABLE 4.7-4**  
**Sound Level Measurements for ~~Gaylord~~ RCC (dB(A))**

ID	Location	Date	Time	Leq.	Lmin	Lmax	L10	L50	L90
ST1	Southeast property line center	09/20/2007	16:00-16:30	62.3	45.8	86.5	64.7	56.5	50.4
ST2	Center of property	09/20/2007	16:35-17:05	60.7	45.3	74.5	64.9	55.5	47.5
ST3	North property line	09/20/2007	17:30-18:00	59.0	42.3	73.9	63.3	53.1	47.0
ST4	East property line	09/24/2007	11:00-12:00	52.9	48.7	66.3	54.7	51.7	50.4

A Rion Model NA-28 American National Standards Institute Type 1 Integrating Sound Level Meter (SLM) was used as the data collection device. The meter was mounted to a tripod roughly 5 feet above ground to simulate the average height of the human ear. The sound level meter was calibrated before and after the measurement period.

A 24-hour sound level measurement (LT1) was conducted at the F & G Street Marsh between 5:00 p.m. on September 19, 2007, and 5:00 p.m. on September 20, 2007, to quantify the existing ambient noise environment in the marsh near the project. The measurement results are summarized in Table 5 of the Noise Analysis Report prepared for Pacifica and ~~Gaylord~~ the RCC (*Appendices 4.7-3 and 4.7-4*) and correspond to the measurement location depicted on *Figures 4.7-1 and 4.7-2*. Noise sources during the site visits consisted of aircraft overflights, distant construction, distant mechanical equipment at the marina located west of the marsh, and vehicle traffic on Marina Parkway. The average 24-hour Leq. was 54.8 dB(A), and the CNEL was 59.0 dB(A).

### c. South Bay Power Plant

The SBPP is located adjacent to the Bay. Field observations indicate that noise from the plant is generally not noticeable in the nearby developed areas, as traffic noise, particularly that associated with I-5, dominates.

Eight measurements were taken at the SBPP, as shown within the inset on *Figure 4.7-3*. For each side of the power plant, a 50-foot measurement and a 100-foot measurement were taken simultaneously to characterize the noise environment. *Table 4.7-5* summarizes the power plant noise measurements. Noise levels at 50 feet from the source range from 72.3 to 80.7 dB(A) Leq., and noise levels at 100 feet ranged from 67.8 to 75.7 dB(A) Leq. The drop-off rate is approximately 4.5 dB per each doubling of distance. Noise sources include turbine humming, transformer humming, fans, steam hammering, and motor noise. The loudest levels occur on the eastern side of the power plant.

**TABLE 4.7-5**  
**Measurement Results for the South Bay Power Plant**

ID	Date	Duration (minutes)	Noise Sources	Noise Level at 50 ft from Source (dB(A)) (Measurement a)	Noise Level at 100 ft from Source (dB(A)) (Measurement b)
1	05/31/2005	15	Turbine humming	72.3	67.8
2	05/31/2005	15	Transformer humming, fans, turbine humming	77.1	77.1
3	05/31/2005	15	Steam hammer, turbine humming	80.7	75.7
4	05/31/2005	15	Turbine humming, motor noise	74.9	73.7





**Legend**

- Long Term
- Short Term

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SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Sound Level Measurement Locations for Pacifica Development**

**FIGURE**  
**4.7-1**

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 945

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1"=400'



**Legend**

● Long Term

● Short Term

SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Sound Level Measurement Locations for RCC Development**

**FIGURE**  
**4.7-2**

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AERIAL SOURCE: DIGITAL GLOBE, MARCH 2007

# Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Noise Measurement Locations

**FIGURE**  
**4.7-3**

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#### d. Goodrich Facility

*Table 4.7-6* summarizes the Goodrich facility measurements. Noise measurement locations for the Goodrich facility are shown on *Figure 4.7-4*. Measurements at the eastern property boundary, adjacent to I-5, range from 64.1 to 71.1 dB(A) Leq. The range in these measurements is due to both the receptor's distance from I-5 and the grade between the receptor locations and I-5. Distance and elevation changes tend to attenuate noise.

**TABLE 4.7-6**  
**Measurement Results for the Goodrich Facility**

ID	Location	Date	Duration (minutes)	Average Noise Level (dB(A))
1	Western property boundary, adjacent to Marina Parkway	09/06/2005	54	59.9
2	Eastern property boundary, adjacent to I-5 and H Street	09/06/2005	48	71.1
3	Eastern property boundary, north of Location 2	09/06/2005	15	64.1

Goodrich occasionally operates a drop hammer, which has been reported to be a significant noise generator. RECON Environmental, Inc. took measurements at the Goodrich facility at a time when the drop hammer was reported to be operating (Siordia pers. com. 2006), but detected no increase in noise levels (*Appendix 4.7-1*).

In addition to RECON's noise analysis for this report, Goodrich commissioned CH2M Hill to examine the noise generated by Goodrich's current operations (CH2M Hill 2005a). The noise study is contained in Attachment 3 of *Appendix 4.7-1*. CH2M Hill conducted three long-term (24-hour) measurements and six short-term (15-minute) measurements at various locations around the perimeter of the property. The measurement locations are shown on *Figure 4.7-4*. Noise sources included operations at the Goodrich facility, traffic noise from I-5 and surrounding surface streets, and operational noises from adjacent commercial yards. Long-term noise levels ranged from 63.4 to 71.6 CNEL,<sup>1</sup> while short-term noise levels ranged from 55.3 to 61.4 dB(A) Leq. These results are summarized in *Table 4.7-7*. The dominant sources of noise include traffic on I-5 and adjacent roadways, operations at the Goodrich facility, and operations at an off-site plant.

<sup>1</sup> The CNEL is a 24-hour A-weighted decibel average sound level [dB(A) L<sub>eq</sub>] from midnight to midnight obtained after the addition of 5 dB to sound levels occurring between 7:00 P.M. and 10:00 P.M. and 10 dB to the sound levels occurring between 10:00 P.M. and 7:00 A.M. A-weighting is a frequency correction that often correlates well with the subjective response of humans to noise. Adding 5 dB and 10 dB to the evening and nighttime hours accounts for the added sensitivity of humans to noise during these time periods. A glossary of common noise terms is presented in *Attachment 1 of Appendix 4.6-3*.

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**TABLE 4.7-7**  
**Goodrich Facilities Measured Noise Levels**

ID	Duration	Location	Noise Source	Noise Level
Site 1	24 hours	South boundary of Goodrich facility, adjacent to the extension of H Street	Traffic on I-5 and area roadways, operations at Goodrich facility	71.6 CNEL
Site 2	24 hours	West boundary of Goodrich facility, adjacent to Marina Parkway	Operations at off-site plant	70.8 CNEL
Site 3	24 hours	Northwest boundary of Goodrich facility, adjacent to railroad tracks	Traffic on I-5, operations at Goodrich facility	63.4 CNEL
Site A	15 minutes	South boundary of Goodrich facility, 100 feet west of Site 1	Traffic on I-5 and H Street	61.4 dB(A) Leq.
Site B	15 minutes	South boundary of Goodrich facility, west of Site A	Operations at Goodrich facility	57.1 dB(A) Leq.
Site C1	15 minutes	100 feet south of Site 1	Operations at Goodrich facility	59.6 dB(A) Leq.
Site C2	15 minutes	200 feet south of Site 1	Operations at Goodrich facility	55.3 dB(A) Leq.
Site C3	15 minutes	100 feet south of Site A	Operations at Goodrich facility	61.3 dB(A) Leq.
Site C4	15 minutes	100 feet south of Site B	Forklifts and vehicles on adjacent property	57.3 dB(A) Leq.

SOURCE: CH2M Hill 2005a.

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Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Goodrich Noise Measurements Conducted by CHM2 Hill

**FIGURE**  
**4.7-4**

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As shown in *Table 4.7-7*, the highest 24-hour measured noise levels are 71.6 and 70.8 dB(A) CNEL. These noise levels were recorded at the southern and western Goodrich property boundaries, respectively. Based on this analysis, residential and other noise sensitive uses are not proposed in areas adjoining the southern or western Goodrich property line.

CH2M Hill also noted that Goodrich's business operations are cyclical, depending on large manufacturing orders, and activities may increase commensurately. Therefore, noise levels would fluctuate.

#### 4.7.2 Impact Significance Criteria

Based on the exterior land use noise compatibility guidelines described in *Table 4.7-1* above, and in accordance with significance criteria established by Appendix G of the State CEQA Guidelines and the City of Chula Vista, a significant impact could occur if the Proposed Project would:

1. Expose persons to or generate noise levels in excess of standards established in the City of Chula Vista General Plan or noise ordinance, or applicable standards of other agencies.
2. Expose persons to or generate excessive groundborne or waterborne vibrations, or noise levels.
3. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
4. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

#### 4.7.3 Impact Analysis

1. **The Proposed Project would have a significant impact if it exposes persons to or generates noise levels in excess of standards established in the City of Chula Vista General Plan or noise ordinance, or applicable standards of other agencies.**

- a. Pacifica Residential and Retail Project—Project Level

- i. Construction

Construction activities at the site would result in a short-term temporary increase in the ambient noise level. The increase in noise level would occur close to the noise source. The magnitude of the impact would depend on the type of construction activity, noise level generated by various pieces of construction equipment, duration of the construction phase, and distance between the noise source and receiver. Sound levels of typical construction equipment range from

approximately 65 dB(A) to 95 dB(A) at 50 feet from the source (U.S. Environmental Protection Agency (U.S. EPA) 1971).

Construction activity and delivery of construction materials and equipment would be limited to the hours between 7:00 a.m. and 10:00 p.m., Monday through Friday, and between 8:00 a.m. and 10:00 p.m. on Saturday and Sunday, in accordance with the City noise ordinance. No impacts to residential receptors would occur from construction noise.

Noise from project construction would be generated during each phase of Pacifica's three to four project construction phases, spanning a total of approximately 4 to 5 years. The construction phasing and equipment list is not available at this time. No blasting would occur. Grading, construction, and paving activity on site typically produces an hourly average noise level of approximately 84 dB(A) Leq. at 50 feet. To minimize unnecessary annoyance from construction noise, the construction contractor will be required to comply with all provisions of the City noise ordinance.

