County of Los Angeles

Re-Circulated Draft Environmental Impact Report

NEPTUNE MARINA APARTMENTS AND ANCHORAGE/WOODFIN SUITE HOTEL AND TIMESHARE RESORT PROJECT

Volume I

SCH#2007031114

Prepared by:

IMPACT SCIENCES, INC.

234 East Colorado Blvd, Suite 205
Pasadena, California 91101

Prepared for:

County of Los Angeles
Department of Regional Planning

June 2009

Recirculated Draft Environmental Impact Report

NEPTUNE MARINA APARTMENTS AND ANCHORAGE/WOODFIN SUITE HOTEL AND TIMESHARE RESORT PROJECT

Volume I

State Clearinghouse No. 2007031114

Prepared for:

County of Los Angeles
Department of Regional Planning
320 West Temple Street
Los Angeles, California 90012

Parcel 10R
Project R2006-03647
RCDPT200600008
RCUPT200600289
RENVT200600217
RPAT200600013
RVART200600013

Parcel FF
Project R2006-03652
RCDPT200600009
RCUPT200600290
RENVT200700024
RPAT200600014
RVART200600014

Parcel 9U North
Project TR067861
RCDPT200600007
RCUPT200600288
RENVT200600216
RPKPT200600020
RVART200600012
TR067861

Parcel 9U South
Project R2006-03643
RCDPT200600006

Basin Adjacent to Parcel 9U
Project R2006-03644
RPPT200602191

June 2009

TABLE OF CONTENTS

Volume I

Recirculated Draft Environmental Impact Report

Section			Page
1.0	INTRODUCTION		1.0-1
3.0	PROJECT DESCRIPTION		3.0-1
5.0	EXISTING CONDITIONS, PROJECT IMPACTS, AND MITIGATION MEASURES		5.0-1
	5.2	Noise	5.2-1
	5.4	Air Quality	5.4-1
	5.6	Visual Quality	5.6-1
	5.7	Traffic/Access	5.7-1
	5.8	Sewer Service	5.8-1
	5.10	Solid Waste Service	5.10-1

Volume II

Appendices

3.0 California Coastal Commission's April 23, 2009, Adopted Revised Findings (Page 137)

5.2 Noise Modeling

5.4 Air Quality

URBEMIS 2007 – Construction and Operational Emissions
Greenhouse Gas Emissions
Localized Significance Thresholds Analysis
1999 Wind Study
Supplement 1999 Wind Study
2004 Wind Study
Carbon Monoxide Hotspots Analysis

5.6 California Coastal Commission's February 8, 1996, Revised Findings (Page 59–60)

5.7 Traffic and Access

Crain & Associates Construction Traffic Schedule and Tables (2009)

Crain & Associates Parking Utilization Study (Parcel FF)

Crain & Associates Shared Parking Analysis for Hotel/Timeshare Resort Component on Parcel 9U

Raju Associates Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California, March 2009

5.8 *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., May 2009

LIST OF FIGURES

Figure		Page
3.0-1	Regional and Site Location	3.0-5
3.0-2	Site Plan: Neptune Marina Project	3.0-8
3.0-3	Residential Units	3.0-19
3.0-4	Conceptual Floor Plans: Building One	3.0-20
3.0-5	Conceptual Floor Plans: Building Two	3.0-21
3.0-6	Conceptual Floor Plans: Building Three	3.0-22
3.0-7	Conceptual Floor Plans: Building Four	3.0-23
3.0-8	Building Elevations: Residential Units – Parcel 10R	3.0-24
3.0-9	Building Elevations: Residential Units – Parcel FF	3.0-25
3.0-10	Building Cross Sections: Residential Units	3.0-26
3.0-11	Parcel 10R Marina Site Plan	3.0-29
3.0-12	Site Plan: Woodfin Suite Hotel and Timeshare Resort	3.0-30
3.0-13	Cross Sections: Woodfin Suite Hotel and Timeshare Resort	3.0-33
3.0-14	Cross Sections: Woodfin Suite Hotel and Timeshare Resort	3.0-34
3.0-15	Conceptual Building Elevations: Woodfin Suite Hotel and Timeshare Resort	3.0-35
3.0-16	Ground Floor Plan: Woodfin Suite Hotel and Timeshare Resort	3.0-36
3.0-17	Second and Third Floor Plans: Woodfin Suite Hotel and Timeshare Resort	3.0-37
3.0-18	Floor Plans Four Through Nineteen: Woodfin Suite Hotel and Timeshare Resort	3.0-38
3.0-19	Waterfront Stroll Promenade	3.0-41
3.0-20	Neptune Marina Project Vehicular Access	3.0-42
3.0-21	Vehicular Access: Woodfin Suite Hotel and Timeshare Resort	3.0-43
3.0-22	Public-Serving Boat Slip Plan	3.0-56
3.0-23	Site Plan: Neptune Marina Parcel 10R	3.0-57
3.0-24	Site Plan: Neptune Marina Parcel FF	3.0-64
3.0-25	Site Plan: Woodfin Suite Hotel and Timeshare Resort	3.0-69
3.0-26	Conceptual Wetland Mitigation Plan	3.0-74
5.2-1	Noise Attenuation Barriers	5.2-5
5.2-2	Typical Levels of Ground-Bourne Vibration	5.2-6
5.2-3	Land Use Compatibility Guidelines for Noise	5.2-15
5.2-4	Noise Monitoring Locations	5.2-16
5.2-5	Noise Sensitive Uses Along Studied Roadway Segments	5.2-19
5.2-6	Haul Route	5.2-30
5.4-1	South Coast Air Basin	5.4-3
5.4-2	Wind Patterns	5.4-6
5.6-1	Viewing Locations	5.6-9
5.6-2	Pre- and Post-Development View of Site (Parcel 10R and 9U)–from Via Marina South of Tahiti Way	5.6-10
5.6-3	Pre- and Post-Development View of the Site (Parcel 10R and 9U)–from Via Marina	5.6-11
5.6-4	Pre- and Post-Development View of the Site (Parcel 10R)–as Observed from the Intersection of Marquesas Way and Via Marina	5.6-12
5.6-5	Pre- and Post-Development View of the Site (Parcel 10R)–as Observed Westerly from Marquesas Way	5.6-13
5.6-6	Pre- and Post-Development View of the Site (Parcel FF)–as Observed Westerly from Marquesas Way	5.6-14

LIST OF FIGURES (continued)

Figure		Page
5.6-7	Pre- and Post-Development View of the Site (Parcel FF)–as Observed from the Intersection of Marquesas Way and Via Marina	5.6-17
5.6-8	Pre- and Post-Development View of the Site (Parcel 9U)–as Observed from Mid-Block on Via Marina	5.6-18
5.6-9	Woodfin Suite Hotel and Timeshare Resort (Parcel 9U) – Viewing Locations	5.6-19
5.6-10	Pre–and Post- Development View of the Site (Parcel 9U)–as Observed from Mother's Beach	5.6-20
5.6-11	Pre-and Post-Development View of the Site (Parcel 9U)–as Observed from Panay Way	5.6-21
5.6-12	Pre-and Post-Development View of the Site (Parcel 9U)–as Observed from Tahiti Way	5.6-22
5.6-13	Pre-and Post-Development View of the Site (Parcel 9U)–as Observed from North Jetty Trail	5.6-23
5.6-14	Pre-and Post-Development View of the Site (Parcel 9U)–as Observed from South Jetty Trail	5.6-26
5.6-15	Pre-and Post-Development View of the Site (Parcel 9U)–as Observed from Fisherman's Village	5.6-27
5.6-16	Pre-and Post-Development View of the Site (Parcel 9U)–as Observed from Burton Chace Park	5.6-28
5.6-17	Pre- and Post-Development View of the Site (Parcel 9U)–as Observed from Bali Way	5.6-31
5.6-18A	Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 9:00 AM through 11:00 AM	5.6-57
5.6-18B	Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 12:00 PM through 2:00 PM	5.6-58
5.6-18C	Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 3:00 PM through 5:00 PM	5.6-59
5.6-19A	Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 9:00 AM through 11:00 AM	5.6-60
5.6-19B	Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 12:00 PM through 2:00 PM	5.6-61
5.6-19C	Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 3:00 PM through 5:00 PM	5.6-62
5.6-20A	Shade and Shadow Effects; Neptune Marina Project – October, 9:00 AM through 11:00 AM	5.6-63
5.6-20B	Shade and Shadow Effects; Neptune Marina Project – October Solstice, 12:00 PM through 2:00 PM	5.6-64
5.6-20C	Shade and Shadow Effects; Neptune Marina Project – October, 3:00 PM through 5:00 PM	5.6-65
5.6-21A	Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM through 11:00 AM	5.6-66
5.6-21B	Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 12:00 PM through 2:00 PM	5.6-67
5.6-21C	Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 3:00 PM	5.6-68
5.6-22A	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 9:00 AM through 11:00 AM	5.6-69

LIST OF FIGURES (continued)

Figure		Page
5.6-22B	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 12:00 PM through 2:00 PM	5.6-70
5.6-22C	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 3:00 PM through 5:00 PM	5.6-71
5.6-23A	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 9:00 AM through 11:00 AM	5.6-72
5.6-23B	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 12:00 PM through 2:00 PM	5.6-73
5.6-23C	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 3:00 PM through 5:00 PM	5.6-74
5.6-24A	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 9:00 AM through 11:00 AM	5.6-75
5.6-24B	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 12:00 PM through 2:00 PM	5.6-76
5.6-24C	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 3:00 PM through 5:00 PM	5.6-77
5.6-25A	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 9:00 AM through 11:00 AM	5.6-78
5.6-25B	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 12:00 PM through 2:00 PM	5.6-79
5.6-25C	Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 3:00 PM	5.6-80
5.6-26A	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 9:00 AM through 11:00 AM	5.6-81
5.6-26B	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 12:00 PM through 2:00 PM	5.6-82
5.6-26C	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 3:00 PM through 5:00 PM	5.6-83
5.6-27A	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 9:00 AM through 11:00 AM	5.6-84
5.6-27B	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 12:00 PM through 2:00 PM	5.6-85
5.6-27C	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 3:00 PM through 5:00 PM	5.6-86
5.6-28A	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 9:00 AM through 11:00 AM	5.6-87
5.6-28B	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 12:00 PM through 2:00 PM	5.6-88
5.6-28C	Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 3:00 PM	5.6-89
5.7-1	Study Intersection Locations	5.7-5
5.7-2	Existing (2007) Traffic Volumes – AM Peak Hour	5.7-12
5.7-3	Existing (2007) Traffic Volumes – PM Peak Hour	5.7-13
5.7-4	Related Projects Location Map	5.7-16

LIST OF FIGURES (continued)

Figure		Page
5.7-5	Trip Distribution Percentages (Parcel 10R)	5.7-29
5.7-6	Trip Distribution Percentages (Parcel FF)	5.7-30
5.7-7	Trip Distribution Percentages (Parcel 9U)	5.7-31
5.7-8	Traffic Volumes – Net Project Traffic – AM Peak Hour	5.7-32
5.7-9	Traffic Volumes – Net Project Traffic – PM Peak Hour	5.7-33
5.7-10	Future (2013) Traffic Volumes Without Project (Ambient Growth) – AM Peak Hour	5.7-34
5.7-11	Future (2013) Traffic Volumes Without Project (Ambient Growth) – PM Peak Hour	5.7-35
5.7-12	Future (2013) Traffic Volumes With Project – AM Peak Hour	5.7-36
5.7-13	Future (2013) Traffic Volumes With Project – PM Peak Hour	5.7-37
5.7-14	Traffic Volumes – Parcel 10R Residential Project Traffic – AM Peak Hour	5.7-55
5.7-15	Traffic Volumes – Parcel 10R Residential Project Traffic – PM Peak Hour	5.7-56
5.7-16	Future (2013) Traffic Volumes with Parcel 10R – AM Peak Hour	5.7-57
5.7-17	Future (2013) Traffic Volumes with Parcel 10R – PM Peak Hour	5.7-58
5.7-18	Traffic Volumes – Parcel FF Residential Project Traffic – AM Peak Hour	5.7-63
5.7-19	Traffic Volumes – Parcel FF Residential Project Traffic – PM Peak Hour	5.7-64
5.7-20	Future (2013) Traffic Volumes with Parcel FF – AM Peak Hour	5.7-65
5.7-21	Future (2013) Traffic Volumes with Parcel FF – PM Peak Hour	5.7-66
5.7-22	Traffic Volumes – Parcel 9U Hotel Project Traffic – AM Peak Hour	5.7-73
5.7-23	Traffic Volumes – Parcel 9U Hotel Project Traffic – PM Peak Hour	5.7-74
5.7-24	Future (2013) Traffic Volumes With Parcel 9U – AM Peak Hour	5.7-75
5.7-25	Future (2013) Traffic Volumes With Parcel 9U – PM Peak Hour	5.7-76
5.7-26	Related Project Traffic Volumes – AM Peak Hour	5.7-82
5.7-27	Related Project Traffic Volumes – PM Peak Hour	5.7-83
5.7-28	Future (2013) Traffic Volumes – With Project and Related Projects – AM Peak Hour	5.7-84
5.7-29	Future (2013) Traffic Volumes – With Project and Related Projects – PM Peak Hour	5.7-85
5.8-1	Existing Wastewater Collection and Conveyance System	5.8-5
5.10-1	Locations of Major Los Angeles County Landfills	5.10-11

LIST OF TABLES

Table		Page
3.0-1	Description of Proposed Residential Units by Type (Parcels 10R and FF)	3.0-17
3.0-2	Proposed Space Sizes and Quantities (Excluding Public-Serving Spaces)	3.0-27
3.0-3	Neptune Marina Project (Parcel 10R and FF) Description of Parking Facilities by Building	3.0-40
3.0-4	Neptune Marina Woodfin Suite Hotel and Timeshare Resort Project Construction Assumptions	3.0-48
3.0-5	Neptune Marina Parcel 10R – Description of Proposed Residential Units by Type	3.0-59
3.0-6	Neptune Marina Parcel 10R – Description of Parking Facilities by Building	3.0-60
3.0-7	Neptune Marina Parcel FF – Description of Proposed Residential Units by Type	3.0-65
3.0-8	Neptune Marina Parcel FF – Description of Parking Facilities by Building	3.0-66
5.2-1	Outside to Inside Noise Attenuation	5.2-3
5.2-2	County of Los Angeles Exterior Point Source Noise Standards	5.2-10
5.2-3	County of Los Angeles Construction Equipment Noise Restrictions	5.2-11
5.2-4	Modeled Existing Off-Site Roadway Noise Levels at Noise-Sensitive Locations Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resorts Project	5.2-18
5.2-5	Noise Levels of Typical Construction Equipment	5.2-24
5.2-6	Vibration Source Levels for Construction Equipment	5.2-27
5.2-7	Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project	5.2-31
5.2-8	Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations Neptune Marina Parcel 10R	5.2-41
5.2-9	Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations Neptune Marina Parcel FF	5.2-52
5.2-10	Off-Site Roadway Noise Levels at Noise-Sensitive Locations Woodfin Suite Hotel and Timeshare Resort (Parcel 9U)	5.2-62
5.2-11	Predicted Cumulative Roadway Noise Levels at Noise Sensitive Locations Measured at 50 Feet from Center of Roadway	5.2-85
5.4-1	Ambient Air Quality Standards	5.4-9
5.4-2	Ambient Pollutant Concentrations Registered in SRA 2	5.4-11
5.4-3	Six Top GHG Producer Countries and the European Community	5.4-18
5.4-4	GHG Sources in California	5.4-20
5.4-5	Comparison of Global Pre-Industrial and Current GHC Concentrations	5.4-21
5.4-6	National Ambient Air Quality Standards and Status – South Coast Air Basin (Los Angeles County)	5.4-26
5.4-7	California Ambient Air Quality Standards and Status – South Coast Air Basin	5.4-28
5.4-8	AB 32 Scoping Plan Measures	5.4-41
5.4-9	Existing Project Site Air Emissions	5.4-46
5.4-10	Existing Operational Greenhouse Gas Emissions	5.4-47
5.4-11	Localized Significance Thresholds for SRA-2	5.4-50
5.4-12	Annual Concentration Thresholds for SRA 2	5.4-50

LIST OF TABLES (continued)

Table		Page
5.4-13	Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project	5.4-54
5.4-14	Localized Significance Thresholds Analysis – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project	5.4-55
5.4-15	Estimated Operational Emissions without Mitigation – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project	5.4-57
5.4-16	Carbon Monoxide Concentrations – Future with Project Traffic (2013)	5.4-62
5.4-17	Carbon Monoxide Concentrations – Cumulative with Project Traffic (2013)	5.4-63
5.4-18	Estimated Construction Greenhouse Gas Emissions – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project	5.4-68
5.4-19	Estimated Operational Greenhouse Gas Emissions – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project	5.4-68
5.4-20	Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Neptune Marina Parcel 10R	5.4-74
5.4-21	Localized Significance Thresholds Analysis – Parcel 10R	5.4-75
5.4-22	Estimated Operational Emissions without Mitigation – Neptune Marina Project 10R	5.4-76
5.4-23	Carbon Monoxide Concentrations – Future with Parcel 10R Traffic (2013)	5.4-79
5.4-24	Estimated Construction Greenhouse Gas Emissions – Neptune Marina Parcel 10R	5.4-82
5.4-25	Estimated Operational Greenhouse Gas Emissions – Neptune Marina Parcel 10R	5.4-82
5.4-26	Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Neptune Marina Parcel FF	5.4-88
5.4-27	Localized Significance Thresholds Analysis – Parcel FF Traffic	5.4-89
5.4-28	Estimated Construction Greenhouse Gas Emissions – Neptune Marina Parcel FF	5.4-90
5.4-29	Carbon Monoxide Concentrations – Future with Parcel FF Traffic (2013)	5.4-93
5.4-30	Estimated Unmitigated Demolition, Excavation/Grading, and Construction Emissions – Woodfin Suite Hotel and Timeshare Resort	5.4-95
5.4-31	Estimated Operational Greenhouse Gas Emissions – Neptune Marina Parcel FF	5.4-96
5.4-32	Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Woodfin Suite Hotel and Timeshare Resort	5.4-101
5.4-33	Localized Significance Thresholds Analysis –Woodfin Suite Hotel and Timeshare Resort	5.4-102
5.4-34	Estimated Operational Emissions without Mitigation – Woodfin Suite Hotel and Timeshare Resort	5.4-103
5.4-35	Carbon Monoxide Concentrations – Future with Woodfin Suite Hotel and Timeshare Resort Traffic (2013)	5.4-106
5.4-36	Estimated Construction Greenhouse Gas Emissions – Woodfin Suite Hotel and Timeshare Resort Project	5.4-109
5.4-37	Estimated Operational Greenhouse Gas Emissions – Woodfin Suite Hotel and Timeshare Resort Project	5.4-109
5.4-38	Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Restored Wetland Park and Upland Buffer	5.4-114
5.4-39	Localized Significance Thresholds Analysis – Restored Wetland and Upper Buffer	5.4-114
5.4-40	Estimated Operational Emissions without Mitigation – Restored Wetland and Upper Buffer	5.4-115

LIST OF TABLES (continued)

Table		Page
5.4-41	Estimated Construction Greenhouse Gas Emissions – Restored Wetland and Upper Buffer	5.4-119
5.4-42	Estimated Operational Greenhouse Gas Emissions – Restored Wetland and Upland Buffer	5.4-120
5.4-43	Comparison of Growth of ADT to Population Growth	5.4-129
5.4-44	Project Features and Mitigation Measures to Achieve Climate Action Team Strategies	5.4-132
5.4-45	Project Features and Mitigation Measures Consistent with Early Action Measures	5.4-133
5.4-46	Estimated Project Net Total Greenhouse Gas Emissions	5.4-136
5.6-1	Summary of Project Components and LCP View Corridor Requirements	5.6-35
5.7-1	Project Trip Generation Rates	5.7-4
5.7-2	Level of Service Operating Characteristics	5.7-6
5.7-3	Critical Movement Volume Ranges[1] for Determining Levels of Service	5.7-6
5.7-4	Level of Service as a Function of CMA Values	5.7-7
5.7-5	Directional Trip Distribution	5.7-10
5.7-6	Critical Movement Analysis (2007) Summary	5.7-11
5.7-7	Total Allowable Phase II Marina del Rey Development	5.7-14
5.7-8	Phase II Development Potential Originally Allocated to Development Zone 2 and Zone 3	5.7-15
5.7-9	Related Projects Descriptions and Trip Generation	5.7-17
5.7-10	Peak Project Construction Trip Generation	5.7-26
5.7-11	Project Trip Generation	5.7-26
5.7-12	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – AM Peak Hour	5.7-28
5.7-13	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – PM Peak Hour	5.7-38
5.7-14	Summary of Critical Movement Analysis Future (2013) Traffic Conditions – With Project Plus Mitigation	5.7-40
5.7-15	Parking Tabulation for the Proposed Project-Parcels 10R, FF, and 9U	5.7-42
5.7-16	Development Zone 2 and 3 PM Peak-Hour Trips	5.7-49
5.7-17	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – AM Peak Hour	5.7-53
5.7-18	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – PM Peak Hour	5.7-59
5.7-19	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – AM Peak Hour	5.7-67
5.7-20	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – PM Peak Hour	5.7-67
5.7-21	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – AM Peak Hour	5.7-77
5.7-22	Summary of Critical Movement Analysis Future (2013) Traffic Conditions Without and With Project – PM Peak Hour	5.7-77
5.7-23	Summary of Critical Movement Analysis Future (2013) Traffic Conditions – With Cumulative Development AM Peak Hour	5.7-87
5.7-24	Summary of Critical Movement Analysis Future (2013) Traffic Conditions – With Cumulative Development PM Peak Hour	5.7-88