Suitable noise sensitive wildlife habitat is located in the F & G Street Marsh and Sweetwater Marsh to the north of the site. The noise level of 84 dB(A) Leq. at 50 feet would attenuate to 60 dB(A) Leq. at a distance of approximately 800 feet from the source. The closest point of the F & G Street Marsh is located over 2,500 feet north of the Pacifica site. The closest point of the Sweetwater Marsh is over 3,000 feet north of the site. No portion of the F & G Street Marsh or Sweetwater Marsh would be exposed to construction noise levels exceeding 60 dB(A) Leq.

The J Street Marsh is located to the south of the Pacifica project site, on the other side of Marina Parkway. Noise from heavy construction equipment could adversely affect birds nesting in the J Street Marsh during breeding season, which is typically from January 15 to August 31. Loud noises may cause nesting birds to flush from their nests and draw attention to their nesting location, resulting in an increased potential for predation on eggs and young. Noise from project construction on the Pacifica project site would be expected to exceed the wildlife noise threshold of 60 dB(A) Leq. during the breeding season at habitat in the J Street Marsh, which could have an adverse affect on nesting birds within the marsh. This would be considered a significant impact (**Significant Impact 4.7-1**).

ii. On-Site Traffic Noise

Vehicular traffic noise would be the predominant external noise source affecting the project site. Future noise levels were predicted at outdoor usable areas and building façades. Outdoor usable areas on the site include roof-top usable areas, courtyards, and patios/balconies.

The Federal Highway Administration (FHWA) Traffic Noise Model (TNM) version 2.5 was used to calculate future on-site traffic noise levels. The model considered project buildings,

roadway alignments, estimated average vehicle speed, peak-hour traffic volume, and vehicle mix. The model assumed a default ground type of “hard soil.” Modeled roadways included Marina Parkway, Street A, Street C, J Street, and I-5.

The analysis used future (Phase IV plus Proposed Project) ADT volumes obtained from the Traffic Impact Analysis (TIA) addendum prepared by KHA. (see *Appendix 4.2-1*). The peak-hour traffic volume was assumed to be 10 percent of the ADT for the local roadways. The TIA also indicated peak-hour traffic volumes for I-5. The speed limits on the roadway segments were obtained from the San Diego Association of Governments (SANDAG) Transportation Forecast Information Center. The vehicle mix for surface streets was estimated, while the vehicle mix for I-5 was obtained from Caltrans’ Traffic and Vehicle Data Systems Unit 2005 Truck Traffic. The ADT volumes, traffic mix, and speed for each modeled roadway segment are shown in *Table 4.7-8*.

**TABLE 4.7-8**  
**Vehicular Traffic for On-Site Traffic Noise Assessment – Pacifica Project**

Roadway	Segment	ADT	Medium Trucks	Heavy Trucks	Speed (mph)
Marina Parkway	H Street to Street C	10,856	1%	0%	35
	Street C to J Street	14,050	1%	0%	35
Street A	H Street to C Street	11,388	1%	1%	35
	Street C to J Street	17,741	1%	1%	35
	J Street to Street B	4,091	1%	1%	35
Street C	Marina Parkway to Street A	2,482	1%	0%	35
J Street	Marina Parkway to Street A	25,039	1%	0%	35
	Street A to Bay Boulevard	36,657	1%	0%	35
Interstate 5	E Street to H Street	11,212*	2.08%	1.62%	65
		12,008†	2.08%	1.62%	65
	H Street to J Street	11,806*	2.08%	1.62%	65
		12,644†	2.08%	1.62%	65
	J Street to L Street	12,010*	2.08%	1.62%	65
		12,863†	2.08%	1.62%	65

Notes:

I-5 traffic volumes are peak-hour:

\* AM Northbound

† PM Southbound

Source: CVBMP TIA (KHA 2008)

Calculations show that future exterior traffic noise levels at outdoor usable areas on the Pacifica project site would range from below 55 dB(A) CNEL to approximately 69 dB(A) CNEL for outdoor usable areas, as illustrated on *Figure 4.7-5*. Future noise levels at the outdoor usable areas could exceed 65 dB(A), resulting in a potentially significant impact (**Significant Impact 4.7-2**).

Future exterior traffic noise levels at building façades would range from below 40 dB(A) CNEL to approximately 70 dB(A) CNEL, as illustrated on *Figure 4.7-6*. Future noise levels at the building façades could exceed 60 dB(A) CNEL; therefore, interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would result in a potentially significant impact (**Significant Impact 4.7-3**).

iii. Operations

The proposed Pacifica project consists of a combination of mid-rise and high-rise residential with a maximum of 1,500 units and up to 15,000 square feet of supporting ancillary retail uses and public spaces. Noise sources associated with the proposed development operations include mechanical equipment.

***Mechanical Equipment.*** The mechanical equipment for the Pacifica development would include rooftop heating, ventilation, and air conditioning (HVAC) systems, a central power plant (CPP), air handling units (AGUs), and a garage ventilation system. The locations and models of this equipment have not been determined at this time.

The property line sound limit for multiple dwelling residential is 50 dB(A) Leq. for the weekdays from 10:00 p.m. to 7:00 a.m. and the weekends from 10:00 p.m. to 8:00 a.m., and 60 dB(A) Leq. for the weekdays from 7:00 a.m. to 10:00 p.m. and the weekends from 8:00 a.m. to 10:00 p.m. In addition, noise levels at the location of any active nest within the adjacent J Street Marsh shall not exceed 60 dB(A) Leq. Noise levels from operation of mechanical equipment could exceed the sound level limits for noise sensitive receptors along Marina Parkway, Street C, J Street and Street A, resulting in a potentially significant impact (**Significant Impact 4.7-4**).

Z:\Projects\570301\Figs\EIR Figs\Section 4\Fig4-7\_05.cdr



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Outdoor Usable Area Noise Levels for Pacifica Development (Prior to Mitigation)

FIGURE

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Ground Floor	XX	dBA CNEL
Low / Top Floor	XX/YY	dBA CNEL
Low / Middle / Top Floor	XX/YY/ZZ	dBA CNEL

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**Building Façade Noise Levels for Pacifica Development (Prior to Mitigation)**

**FIGURE**  
**4.7-6**

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iv. Off-Site Traffic Noise

Existing and future off-site noise levels were estimated using a long single-lane roadway in TNM as described above. The Phase I baseline plus traffic volumes of the Proposed Project were used in the off-site traffic noise analysis. The land uses along the off-site roadway segments include manufacturing, office, retail, marina, and park. Marina land use is not considered noise sensitive. Existing land uses only were evaluated; any future projects in the influence area that would involve a land use designation change would be expected to evaluate compatibility and compliance with regard to noise as part of that project.

Noise levels were estimated at a distance of 50 feet from the centerline of each roadway segment, and the distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours were estimated. Existing and future noise levels are summarized in the Noise Analysis Report prepared for the Pacifica Development (*Appendix 4.7-4*).

According to the Noise Analysis Report prepared for the Pacifica development (see *Appendix 4.7-4*), the following roadway segments would experience an increase in dB(A):

- H Street (between Street A and I-5 Ramp): 3 dB(A)
- J Street (between Street A and Bay Boulevard): 3 dB(A)
- Bay Boulevard (between F Street and H Street): 3 dB(A)
- Bay Boulevard (between Street C and L Street): 4 dB(A)

There are no noise sensitive land uses adjacent to these segments; therefore, the noise level increases along these segments are considered less than significant.

According to the Noise Analysis Report prepared for the Pacifica development (*Appendix 4.7-4*), the segment of Marina Parkway between H Street and J Street would experience an increase of approximately 6 dB(A). The Pacifica development site is adjacent to Marina Parkway between Street C and J Street and is the only property with noise sensitive areas proposed adjacent to this segment. Noise impacts to these areas are addressed above (see **Significant Impacts 4.7-2 and 4.7-3**).

v. F & G Street Marsh and Sweetwater Marsh

The F & G Street Marsh is located north of the Pacifica project site. Due to the traffic increase and roadway development in the vicinity of the marsh, the future noise levels at the marsh were analyzed as part of the Noise Analysis Report prepared for the Pacifica development (see *Appendix 4.7-4*). The Phase I baseline plus Proposed Project traffic volumes were used to analyze the noise impacts at the marsh.

The closest roadway to the F & G Street Marsh is E Street. The ADT volume for E Street, from H Street to its terminus at ~~Gaylord-RCC~~ Driveway, is 6,035 vehicles, according to the Traffic Impact Assessment (see *Appendix 4.2-1*). The noise level at the closest point (southern edge) of the F & G Street Marsh would be 53 dB(A) CNEL. This noise level is considered less than significant. The ADT volume on this segment of E Street attributable to the project is 2,790 vehicles, according to the Traffic Impact Assessment.

b. ~~Gaylord~~ Resort and Convention Center (RCC)—Program Level

i. Construction

Construction activities at the site would result in a short-term temporary increase in the ambient noise level. The increase in noise level would primarily be experienced close to the noise source. The magnitude of the impact would depend on the type of construction activity, noise level generated by various pieces of construction equipment, duration of the construction phase, and distance between the noise source and receiver. Sound levels of typical construction equipment range from approximately 65 dB(A) to 95 dB(A) at 50 feet from the source (U.S. Environmental Protection Agency (U.S. EPA) 1971).

Construction activity and delivery of construction materials and equipment would be limited to the hours between 7:00 a.m. and 10:00 p.m., Monday through Friday, and between 8:00 a.m. and 10:00 p.m. on Saturday and Sunday, in accordance with the City noise ordinance. No impacts to residential receptors would occur from construction noise.

A final grading plan and construction phasing plan has not been developed at this time; therefore, only a general estimate of construction noise levels can be provided.

Noise from project construction would primarily be generated by site preparation. Grading would require the use of heavy equipment such as bulldozers, loaders, and scrapers. No blasting would occur. Site preparation typically produces an hourly average noise level of approximately 84 dB(A) Leq. at 50 feet.

Exceeding City of Chula Vista General Plan (Chula Vista, City of 1995) and noise ordinance exterior noise level standards as a result of the construction of the ~~Gaylord-RCC~~ will be temporary and therefore would not be considered significant. However, in order to minimize unnecessary annoyance from construction noise, the contractor will be required to follow construction noise control measures that are required to reduce the level of significance from these temporary noise impacts.

Suitable noise sensitive wildlife habitat is located in the Sweetwater Marsh to the north of the parcel H-3 project site and in the F & G Street Marsh to the northeast of the H-3 project site. The

noise level of 84 dB(A) Leq. at 50 feet would attenuate to 60 dB(A) Leq. at a distance of approximately 800 feet from the source; therefore, unmitigated construction activity occurring over 800 feet from the habitat would not result in a significant impact. Construction activity occurring within 800 feet of the habitat during the breeding season would result in a significant impact (**Significant Impact 4.7-5**).