LIST OF TABLES (continued)

Table		Page
5.7-25	Summary of Critical Movement Analysis Future (2013) With Cumulative Development Traffic Conditions	5.7-92
5.8-1	Existing Wastewater Generation	5.8-6
5.8-2	Proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project Wastewater Generation	5.8-10
5.8-3	Proposed Neptune Marina Parcel 10R Project; Wastewater Generation	5.8-14
5.8-4	Proposed Neptune Marina Parcel FF Project; Wastewater Generation	5.8-17
5.8-5	Proposed Woodfin Suite Hotel and Timeshare Resort; Wastewater Generation	5.8-20
5.8-6	Cumulative Wastewater Generation – Related Projects within Marina Sewer Maintenance District	5.8-23
5.8-7	Cumulative Wastewater Generation – Proposed Project and Related Projects	5.8-24
5.10-1	Neptune Marina Apartments and Anchorage/ Woodfin Suite Hotel and Timeshare Resort Project – Existing Solid Waste Generation (No Recycling)	5.10-8
5.10-2	Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort –Proposed Project Solid Waste Generation (No Recycling)	5.10-17
5.10-3	Neptune Marina (Parcel 10R) Proposed Project Solid Waste Generation (No Recycling)	5.10-22
5.10-4	Neptune Marina (Parcel FF) Proposed Project Solid Waste Generation (No Recycling)	5.10-27
5.10-5	Woodfin Suite Hotel and Timeshare Resort – Proposed Project Solid Waste Generation (No Recycling)	5.10-31
5.10-6	Cumulative Solid Waste Generation (No Recycling) – Proposed Project and Related Projects	5.10-34
5.10-7	Disposal Capacity Need Analysis for Los Angeles County	5.10-36

1.0 INTRODUCTION

This introduction is included to provide the reader with an overview of (1) requirements for recirculation of an Environmental Impact Report (EIR); (2) the scope and content of the Recirculated EIR prepared by the County of Los Angeles for the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project; and (3) the Recirculated EIR review process. The analysis contained in this document supplements the Draft EIR (State Clearinghouse No. 2007031114) for the Neptune Marina Apartments, Anchorage/Woodfin Suite Hotel, and Timeshare Resort Project

The County of Los Angeles distributed a Draft EIR for **The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project** for public review and comment from **September 8, 2008, to October 22, 2008**. An initial public hearing on the project and the Draft EIR was held before the Los Angeles County Regional Planning Commission (RPC) on October 29, 2008. At the conclusion of that hearing, the RPC continued the public hearing to November 5, 2008, in order to schedule a field trip to the project site and nearby parcels and to allow for a local public hearing in Marina del Rey. The RPC scheduled its field trip and continued public hearing in Marina del Rey for November 22, 2008. On November 12, 2008, however, the applicants for the above-mentioned project requested the RPC to take its November 22nd continued public hearing and field trip in Marina del Rey off its hearing calendar. This request was based on the recommendation of County staff to revise and recirculate certain sections of the Draft EIR in response to new information that was not previously analyzed and which could have potential impacts not addressed in the original Draft EIR. The RPC honored the applicants' request in this regard and took the continued public hearing and field trip in Marina del Rey off its hearing calendar, pending the County's revision and recirculation of certain Draft EIR sections.

1.1 REQUIREMENTS FOR RECIRCULATION OF AN EIR

This Draft EIR containing sections for recirculation has been prepared in accordance with the California Environmental Quality Act (CEQA) and the State Guidelines for the implementation of CEQA. The requirements for recirculation of an EIR prior to certification, defined by Section 15088.5 of the *State CEQA Guidelines*, which provides as follows:

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of 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 (including a feasible project alternative) that the

project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental 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 a level of insignificance.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

(c) If the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified. (*Emphasis added.*)

(d) Recirculation of an EIR requires notice pursuant to Section 15087, and consultation pursuant to Section 15086.

(e) A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.

As described below in **Section 1.2, Scope, Content and Format of the Recirculated EIR**, new information regarding the design and alignment of needed sewer infrastructure became known subsequent to the initial circulation of the Draft EIR in September 2008. In order to provide the public with a meaningful opportunity to comment upon potential impacts related to the sewer infrastructure, as well as to respond to certain issues raised at the first public hearing on the project (discussed below), the County decided to revise and to recirculate for additional public review certain sections of the Draft EIR for the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project.

1.2 SCOPE AND CONTENT OF THE RECIRCULATED EIR

This Recirculated EIR considers in detail potential cumulative impacts of the proposed project and the Venice Pumping Plant Dual Force Main Project. This related project is proposed by the City of Los Angeles and is outside the control of Los Angeles County. One of the three proposed alternative alignments for the new sewer line would run beneath Via Marina adjacent to the proposed project site; however, no final decision on the alignment has been made at the time of this writing. Also, the timing of the implementation of this related project is uncertain. Nonetheless, to provide a conservative analysis,

this Recirculated EIR assumes that the Via Marina alternative will be selected and that construction of the related project and the proposed project would overlap.

The Department of Public Works initiated review and funding for sewer pipeline upgrades in Marina del Rey on September 9, 2008, before the County of Los Angeles Board of Supervisors. Subsequently, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort project engineers met with the Sewer Maintenance Division to design a sewer infrastructure that would both meet the needs of an upgraded sewer system as well as accommodate the proposed project analyzed in this EIR. This has resulted in a different alignment for the new sewer lines needed to service the new development on Parcel 10R. The details of this proposed sewer infrastructure and an analysis of potential impacts are provided in this Recirculated Draft EIR.

At the same time, details of the City of Los Angeles proposed Venice Pumping Plant Dual Force Main project became known; there is the potential for impacts associated with that project to overlap with construction impacts for the proposed project, resulting in potentially significant cumulative impacts Therefore, it was decided that the potential impacts from this project also warranted analysis in this recirculated document.

Because of the potential for cumulative impacts with the Venice Pumping Plant Dual Force Main Project and the potential for new or increased impacts associated with the proposed project-serving sewer lines, the County, as lead agency, decided to conduct and circulate for public comment this Recirculated EIR.

The following seven sections of the Draft EIR have been revised for this recirculation:

3.0 Project Description, to include a detailed description of the sewer infrastructure improvement and alignment, to provide an update to the construction schedules, and to provide a summary for compliance with applicable provisions of the County of Los Angeles' Green Building Ordinance, which recently took effect on January 1, 2009.

5.2 Noise, to update the analysis of construction noise impacts, including noise along haul route and impacts to existing residential areas, and discussion of the Venice Dual Force Main and The Shores Apartments (on Marina del Rey Parcels 100 and 101) projects in the cumulative impact discussion.

5.4 Air Quality, to update the construction and cumulative impacts discussions to include the Venice Dual Force Main project, and to update the greenhouse gas/climate change analysis.

5.6 Visual Quality, to augment the discussion of the shade-shadow analysis as requested by the RPC, and to augment the discussion of potential impacts from distant vantage points.

5.7 Traffic/Access, to address construction traffic impacts analysis and discussion.

5.8 Sewer Service, to revise generation rate calculations using recent information provided by the City of Los Angeles, and to describe the new proposed sewer alignment.

5.10 Solid Waste Service, to address in greater detail the potential impacts to a public landfill caused by the excess cut materials from excavation.

Of these topics, the following areas were found to be significant after implementation of feasible mitigation measures:

- Short-term construction noise and vibration impacts;
- Short-term cumulative construction noise and vibration impacts;
- Short-term construction air quality impacts;
- Cumulative construction air quality impacts;
- Visual resource impacts, cumulative traffic impacts;
- Project-specific and cumulative solid waste impacts; and
- Cumulative population and housing impacts.

1.3 RECIRCULATED EIR REVIEW PROCESS

Recirculation of the portions of the Draft EIR noted below is being made in accordance with the requirements of *State CEQA Guidelines* Section 15088.5. Recirculation will occur for a period of 45 days, from June 11, 2009, to July 27, 2009.

During this public review period, written comments concerning the adequacy of the document may be submitted by any interested person and/or affected agency to the County of Los Angeles, Department of Regional Planning, Special Projects Section, Attention: Michael Tripp, Room 1362, 320 West Temple Street, Los Angeles, California 90012.

The County of Los Angeles requests that commenters limit comments to only the revised sections provided in this document. Comments received on the Draft EIR during the previous comment period will be responded to in the Final EIR and need not be re-submitted on the revised sections. The County intends to respond only to comments submitted during the recirculation period that relate to portions of the EIR that are revised and included in this recirculation.

Following the public review periods for the Draft EIR and the recirculated Draft EIR sections, written responses will be prepared for comments submitted either in writing during the public review periods or orally at public hearings held during the process, provided that such comments raise environmental issues. At least 10 days prior to a hearing to certify the Final EIR, proposed responses to comments from public agencies on the Draft EIR will be sent to those agencies. The Final EIR will be submitted to the RPC and subsequently to the Board of Supervisors, which will determine whether to certify the document as reflecting the County's independent judgment and having been properly prepared in accordance with CEQA. No aspect of the proposed project will be approved until after the Final EIR is certified.

3.0 PROJECT DESCRIPTION

PURPOSE

The purpose of the Project Description required by the California Environmental Quality Act (CEQA) is to describe the project in a way that will be meaningful to the public, reviewing agencies and decision makers. The State CEQA Guidelines *state that the Project Description need not be exhaustive but should supply the detail needed for the evaluation and review of potential environmental impacts. The* State CEQA Guidelines *require that a Project Description address the following items: (1) the precise location and boundaries of the project; (2) a statement of project objectives; (3) a general description of the project's characteristics; and (4) a listing of required project approvals and decision-making agencies.*

This section includes a description of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project. The project occurs on Marina del Rey Parcels 10R, FF, and 9U. The project includes five project components: (1) Neptune Marina Parcel 10R; (2) Neptune Marina Parcel FF; (3) the Woodfin Suite Hotel/Timeshare Resort; (4) a restored public wetland and upland park project on the southern portion of Parcel 9U; and (5) a public-serving anchorage within Marina del Rey Basin B adjoining the Parcel 10R and 9U bulkhead, containing approximately 542 lineal feet of dock space and supporting between approximately seven and 11 vessels (depending on the boats' relative sizes) inclusive of an area for dinghy berthing at the northerly end of the anchorage. It is important to note that project Components 4 and 5 are integral to the LCP amendment to change the designated open space land use on Neptune Marina Parcel FF, which is currently developed as an underutilized surface parking lot, to a residential land use. To better accommodate the County zoning code requirements, this Project Description includes separate descriptions of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project and each of the five project components.

3.1 OVERVIEW

As part of the County of Los Angeles' original construction of Marina del Rey, the County divided Marina del Rey's land and water areas into a number of parcels with a specific number and lettering scheme. The proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project occurs on three parcels of land respectively designated as Marina del Rey Parcels 10R, FF, and Parcel 9U. The project is subject to the Marina del Rey Specific Plan, which is a component of the certified Marina del Rey Local Coastal Program (LCP). The LCP consists of the Marina del Rey Land Use Plan (LUP), Local Implementation Plan (LIP) and Design Guidelines that are an appendix to the LUP. The Marina del Rey certified LCP and this EIR also use the parcel numbering and lettering system that is described above.

The Marina del Rey LCP and LUP were originally certified by the California Coastal Commission (CCC) in October 11, 1984. The current effective Marina del Rey LCP/LUP and Specific Plan involved a major amendment to the original LCP, which was certified by the CCC on February 8, 1996.

Section 15265 of the *State CEQA Guidelines* exempts local agencies from the CEQA requirements to inform the public and decisions makers about the environmental effects, identify avoidance of and prevent significant environmental damage, and disclose the reasons for approval when that local agency is adopting a local coastal program. This exemption is provided because the responsibility for environmental analysis is shifted to the CCC's certified regulatory plan for its local coastal program certification program, which allows written environmental information as the functional equivalent of an environmental impact report under the provisions of the Public Resources Code Section 21080.5. The CCC must find that the LUP conforms to the Coastal Act, contains public access components, and is consistent with past actions.

The County of Los Angeles and the CCC both held extensive public hearings regarding the major amendment to the LCP preceding the CCC's ultimate certification of the major LCP amendment in 1996. These public hearings included discussion of the environmental effects that the land use changes contained within the amended LCP would cause.

During the public hearings for the 1996 major amendment to the LCP, the County and the CCC considered changes that would result from modified development standards allowing building heights up to 225 feet. Buildings of up to 225 feet (the maximum height allowed in the Marina under the certified LCP) are allowed on select parcels fronting on Marina "loop roads" Via Marina and Admiralty Way, but only when the proposed building height is accompanied with the provision of view corridors that guarantee views to the harbor. This requirement is consistent with Coastal Act Policy 30251, which requires that coastal development be sited in a manner that shall protect views of the coastal waters. Consistent with this policy, all development on waterfront parcels, regardless of the height of buildings developed thereon, shall provide a minimum unobstructed view corridor of 20 percent of the parcels' waterfront to the boat basins. The potential impact of taller buildings causing sun shadow effects or affecting the wind patterns of the Marina are required to be evaluated for any potentially negative impact prior to such taller buildings being constructed.

The certified LCP sets forth a key urban design principal for the Marina calling for the implementation of a "modified bowl concept," consisting of a skyline of taller buildings around the outer and northern edges of the Marina, with lower height buildings on the mole roads, with limited exception. Implementation of the concept is intended to enhance the Marina's image and to guarantee that adequate sunlight and wind circulation continues over the Marina water basin (see Los Angeles County Code

22.46.1040). To implement the modified bowl concept, the LCP provides for building heights up to a maximum of 225 feet on select parcels when expanded view corridors comprising at least 40 percent of the parcels' water frontage are provided. The tradeoff for the additional building height (i.e., maximum of 225 feet) is the provision of larger public view corridors over the parcels (i.e., view corridor comprising no less than 40 percent of the parcel's water frontage).

Hotels within the amended Marina LCP are permitted a height limit of 225 feet (Marina del Rey Land Use Plan page 8-11). Additionally, height design flexibility is provided for seaward parcels along Via Marina, including the subject Parcel 9U, allowing for a maximum height of 225 feet when a 40 percent view corridor is provided (Policy 8b of the Marina del Rey LUP page 9-6). Parcel 9U is included in the Tahiti Development Zone and has been designated as "Hotel-Waterfront Overlay Zone" in the Marina Land Use Plan (Marina del Rey LUP Map 10 and page 8-15). Specified development potential in this development zone is 288 hotel rooms within the permitted hotel use on Parcel 9U.

In 1981, a hotel was previously approved by the CCC for development on the subject Parcel 9U (the "Marina Plaza Hotel"; see CCC Case No. A-207-79). The Marina Plaza Hotel was approved by the CCC with 300 guest rooms in nine stories and an assortment of patron- and visitor-serving accessory uses, including restaurants, a bar, a coffee shop, banquet facilities and meeting rooms, all over two stories of subterranean parking. Some site grading was completed and two concrete piles were installed by the developer of the Marina Plaza Hotel. The developer ultimately abandoned the Marina Plaza Hotel development on Parcel 9U due to lack of finances.

A review of the CCC-approved site plan contained in CCC case file A-207-79 indicates that the nine-story Marina Plaza Hotel structure was spread over almost the entire parcel, providing only a small public view corridor to the water from Via Marina. While the subject nineteen-story hotel/timeshare resort structure being proposed for Parcel 9U by Woodfin Suite Hotels is taller than the nine-story Marina Plaza Hotel previously approved for the site, the Woodfin project implements the LCP's modified bowl urban design principal. As described above, consistent with the certified LCP's modified bowl concept, the Woodfin project provides an expansive 40 percent view corridor over the Parcel 9U as a trade-off for developing a taller building with a significantly smaller building footprint on the parcel.

Within the existing Marina, development of some kind has occurred on all leasehold parcels. This existing development cycle is referred to as Phase I development, which is now complete. Recycling, intensification, or conversion of these initial uses on leased parcels is referred to as Phase II development, which will be permitted, subject to the individual leaseholders demonstrating consistency with the policies of this LCP.

High-rise development generally will be permitted in appropriate locations on the periphery of the Marina, provided that such development will be sited such as to allow for adequate passage of prevailing offshore winds into the Marina waters.

All development of coastal housing shall be contingent upon meeting all applicable policies and development standards of the certified LCP, including but not limited to adequate parking, view corridors, public access to the shoreline, provision of adequate traffic capacity, and the provision of new usable public recreation, open space, and visitor serving recreational uses.

3.1.1 Project Location

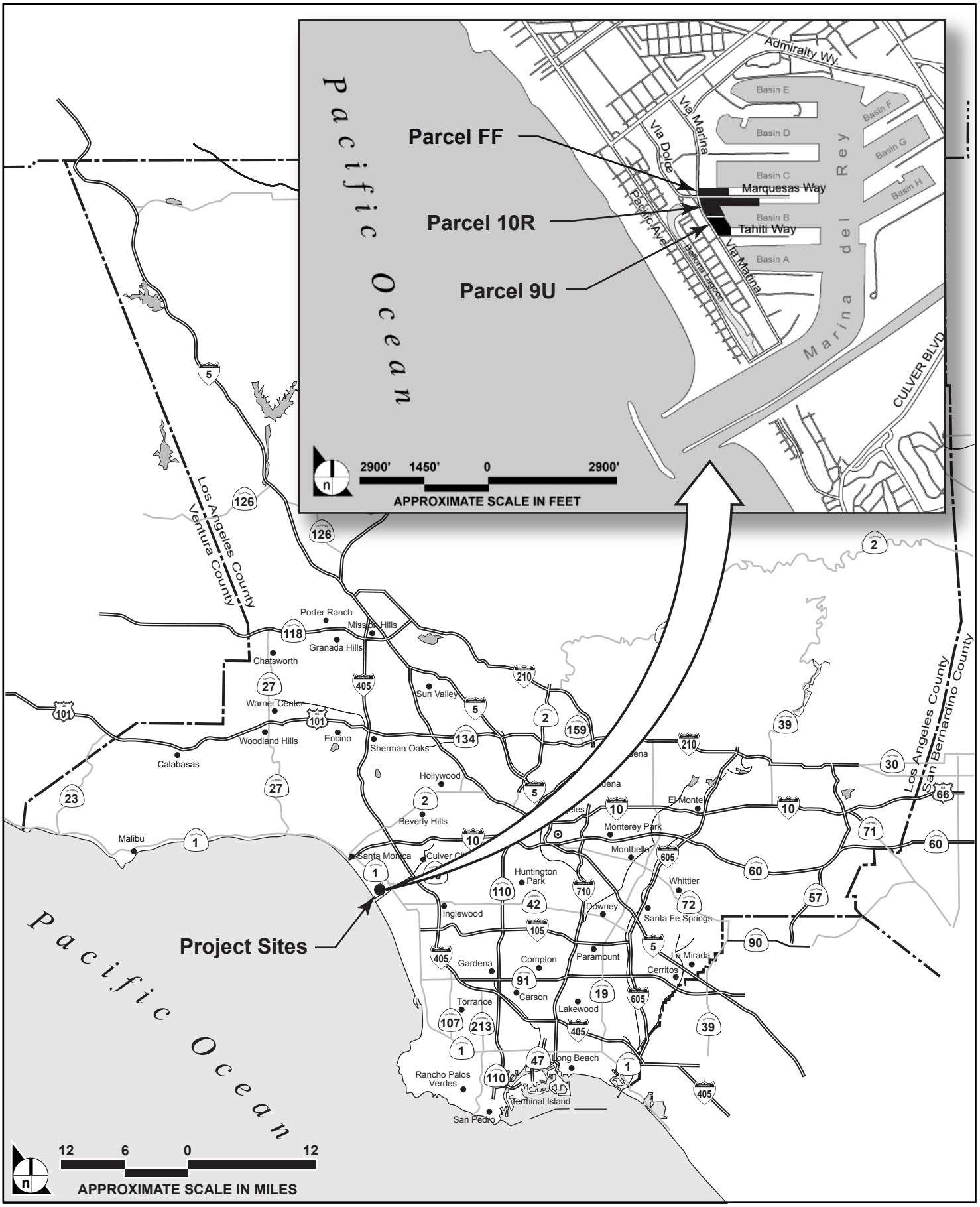
The proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site (**Figure 3.0-1, Regional and Site Location**) is located in the western portion of the Marina del Rey small-craft harbor. Specifically, the project site totals 13.03 landside acres and 4.68 waterside or submerged acres.