A portion of the F & G Street Marsh would be exposed to construction noise levels exceeding 60 dB(A) Leq. No portion of the Sweetwater Marsh would be exposed to construction noise levels exceeding 60 dB(A) Leq.

ii. On-Site Traffic Noise

Vehicular traffic noise would be the predominant external noise source affecting the project site. Future noise levels were predicted at outdoor usable areas and building façades. Outdoor usable areas on the project site include the resort court and the hotel patios and balconies.

The FHWA TNM version 2.5 was used to calculate future on-site traffic noise levels. The model considered project buildings, roadway alignments, estimated average vehicle speed, peak-hour traffic volume, and vehicle mix. The model assumed a default ground type of “hard soil.” Modeled roadways included E Street, H Street, Marina Parkway, Bay Boulevard, Street A, Street C, and I-5.

The analysis used future (Phase IV plus Proposed Project) ADT volumes obtained from the TIA prepared by KHA (see *Appendix 4.2-1*). The peak-hour traffic volume was assumed to be 10 percent of the ADT for the local roadways. The TIA also indicated peak-hour traffic volumes for I-5. The speed limits on the roadway segments were obtained from the SANDAG Transportation Forecast Information Center. The vehicle mix for surface streets was estimated while the vehicle mix for I-5 was obtained from Caltrans’ Traffic and Vehicle Data Systems Unit 2005 Truck Traffic. The ADT volumes, traffic mix, and speed for each modeled roadway segment are shown in *Table 4.7-9*.

**TABLE 4.7-9**  
**Vehicular Traffic for On-Site Traffic Noise Assessment — Gaylord RCC**

Roadway	Segment	ADT	Medium Trucks	Heavy Trucks	Speed (mph)
E Street	H Street to F Street	5,819	1%	0%	35
	<u>Gaylord</u> RCC Driveway to F Street	9,089	1%	0%	35
	F Street to Bay Boulevard	16,279	1%	0%	35
H Street	West of Marina Parkway	12,520	1%	0%	25
	Marina Parkway to Street A	15,961	2%	1%	35
	Street A to I-5 Ramps	34,588	2%	1%	35
Marina Parkway	H Street to Street C	10,856	1%	0%	35
	Street C to J Street	14,050	1%	0%	35
Bay Boulevard	E Street to F Street	12,676	1%	1%	35
	F Street to H Street	7,116	1%	1%	35
	H Street to J Street	7,787	1%	1%	35
Street A	H Street to Street C	11,388	1%	1%	35
	J Street to Street B	4,091	1%	1%	35
	Street C to J Street	17,741	1%	1%	35
Street C	Marina Parkway to Street A	2,482	1%	0%	35
Interstate 5	E Street to H Street	11,212*	2.08%	1.62%	65
		12,008†	2.08%	1.62%	65
	H Street to J Street	11,806*	2.08%	1.62%	65
		12,644†	2.08%	1.62%	65
	J Street to L Street	12,010*	2.08%	1.62%	65
		12,863†	2.08%	1.62%	65

Notes:

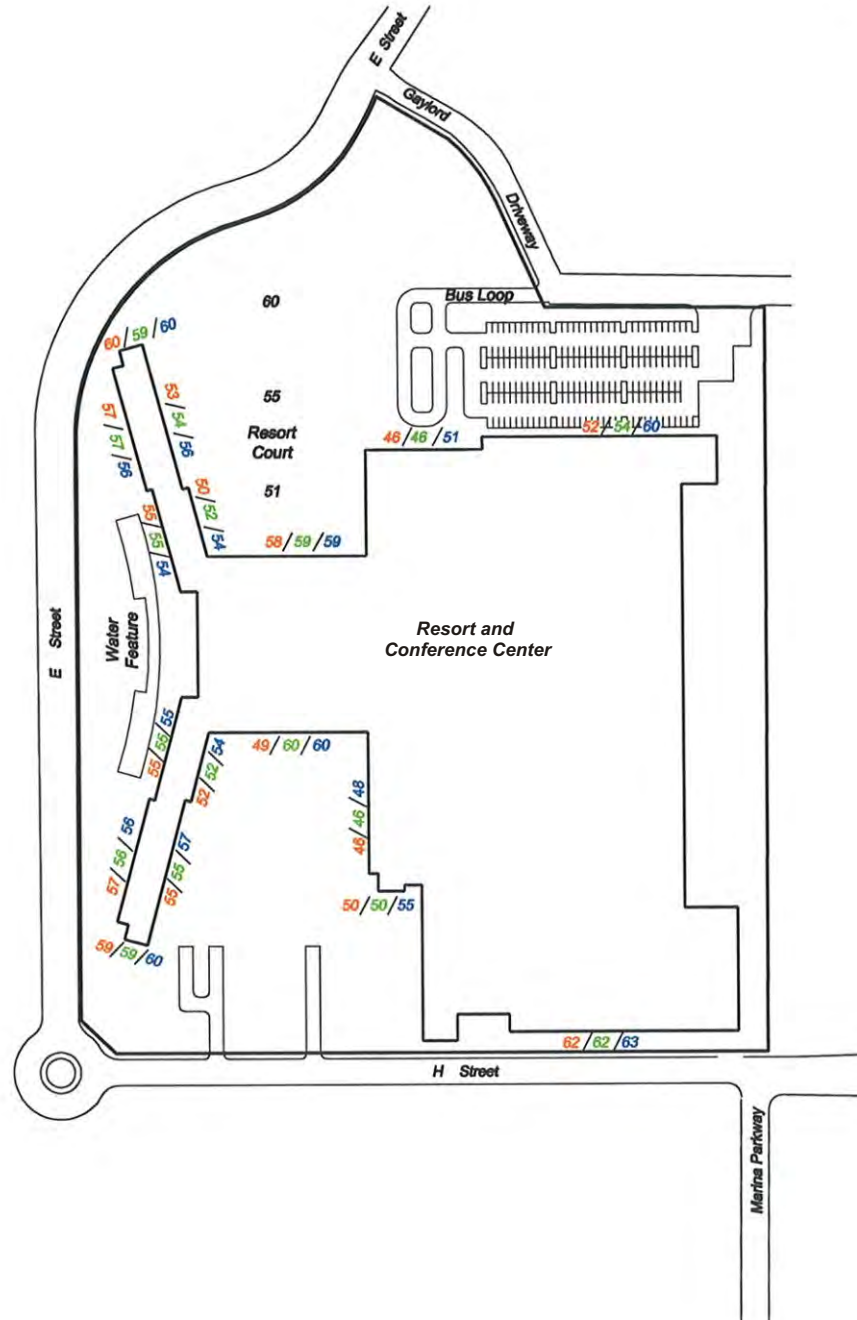
I-5 traffic volumes are peak-hour:

\* AM Northbound

† PM Southbound

Source: CVBMP TIA (KHA 2008).

Calculations show that future exterior traffic noise levels at the proposed on-site outdoor usable areas and building façades would range from approximately 46 dB(A) to 63 dB(A) CNEL, as illustrated on *Figure 4.7-7*. Traffic noise levels at the outdoor usable areas are estimated to be less than 65 dB(A) CNEL and are not considered significant. An interior noise analysis would be required for habitable rooms with any façade exposed to exterior noise levels exceeding 60 dB(A) CNEL.



#### Legend

Ground / Middle / Top Floor  
building facade noise levels xx/yy/zz

Outdoor Usable Area xx

SOURCE: Kimley-Horn and Associates, Inc.

## Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Estimated Future On-site Noise Levels for RCC Development

FIGURE

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### iii. Operations

The ~~Gaylord~~ RCC will likely be comprised of three main components: a 2,000-room hotel, an approximately 1.3 million gross square-foot convention center, and an approximately 2,900-car parking structure at ultimate build-out. Noise sources associated with the RCC operation include deliveries, buses, and mechanical equipment.

**Deliveries and Buses.** The project would generate daily vehicle trips associated with deliveries and passenger buses, as detailed in *Table 4.7-10* and *Figure 4.7-8*. The worst-case hour, used to evaluate compliance with the City noise ordinance, was estimated based on the daily distribution.

**TABLE 4.7-10**  
**Project Vehicle Traffic —~~Gaylord~~ RCC**

Purpose	Vehicle Type	Location	Daily Trips	Hours	Worst-Case Hour	
					Daytime	Nighttime
Valet Service	Van (Auto)	House Dock	4	7 a.m. –7 p.m.	1	0
Laundry Service	Van (Auto)	House Dock	10	7 a.m. –7 p.m.	1	0
UPS/FedEx	Medium Truck	Convention Dock	50	7 a.m.–7 p.m.	6	0
Food Delivery	Medium Truck	Convention Dock	50	24 hours	4	4
CC Event Related	Medium Truck	Convention Dock	30	7 a.m.–10 p.m.	3	0
	Heavy Truck	Convention Dock	30	7 a.m.–10 p.m.	3	0
Passenger Bus	Bus	Drop-Off Area	160	7 a.m –10 p.m.	11	0

Notes: Daytime includes 7 a.m.–10 p.m.

Nighttime includes 10 p.m.–7 a.m.

Deliveries would be assumed to occur on the east side of the project building, at the convention and house docks adjacent to Goodrich. Buses to and from the site would use the bus loop on the north side of the building. Deliveries would access the site via H Street, and buses would access the site via H Street to E Street.

The delivery operations were modeled as multiple moving point sources, evenly distributed over the loading dock entrance and exit path from H Street and the area between the loading dock building façade and the eastern edge of the parking lot. This represents the continuous action of multiple vehicles entering the area, maneuvering to one of the 18 delivery docks, and exiting by the same road. The buses were modeled as multiple moving point sources along a line of travel entering and exiting the site using the bus loop.

All delivery vehicles and buses were assumed to be traveling at 15 miles per hour on the property. The point source noise levels associated with vehicles were obtained using a basic TNM model with one vehicle on a single-lane roadway. It was assumed that half of the food delivery trucks would be refrigerated; these trucks would be continuously idling while at a dock.

A noise level of 82 dB(A) at 3 feet was used for an idling refrigerated truck with the refrigeration unit operating. All other trucks would be turned off during unloading, pursuant to Mitigation Measure 4.6-6 in *Section 4.6, Air Quality*, of this report.