Parcel 10R is a rotated L-shaped site that wraps partially around "Basin B" of the Marina del Rey small-craft harbor. The parcel consists of a total of 7.32 landside acres and 4.68 waterside or submerged acres. The perimeter of the site is bordered to the west by Via Marina and to the north by Marquesas Way.

Marina del Rey Parcel 9U forms the southern boundary of the landside portion of the Parcel 10R site, while Marina del Rey Parcel 12R forms the easternmost boundary on the landside portion of the parcel. The site perimeter extends into the waters of Basin B to the south and east. The proposed public-serving boat anchorage would adjoin a portion of the Parcel 10R bulkhead, within Marina Basin B.

Parcel FF is a rectangular site that occurs adjacent to the southwest corner of "Basin C" of the Marina del Rey small-craft harbor. The parcel consists of a total of 2.05 landside acres and borders the waterfront along approximately 200 linear feet of the northern boundary of the site. The perimeter of the site is bordered to the west by Via Marina and to the south by Marquesas Way. Its easternmost boundary is formed by Marina del Rey Parcel 13R. Marina del Rey Parcel 15U and the waters of Basin C comprise the northern boundary of Parcel FF.

Parcel 9U consists of 3.66 landside acres and is bound by Marina del Rey Parcel 10R to the north, Via Marina to the west, Basin B of Marina del Rey to the east and Tahiti Way to the south. The Woodfin Suite Hotel and Timeshare Resort Project would be confined to the northernmost 2.20 acres of Parcel 9U. The proposed restored public wetland and upland park would be confined to the approximately 1.46 southerly-most acres of Parcel 9U.



SOURCE: Impact Sciences, Inc. – March 2006

FIGURE **3.0-1**

Regional and Site Location

460-04•12/07

3.1.2 Project Objectives

Existing uses in Marina del Rey were developed in the early to mid-1960s around the time the small-craft harbor was initially dedicated. This early construction is considered or termed "Phase I" marina development as identified in the Marina del Rey LUP. Existing residential uses, in most locations, are now over 40 years of age. These aging improvements lack contemporary design elements and tenant amenities necessary to serve current water-oriented residential lifestyles, including state-of-the-art wiring for high-speed telecommunications and electronics, contemporary kitchens and modern climate control systems. Similarly, the existing anchorage docks, which are dilapidated, were originally constructed to accommodate the boating community of the 1960s. The existing anchorage lacks contemporary design features and amenities such as Americans with Disability Act (ADA) compliant boat spaces, sanitary sewage pump-out stations, wider space berths, increased storage, state-of-the-art wiring for high-speed telecommunications and electronics that are necessary to serve the current recreational boating community.

As a policy, the Marina del Rey certified LCP specifically encourages the recycling and intensification (within defined density limits) of the existing Phase I development. Consistent with the LCP for Marina del Rey and the County's broader public policy goals and objectives, proposed redevelopment uses on the project site are intended to meet the following objectives:

- Create an integrated, self-contained recreational marina boating community with contemporary on-water facilities.
- Enhance habitat value by restoring the existing degraded wetland on Parcel 9U.
- Create a public park in a location that provides convenient parking and public access and expansive and higher quality views of the basin and allows integration with other public uses and amenities.
- Improve public coastal recreational opportunities.
- Provide improved public pedestrian access to the waterfront.
- Provide increased coastal residential opportunities with designs that emphasize coastal views, consistent with the residential build-out framework for Marina del Rey specified in the certified LCP.
- Provide for additional needed affordable housing in or near the Coastal Zone, in compliance with the Mello Act.
- Develop an apartment project of sufficient density to support the construction of on-site replacement and inclusionary affordable unit in compliance with the County's Mello Act policy.
- Replace an underutilized parking lot with high quality residential development and facilitate the future relocation of public parking in another area of the Marina which will better serve the public.

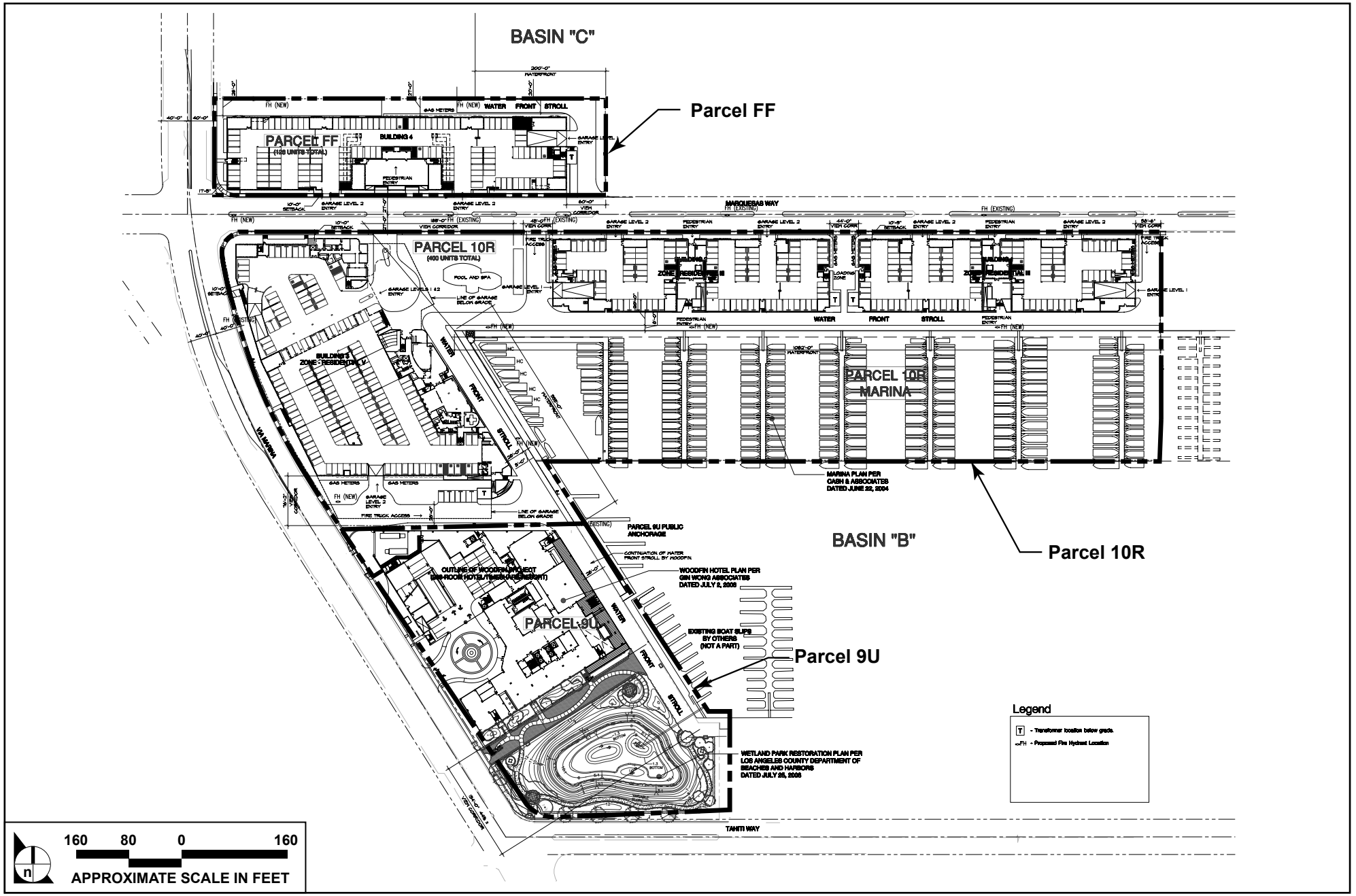
- Develop a hotel/time share resort proximate to the water as additional high-value visitor-serving uses in the Coastal Zone in compliance with the Coastal Act.
- Replace existing non-ADA compliant boating facilities with new, state-of-the-art facilities.
- Replace existing aging housing with new, high-quality housing.
- Restore and enhance the existing artificially created wetland by creating a wetland park.
- Generate additional revenues to the County in the form of increase ground rents, fees and tax revenues.

3.1.3 Project Characteristics

3.1.3.1 Overview Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

Figure 3.0-2, Site Plan: Neptune Marina Project illustrates a conceptual site plan for the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project consists of five components that include (1) Neptune Marina Parcel 10R; (2) Neptune Marina Parcel FF; (3) the Woodfin Suite Hotel and Timeshare Resort (on northerly portion of Parcel 9U); (4) a restored public wetland and upland park project on the southern portion of Parcel 9U; and (5) a public-serving boat anchorage proximal to Parcel 9U within Marina del Rey Basin B. It is important to note that Components 4 and 5 are associated with and offset the loss of open space-designated land that would result from development of Neptune Marina Parcel FF (Component 2).

Component 1 includes the landside development of **Parcel 10R** and waterside development in adjacent Basin B and is referred to as "**Neptune Marina Parcel 10R**." Landside development consists of a proposed 400-unit, residential apartment community consisting of three structures and a waterfront public pedestrian promenade. The height of two of the three buildings: Buildings 1 and 2, which front on the Marquesas Way mole road, would not exceed 55 feet, while Building 3, which fronts on Via Marina, would not exceed 60 feet (exclusive of appurtenant, screened roof-top equipment) when measured per County standards. These structures would front Marquesas Way and Via Marina and are proposed to be located generally southeast of this intersection. The project would also include an approximately 0.25-mile-long (1,437 linear feet) public waterfront pedestrian promenade. Construction staging would occur on site and on Parcel FF with authorization from the County.



SOURCE: Thomas P. Cox: Architects, Inc. – August 2008; Note: Ground Level Perspective

FIGURE **3.0-2**

Site Plan: Neptune Marina Project

To authorize development of the Neptune Marina Parcel 10R project, the County of Los Angeles proposes an amendment to the Marina del Rey LUP and Specific Plan to allow the density allowed by the current Residential III and Residential V land use designations for Parcel 10R to be averaged over the entire parcel. This amendment would allow the proposed project to have an aesthetic and development profile that is consistent across the parcel and with an adjoining apartment project currently under construction on Marina Parcel 12 to the east.

Parcel 10R is located in LCP Development Zone 3 (Marquesas), which has a current residential development potential of three (3) additional dwelling units. Therefore, to facilitate development of this project, the County proposes an LCP amendment to authorize the transfer of 261 excess (or "unused") dwelling unit credits from the southern abutting Development Zone 2 (Tahiti Development Zone) into Development Zone 3. With adoption of this LCP amendment, there will be sufficient available dwelling unit credits within the subject Development Zone 3 to accommodate the planned development of 400 rental dwelling units on Parcel 10R.

Additional approvals are necessary for the Neptune Marina Parcel 10R component of the project. A Coastal Development Permit is required for all new development to ensure that individual projects conform to the certified LCP. A Conditional Use Permit (for site grading, export of earth and parking for boater-related uses) and a Variance (to allow for enhanced signage and a reduced yard adjacent to the waterfront pedestrian promenade) are also required in order to implement this component.

The waterside portion of Parcel 10R in Basin B would be comprised of a small craft anchorage consisting of 174 boat spaces that would replace an existing marina containing 198 boat spaces, which has deteriorated over time. The new anchorage would provide users water and electrical service and a sewage pump out station. A total of 161 of the proposed private boat spaces associated with the Neptune Marina Parcel 10R would be wide enough to accommodate modern boat designs and boats up to 40 feet. Larger boats could be accommodated at 13 proposed end-tie spaces (161 + 13 = 174 total marina spaces). The reduction in 24 boat spaces between the existing 198-space marina and proposed 174-space marina results from achieving compliance with California Department of Boating and Waterways and ADA standards, and the increased size of the proposed slips. For the Parcel 10R marina component, the County's "Approval in Concept" is required prior to making application to the California Coastal Commission for a separate Coastal Development Permit authorizing this proposed waterside development.

Component 2 includes the development of Parcel FF and has been defined as "**Neptune Marina Parcel FF**." Development consists of a proposed 126-unit, residential apartment community contained within a single structure and a waterfront public pedestrian promenade. The height of the proposed building (Building 4) would not exceed 55 feet (exclusive of appurtenant, screened rooftop equipment) when measured per County standards. This structure would front on Marquesas Way and be located generally northeast of this intersection. Construction staging would occur on site and on Parcel 10R. A total of 242 parking spaces would be provided in a structured parking garage below the building. This project component would also include construction of a 200-foot-long public Waterfront Stroll Promenade. Development of the Neptune Marina Project Parcel FF will require the removal of an existing, underutilized 2-acre surface parking lot with ~~206~~ 201 spaces. Th~~is~~e ~~project~~ applicant, under its to-be-executed lease extension agreement with the County, ~~is~~ will be required ~~under the lease agreement~~ to replace or bond for the replacement of one-half of the removed parking spaces, at a superior public/visitor-serving location within the Marina, prior to occupancy of this residential component.

~~Development of Parcel FF with residential use, as proposed, will preclude the potential future development of a public park on the parcel, which could have occurred pursuant to the parcel's current Open Space land use designation. It should be noted there is no evidence that, absent the current development proposal, a park would, in fact, be developed on Parcel FF in the future.~~ Parcel FF has for many years been developed with an underutilized surface parking lot (identified as an "overflow Parking Lot 12" in the certified LCP). Parking Lot 12's historic underutilization by the public has been thoroughly analyzed and is well documented. A 2004 Parking Utilization Study by traffic engineering firm Crain & Associates of Southern California (attached as **Appendix 5.7** to this DEIR), based upon surveys conducted by Crain over the summer weekends of June 26-27, July 17-18 and July 24-25, 2004, found the public's use of Lot 12 to be minimal. The Crain report notes that the majority of the few vehicles accessing the lot were observed to be associated with residential parking needs for the adjacent apartments (apartments that are underserved by parking due to having been constructed in the 1960s, when the county's residential parking requirements were less stringent than today's parking requirements) as opposed to serving the recreating public.

Crain's 2004 findings regarding Lot 12's underutilization by the public are corroborated by the more recent findings of a comprehensive March 2009 report titled "Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California," prepared for the County Department of Beaches & Harbors by traffic engineering firm Raju Associates, Inc. ("Right-Sizing Study," attached as **Appendix 5.7** to this DEIR). Based on parking demand surveys of each of the Marina's 13 public parking lots conducted by Raju Associates during the busiest summer weekends, holidays (Memorial Day, Fourth of July and Labor Day), and special event days in the Marina (i.e., the Halibut Derby and Boat Parade) of 2005 and 2007, the

Right-Sizing Study finds that each of the Marina's public parking lots "are greatly underutilized to varying degrees almost throughout the year, except for a few holidays and pre-holiday weekend days, even when the gate arms are up and no parking fee is charged" (Right-Sizing Study, Executive Summary, Page 1). Regarding Lot 12, the Right-Sizing Study concludes:

> …[I]n the past few years, this overflow lot has not been used much by the general public for recreational purposes but has been used mostly for construction staging and by construction vehicles during construction [of a nearby apartment project]. No public demand has been noticed in this lot…This lot is planned to be removed from the list of public parking lots in the future pending a Plan Amendment is by the CCC (Right-Sizing Study, Page 15).

Lot 12's underutilization by the public is explained by the lot's relative isolation from visitor or recreational attractions in the Marina or surrounding vicinity. As Crain explains in its conclusion to its study:

> Based on our data, observations, and analyses, it is our conclusion that Parking Lot 12 does not well serve the public parking function for which it was initially intended. The lack of public parking use of Lot 12 is perhaps best explained by the LCP's reference to Lot 12 as "overflow" parking for the Pierview Café…Once a popular restaurant located across Marquesas Way from Lot 12 on Parcel 10R, the Pierview Café went out of business some years ago and the structure was converted to storage use related to the existing Neptune Marina apartments on Parcel 10R. Thus, patron "overflow" parking for that establishment is no longer needed at Lot 12.
>
> Our observations and analyses indicate that the Lot 12 location within the Marina is not conducive to its use as a public parking facility. The lot is not directly adjacent to any public beach within the Marina and it is located quite far from the Pacific Ocean beaches. Moreover, the western side of Marina del Rey, particularly south of Panay Way, is primarily a residential community, and there is little public-related or visitor-serving activity that occurs in this area. This lack of marine or visitor-related parking use on Lot 12 is contrasted by the primary use of the lot by residents and visitors of the nearby and adjacent apartment developments. Most of the vehicles currently using the Lot 12 facilities are overflow parking from these developments, either due to convenience or lack of adequate on-site parking for the individual developments. However, this amount of parking is not significant, and overall, Lot 12 is inadequately utilized, with a maximum parking occupancy of 15 percent during the

> two weekends surveyed. (It should be noted that as the Lot 12-adjacent Parcels 10R, 12 and 15 are redeveloped with new apartment and anchorage facilities, the parking facilities for these projects will be significantly upgraded and the amount of on-site parking increased to be consistent with current County Code parking requirements. The additional on-site parking supplies for these developments will further reduce the parking used of Lot 12, as persons who currently utilize this lot as overflow parking for the currently inadequate parking supplies at the adjacent residential developments will relocate to the free guest parking facilities provided in these new apartment and marina projects.) (Crain's 2004 Parking Utilization Study, Page 4)

In its April 23, 2009 Adopted Revised Findings to support the Commission's January 9, 2008 approval of the Los Angeles County's Marina del Rey Periodic LCP Review ("Revised Findings Report"), the findings and recommendations of which the CCC moved to adopt their report, the staff of the CCC expressly acknowledges that Lot 12's (Parcel FF) relative isolation from key visitor/recreational attractions may lead to its underutilization by the public, writing:

> The LCP requires that public parking lots be conveniently located near key visitor attractions with adequate location signage…However, there are a few public parking lots that the County provides that are not located adjacent to key visitor attractions and may be underutilized due to their location. Parcels FF and OT are examples of such parking lots…The nearest key visitor-serving or recreational facilities [to Parcel FF] are Marina Beach and the North Jetty, both located over 1,000 feet of the parking lot. The closest recreational facility is the promenade, which runs along a portion of the parking lot. Although the promenade is a significant recreational facility, people generally access the promenade in other areas and to not rely on this parking lot. (Revised Findings Report, Page 137; this page is attached as **Appendix 3.0** to this DEIR).

Development of Parcel FF with residential use, as proposed, will preclude the potential future development of a public park on the parcel, which could have occurred pursuant to the parcel's current Open Space land use designation. It should be noted there is no evidence that, absent the current development proposal, a park would, in fact, be developed on Parcel FF in the future.

Neither the County nor the private development community has any plans to develop Parcel FF for the permitted park use. To the contrary, Section A.2 of the LUP (page 2-5), under the "Potential Conversion of Public Parking Lots" subsection, expressly acknowledges that Parcel FF is underutilized by the public and is thus being contemplated for conversion to residential use. Therefore, the applicant is proposing to

develop a portion of the adjoining Parcel 9U with a public park to offset the loss of Open Space designated land and potential future public park, in conjunction with the construction of a public anchorage within Marina del Rey Basin B. The applicant will also offset the loss of the existing underutilized parking lot on Parcel FF through the lease agreement by making a financial contribution toward the construction of replacement parking at another site in the Marina designated by the County.

As described in greater detail in **Section 5.15, Parks and Recreation**, the discretionary project approvals for the Neptune Marina Parcel FF project include an LCP amendment request by the County of Los Angeles to change the current Open Space designation of Parcel FF to Residential V (1.38-acre "non-mole" portion) and "Residential III" (0.67-acre "mole" portion). To offset the loss of designated Open Space, the applicant proposes to relocate the potential future public park space contemplated in the LCP for development on Parcel FF to the southerly portion of Parcel 9U. Legacy Partners and Woodfin Suite Hotels would split the cost of developing a 1.46-acre public park inclusive of a 0.47-acre restored wetland and 0.99-acre upland buffer on the southerly portion of Parcel 9U. Without this financial commitment from the project applicants, the park would not be developed, as the County would be unable to devote the financial resources to this environmental amenity.