Based on the above assumptions, Delivery and bus operations would produce a maximum hourly noise level of approximately 57 dB(A) Leq. at the east property line, 52 dB(A) Leq. at the north property line, 41 dB(A) Leq. at the south property line, and below 41 dB(A) Leq. at all other property lines. Delivery and bus operations at all property lines are estimated to be less than 70 dB(A) Leq. and are considered less than significant. *Figure 4.7-8* illustrates the noise levels for delivery and bus operations at these locations. The noise limit at the east property line is 70 dB(A) Leq., and the noise limit at all other property lines is 60 dB(A) Leq. Noise levels for delivery and bus operations are estimated to be below City exterior noise limits at all property lines and below Multiple Species Conservation Program (MSCP) thresholds at the F & G Street Marsh and are not considered significant.

***Mechanical Equipment.*** The mechanical equipment for the RCC would likely include rooftop HVAC systems, a CPP, AGUs, and a garage ventilation system. The locations and models for this equipment have not been determined at this time. The sound level limit is 70 dB(A) Leq. at the east property line and 60 dB(A) Leq. at all other property lines. Measures such as proper equipment selection, acoustic louvers, silencers, parapet walls, and setbacks can be implemented to achieve compliance with the noise ordinance requirements.

As the delivery and bus operations are projected to produce less than 60 dB(A) Leq. at any property line during any hour, the cumulative noise level from project operations would not exceed 70 dB(A) Leq. at any property line. Cumulative operation noise levels at all property lines are estimated to be less than 70 dB(A) Leq. and are not considered significant.

iv. Off-Site Traffic Noise

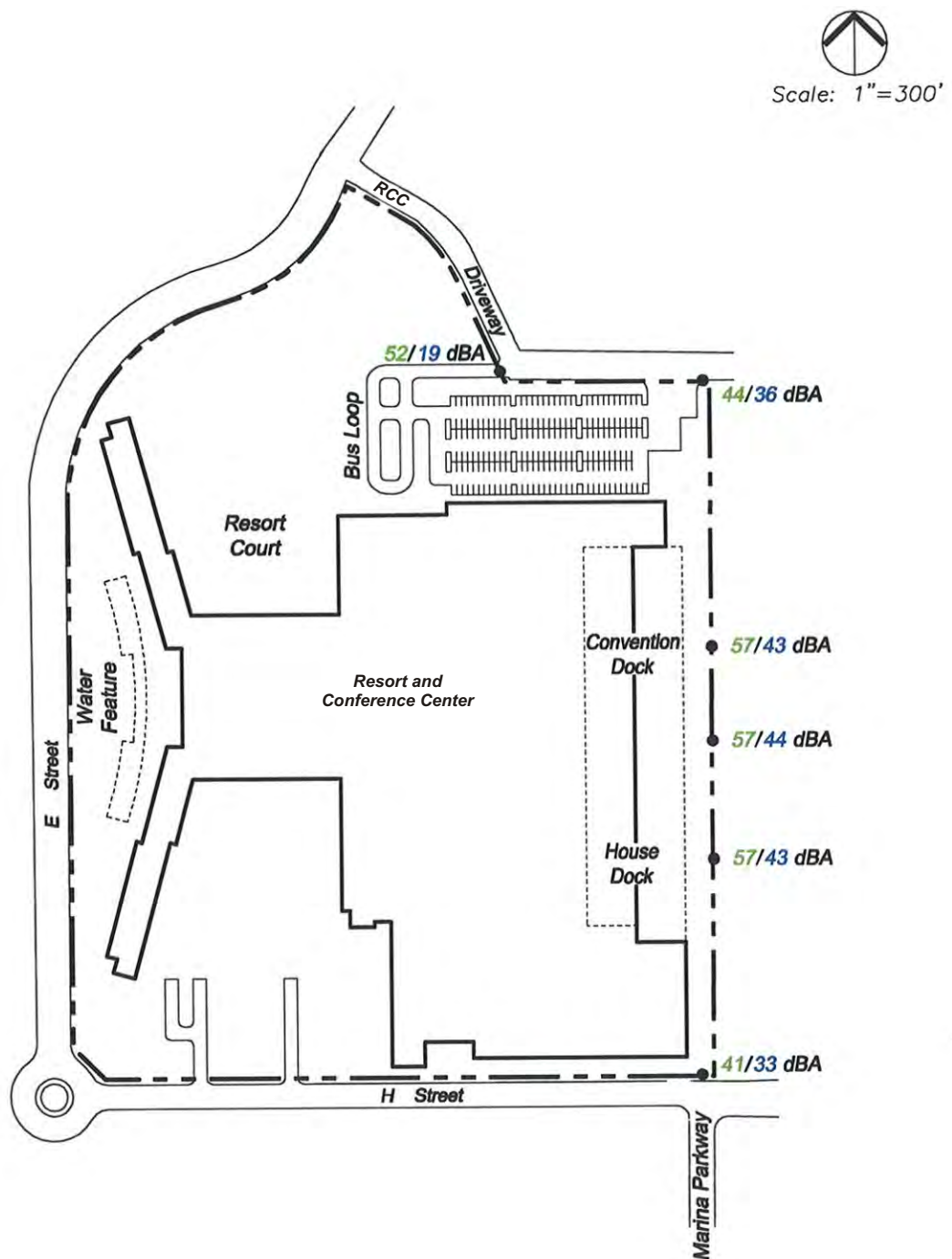
Existing and future off-site noise levels were estimated using a long single-lane roadway in TNM as described above. The Phase I baseline plus traffic volumes of the Proposed Project were used in the off-site traffic noise analysis. The land uses along the off-site roadway segments include manufacturing, office, retail, marina, and park. Marina land use is not considered noise sensitive. Existing land uses only were evaluated; any future projects in the influence area that would involve a land use designation change would be expected to evaluate compatibility and compliance with regard to noise as part of that project.



### Legend

Daytime / Nighttime  
noise levels

● XX / YY dBA



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Estimated Delivery & Bus Operation Noise Levels for Gaylord Development

FIGURE

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Noise levels were estimated at a distance of 50 feet from the centerline of each roadway segment, and the distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours were estimated. The actual sound level at any receptor location is dependent on factors such as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.

According to the Noise Analysis Report prepared for the ~~Gaylord-RCC~~ development (see *Appendix 4.7-3*), the following roadway segments would likely experience an increase in dB(A):

- H Street (between Street A and I-5 Ramp): 3 dB(A)
- J Street (between Street A and Bay Boulevard): 3 dB(A)
- Bay Boulevard (between F Street and H Street): 3 dB(A)
- Bay Boulevard (between J Street and L Street ): 4 dB(A)
- Marina Parkway (between H Street and J Street): 8 dB(A)

The first four segments above would experience an increase of approximately 3 dB(A) or approximately 4 dB(A). There are no noise sensitive land uses adjacent to these four segments; therefore, the noise level increases along these segments are not considered significant.

According to the Noise Analysis Report prepared for the ~~Gaylord-RCC~~ development, the segment of Marina Parkway between H Street and J Street would experience an increase of approximately 8 dB(A). The Pacifica development site is adjacent to Marina Parkway between Street C and J Street and is the only property with noise sensitive areas proposed adjacent to this segment. Noise impacts to these areas are therefore being analyzed and mitigated for through the Pacifica Retail and Residential component of the Proposed Project (see **Significant Impacts 4.7-2** and **4.7-3**). Implementation of mitigation measures for the Pacifica project would reduce noise levels at outdoor usable areas and building façades to below a level of significance.

v. F & G Street Marsh and Sweetwater Marsh

The F & G Street Marsh is located northeast of the ~~Gaylord-RCC~~ site. The Sweetwater Marsh is located north of the project site. The TIA assumes that Phase I would not include the construction of E Street between ~~Gaylord-RCC~~ Driveway and F Street, as it is not required as a Phase I traffic mitigation measure. Traffic volumes were also analyzed in the event that E Street between the ~~Gaylord-RCC~~ Driveway and F Street would be constructed during Phase I.

If E Street between ~~Gaylord-RCC~~ Driveway and F Street is not constructed during Phase I, the closest roadway to the F & G Street Marsh would be E Street/~~Gaylord-RCC~~ Driveway. The ADT volume for E Street/~~Gaylord-RCC~~ Driveway from H Street to its terminus at the project site is 6,035 vehicles, according to the TIA (KHA 2008). The peak-hour noise level at the closest point (southern edge) of the F & G Street Marsh would be 53 dB(A) Leq.; this noise level is not

considered significant. The Sweetwater Marsh is located beyond the F & G Street Marsh to the north, and would not be exposed to noise levels exceeding 60 dB(A) Leq.

If E Street between ~~Gaylord-RCC~~ Driveway and F Street is constructed during Phase I, the closest roadway to the F & G Street Marsh would be E Street. The ADT volume for E Street between ~~Gaylord-RCC~~ Driveway and F Street is 7,620 vehicles, according to the TIA (KHA 2008). The closest point of the F & G Street Marsh is approximately 95 feet east of the centerline of E Street. The closest point of the Sweetwater Marsh is over 200 feet from the centerline of E Street. The 60 dB(A) Leq. contour is approximately 90 feet from the centerline of E Street. Therefore, no portion of the F & G Street Marsh or the Sweetwater Marsh would be exposed to noise levels greater than 60 dB(A) Leq. Therefore, this noise level is not considered significant.

c. Other Program Level Components

i. On-Site Traffic Noise

Future noise levels at land uses adjacent to project roadways were estimated using the FHWA TNM version 2.5. The Phase IV baseline plus Proposed Project traffic volumes were used in the traffic noise analysis (Chula Vista Bayfront Master Plan (CVBMP) Traffic Impact Analysis, KHA 2008). The model considered estimated average vehicle speed, peak-hour traffic volume, and vehicle mix. The model assumed a default ground type of “hard soil.”

The peak-hour traffic volume was assumed to be 10 percent of the ADT for the local roadways. The TIA indicated peak-hour traffic volumes for I-5. The speed limits on the roadway segments were obtained from the SANDAG Transportation Forecast Information Center. The vehicle mix for the surface streets was estimated. The vehicle mix for I-5 was obtained from Caltrans’ Traffic and Vehicle Data Systems Unit 2005 Truck Traffic.

Land uses along the roadway segments include manufacturing, office, retail, marina, and park. Marina land use is not considered noise sensitive. Existing land uses only were evaluated; any future projects in the influence area that would involve a land use designation change would be expected to evaluate compatibility and compliance with regard to noise as part of that project.

Noise levels were estimated at a distance of 50 feet from the centerline of each roadway segment, and the distances to the 60, 65, 70 and 75 dB(A) CNEL noise contours were estimated. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography. *Table 4.7-11* shows the Proposed Project traffic noise levels along project roadway segments.

**TABLE 4.7-11**  
**Future Traffic Noise Levels – Program Level**

Roadway Segment	ADT	Medium Trucks	Heavy Trucks (mph)	Speed	CNEL at 50 ft from Centerline	Approximate Distance to CNEL Noise Contour			
						60 ft	65 ft	70 ft	75 ft
E Street									
H St to <del>Gaylord RCC</del> Driveway	5,819	1%	0%	35	62	70	—	—	—
<del>Gaylord-RCC</del> Driveway to F St	9,089	1%	0%	35	64	110	35	—	—
F St to Bay Blvd	16,279	1%	0%	35	66	185	65	—	—
Bay Blvd to I-5 Ramps	26,289	1%	1%	35	69	285	115	40	—
I-5 Ramps to Woodlawn Ave	33,608	1%	1%	35	70	335	145	50	—
Woodlawn Ave to Broadway	32,472	1%	1%	35	70	325	140	45	—
Broadway to 3rd Ave	23,063	1%	1%	35	68	260	100	35	—
F Street									
Marina Pkwy to Bay Blvd	3,600	1%	0%	35	60	45	—	—	—
Bay Blvd to Broadway	8,325	1%	0%	35	63	100	35	—	—
Broadway to 4th Ave	12,275	1%	0%	35	65	145	50	—	—
4th Ave to 3rd Ave	12,997	1%	0%	35	63	105	35	—	—
H Street									
West of Marina Pkwy	12,520	1%	0%	35	61	65	—	—	—
Marina Pkwy to Street A	15,961	2%	1%	35	67	210	75	25	—
Street A to I-5 Ramps	34,588	2%	1%	35	70	355	155	50	—
I-5 Ramps to Broadway	49,203	1%	1%	35	72	425	200	70	—
Broadway to 3rd Ave	32,063	1%	1%	35	70	325	140	45	—
J Street									
Marina Pkwy to Street A	25,039	1%	0%	35	68	250	95	30	—
Street A to Bay Blvd	36,657	1%	0%	35	70	320	140	45	—
Bay Blvd to I-5 Ramps	38,913	1%	1%	35	70	365	165	55	—
I-5 Ramps to Broadway	23,131	1%	1%	35	68	255	100	35	—
L Street									
Bay Blvd to Industrial Way	20,402	2%	1%	35	68	245	95	30	—
Industrial Way to Broadway	24,531	2%	1%	35	69	280	115	35	—
Marina Pkwy									
H St to Street C	10,856	1%	0%	35	64	130	45	—	—
Street C to J St	14,050	1%	0%	35	65	165	55	—	—
Bay Boulevard									
E St to F St	12,676	1%	1%	35	66	170	55	—	—
F St to H St	7,116	1%	1%	35	63	100	35	—	—
H St to J St	7,787	1%	1%	35	64	110	35	—	—
J St to L St	12,173	1%	1%	35	65	165	55	—	—
L St to I-5 Ramps	6,347	1%	1%	35	63	90	30	—	—
South of I-5 Ramps	6,087	1%	1%	35	62	85	30	—	—

TABLE 4.7-11 (Cont.)

Roadway Segment	ADT	Medium Trucks	Heavy Trucks (mph)	Speed	CNEL at 50 ft from Centerline	Approximate Distance to CNEL Noise Contour			
						60 ft	65 ft	70 ft	75 ft
Broadway									
Street C to E St	27,020	1%	1%	35	69	290	120	40	—
E St to H St	27,585	1%	1%	35	69	295	120	40	—
H St to K St	32,076	1%	1%	35	70	325	140	45	—
K St to L St	27,266	1%	1%	35	69	290	120	40	—
South of L St	28,456	1%	1%	35	69	295	125	40	—
Street A									
H St to Street C	11,388	1%	1%	35	65	155	50	—	—
Street C to J St	17,741	1%	1%	35	67	220	80	25	—
J St to Street B	4,091	1%	1%	35	61	55	—	—	—
Street B									
Street A to Bay Blvd	1,876	2%	1%	35	58	30	—	—	—
Street C									
Marina Pkwy to Street A	2,482	1%	1%	35	58	30	—	—	—

Future Phase IV baseline with Proposed Project ADT from TIA (KHA 2008)

Speed limits obtained from SANDAGs Transportation Forecast Information Center

As shown above, traffic on area roadways would be expected to generate noise levels at ground-level sensitive receptors in excess of the City's residential exterior standard of 65 dB(A) CNEL. Specifically, the residential units adjacent to the roadways proposed in the Harbor District would be exposed to noise levels greater than 65 dB(A) CNEL. Future noise levels at noise sensitive areas in excess of 65 dB(A) would result in a potentially significant impact (**Significant Impact 4.7-6**). Furthermore, as exterior noise levels at proposed residential sites would exceed 60 dB(A) CNEL, interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would be a significant impact (**Significant Impact 4.7-7**).

## ii. Off-Site Traffic Noise

The Proposed Project would contribute traffic to off-site roads as well as on-site roads. An increase of 3 dB is considered a perceptible increase in noise. For off-site roadways that currently generate noise levels in excess of applicable noise standards, a project-related increase of 3 dB would be significant. All off-site roadways affected by project traffic currently generate noise levels in excess of 65 dB(A) (Chula Vista, City of 2004). *Table 4.7-12* shows the comparison of existing and future off-site traffic noise levels at 50 feet from the centerlines of project roadway segments. In cases where existing roadways would be removed in the future, the closest future cross street was used for comparison; the existing roadway name is shown in parentheses in *Table 4.7-12*. In cases where the future roadway does not exist, quantification of a

change in noise level is not applicable and was noted as such. Segments that would experience a delta of 3 dB(A) or more are shown in bold.

**TABLE 4.7-12**  
**Existing and Future Off-Site Traffic Noise Levels**

Roadway	Segment	Existing Noise Level at 50 ft	Future Noise Level at 50 ft	Delta
E Street	H St to <del>Gaylord-RCC</del> Driveway	—	62	N/A
	<del>Gaylord-RCC</del> Driveway to F St	—	64	N/A
	F St to Bay Blvd	—	66	N/A
	Bay Blvd to I-5 Ramps	—	69	N/A
	I-5 Ramps to Woodlawn Ave	69	70	+1
	Woodlawn Ave to Broadway	69	70	+1
	Broadway to 3rd Ave	67	68	+1
F Street	E St (Marina Pkwy) to Bay Blvd	60	60	0
	<b>Bay Blvd to Broadway</b>	<b>60</b>	<b>63</b>	<b>+3</b>
	Broadway to 4th Ave	64	65	+1
	4th Ave to 3rd Ave	62	63	+1
H Street	West of Marina Pkwy	—	61	N/A
	Marina Pkwy to Street A	—	67	N/A
	<b>Street A (Bay Blvd) to I-5 Ramps</b>	<b>67</b>	<b>70</b>	<b>+3</b>
	<b>I-5 Ramps to Broadway</b>	<b>69</b>	<b>72</b>	<b>+3</b>
	Broadway to 3rd Ave	69	70	+1
J Street	<b>Marina Pkwy to Street A</b>	<b>63</b>	<b>68</b>	<b>+5</b>
	<b>Street A to Bay Blvd</b>	<b>63</b>	<b>70</b>	<b>+7</b>
	<b>Bay Blvd to I-5 Ramps</b>	<b>67</b>	<b>70</b>	<b>+3</b>
	I-5 Ramps to Broadway	67	68	+1
L Street	Bay Blvd to Industrial Way	67	68	+1
	Industrial Way to Broadway	68	69	+1
Marina Pkwy	<b>H St (G St) to Street C (Sandpiper Way)</b>	<b>53</b>	<b>64</b>	<b>+11</b>
	<b>Street C (Sandpiper Way) to J St</b>	<b>53</b>	<b>65</b>	<b>+12</b>
Bay Blvd	E St to F St	65	66	+1
	<b>F St to H St</b>	<b>58</b>	<b>63</b>	<b>+5</b>
	<b>Street C (H St) to J St</b>	<b>58</b>	<b>64</b>	<b>+6</b>
	<b>J St to L St</b>	<b>59</b>	<b>65</b>	<b>+6</b>
	<b>L St to I-5 Ramps</b>	<b>60</b>	<b>63</b>	<b>+3</b>
	South of I-5 Ramps	60	62	+2
Broadway	Street C to E St	69	69	0
	E St to H St	69	69	0
	H St to K St	69	70	+1
	K St to L St	69	69	0
	South of L St	69	69	0
Street A	H St to Street C	—	65	N/A
	Street C to J St	—	67	N/A
	J St to Street B	—	61	N/A
Street B	Street A to Bay Blvd	—	58	N/A
Street C	Marina Pkwy to Street A	—	58	N/A

Segments that would experience an increase of 3 dB(A) CNEL or greater are the following:

- F Street (between Bay Boulevard and Broadway): 3 dB(A)
- H Street (between Street A and I-5 Ramps): 3 dB(A)
- H Street (between I-5 ramps and Broadway): 3 dB(A)
- J Street (between Marina Parkway and Street A): 5 dB(A)
- J Street (between Street A and Bay Boulevard): 7 dB(A)
- J Street (between Bay Boulevard to I-5 Ramps): 3 dB(A)
- Marina Parkway (between H Street and Street C): 11 dB(A)
- Marina Parkway (between Street C and J Street): 12 dB(A)
- Bay Boulevard (between F Street and H Street): 5 dB(A)
- Bay Boulevard (between Street C and J Street): 6 dB(A)
- Bay Boulevard (between J Street and L Street): 6 dB(A)
- Bay Boulevard (between L Street and I-5 Ramps): 3 dB(A)

According to the Roadway Noise Analysis prepared for the Proposed Project (*Appendix 4.7-2*), the segment of Marina Parkway between H Street and Street C would experience an increase of approximately 11 dB(A) CNEL and the segment of Marina Parkway between Street C and J Street would experience an increase of approximately 12 dB(A) CNEL. The Pacifica development site is adjacent to Marina Parkway between Street C and J Street and is the only property with noise sensitive areas proposed adjacent to this segment. Noise impacts to these areas are therefore being analyzed and mitigated for through the Pacifica Retail and Residential component of the Proposed Project (see **Significant Impacts 4.7-2** and **4.7-3**). Implementation of mitigation measures for the Pacifica project would reduce noise levels at outdoor usable areas and building façades in the Pacifica project to below a level of significance.