Parking Policy No. 12 of Chapter 2 of the LUP (page 2-8) states that public parking spaces lost due to the conversion of parking lots to public park use (by extrapolation from the proposed construction of the restored wetland and upland park) ~~will~~ shall be replaced elsewhere in the Marina on a 0.5:1 (50 percent) basis. Although the parking lot on Parcel FF would be replaced with residential use, the County has determined Parking Policy No. 12 applies in this case. Furthermore, Specific Plan Sections 22.46.1250.D and 22.46.1330.D provide that the displaced parking spaces must be replaced within the Marina before the development which displaces it may commence (i.e., occupancy of the apartment building). For this reason, the discretionary project approvals for the Parcel FF component of the project includes a proposed amendment to the LCP to modify the LUP and Specific Plan to allow deferral of construction of the ~~103~~ 101"replacement" parking spaces (i.e., 50 percent of the existing ~~206~~ 201 spaces) required as a condition of the proposed development of Parcel FF with residential use until such time as construction of such replacement parking spaces can be provided for by the County at an alternate location in the Marina more proximate to recreational or visitor-serving uses. This proposed LCP amendment ~~will~~ also requests authorization to allow occupancy of the new Parcel FF apartment building prior to construction of replacement parking spaces elsewhere in the Marina. Legacy Partners will deposit funds sufficient to construct the replacement parking with the County prior to issuance of a building permit. ~~As~~ Because, as detailed above, ~~the current parking lot is~~Lot 12 continues to be heavily underutilized by the public, no short-term parking impacts are anticipated. In relation to the proposed development of Parcel FF, the

County is also proposing to amend the LCP to:

- Authorize the transfer of 14 development units from abutting Development Zone-2 (Tahiti) into the subject Development Zone-3 (Marquesas) and 112 development units from the proximate Development Zone-1 (Bora Bora Development Zone) into the subject Development Zone-3 (i.e., 14 units transferred from DZ 2 + 112 units transferred from DZ 1 = 126 units on subject Parcel FF). With approval of this development unit transfer, there will be sufficient dwelling unit credits within the subject Marquesas Development Zone to accommodate the planned development of 126 rental dwelling units on Parcel FF;

- Change the Height Category on Parcel FF from "Height Category 1" (maximum building height of 25 feet) to "Height Category 3" (which allows for 45-foot building heights when a 20 percent view corridor is provided, ranging to 75 feet maximum when a 40 percent view corridor is provided). The proposed 55-foot building height would be consistent with the proposed Height Category 3 designation because the applicant is providing a view corridor comprising 26.7 percent of the parcel's water frontage ; and

- As for Parcel 10R, "blend" residential densities over Parcel FF without respect to the 35 dwelling units/acre and 75 dwelling units/acre density development standards prescribed in the LCP for the proposed Residential III and Residential V land use categories. Total site density will not exceed the LCP-prescribed 126 dwelling units for Parcel FF, but the units will be more evenly distributed between the R-V (non-mole portion) and R-III (mole portion) designated areas of the parcel, allowing for a more uniform and attractive building massing scheme and development.

Related discretionary approvals for the Neptune Marina Parcel FF component include a Coastal Development Permit (necessary for all new development in the coastal zone), a Conditional Use Permit (for site grading and export of earth) and a Variance (to allow for enhanced signage and a reduced yard adjacent to the waterfront pedestrian promenade) in order to implement this component.

Although the proposed transfer of 387 "excess" residential development credits into the subject Marquesas Development Zone from the adjoining and nearby Tahiti and Bora Bora Development Zones, as outlined above for Components 1 and 2, may be considered as an intensifying the Marquesas Development Zone, it is important to note that precedent exists in Marina del Rey for such inter-development zone residential development credit transfers. In certifying a similar LCP amendment in County Case No. 98-172-4 (Marina del Rey Parcel 20; developer Goldrich & Kest), the County and Coastal Commission found that the transfer of 97 unused residential development units from the Bora Bora Development Zone into the more distant Panay Development Zone on Via Marina was appropriate because the traffic impacts associated with the unit transfer were not significant. As with the Parcel 20 LCP amendment, a traffic analysis has been prepared for this project which has determined that the traffic and circulation impacts of the proposed inter-development zone transfer of excess development units are insignificant.

Component 3 includes development of the northerly approximately 2.20 acres of Parcel 9U and is referred to as the "**Woodfin Suite Hotel and Timeshare Resort**." This project component consists of a 19-story hotel structure with 288 hotel and timeshare suites consisting of a minimum of 152 conventional hotel suites and 136 timeshare suites, meeting rooms, a restaurant and bar/lounge, a spa/fitness center (including an outdoor pool), and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities. The building would also feature an outdoor terrace and a large third floor deck with a pool, both of which would overlook the waters of the marina. In total, up to 21 fee-based "self-park" and 339 valet-managed parking spaces would be provided in a six-level parking garage, with one level below grade, for a project total of 360 parking spaces.

Consistent with the Marina del Rey certified LCP, the height of the hotel structure would not exceed 225 feet (exclusive of appurtenant, screened rooftop equipment) when measured per county standards. The hotel/timeshare resort structure has been oriented on the site in a fashion that maximizes public views to the water from Via Marina. The structure would front on Via Marina over the northerly portion of the parcel. Consistent with the LCP height standards allowing for a building with a maximum height of 225 feet on this parcel, the project has been designed with an unobstructed view corridor comprising at least 40 percent of the parcel's frontage on Via Marina; this large public view corridor will provided over the public wetland park to be developed on the southerly approximately 1.46 acres of the parcel. Public viewing of the harbor will be further enhanced through the project's development of a 28-foot-wide public pedestrian promenade along the parcel's entire water frontage (which will connect seamlessly to the waterfront pedestrian promenade being constructed by Legacy Partners as part of the Parcel 10R project component). Public access from Via Marina to the waterfront will be provided along the perimeter of the adjacent public wetland park. Moreover, the public will be able to access both the public waterfront promenade and adjacent wetland park at multiple access points to be provided within the hotel/timeshare resort facility.

Discretionary approvals required for this component of the project include a Coastal Development Permit (required for all new development in the coastal zone), a Tentative Tract Map approval (related to the proposed timeshare units), a Conditional Use Permit (for the proposed parking structure, project building identification signage, an emergency rooftop helistop, and the sale of alcoholic beverages for on-site consumption at the proposed accessory hotel restaurant and outdoor terrace dining area), a Parking Permit for shared use of on-site parking and a Variance (to allow a reduced yard adjacent to the waterfront pedestrian promenade). No amendments to the certified LCP are required for this project component (see **Section 5.15, Parks and Recreation**, for LCP consistency discussion).

Component 4 consists of a 1.46-acre restored public wetland and upland park that would be constructed on the southern portion of Parcel 9U. Discretionary approvals required for this component of the project include a Coastal Development Permit, filed by the County as applicant.

Component 5 includes a public-serving anchorage containing approximately 542 lineal feet of dock space (accommodating berthing of between 7 and 11 public and transient boats, and dinghy moorage) that would be situated adjacent to the Parcel 9U bulkhead within Marina del Rey Basin B. The anchorage would provide four sewage pumpout stations with a single sewage pump that would drain to the existing sewer system. For this project component, the County's "Approval in Concept" is required prior to making application to the California Coastal Commission for a separate Coastal Development Permit authorizing this proposed waterside development.

The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort ~~Project~~ projects would, therefore, collectively consist of 526 residential dwelling units, 288 hotel/timeshare suites with an assortment of accessory patron- and visitor-serving uses, 174 private and between 7 and 11 public-serving boat spaces and dinghy moorage area, a waterfront public pedestrian promenade and a restored public wetland and upland park area. As there are 136 existing apartments and 198 boat spaces presently on site, implementation of the proposed project would result in a net increase of 390 apartment units, 288 hotel and timeshare suites with accessory patron- and visitor-serving uses, a net decrease of up to 17 boat spaces, a 0.47-acre wetland and 0.99-acre public upland buffer area.

For the residential and hotel/timeshare resort project components, emphasis has been placed on a design that balances public and private views of the marina and enhances the pedestrian experience adjacent to the water. A major feature of the projects that unifies and integrates the proposed residential units, the hotel/timeshare resort, the public wetland and upland park and the adjacent private and public marina components is a pedestrian walkway between the buildings and the anchorages, the "Waterfront Stroll Promenade." Located along the waterside perimeter of Marina Basins B and C, the 28-foot-wide Waterfront Stroll Promenade would feature color-patterned paving, pedestrian seating and marina-styled fencing and lighting and would total 2,023 feet in length (1,437 feet associated with Neptune Marina Parcel 10R, 386 feet associated with the Woodfin Suite Hotel and Timeshare Resort and adjacent public wetland and upland park on Parcel 9U, and 200 feet associated with Neptune Marina Parcel FF, totaling nearly 0.5 mile in length). ~~Along~~ Intermittently along its length, the Waterfront Stroll Promenade would also feature landscaped planters ~~and other landscape~~, benches, decorative light standards, drinking fountains and potential other ~~features~~ pedestrian amenities constructed ~~immediately~~ adjacent to ~~this pedestrian amenity~~the open promenade. The entire length of the Waterfront Stroll Promenade would be open to the public and would also function as Fire Department access.

3.1.3.1.1 Residential Units: Neptune Marina Project (Parcels 10R and FF)

As proposed, the Neptune Marina Project consists of four new residential structures each being four stories above two levels of parking (**Figure 3.0-3, Residential Units**). Three buildings (depicted as Buildings 1, 2, and 3 on Site Plan in **Figure 3.0-2**) are situated on Parcel 10R south of Marquesas Way, while one building (depicted as Building 4 on Site Plan in **Figure 3.0-2** below) is situated north of Marquesas Way on Parcel FF. Within the four structures, 526 residential units are proposed that include rental apartment and rental townhome units. The design of the residential component of the project emphasizes a relationship to the waterfront and was conceptually approved by the Design Control Board (DCB) on June 29, 2006. Apartment building orientations have been configured to ensure direct pedestrian access to the Waterfront Stroll Promenade, a portion of which fronts on the newly constructed Neptune Marina Anchorage (Parcel 10R only). There are multiple points for the public to have unimpeded access to the Waterfront Stroll Promenade and the marina. The apartment structures have been separated to the maximum extent feasible to allow for unobstructed view corridors.

The various vehicular, non-vehicular and fire access entries on the property would provide pedestrian access to the promenade and are located between buildings. All access points would be treated with enhanced paving and landscaping that open to the Waterfront Stroll Promenade.

One- and two- bedroom rental units are proposed in 11 different floor-plan configurations. As defined above, 526 residential units are planned. Of these, 330 are one-bedroom apartment units (63 percent of the total) in four different floor-plan configurations; and 196 are two-bedroom apartment units (37 percent of the total) in two different floor-plan configurations. **Table 3.0-1, Description of Proposed Residential Units by Type (Parcels 10R and FF)**, below, provides a breakdown of the number of residential units by product type and their approximate size.

Table 3.0-1
Description of Proposed Residential Units by Type (Parcels 10R and FF)

Type of Unit	Quantity Proposed	Size of Unit (sq. ft.)
1-Bedroom Apartment; Type A-1	196	716
1-Bedroom Apartment; Type A-2	64	650
1-Bedroom Apartment; Type A-3	64	849
1-Bedroom Apartment; Type A-4	6	745
2-Bedroom Apartment; Type B-1	46	1,122
2-Bedroom Apartment; Type B-2	42	1,282

Type of Unit	Quantity Proposed	Size of Unit (sq. ft.)
2-Bedroom Townhome; Type T-1	28	1,359
2-Bedroom Townhome; Type T-1b	8	1,543
2-Bedroom Townhome; Type T-1c	10	1,529
2-Bedroom Townhome; Type T-2	28	1,691
2-Bedroom Townhome; Type T-3	34	1,653
TOTAL	**526**	

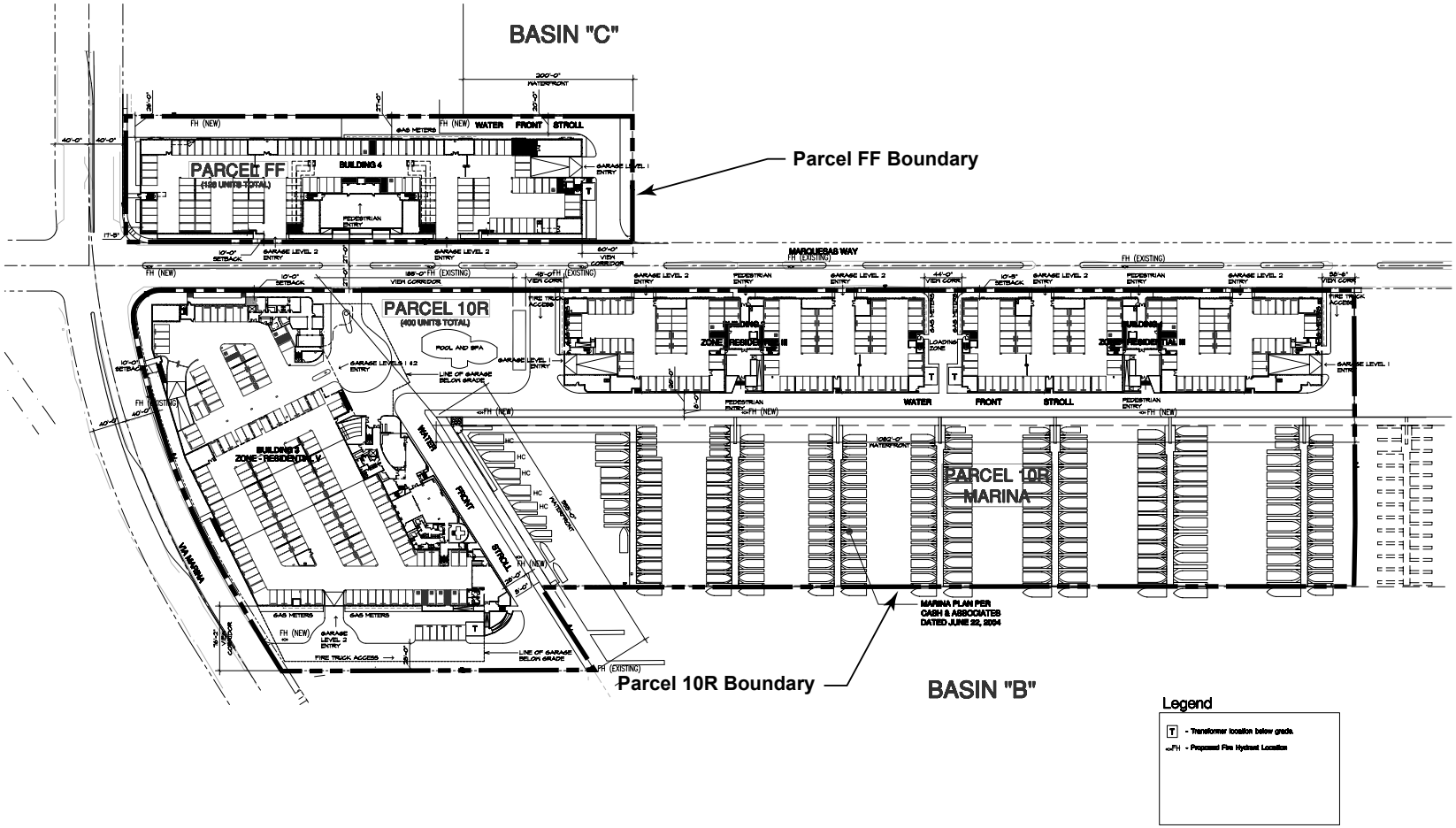
Figure 3.0-4 through **Figure 3.0-7** provide illustrations of conceptual floor plans for each of the four residential structures that comprise the Neptune Marina Project (Parcels 10R and FF). The proposed new residential structures would consist of 4, four-story Type V, 1-hour, fully sprinklered, wood-framed residential buildings that would be constructed over a two-level parking garage. Structures are designed with open-air courtyards and perimeter landscaping which is incorporated into the public Waterfront Stroll Promenade. As noted, structure height would not exceed 55 feet for Buildings 1, 2, and 3 and 60 feet for Building 4 (exclusive of appurtenant, screened roof-top equipment) when measured per county standards.

Figure 3.0-8, Building Elevations: Residential Units–Parcel 10R, and **Figure 3.0-9, Building Elevations: Residential Units–Parcel FF**, provide representative building elevations, while **Figure 3.0-10, Building Cross Sections: Residential Units**, illustrates representative building cross sections for each proposed structure.

3.1.3.1.1.1 Residential Amenities Neptune Marina Project (Parcels 10R and FF)

The residential component of the project would feature a variety of recreational amenities, including a resident's fitness center, a media theater room, a recreational lounge, a game room and a business center. In addition to these facilities, the residential component of the project would include space for the harbormaster and leasing offices.

Outdoor recreational amenities would include landscaped decks and grounds adjacent to the Waterfront Stroll Promenade. An exterior pool is proposed between Buildings 2 and 3 (Parcel 10R). These exterior recreational areas would face the marina and would be connected directly to the public Waterfront Stroll Promenade via key-accessed secure gates.

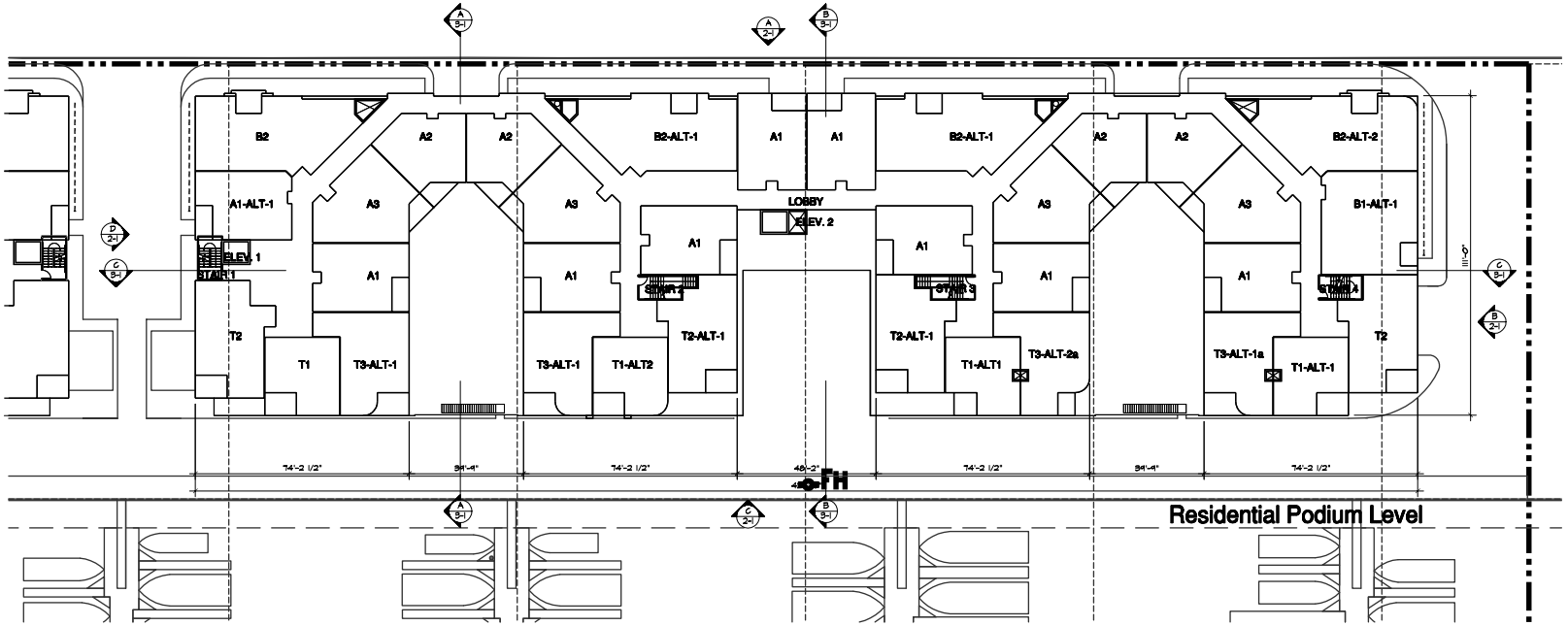


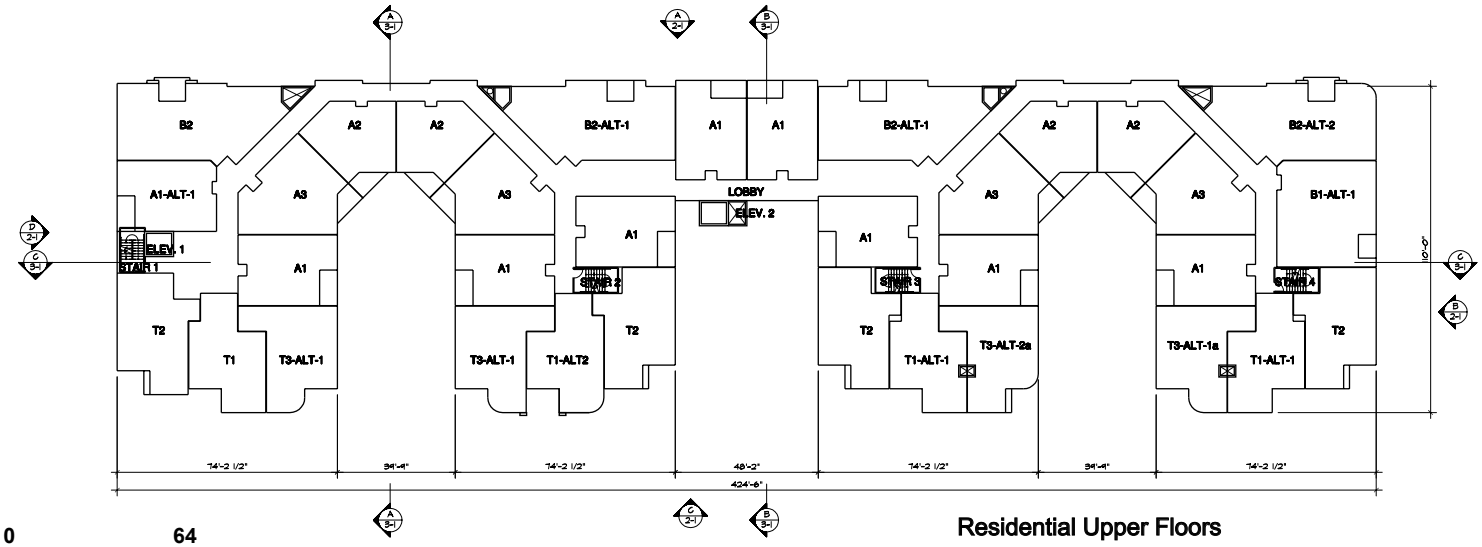
SOURCE: Thomas P. Cox: Architects, Inc. – August 2008; Note: Ground Level Perspective

FIGURE **3.0-3**

Residential Units

460-04•05/09





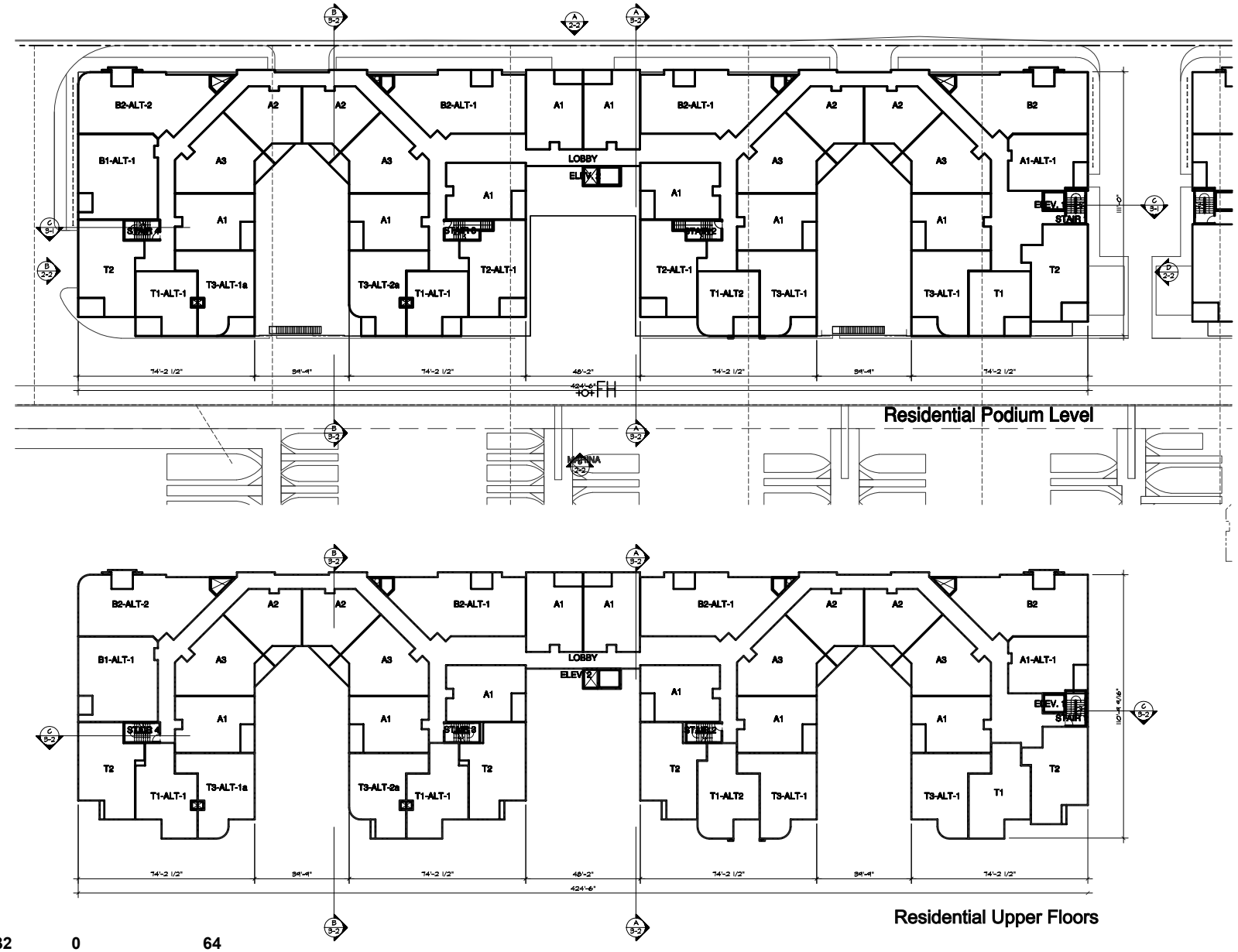
64 32 0 64

APPROXIMATE SCALE IN FEET

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005

FIGURE **3.0-4**

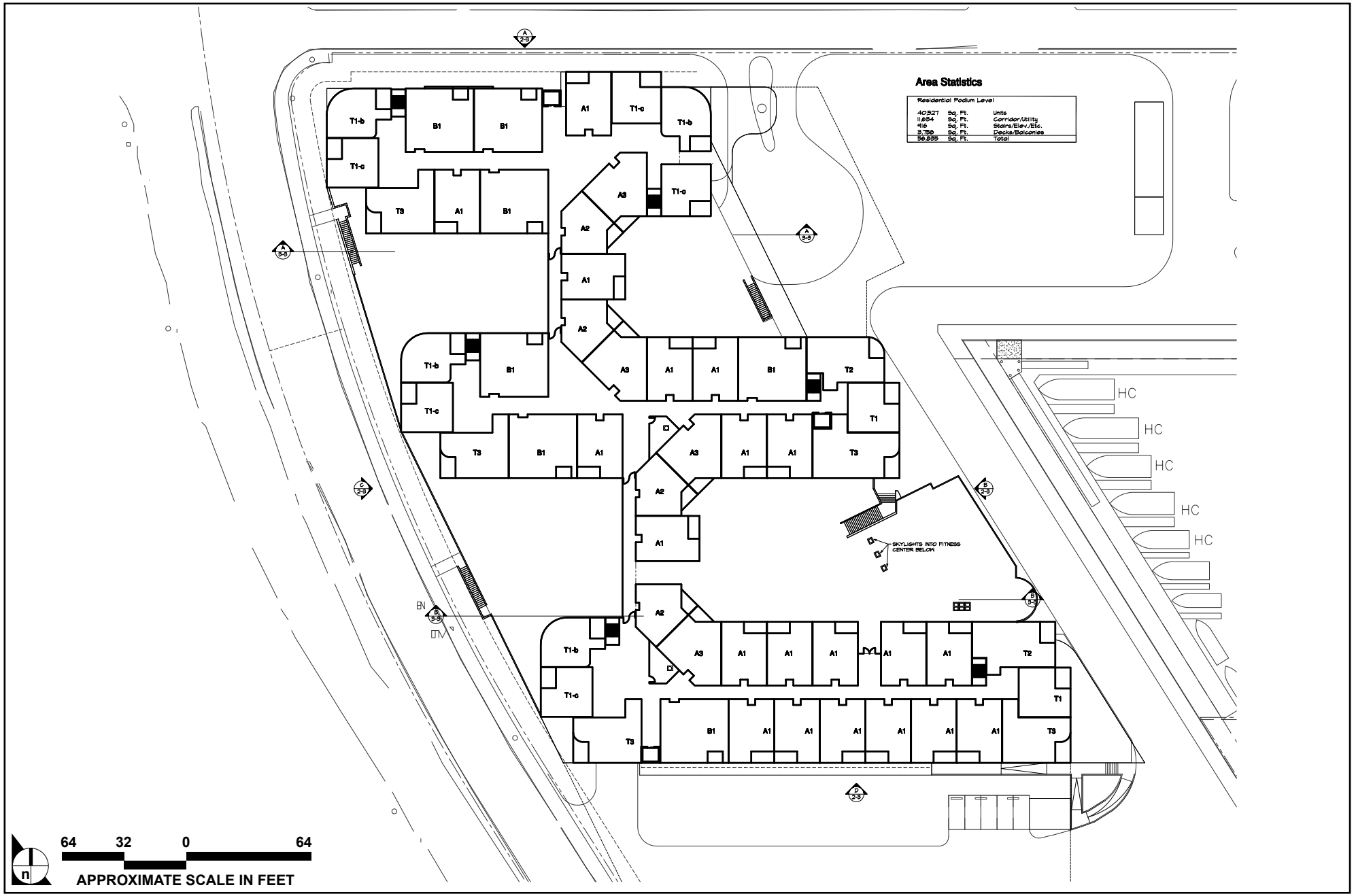
Conceptual Floor Plans: Building One



SOURCE: Thomas P. Cox: Architects, Inc. – October 2005

FIGURE **3.0-5**

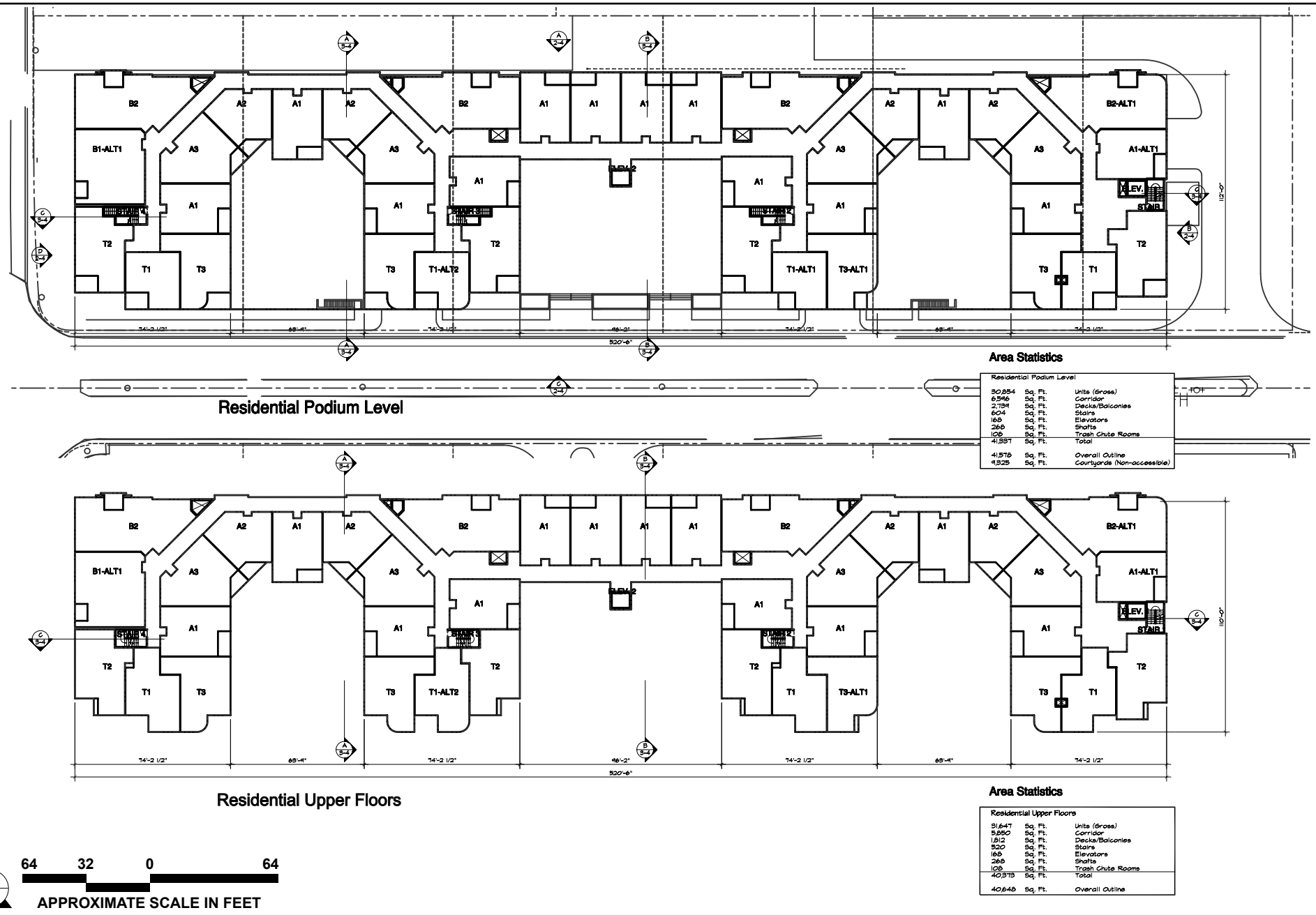
Conceptual Floor Plans: Building Two



SOURCE: Thomas P. Cox: Architects, Inc. – October 2005

FIGURE **3.0-6**

Conceptual Floor Plans: Building Three



SOURCE: Thomas P. Cox: Architects, Inc. – October 2005

FIGURE **3.0-7**

Conceptual Floor Plans: Building Four

460-04•12/07

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – June 2005

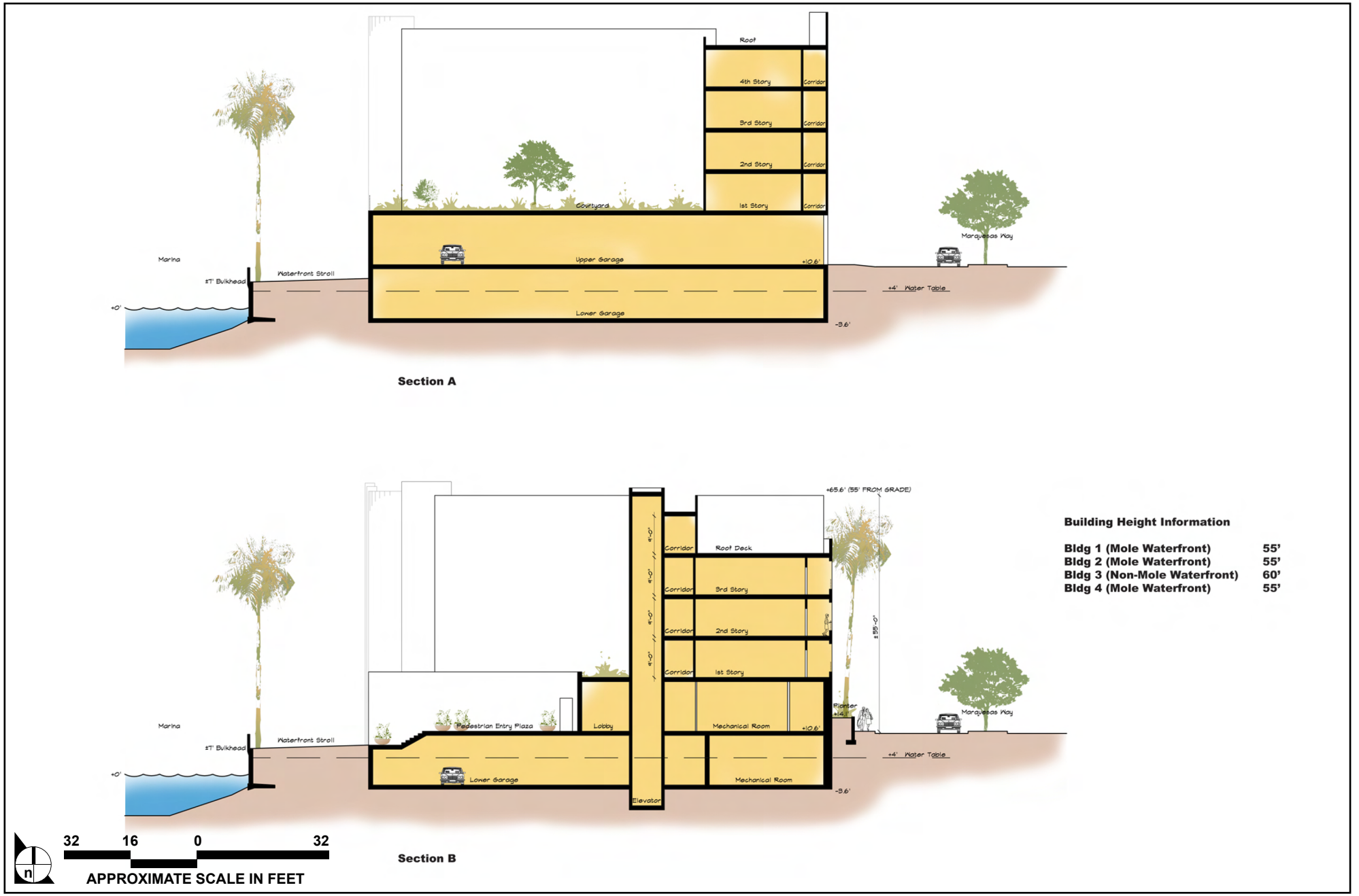
FIGURE **3.0-8**

Bulding Elevations: Residential Units – Parcel 10R

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – June 2005

FIGURE **3.0-9**

Building Elevations: Residential Units – Parcel FF



SOURCE: Thomas P. Cox: Architects, Inc. – October 2005

FIGURE **3.0-10**

Building Cross Sections: Residential Units

460-04•12/07

3.1.3.1.2 Boat Anchorage: Neptune Marina Project (Parcel 10R)

The proposed Neptune Marina Anchorage, a component part of the Neptune Marina Parcel 10R project, is illustrated in **Figure 3.0-11, Parcel 10R Marina Site Plan**. Within Basin B, a new anchorage would be developed waterside of Buildings 1, 2, and 3 (Parcel 10R) and would be constructed concurrent with the apartment buildings. The existing 198-boat space anchorage would be removed and replaced with 174 new slips and end-tie spaces (a net reduction of 24 spaces). The new marina includes 5 spaces compliant with Americans with Disabilities Act (ADA) requirements. A total of 150 of the 174 proposed spaces are 34 feet or less, with 24 spaces accommodating boats 35 feet in length or more. Maximum slip length would be 40 feet. A summary of the new marina adjacent to Parcel 10R is provided in **Table 3.0-2, Proposed Space Sizes and Quantities (Excluding Public-Serving Spaces)**. Parking is provided in structures below Building 1, 2, and 3.

Table 3.0-2
Proposed Space Sizes and Quantities (Excluding Public-Serving Spaces)

Length	Regular	End Ties	ADA	Total	Total Length
24 Feet	9			9	216′
26 Feet	3			3	78′
28 Feet	10			10	280′
30 Feet	71	7	1	79	2,370′
32 Feet	5			5	160′
34 Feet	38	4	2	44	1,496′
38 Feet	2			2	76′
40 Feet	18	2	2	22	880′
TOTAL	**156**	**13**	**5**	**174**	**5,556′**

The new marina would replace the existing anchorage facilities with docks and spaces meeting current State of California Department of Boating and Waterways Guidelines for space widths and federal requirements for ADA compliance through use of an ADA gangway and ramp system, which would service a range of space sizes. It is anticipated that the new docks would be constructed with current marina industry technology and materials (possibly a proprietary concrete dock system, with all new pre-stressed concrete guide piles and served with a new utility distribution system for power, water, cable, and phone connections).

ADA requirements and modern boat dimensions (wider beam widths) necessitate the 24-space reduction defined above. ~~Current ADA requirements and analysis of modern boat dimensions are provided in~~

~~**Appendix 3.0.**~~ In the anchorage, all utility lines would be concealed under the deck. As shown in **Figure 3.0-11**, the anchorage design utilizes seven gates and gangways to access the docks from the landside. Gate access would be electronically controlled.

To promote clean water boating, sewage pump-out would be located in a central location that would serve the entire anchorage. Oversized storage facilities (dock boxes) would be provided at the anchorage to better serve recreational boaters.