There are no noise sensitive land uses adjacent to the remainder of the roadway segments that would experience an increase of 3 dB(A) or more; therefore, noise level increases along these segments are not considered significant.

iii. F & G Street Marsh

The segment of E Street between ~~Gaylord~~ RCC Driveway and F Street would experience a future peak hour noise level of 64 dB(A) at 50 feet. The closest point of the F & G Street Marsh habitat to the roadway noise is approximately 90 feet from the centerline of E Street. The highest noise level at the habitat would be approximately 62 dB(A). This noise level exceeds the wildlife noise



threshold of 60 dB(A) Leq. during breeding season at habitat in the F & G Street Marsh. This would be a significant impact (**Significant Impact 4.7-8**).

iv. J Street Marsh

The segment of J Street between Marina Parkway and Street A would experience a future peak hour noise level of 68 dB(A) Leq. at 50 feet. The segment of Street A between J Street and Street B would experience a future noise level of 61 dB(A) Leq. at 50 feet. The closest point of the J Street Marsh habitat to the roadways is approximately 200 feet from the centerline of J Street and 200 feet from the centerline of Street A (see *Figure 4.7-9*). The park between J Street and the J Street Marsh is approximately 2 feet above the grade of J Street and 12 feet above the grade of the J Street Marsh. The difference in elevation would provide approximately 6 dB(A) of noise attenuation on J Street. With the shielding effect of the intervening topography, the highest noise level at the habitat would be approximately 59 dB(A) Leq. This noise level does not exceed the wildlife noise threshold of 60 dB(A) Leq. during the breeding season at habitat in the J Street Marsh. The impact would therefore be less than significant.

v. Stationary Source

**Goodrich Facility.** As shown in *Table 4.7-7* above, a CNEL of 71.6 was measured by CH2M Hill at Site 1 (CH2M Hill 2005a). CH2M Hill also measured average noise levels at locations adjacent to Site 1 at Sites A, C1, C2, and C3. The noise levels at Sites A, C1, C2, and C3 were 61.4, 59.6, 55.3, and 61.3 dB(A) Leq., respectively. The hourly detail making up the CNEL measurement was not provided in the CH2M Hill report, but a continuous 24-hour noise level of 65 dB results in a CNEL of 71.6 dB. These noise sources are dominated by traffic on the freeway and on area roads.

RECON also measured noise in this area (*Appendix 4.7-1*). Those measurements were in line with the lower measurements made by CH2M Hill. Measurements by RECON near the Goodrich facility were 59.9 and 64.1 dB. Based on these measurements, an average noise level of 65 dB was used for assessing the potential for compliance with the City of Chula Vista noise ordinance, and a 72 dB CNEL was used to assess the conformance to the planning standard.

The closest proposed residential units are approximately 1,265 feet south of the southern existing Goodrich boundary. Noise from a point source is reduced by 6 dB per doubling of distance. Using this fall-off rate, noise levels at 1,265 feet from the existing Goodrich facility, the projected CNEL at the residential properties would be 44 dB. This would be below the 65 dB standard for residential development as specified by the Chula Vista General Plan. The standard at the property line, as set by the City's noise ordinance, between two light industrial zones is an hourly Leq. of 70 dB and between two heavy industrial zones is 80 dB. The measured hourly Leq. at the Goodrich facility is below 65 dB. The impact would not be significant.

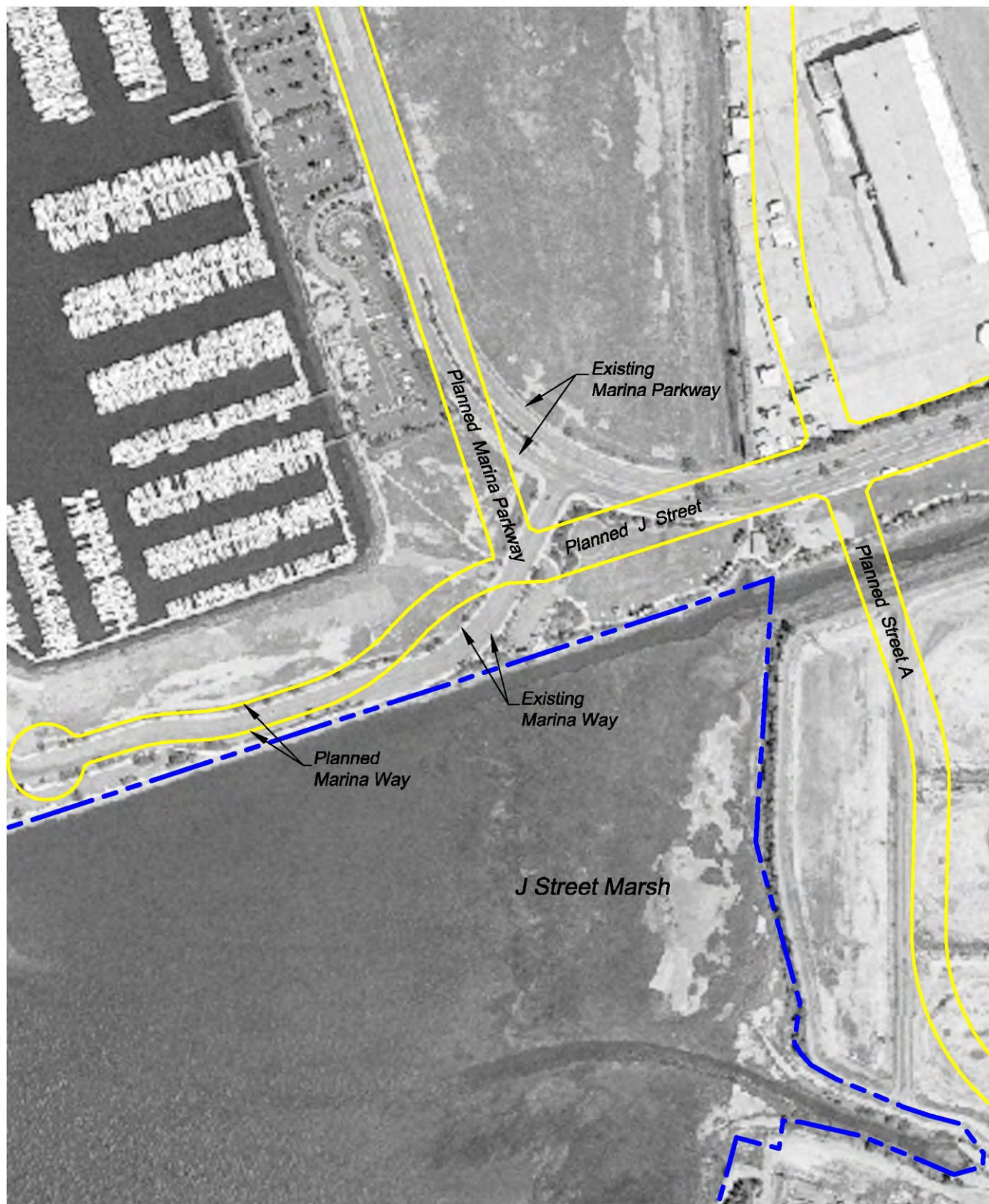
vi. Construction

Construction activities are exempt from the exterior noise standards specified in Section 19.68.060 of the City's Municipal Code. However, as discussed below, construction noise during all phases of the Proposed Project may create a nuisance for residential uses and for sensitive receptors using parks in the project area.

Construction for each phase can be divided into two main categories: site preparation and building construction. Noise effects occur primarily during site preparation, with the grading of the site and construction of infrastructure. Actual building construction creates notably less noise. A variety of noise-generating equipment would be used during the construction phase of the Proposed Project. This construction equipment may include dump trucks, graders, loaders, and concrete mixers, along with others. Phase I site preparation would include the grading of the entire project area, the construction of the major access roads, and sewer and water infrastructure. Grading in subsequent phases would be limited to modifying the rough grading that occurred during the first phase. While it is anticipated that the development of all phases of the project could take 24 years, it is anticipated that site preparation in any given phase would last for 1 year or less. As with the air quality analysis, it was assumed that construction buildings within each phase would take between 1 and 4 years after site preparation.

*Table 4.7-13* indicates the types of construction equipment typically involved in construction projects and the approximate noise levels associated with each. This type of equipment can individually generate noise levels that range between 78 and 91 dB(A) at 50 feet from the source, as listed in *Table 4.7-13*. Ground-clearing activities generally generate the greatest average construction noise levels. These activities are estimated to generate average noise levels of 83 to 85 dB(A) Leq. 50 feet from the site of construction (Bolt, Beranek, and Newman, Inc. 1971).

This value is based on empirical data on the number and types of equipment at a construction site and their average cycle of operation. As seen in *Table 4.7-13* above, a backhoe can produce 85 dB(A) during heavy working activity.



SCALE: 1" = 300'

SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**J Street Marsh**

**FIGURE**  
**4.7-9**  
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**TABLE 4.7-13**  
**Measured Noise Levels of Common Construction Equipment**

Equipment	Approximate Noise Level (dB(A))
Air compressor	81
Backhoe	85
Concrete mixer	85
Dozer	80
Generator	78
Grader	85
Jackhammer	88
Loader	79
Paver	89
Pneumatic tool	86
Saw	78
Scraper	88
Truck	91

SOURCE: Bolt, Beranek, and Newman, Inc. 1971.

NOTE: Noise levels at 50 feet from the source.

The estimated 84 dB noise level used for assessing construction impacts is based on the quantities of each item of equipment typically present at a site, the length of the duty cycles of the equipment, and the average noise levels during operation. The duty cycle for construction noise analysis is provided in *Table 4.7-14*.

**TABLE 4.7-14**  
**Construction Duty Cycle**

Equipment	Noise Level	Usage	Number
Backhoe	85	0.04	1
Dozer	80	0.16	1
Generator	78	0.40	2
Grader	85	0.08	1
Loader	79	0.16	1
Scraper	88	0.55	1
Truck	91	0.16	2

Construction noise generally can be treated as a point source and would attenuate at approximately 6 dB(A) for every doubling of distance. A noise level of 84 dB(A) Leq. at 50 feet would attenuate to 75 dB(A) Leq. at approximately 150 feet from the noise source.

Construction activities such as grading would be distributed over the entire site and would not be situated at any one location. The closest existing sensitive land uses are the residential uses on the east side of I-5. These homes are minimally 900 feet from the edge of the Proposed Project site and about 1,500 feet from the center of the construction area within the Harbor District with

the freeway in between. The average noise levels caused by traffic on the freeway at F Street and Interstate 8 (I-8), as reported in the General Plan Update EIR (Chula Vista, City of 2005a), was between 70 and 74 dB(A) over a 24-hour period. Noise levels with a source of 84 dB at 900 feet from a construction area would be 59 dB. At 1,500 feet from the center of the construction area the noise level would be 55 dB. The noise from the construction activities at the homes on the east side of the highway would be below the noise levels produced by the freeway.

~~No sensitive receptors would exist on the Proposed Project site during Phase I.~~ The entire project area needs to be graded in order to permit the construction identified in Phase I. ~~As such, the current RV park and the Bayfront Park would not be in use until the grading of those areas is complete.~~ Construction includes grading the site, paving the roads, and constructing the buildings along with the associated worker trips and equipment use.

The construction of off-site improvements, such as water mains, that could affect residences would also occur in Phase I. These improvements would occur within J Street between Bay Boulevard and Broadway, L Street between Bay Boulevard and Broadway, and Broadway between J Street and Main Street. Because the construction of off-site improvements could result in noise impacts that would affect residents in those areas, noise impacts would be considered significant (**Significant Impact 4.7-9**). There are off-site improvements in other roadways, but those are not adjacent to any residential uses and would not represent a significant noise impact.

The construction activities in the Harbor District would occur between an area as far away from the refuge as 1,400 feet to a location adjacent to the marina. Using the geometric mean of the near and far construction distances, the projected noise levels at the marina could be as high as 74 dB(A). In the City of Chula Vista, construction noise is exempt from the noise ordinance although construction activities must comply with the hours set by the City's Municipal Code. Pursuant to the Municipal Code, construction would be prohibited Monday through Friday from 10:00 p.m. to 7:00 a.m., and from 10:00 p.m. to 8:00 a.m. on Saturdays and Sundays. The potential for a 74 dB(A) hourly Leq. for construction noise at the marina would be a significant impact. In Phase I, the project would construct residential and park uses near the center of the project site and the RV park would remain open. During Phases II through IV, these uses could be exposed to construction noise levels of 85 dB(A) Leq., depending upon the location of the construction relative to the sensitive user. Therefore, construction noise during these subsequent phases of the project could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phases ~~II~~ through IV program-level components. Because subsequent phases of development could result in noise impacts that would affect uses created during Phase I of development, noise impacts are significant (**Significant Impact 4.7-10**).



Construction and operational noise would have the potential to adversely affect birds nesting and foraging in the Sweetwater Marsh National Wildlife Refuge (NWR) located north of the Proposed Project site. Noise levels are not to exceed 60 dB(A) Leq. during breeding season. With a noise source of 84 dB during construction, a noise level of 60 dB is achieved with a direct line of sight to the noise source, when the receiver is approximately 800 feet from the source.

There is the likelihood that pile driving would be required for the construction of the improvements associated with the ~~Gaylord~~ RCC, Pacifica Residential and Retail project, marina development, and the improvements at the existing South Bay Boatyard site. Pile driving can cause noise levels between 82 and 105 dB(A) (Easton 2000). As there are no existing sensitive receptors in the project area, however, the impacts will be less than significant.

The construction activities in the Sweetwater District would occur between an area as far away from the refuge as 1,320 feet to a location adjacent to the refuge. Using the geometric mean of the near and far construction distances, the projected noise levels at the edge of the refuge could be as high as 77 dB. During the breeding season, this would be a significant impact (**Significant Impact 4.7-11**). To lessen this impact, construction would have to be restricted adjacent to the Sweetwater Marsh NWR during the breeding season.

The Proposed Project involves the import of 740,000 cubic yards of material. Assuming 20 cubic yards per truck trip, this would require 140.2 round trips per day, assuming import occurs within 1 year. All truck trips would occur on area freeways. For I-5 at E Street, 140 truck trips represent about two-tenths of one percent of the current traffic volume. This would not affect the noise levels emanating from the freeway.

**2. The Proposed Project would have a significant impact if it exposes persons to or generates excessive groundborne or waterborne vibrations, or noise levels.**

The Proposed Project does not propose uses that generate groundborne vibration or noise levels. Therefore, the Proposed Project would not generate or expose persons to excessive groundborne vibration or groundborne noise levels at build-out.

**3. The Proposed Project would have a significant impact if it results in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.**

As discussed above under significance threshold 1, a permanent increase in ambient noise levels in the project vicinity would cause noise level impacts if left unmitigated. The Pacifica development site is adjacent to Marina Parkway between Street C and J Street and is the only property with noise sensitive areas adjacent to this segment. Future noise levels at the outdoor usable areas and building façades of the Pacifica Residential and Retail Project could exceed 65

dB(A) and 60 dB(A) CNEL, respectively, resulting in potentially significant impacts to the sensitive receptors along Marina Parkway associated with the Pacifica project (see **Significant Impacts 4.7-2** and **4.7-3**). The Pacifica project would also include mechanical equipment that could exceed the acceptable sound levels adjacent to noise sensitive receptors on Marina Parkway, Street C, J Street, and Street A, resulting in a potentially significant impact (see **Significant Impact 4.7-4**).

Traffic on area roadways would be expected to generate noise levels at ground-level sensitive receptors in excess of the City's residential exterior standard of 65 dB(A) CNEL. Future noise levels at noise sensitive areas in excess of 65 dB(A) would result in a potentially significant impact (see **Significant Impact 4.7-6**). Furthermore, as exterior noise levels at proposed residential sites may exceed 60 dB(A) CNEL, interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would be a significant impact (see **Significant Impact 4.7-7**). Future noise levels at the F & G Street Marsh habitat would be expected to exceed the wildlife noise threshold of 60 dB(A) Leq. during breeding season without proper mitigation. This is considered a significant impact (see **Significant Impact 4.7-8**).

**4. The Proposed Project would have a significant impact if it results in a substantial temporary or a periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**

Construction of the Proposed Project would result in a temporary increase in ambient noise levels. Site preparation is anticipated to not exceed 1 year for any phase of the project with building construction occurring in the subsequent 1 to 4 years.

As discussed above in significance threshold 2, a temporary or periodic increase in ambient noise levels in the project vicinity would result from construction activities associated with all phases of the Proposed Project if left unmitigated. Noise from project construction on the Pacifica project site would be expected to exceed the wildlife noise threshold of 60 dB(A) Leq. during the breeding season at habitat in the J Street Marsh, which could have an adverse affect on nesting birds within the marsh (see **Significant Impact 4.7-1**). Construction activity during the breeding season occurring within 800 feet of noise sensitive wildlife habitat located in the Sweetwater Marsh (to the north of the [Gaylord-H-3](#) project site) and in the F & G Street Marsh (to the northeast of the [Gaylord-H-3](#) project site) would result in a significant impact (see **Significant Impact 4.7-5**).

The construction of off-site improvements such as water and sewer mains that could affect residences would occur within J Street between Bay Boulevard and Broadway, L Street between Bay Boulevard and Broadway, and Broadway between J Street and Main Street. The construction of these improvements could result in noise impacts that would affect residents in



those areas (see **Significant Impact 4.7-9**). In addition, construction noise during subsequent phases of development could result in noise impacts that would affect sensitive uses established through development of Phase I (see **Significant Impact 4.7-10**). Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phases II through IV.

Finally, construction activities in the Sweetwater District would occur between an area as far away from the Sweetwater Marsh NWR as 1,320 feet to a location adjacent to the refuge. Using the geometric mean of the near and far construction distances, the projected noise levels at the edge of the refuge could be as high as 77 dB. During the breeding season, this would be a significant impact (see **Significant Impact 4.7-11**).

#### 4.7.4 Mitigation Measures

The mitigation measures for the identified noise impacts associated with the Proposed Project are provided below.

##### Mitigation Measure 4.7-1

The following mitigation measure would reduce **Significant Impact 4.7-1** (associated with construction noise levels exposing nesting birds in the J Street Marsh to noise levels greater than 60 dB(A) Leq.) to below a level of significance.

**City:** Construction-related noise shall be limited adjacent to the J Street Marsh during the typical breeding season of January 15 to August 31. Construction activity adjacent to these sensitive areas must not exceed 60 dB(A) Leq. at any active nest within the marsh. Prior to issuance of a building permit, the project developer shall prepare and submit to the City for review and approval an acoustical analysis and nesting bird survey to demonstrate that the 60 dB(A) Leq. noise level is maintained at the location of any active nest within the marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer shall construct noise barriers or implement other noise control measures to ensure that construction noise levels do not exceed the threshold.

##### Mitigation Measure 4.7-2

The following mitigation measures would reduce **Significant Impact 4.7-2** (associated with exterior traffic noise levels at outdoor usable areas at the Pacifica site being exposed to noise levels greater than 65 dB(A) CNEL) to below a level of significance.

**City:** Prior to the approval of Design Review for the Pacifica project, the applicant shall submit a site plan for the project demonstrating to the satisfaction of the Director of

Planning and Building of the City that outdoor use areas are not exposed to noise levels in excess of 65 dB(A) CNEL. Applicants shall submit project plans demonstrating that outdoor usable residential areas conform to the standards set by the City of Chula Vista General Plan.

**City:** Prior to the issuance of building permits, the developer shall install noise barriers that would reduce sound levels to 65 dB(A) CNEL or below at outdoor usable areas on the Pacifica site. To preserve a view, glass or Plexiglas with a minimum density of 3.5 pounds per square foot may be substituted for other construction materials. The barrier locations, heights, and lengths for the Pacifica development, as summarized in *Table 4.7-15* and illustrated on *Figure 4.7-10*, would achieve these reductions.

**TABLE 4.7-15**  
**Barrier Locations, Heights, and Lengths For Rooftop Parapet**

Barrier Location	Height (ft)	Length (ft)
<b>Rooftop Parapet</b>		
HD-1B: North Façade	5	224
HD-1B: East Façade	6	243
HD-2A: East/South Façades	5	313
HD-2B: North Façade	5	128
HD-2B: East Façade	6	188
HD-3A: East Façade	5	215
HD-3A: South Façade	5	350
HD-4A: East Façade	5	264
HD-4A: South Façade	5	336

### Mitigation Measure 4.7-3

The following mitigation measure would reduce **Significant Impacts 4.7-3** and **4.7-7** (associated with interior noise levels that could exceed 45 dB(A) CNEL due to exterior sources even with standard construction practices) to below a level of significance.