3.1.3.1.3 Woodfin Suite Hotel and Timeshare Resort Project

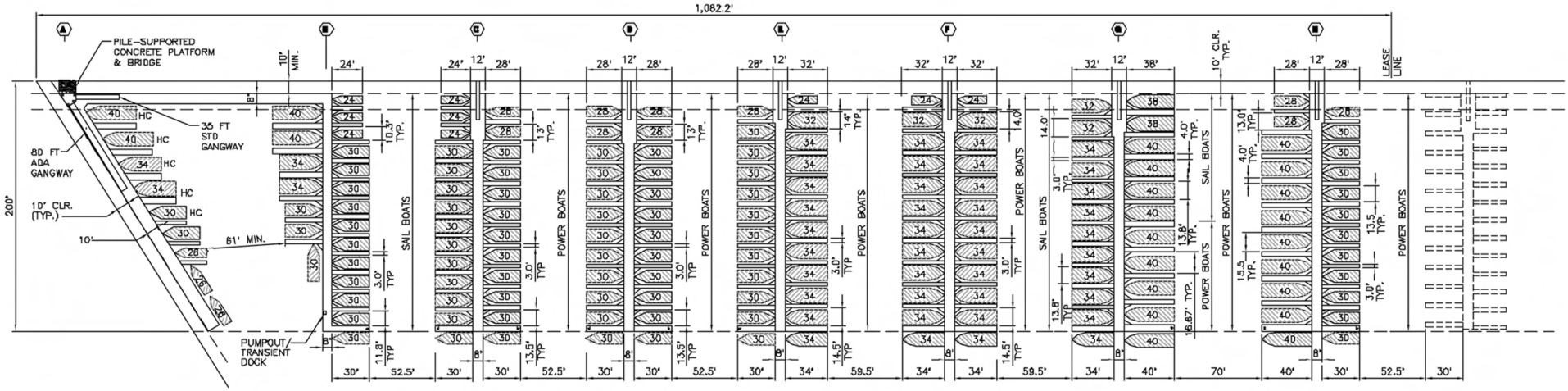
Figure 3.0-12, Site Plan: Woodfin Resort Hotel and Timeshare Resort, provides a conceptual illustration of the proposed Woodfin Suite Hotel and Timeshare Resort Project. The project is situated on the northern portion of Parcel 9U and consists of a 19-story building with 288 hotel and timeshare suites and an assortment of accessory patron- and/or visitor-serving uses, including meeting rooms, a restaurant and bar/lounge, an exercise room, a spa, an outdoor pool, and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities. The building would also feature an outdoor terrace and a large third floor deck with a pool, both of which would overlook the waters of the marina. In total, 360 parking spaces would be provided in a six-level parking garage, with one level below grade.

The intent of the site plan was to concentrate development on the northern portion of the project site and preserve the southern portion of Parcel 9U as a restored public wetland and upland park. All ground floor uses would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the wetland park, and the public-serving boat spaces combine to create an interactive public node.

Consistent with the certified LCP and past CCC approvals, height of the hotel/timeshare resort structure would not exceed 225 feet (exclusive of appurtenant, screened roof-top equipment, parapets and architectural features) when measured from the finished grade. The structure would front Via Marina and would be located southeast of the intersection of Via Marina and Marquesas Way and northeast of the intersection of Via Marina and Tahiti Way.

3.1.3.1.3.1 Proposed Hotel/Timeshare Resort Building Layout

Floors one, two, and three of the hotel would include all non-residential areas of the buildings, including loading areas, hotel lobby and offices, a restaurant and bar, an exercise room, a spa, a pool, outdoor function areas, meeting rooms and a conference room/ballroom. Cross-sections of the project are



(SAIL/POWER BOATS) SINGLE WIDE SLIPS

OPTION 174

OPTION 174 – BOAT COUNT

LENGTH	REGULAR	END TIES	ADA	TOTAL	TOTAL LF
24'	9			9	216'
26'	3			3	78'
28'	10			10	280'
30'	71	7	1	79	2370'
32'	5			5	160'
34'	38	4	2	44	1496'
38'	2			2	76'
40'	18	2	2	22	880'
TOTAL	156	13	5		
GRAND TOTAL				174	5558'

AVERAGE BOAT SIZE = 31.94'

9/174x100=5% 24' OR LESS
12/174x100=7% 26' OR LESS
22/174x100=13% 28' OR LESS
101/174x100=58% 30' OR LESS
106/174x100=61% 32' OR LESS
150/174x100=86% 34' OR LESS

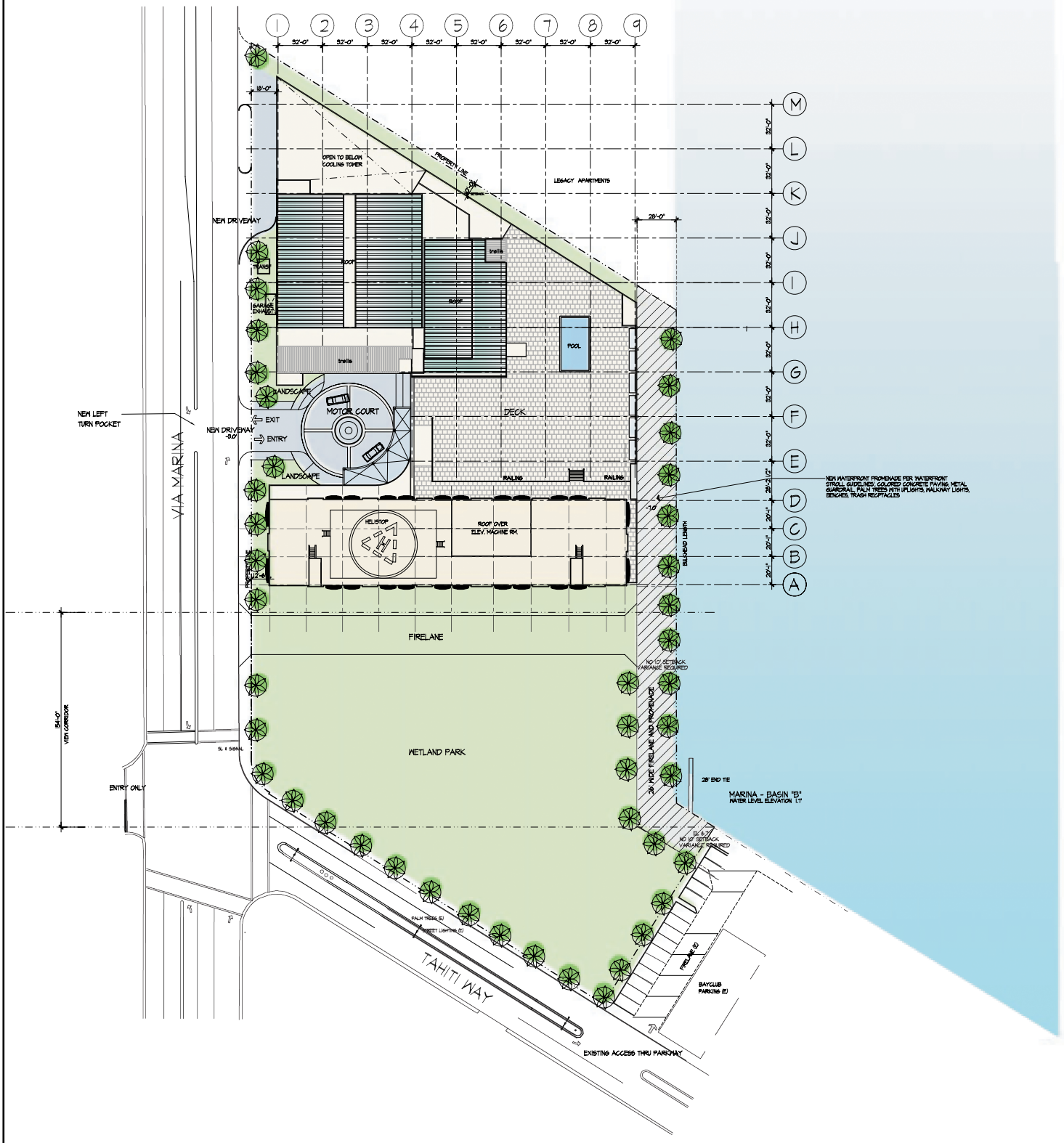
80 40 0 80

APPROXIMATE SCALE IN FEET

SOURCE: Thomas P. Cox: Architects, Inc. – March 2006

FIGURE **3.0-11**

Parcel 10R Marina Site Plan



SOURCE: Gin Wong Associates – February 2006

FIGURE **3.0-12**

Site Plan: Woodfin Suite Hotel and Timeshare Resort

illustrated on **Figures 3.0-13, Cross Sections: Woodfin Suite Hotel and Timeshare Resort**, and **3.0-14, Cross Sections: Woodfin Suite Hotel and Timeshare Resort**. Building elevations are shown on **Figure 3.0-15, Conceptual Building Elevations: Woodfin Suite Hotel and Timeshare Resort**.

The ground floor of the project would include the lobby and registration/reception area, elevator bays (four bays), the business center, hotel offices, a resort restaurant and bar, kitchen, sundry shop, meeting rooms and restrooms. The exterior of the ground floor of the hotel (**Figure 3.0-16, Ground Floor Plan: Woodfin Suite Hotel and Timeshare Resort**) would provide for resort ancillary uses consisting of outdoor dining areas, the motor court (drop-off and valet parking area), the entrance to the parking area, and service docks for truck loading. All ground floor uses would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, restored wetland and upland park and the public-serving boat spaces combine to create an interactive public node.

Second and third floor uses are illustrated on **Figure 3.0-17, Second and Third Floor Plans: Woodfin Suite Hotel and Timeshare Resort**. As shown, second floor uses would include a ballroom, meeting rooms, and banquet kitchen. The third floor of the building would contain an exercise room/spa that would open to the pool deck.

The tower portion of the building, incorporating portions of the second and third floors, and floors 4 through 19, would contain the 288 hotel and timeshare units. An example of the layout of these floors is presented in **Figure 3.0-18, Floor Plans Four through Nineteen: Woodfin Suite Hotel and Timeshare Resort**. Other uses on floors 4 through 19 would include the elevator lobby, a service lobby, and housekeeping rooms.

An emergency helistop is proposed on the roof of the hotel complex consistent with County Code requirements (Fire Code 1107.9). Other screened roof elements include mechanical equipment, chillers, cooling towers, a service lobby, elevator machine room, and an emergency generator and boiler.

3.1.3.1.3.2 Hotel and Timeshare Units

In total, 288 hotel and timeshare guest units are proposed as part of the project. There are three general types of units proposed for the building: hotel units, one-bedroom timeshare units and two-bedroom timeshare units. As proposed, there would be 152 conventional hotel suites, 68 one-bedroom timeshare units, and 68 two-bedroom timeshare units. Each hotel suite and timeshare unit would have one or two bedrooms, a sitting area, kitchenette and bathroom, and an exterior balcony.

All of the project's proposed 136 timeshare suites are intended and designed to be used on a temporary basis by guests. At this time, it is expected that stays in the timeshare units would be limited to no more

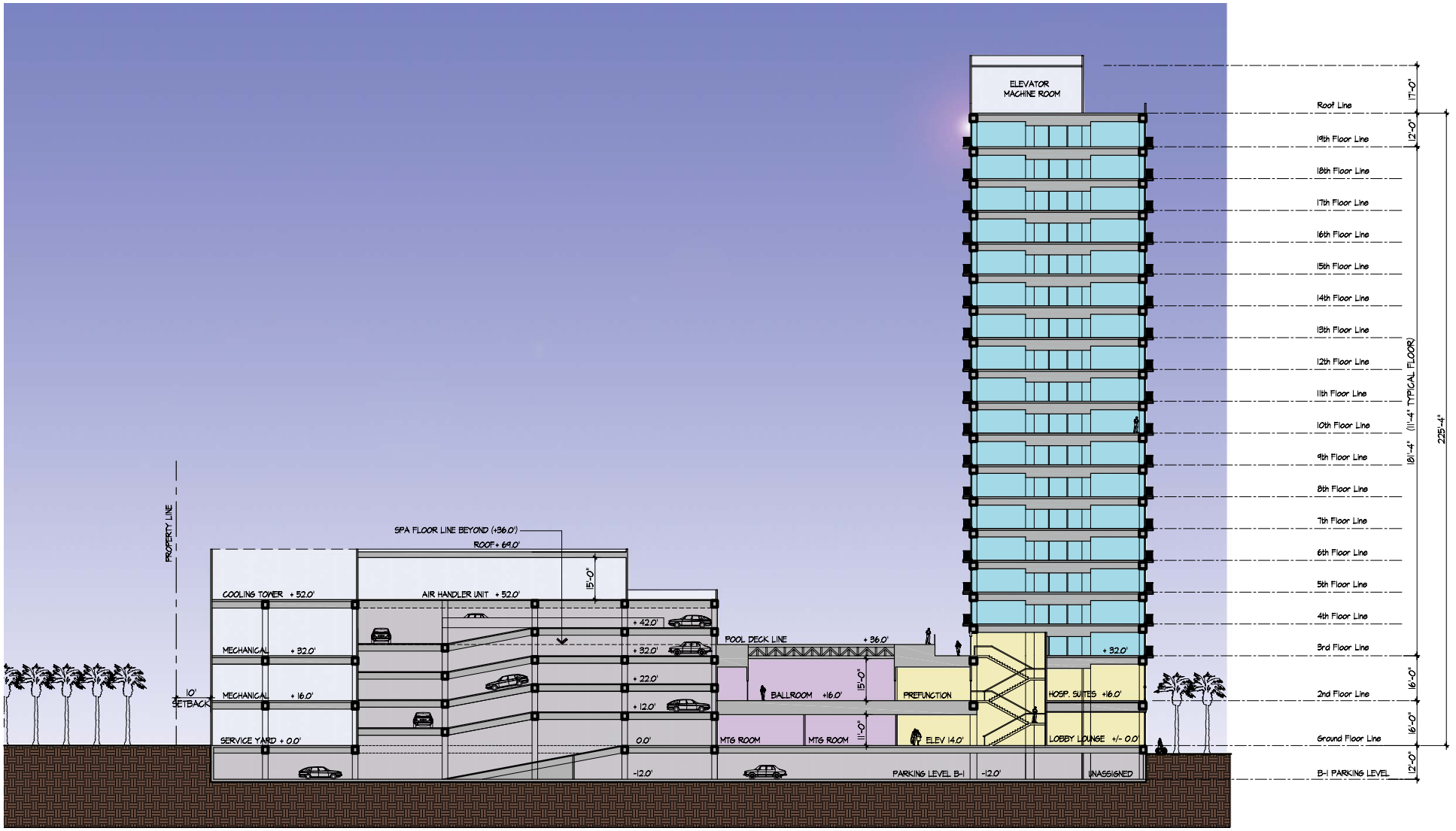
than four weeks annually and consecutively. Per Title 22 of the Los Angeles County Code, hotel stays would be limited to 30 consecutive days for any one stay. Moreover, the Woodfin Suite Hotel and Timeshare Resort will be a full-service facility, with a single set of support facilities (check-in desk, reception, restaurants, cocktail lounge, etc.) for both timeshare and hotel users. Therefore, there will be no distinction in terms of services between hotel patrons and timeshare patrons.

The Woodfin Suite Hotel and Timeshare Resort will enhance visitor-serving uses by providing much needed additional overnight accommodations through both the hotel and timeshare component, both of which are consistent with the LCP. The hotel and timeshare units are intended or designed to be indistinguishable and used on a temporary basis by guests. Some key operational aspects of the project include:

- The timeshare suites will not be in a separate tower from the hotel suites; rather, both the hotel and timeshare suites will be on same floors (4 through 19).
- Rental of both the timeshare suites and hotel suites will be handled in a similar manner by on-site management (electronic keys issued by the front desk, concierge services, housekeeping, and front-desk check-in/out).
- Timeshares will be made available to the general public through the hotel reservation system when not used by timeshare vacationers.
- Timeshare vacationers may make their unused timeshare suites available to the general public.
- Timeshare suites will be marketed through an exchange program and through the hotel, and will be rented at comparable rates to equivalent hotel suites.
- Timeshare suites will be sold in one-week intervals.
- Stays in the timeshare suites will be limited to no more than a total of four weeks annually.
- The Woodfin timeshare component will remain a commercial use and will comply with the timeshare laws governed by the California Department of Real Estate.

3.1.3.1.3.3 Guest and Visitor Amenities

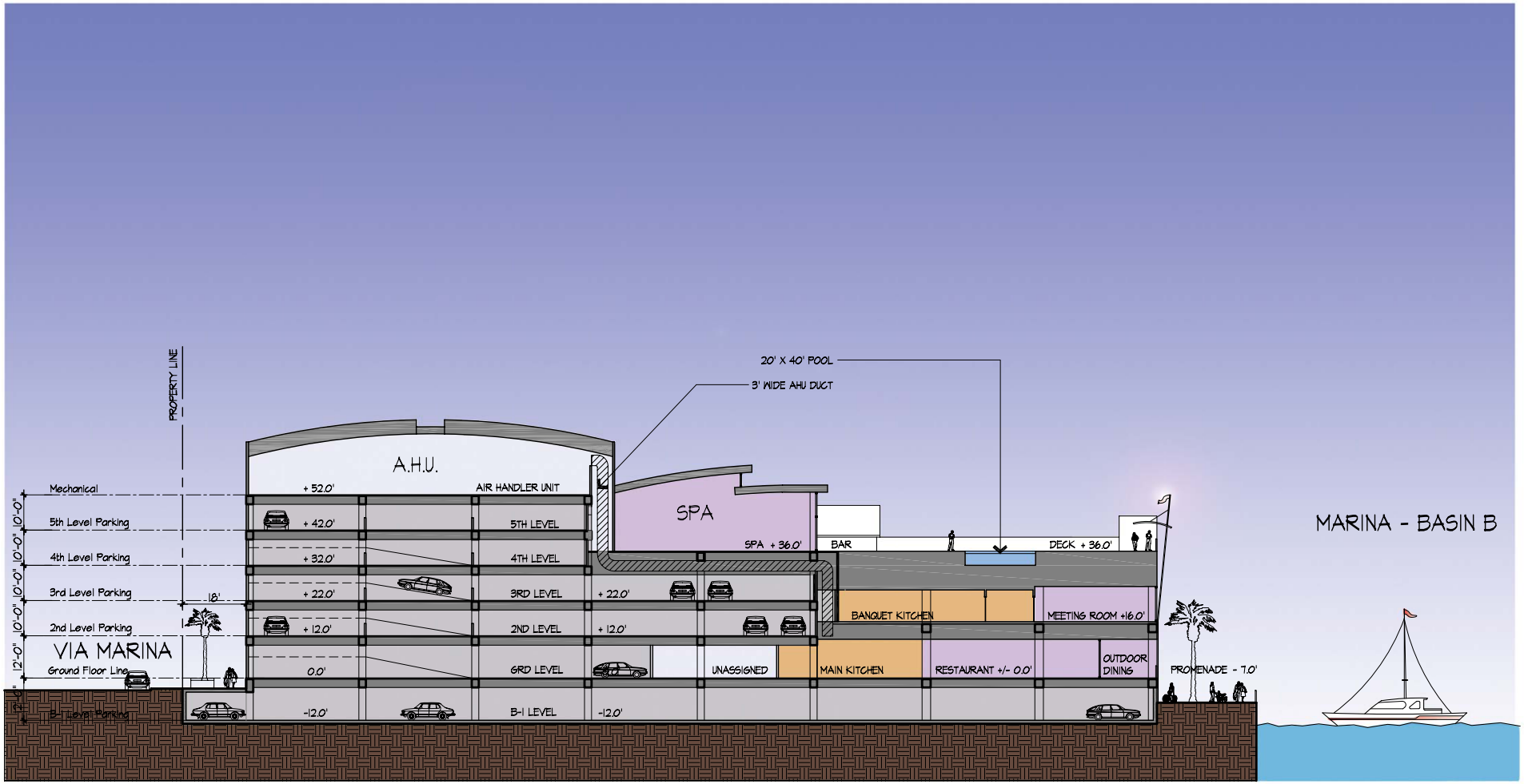
The Woodfin Suite Hotel and Timeshare Resort project would feature a variety of visitor-serving recreational amenities, including a restaurant and bar, a business center, meeting rooms, sundry shop, and exercise room/spa. Outdoor amenities would include pool facilities and a dining terrace overlooking the Waterfront Stroll Promenade and the Marina.