**City:** Prior to the issuance of building permits for residential units adjacent to circulation element roadways in the Harbor District, the applicant shall perform and submit an acoustical analysis to the City, demonstrating that the proposed building plans ensure that interior noise levels due to exterior sources are 45 dB(A) CNEL or less in any habitable room. The analysis must also identify Sound Transmission Loss (STL) rates of each window.



#### Legend

- Proposed Sound Wall on Rooftop
- Note: Height is based on the roof elevation.

SOURCE: Kimley-Horn and Associates, Inc.

## Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan Mitigation for Outdoor Useable Areas for Pacifica Development

FIGURE

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#### Mitigation Measure 4.7-4

The following mitigation measures would reduce **Significant Impact 4.7-4** (associated with the operation of mechanical equipment for the Pacifica project that could exceed the acceptable sound levels adjacent to sensitive receptors off of Marina Parkway, Street C, J Street, and Street A) to below a level of significance.

**City:** Prior to the approval of Design Review for the Pacifica project, the applicant shall submit a design plan for the project demonstrating to the satisfaction of the City's Director of Planning and Building that the noise level from operation of mechanical equipment will not exceed 50 dB(A) Leq. at any property line. Noise control measures may include, but are not limited to, the selection of quiet equipment, equipment setbacks, silencers, and/or acoustical louvers. Such measures must be designed and installed so as to achieve a cumulative sound level from mechanical equipment that does not exceed 40 dB(A) at 50 feet from the building façades adjacent to Marina Parkway, Street C, and J Street or 54 dB(A) at 50 feet from the building façades facing Street A.

**City:** Prior to the approval of Design Review for the Pacifica project, the applicant shall prepare and submit to the City for review and approval an acoustical analysis and nesting bird survey to demonstrate that operation of mechanical equipment will not exceed the 60 dB(A) Leq. noise level at the location of any active nest within the J Street Marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer shall construct noise barriers and/or implement noise control measures to maintain operational noise levels below the threshold.

#### Mitigation Measure 4.7-5

The following mitigation measures would reduce **Significant Impact 4.7-5** (construction activity occurring within 800 feet of the noise sensitive wildlife habitat) to below a level of significance.

**Port/City:** To avoid significant impacts to the F & G Street Marsh and reduce the construction noise level to 60 dB(A) or below, the developer [of Parcel H-3](#) shall install and place a 20-foot-high temporary noise barrier or wall along the northeast project property line and returns along the east and west property lines. This mitigation would be necessary for construction activity occurring within 800 feet of the habitat during the extended breeding season. As demonstrated on *Figure 4.7-11*, the barrier must be of solid construction, with no gaps or cracks through or below the wall, and must have a minimum density of 3.5 pounds per square foot. The barrier must block line-of-sight between the source and receiver and be long enough to prevent flanking around the ends.

**Port/City:** Prior to the start of construction, upon selection of a contractor and once specific equipment models and locations, phasing, operational duration, etc. are known, a detailed analysis shall be conducted by the project developer and approved by the Port and/or City to determine proper placement of the temporary noise barrier.

#### **Mitigation Measure 4.7-6**

The following mitigation measures would reduce **Significant Impact 4.7-6** (associated with ground-level sensitive receptors being exposed to noise levels greater than 65 dB(A) CNEL) to below a level of significance.

**Port/City:** Prior to the approval of Design Review, the applicant shall submit a site plan for the project demonstrating to the satisfaction of the Director of Planning and Building of the City and the Port, that outdoor use areas are not exposed to noise levels in excess of 65 dB(A) CNEL. As part of CEQA review for subsequent execution of actions associated with project construction phases, applicants shall submit project plans demonstrating that outdoor usable residential areas conform to the standards set by the City of Chula Vista General Plan.

**Port/City:** Prior to issuance of building permits or certificates of occupancy, the developer shall install noise barriers that would reduce sound levels to 65 dB(A) CNEL or below at ground-level noise sensitive receptors on the project site. To preserve a view, glass or Plexiglas with a minimum density of 3.5 pounds per square foot may be substituted for other construction materials.

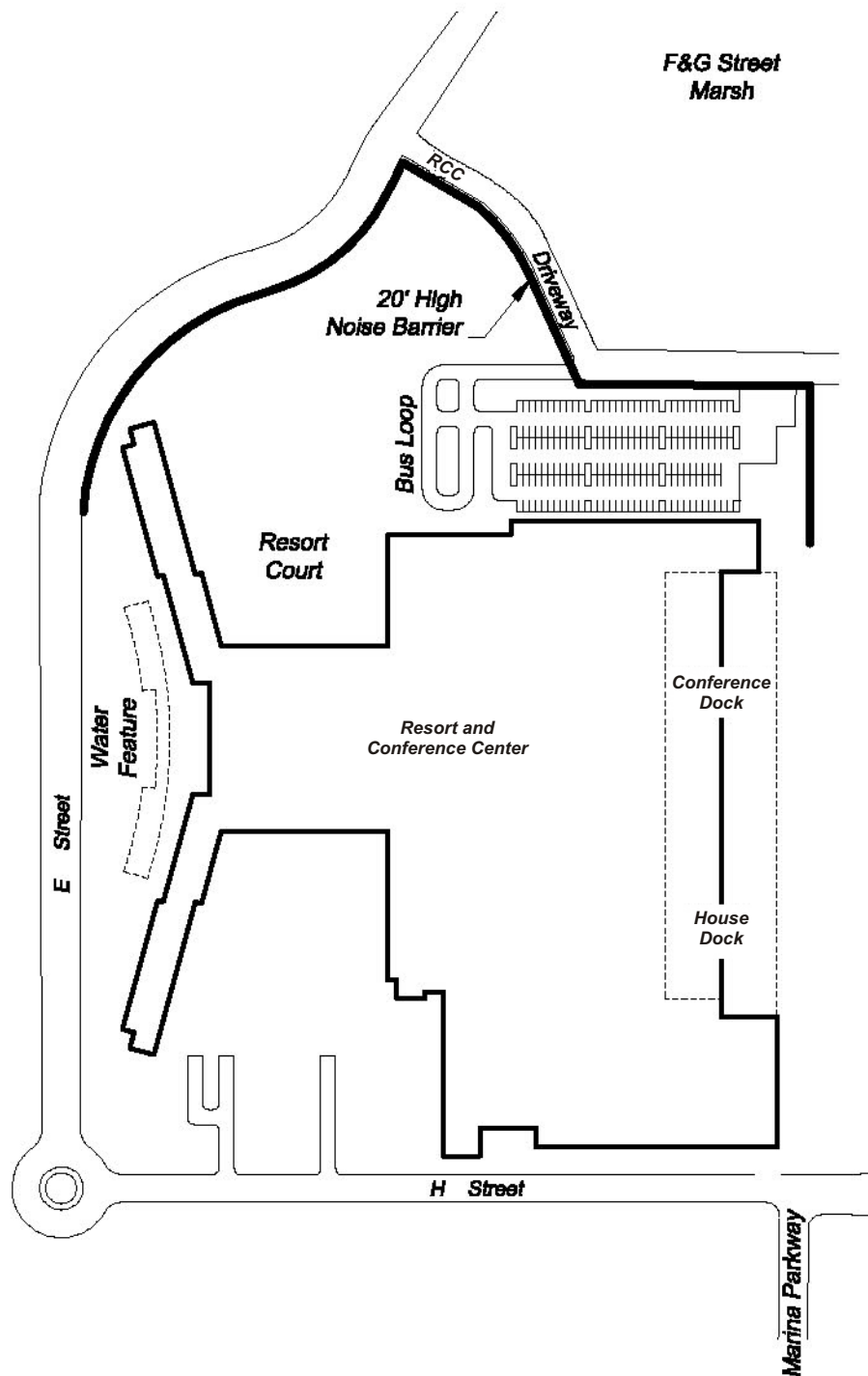
#### **Mitigation Measure 4.7-7**

The following mitigation measure would reduce **Significant Impact 4.7-8** (noise impacts to habitat in the F & G Street Marsh during the breeding season) to below a level of significance.

**Port/City:** To avoid significant impacts to the F & G Street Marsh and reduce the noise level at habitat to 60 dB(A) or below, the developer shall install a 3-foot-high noise barrier along the east right-of-way of E Street for the extent of the habitat, as shown on *Figure 4.7-12*. The barrier must be of solid construction, with no gaps or cracks through or below the wall, and must have a minimum density of 3.5 pounds per square foot. The barrier must block line-of-sight between the source and receiver and be long enough to prevent flanking around the ends.



Scale: 1"=300'



SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
**H-3 Construction Noise Barrier**

**FIGURE**

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SCALE: 1" = 300'

SOURCE: Kimley-Horn and Associates, Inc.

Final Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan  
Noise Barriers at F & G Street Marsh

FIGURE

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**Mitigation Measure 4.7-8**

The following mitigation measure would reduce **Significant Impacts 4.7-9** and **4.7-10** (noise impacts on residents resulting from construction of off-site improvements and noise impacts on uses created during Phase I of development, resulting from construction noise during subsequent phases of development) to a level less than significant.

**Port/City:** To avoid significant construction-related noise impacts, the following measures shall be followed:

- Construction activity shall be prohibited Monday through Friday from 10:00 p.m. to 7:00 a.m., and Saturday and Sunday from 10:00 p.m. to 8:00 a.m., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J).
- All stationary noise generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors. Where practicable, noise generating equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible.
- All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust.
- Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use.
- Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5, provided the route does not expose additional receptors to noise.
- Construction equipment items shall be selected as those capable of performing the necessary tasks with the lowest sound level and the lowest acoustic height possible to perform the required construction operation.
- Construction equipment shall be operated and maintained to minimize noise generation. Equipment shall be kept in good repair and fitted with “manufacturer-recommended” mufflers.

### Mitigation Measure 4.7-9

The following mitigation measure would reduce **Significant Impact 4.7-11** (construction-related noise levels at the edge of the Sweetwater Marsh NWR that could impact breeding in the refuge) to a level less than significant.

**Port/City:** Construction-related noise shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR and F&G Street Marsh. The current accepted noise threshold is 60 dB(A) Leq.; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the project developer shall prepare and submit an acoustical analysis to the Port and/or City that shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers, construction activities, or other methods are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.

### 4.7.5 Significance of Impacts After Mitigation

Implementation of Mitigation Measures 4.7-1 through 4.7-9 would reduce **Significant Impacts 4.7-1** through **4.7-11** to below a level of significance.