SOURCE: Gin Wong Associates – February 2006

FIGURE **3.0-13**

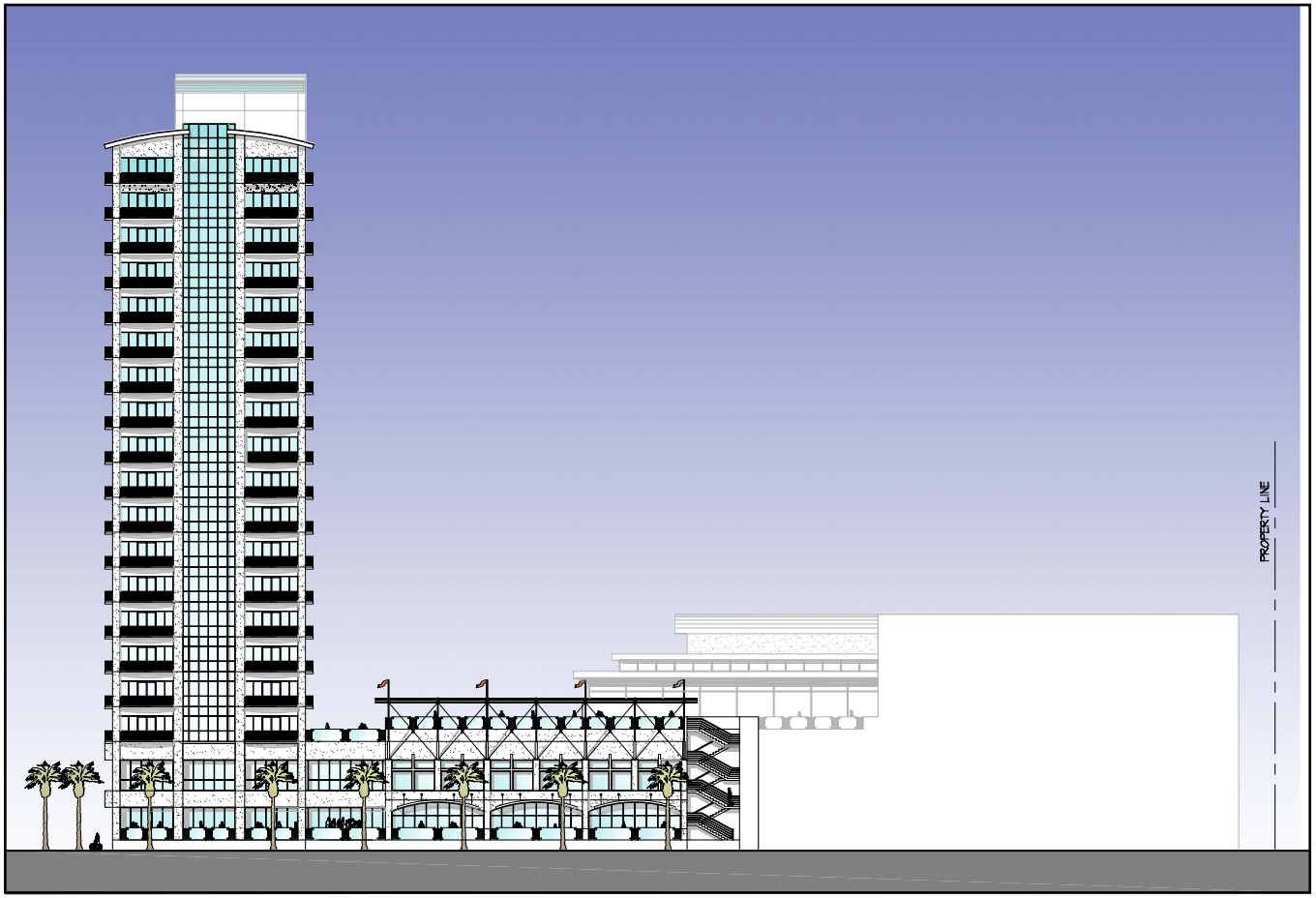
Cross Sections: Woodfin Suite Hotel and Timeshare Resort



SOURCE: Gin Wong Associates – February 2006

FIGURE **3.0-14**

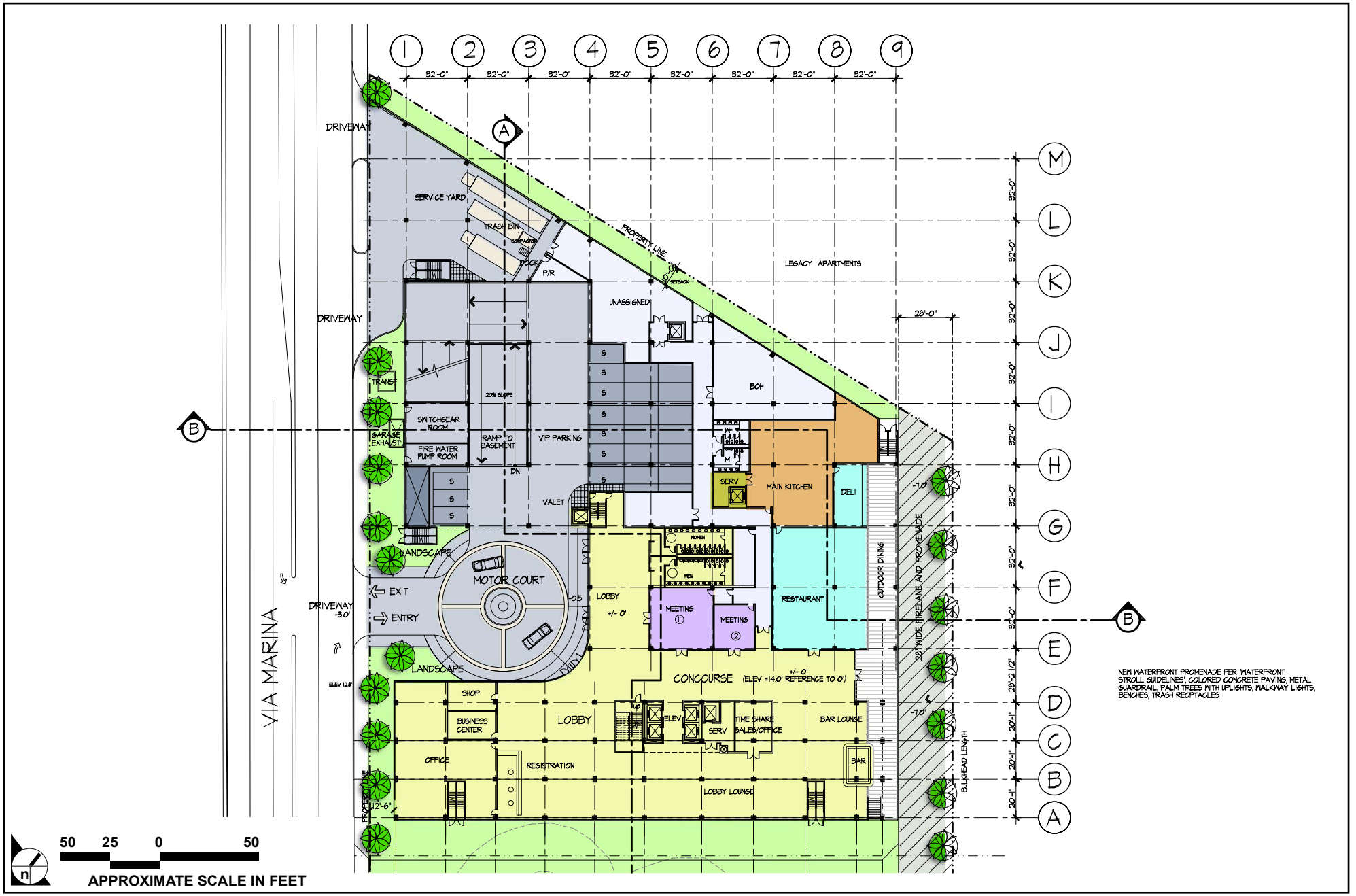
Cross Sections: Woodfin Suite Hotel and Timeshare Resort



SOURCE: Gin Wong Associates – 2006

FIGURE **3.0-15**

Conceptual Building Elevations: Woodfin Suite Hotel and Timeshare Resort

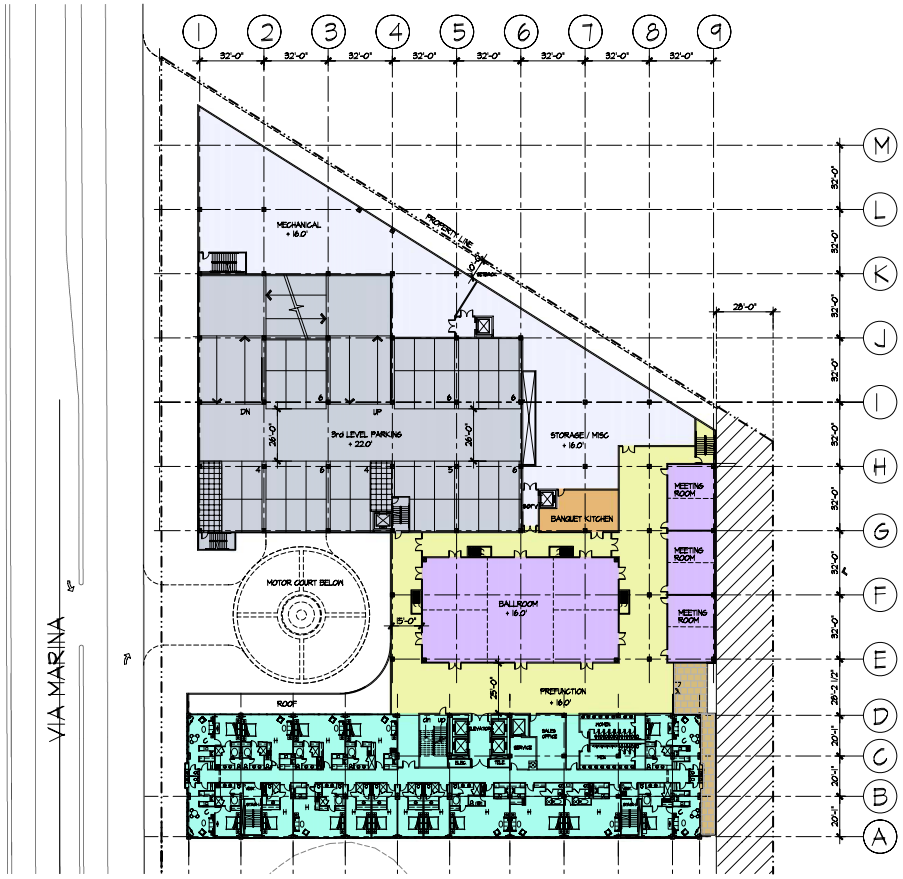


SOURCE: Gin Wong Associates – 2006

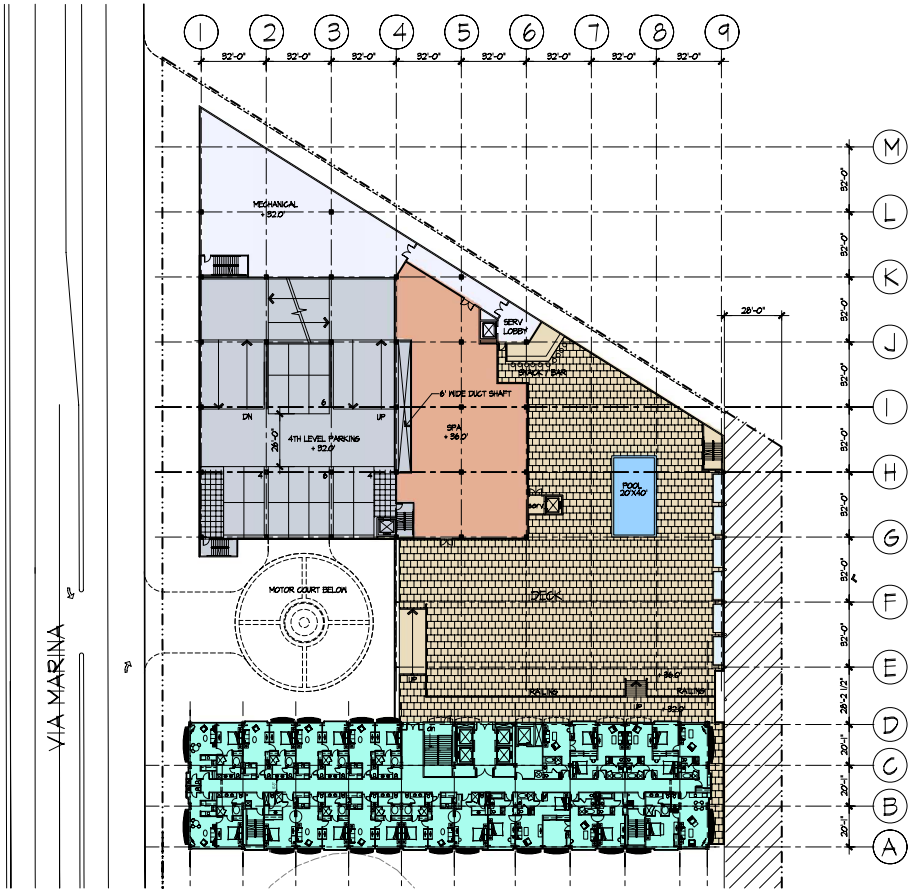
FIGURE **3.0-16**

Ground Floor Plan: Woodfin Suite Hotel and Timeshare Resort

460-04•12/07



Second Floor Plan



Third Floor Plan

50 25 0 50

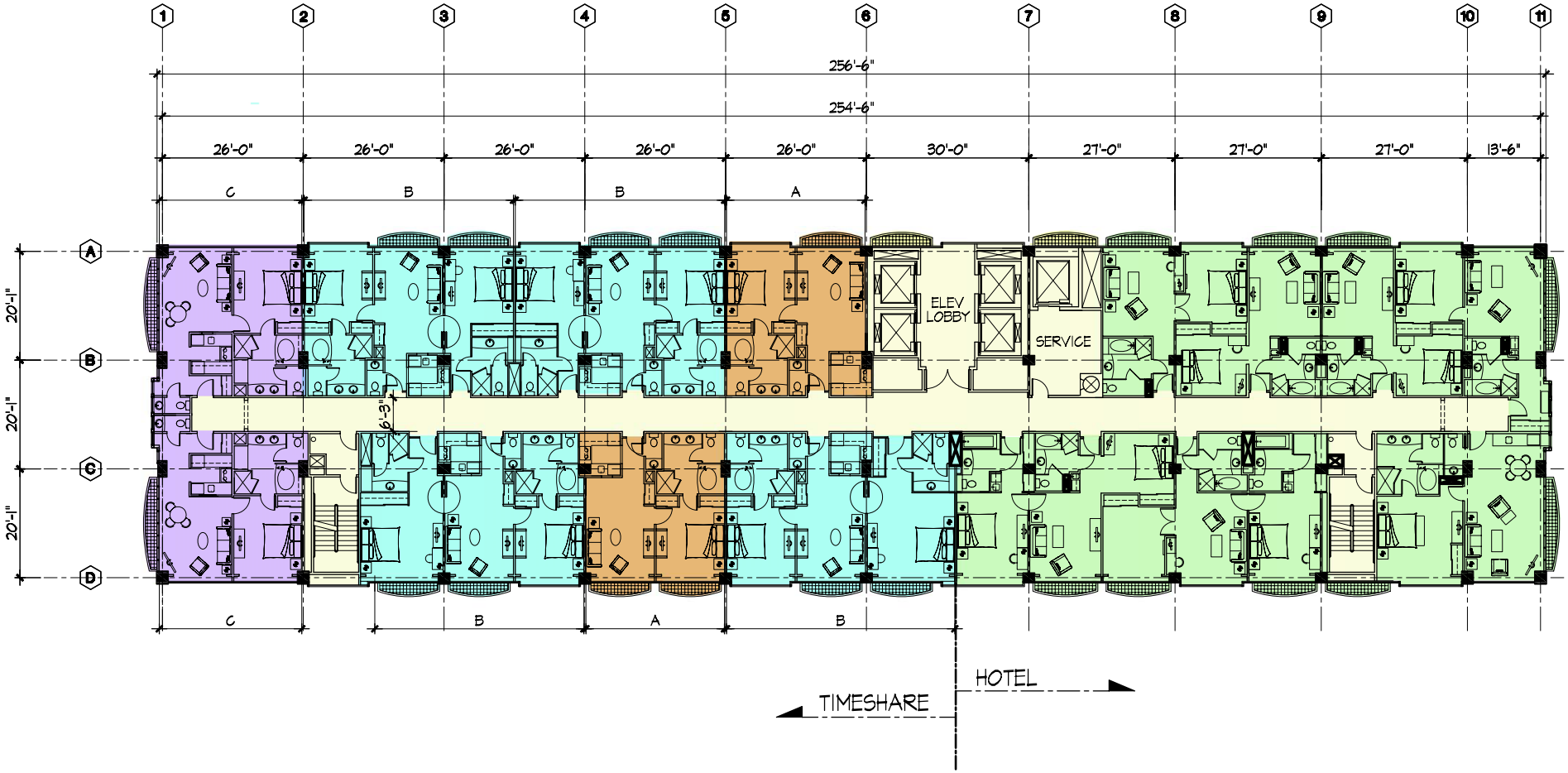
APPROXIMATE SCALE IN FEET

SOURCE: Gin Wong Associates – 2006

FIGURE **3.0-17**

Second and Third Floor Plans: Woodfin Suite Hotel and Timeshare Resort

460-04•12/07



SOURCE: Gin Wong Associates – 2006

FIGURE **3.0-18**

Floor Plans Four Through Nineteen: Woodfin Suite Hotel and Timeshare Resort

460-04•12/07

3.1.3.1.3.4 Public Amenities

A major feature of the project that unifies and integrates the hotel/timeshare resort with the Marina is the continuation of the Waterfront Stroll Promenade from Legacy Partners' Parcel 10R ~~p~~Project across the entire waterfront extent of Parcel 9U. The Waterfront Stroll Promenade is an improvement to an existing narrow (approximately 8 feet) concrete sidewalk that occurs adjacent to the marina. A conceptual representation of this feature is presented in **Figure 3.0-19, Waterfront Stroll Promenade**. To be located along the waterside perimeter of the proposed hotel/timeshare resort and public wetland park at Parcel 9U, the 28-foot-wide public Waterfront Stroll Promenade will feature special color-patterned paving, landscaping, pedestrian seating and marina-styled fencing and lighting and would also serve as fire access. The length of the Waterfront Stroll Promenade on Parcel 9U is approximately 386 feet. The hotel/timeshare resort will feature landscaped planters and other features constructed immediately adjacent to but separated from the public Waterfront Stroll Promenade. Landscaped areas are also proposed along the western, eastern, and southern margins of the project and in various perimeter areas surrounding the hotel/timeshare resort structure. During project operation, public access to the Marina and the Waterfront Stroll Promenade will be available at all times along a walkway on the southeastern side of the building. This walkway would be treated with enhanced paving and landscaping similar to that of the Waterfront Stroll Promenade. Temporary closures to the promenade will occur during construction activities.

As stated, all ground floor uses of the hotel would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the restored wetland and upland park and the public-serving boat spaces combine to create an interactive public node.

3.1.3.1.4 Access and Parking: Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

3.1.3.1.4.1 Neptune Marina: Parcels 10R and FF

For residents, vehicular access (**Figure 3.0-20, Neptune Marina Project Vehicular Access**) to and from the proposed residential components would be provided at 11 locations. Ten points of access are located off Marquesas Way (seven to the south and three to the north). The one remaining point of vehicular access is located along Via Marina south of Marquesas Way. For residential visitors, vehicular access to the interior portions of the project is via four signed entrances on Marquesas Way. New median cuts along Marquesas Way are proposed that will require the removal of up to nine trees landscape trees. Vehicular access for boaters and users of the anchorage is via one entrance on Via Marina (to the south). Pedestrian access to the public Waterfront Stroll Promenade is via a series of signed paved walkways between the buildings.

In each of the four proposed buildings, parking is provided in two-level garages built below each building. The lowest level of parking is entirely subterranean on the street side of the building while the upper level of parking would be built at ground level. All parking garages would be screened by architectural and landscaping features, primarily by terraced, landscaped planters along the street and by landscaping along the promenade.

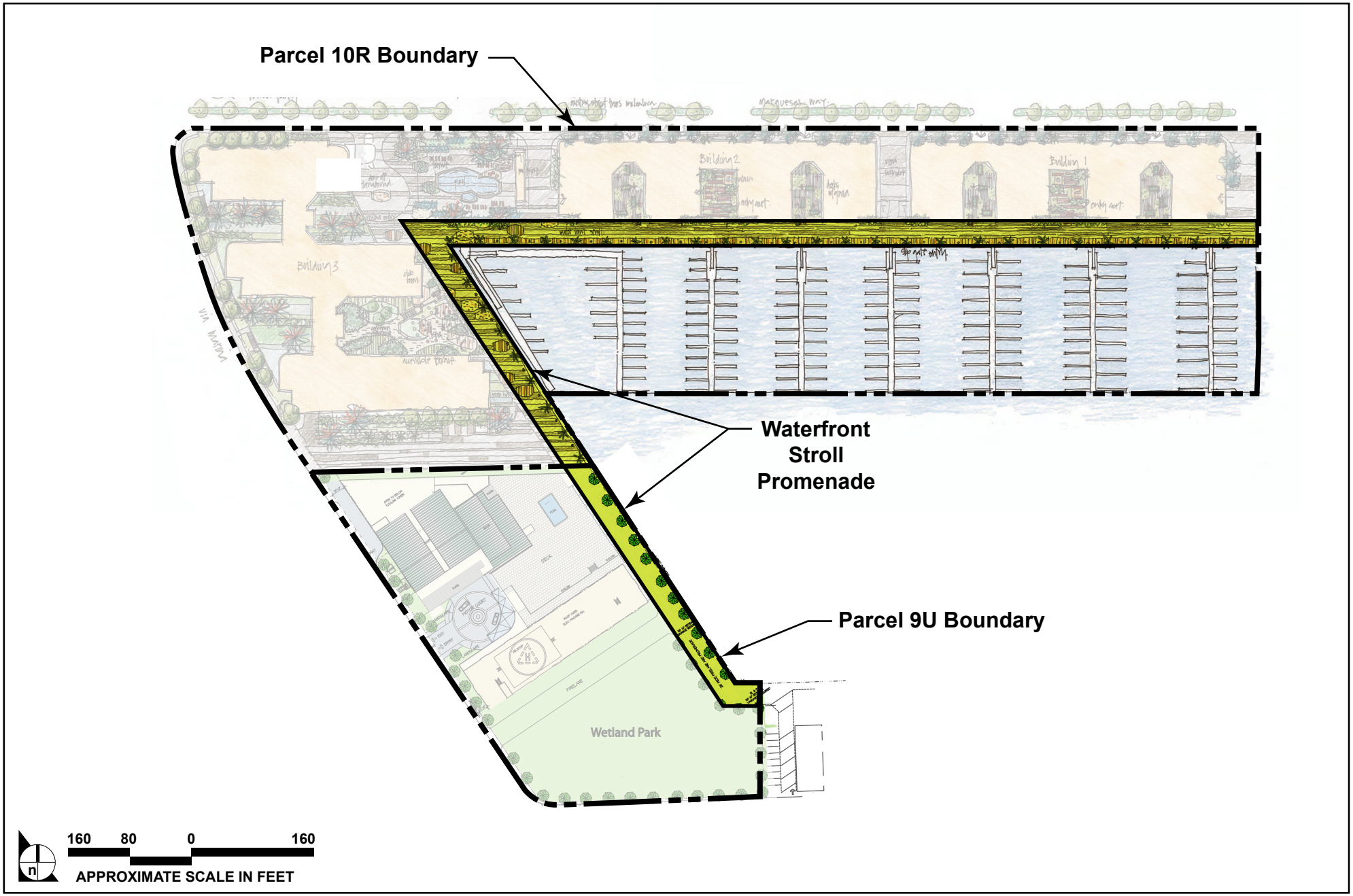
A minimum of 1,150 parking spaces would be provided throughout the Neptune Marina Parcels 10R and FF. Parking for apartment residents, their guests and the anchorage boaters would be segregated. Among the three user types, residents would be provided parking within the two-level garages through the use of security gate enclosures provided at both levels in all four buildings. Parking for guests is provided within the garages of each building. A parking area for boaters and users of the anchorage is provided in the southern end of the garage in Building 3 (on Parcel 10R). **Table 3.0-3, Neptune Marina Project (Parcels 10R and FF), Description of Parking Facilities by Building**, shows the breakdown of parking spaces by building.

Table 3.0-3
Neptune Marina Project (Parcels 10R and FF)
Description of Parking Facilities by Building

Building	Resident Spaces	Guest Spaces	Boater Spaces	Total
I (10R)	189	28	0	217
II (10R)	189	28	0	217
III (10R)	299	44	131	474
IV (FF)	210	32	0	242
TOTAL	**887**	**132**	**131**	**1,150**

3.1.3.1.4.2 Woodfin Suite Hotel and Timeshare Resort

Vehicular access to and from the Woodfin Suite Hotel and Timeshare Resort Project would be taken from two locations along Via Marina (see **Figure 3.0-21, Vehicular Access: Woodfin Suite Hotel and Timeshare Resort**). One access point would provide an entry to the motor court and the parking garage. The second access point would be located north of the access to the motor court and would provide access to the service entry and loading docks. Project applicants associated with Parcels 10R and 9U have conceptually agreed that there will be a limited access easement for trucks entering the Woodfin Suite Hotel service area to pass over Parcel 10R at the street side (across from the fire lane) on the north side of 9U.

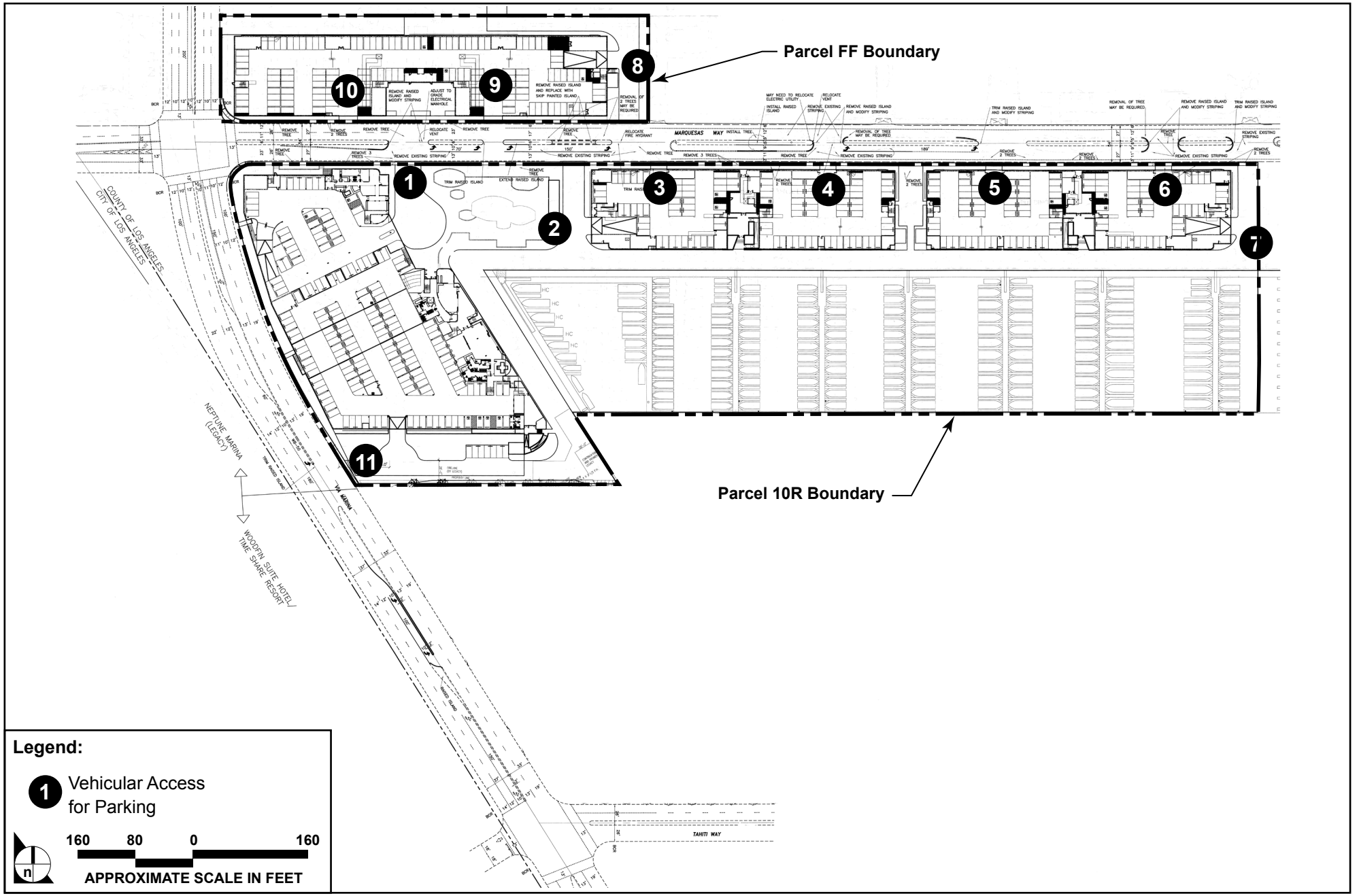


SOURCE: Thomas P. Cox: Architects, Inc. – April 2005

FIGURE **3.0-19**

Waterfront Stroll Promenade

460-04•03/07

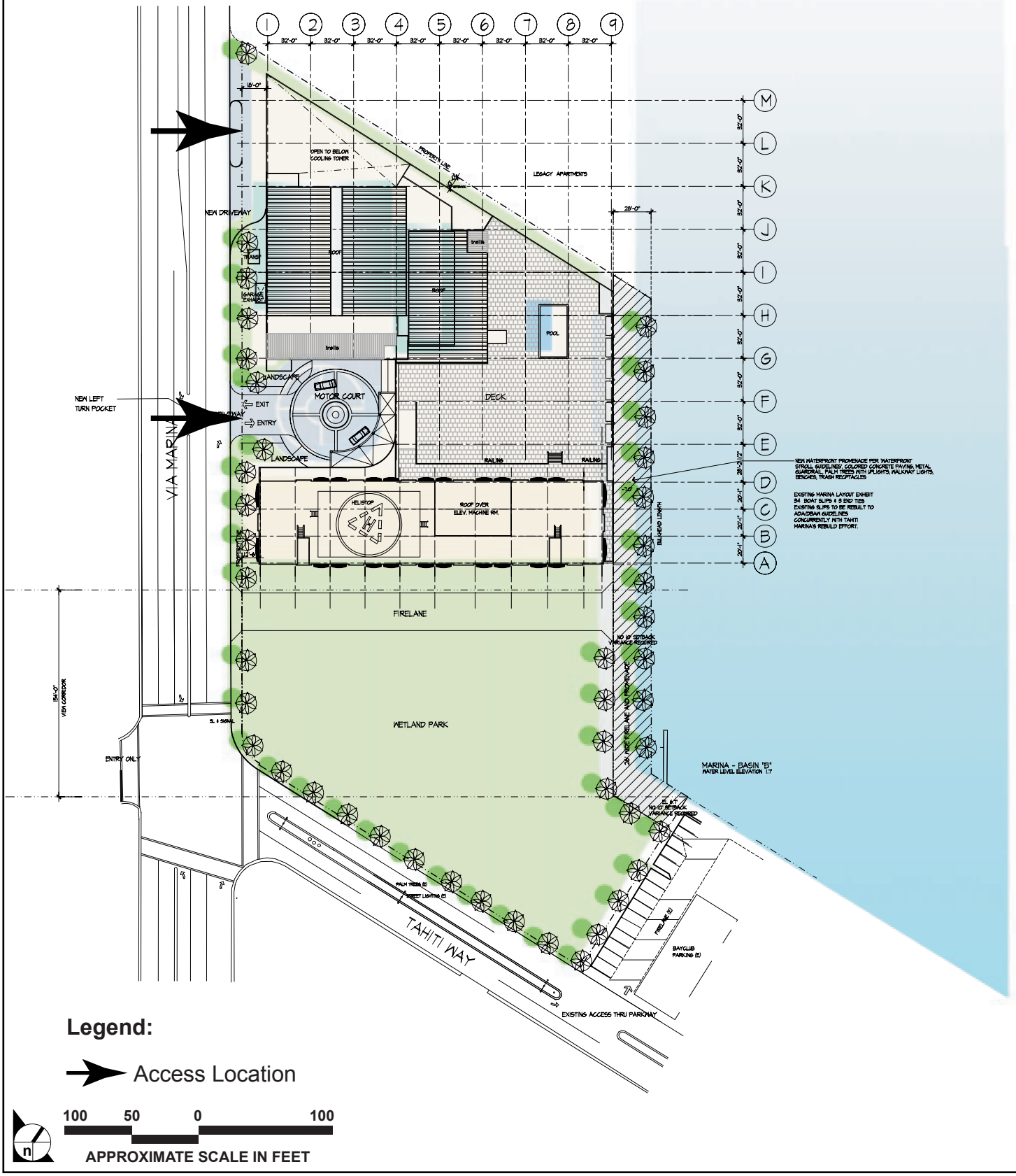


SOURCE: Crain and Associates - August 2006

FIGURE **3.0-20**

Neptune Marina Project Vehicular Access

460-04•05/09



SOURCE: Gin Wong Associates – February 2006

FIGURE **3.0-21**

Vehicular Access: Woodfin Suite Hotel and Timeshare Resort

Parking for the Woodfin Suite Hotel and Timeshare Resort would be provided in a six-level parking structure connected to northern side of the hotel building. Five levels would be above and one level would be below finished grade. The first three levels of the garage would connect with the ground, second and third floors of the hotel building. Three-hundred-sixty parking spaces would be provided within this structure, 21 of which would be fee-based "self-parking" spaces open to the public and the remainder of which would be valet-managed parking spaces. One space would be dedicated to the restored wetland and upland buffer park.

3.1.3.1.5 View Corridors: Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

3.1.3.1.5.1 Neptune Marina: Parcels 10R and FF

As noted, during the public hearings for the 1996 major amendment to the LCP, the County and the CCC considered changes that would result from modified development standards allowing building heights up to 225 feet. Buildings of up to 225 feet (the maximum height allowed in the Marina under the certified LCP) are allowed on select parcels fronting on Marina "loop roads" Via Marina and Admiralty Way, but only when the proposed building height is accompanied with the provision of view corridors that guarantee views to the harbor. This requirement is consistent with Coastal Act Policy 30251, which requires that coastal development be sited in a manner that shall protect views of the coastal waters. Consistent with this policy, all development on waterfront parcels, regardless of the height of buildings developed thereon, shall provide a minimum unobstructed view corridor of 20 percent of the parcels' water front to the boat basins. The potential impact of taller buildings causing sun shadow effects or affecting the wind patterns of the Marina are required to be evaluated for any potentially negative impact prior to such taller buildings being constructed.

The certified LCP sets forth a key urban design principal for the Marina calling for the implantation of a "modified bowl concept," consisting of a skyline of taller buildings around the outer and northern edges of the Marina, with lower height buildings on the mole roads, with limited exception. Implementation of the concept is intended to enhance the Marina's image and to guarantee that adequate sunlight and wind circulation continues over the Marina water basin (see Los Angeles County Code 22.46.1040). To implement the modified bowl concept, the LCP provides for building heights up to a maximum of 225 feet on select parcels when expanded view corridors comprising at least 40 percent of the parcels' water frontage are provided. The trade-off for the additional building height (i.e., maximum of 225 feet) is the provision of larger public view corridors over the parcels (i.e., view corridor comprising no less than 40 percent of the parcel's water frontage).

Consistent with the view corridor/building height relationship of the certified LCP, Neptune Marina Parcels 10R and FF incorporate five view corridors. Of the five view corridors, three corridors allow vistas of Marina del Rey Basin B from Marquesas Way (southerly), and one corridor allows vistas of Marina del Rey Basin C from Marquesas Way (northerly). The fifth view corridor allows vistas of Marina del Rey Basin B from Via Marina (easterly).

Provisions of the LCP tabulate the width of required view corridor based on the length of the parcel's water frontage and the proposed building height. Based on the length of the parcel's water frontage and a proposed building height of 55 feet for Buildings 1, 2 (Parcel 10R); and 4 (Parcel FF); and 60 feet for Building 3 (Parcel 10R); the LCP requires a total of 413 linear feet of view corridor for both parcels. As proposed, the Neptune Marina Parcels 10R and FF project would provide 449 linear feet of view corridor. As such, the residential project, as planned, is consistent with view corridor provisions of the Marina del Rey LCP that call for public and private views of the marina from perimeter roadways.

3.1.3.1.5.2 Woodfin Suite Hotel and Timeshare Resort (Parcel 9U)

The Woodfin Suite Hotel and Timeshare Resort Project incorporates one expansive view corridor ~~on that~~over the southerly portion of Parcel 9U~~, south of the hotel~~. The primary view corridor allows vistas of Marina del Rey Basin B from Via Marina through the Parcel 9U public park/wetland. As set forth in the above discussion of the certified LCP's modified bowl urban design concept, based on the proposed 225-foot height of the hotel/timeshare resort structure (excluding appurtenant roof-top structures), a view corridor totaling 40 percent of the parcel length is required. For the 386-foot-long site, a minimum 154-foot-wide view corridor is required. The project plans for 154 linear feet of view corridor through the Parcel 9U public park/wetland situated south of the hotel/timeshare resort structure. Because the project provides the required 154 feet of public view corridor on Parcel 9U (the minimum required in this instance to achieve the proposed hotel structure height), the hotel/timeshare resort is consistent with provisions of the LCP that call for public and private views of the Marina from perimeter roadways. ~~However, the hotel and timeshare resort structure would also be substantially taller than the lower-height residential structures in the project vicinity that do not exceed three stories.~~

3.1.3.1.6 Infrastructure Improvements: Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

3.1.3.1.6.1 Neptune Marina Parcels 10R and FF

All infrastructure and utilities needed to serve the Neptune Marina Parcels 10R and FF are located on-site or in perimeter roadways. The project would construct or participate in the construction of all improvements necessary to serve the proposed project, including improvements to off-site facilities.

Improvements for Parcel 10R consist of a looped fire main connecting to an existing 12-inch main located along Marquesas Way at the easterly end of the project site and ~~a~~ the installation of and connection to a new ~~existing 12~~18-inch water main to replace the existing 12-inch water main located along Via Marina at the western end of the project. The ~~precise~~ alignment of the proposed 500 feet main ~~has not been defined, but~~ would occur within the existing ~~site boundaries~~utility easement within Via Marina.

For Parcel FF, on-site improvements would consist of a looped fire main connecting to an existing 12-inch main located along Marquesas Way at the easterly end of the project site and the installation of and connection~~g~~ to a n~~-existing 12~~ew 18-inch water main to replace the existing 12-inch water main located along Via Marina at the western end of the project. The ~~precise~~ alignment of the proposed 170 feet main ~~has not been defined, but~~ would occur within the existing utility easement within Via Marina~~site boundaries~~.

Once off-site and on-site improvements are completed, the existing and proposed water mains would have the capacity to adequately serve the Neptune Marina Parcels 10R and FF. Planned off- and on-site improvements are described in detail in **Section 5.9, Water Service**, of this draft EIR.

Proposed sewer improvements for Parcel 10R would require the abandonment of approximately ~~1,046~~650 linear feet (466 feet within Parcel 10R, 130 feet within Parcel FF, and 54 feet within Marquesas Way right-of-way) of existing 10-inch sewer main and 240 linear feet of an existing 8-inch line. A new 8-inch and 10-inch sewer would be constructed to service the Neptune Marina Parcel 10R ~~and Neptune Marina Parcel FF~~. The ~~precise~~ alignment of the proposed 10-inch main ~~has not been defined, but~~would place about 500 linear feet within Marquesas Way and 160 linear feet within Via Marina; an additional 180 linear feet would occur within existing site boundaries of Parcel 10R. Approximately 710 linear of a new 8-inch sewer line would occur within the Parcel 10R boundaries along the bulk head. These improvements are described in detail in the **Section 5.8, Sewer Service**, of this draft EIR.

Other on-site improvements involve construction of the storm water drainage network and utility systems. All infrastructure would be designed and constructed in accordance with policies and standards defined by the County of Los Angeles Department of Public Works. A drainage study has been prepared and submitted for County approval.

3.1.3.1.6.2 Woodfin Suite Hotel and Timeshare Resort

All infrastructure and utilities needed to serve the Woodfin Suite Hotel and Timeshare Resort Project are located proximal to each project site in Via Marina and Tahiti Way. The project would construct or participate in the construction of all improvements necessary to serve its proposed uses, including improvements to off-site facilities. Improvements proposed for Parcel 9U consist of a new fire main

connecting to the existing 12-inch water main located on Tahiti Way. Given these improvements, the existing and proposed water mains would have the capacity to adequately service the project. However, approximately 570 feet of a new 18-inch diameter water main in Via Marina is planned to replace the existing 12-inch water main.

Proposed sewer improvements associated with project would require approximately 210 linear feet of new 8-inch sewer to service the Woodfin Suite Hotel and Timeshare Resort Project. The precise alignment of the proposed sewer has not been defined, but would occur within existing site boundaries. These improvements are discussed in detail in **Section 5.8** of this draft EIR. Other on-site improvements would involve the construction of the storm water drainage network, and utility systems. All infrastructure would be designed and constructed in accordance with the policies and standards set forth by the County of Los Angeles Department of Public Works.

3.1.3.1.7 Construction Program: Neptune Marina Project

An overall construction schedule for Neptune Marina Parcels 10R and FF and the Woodfin Suite Hotel and Timeshare Resort project is provided in **Table 3.0-4**, **Neptune Marina Woodfin Suite Hotel and Timeshare Resort Project – Construction Assumptions**, below. In addition, the total amount of cut, fill, and soil export is defined. The public-serving boat spaces are anticipated to be completed in January 2011.

It is expected that public access to the Waterfront Stroll Promenade would be closed during construction. As shown above, the Waterfront Stroll Promenade would be closed ~~33~~ 30 months in association with development of Parcel 10R, ~~21~~ 24 months in association with development of Parcel FF, ~~24~~ 30 months in association with development of Parcel 9U and 12 months in association with development of the restored public wetland and upland buffer. Pedestrian access would be routed along Via Marina and Marquesas Way during project construction. The project construction will result in excess cut from grading operations that will require export of soil to a solid waste facility (Puente Hills Landfill). As depicted in **Figure 5.3-6, Truck Haul Route**, the haul route for trucks carrying the export materials extends north on Via Marina to Washington Boulevard, then east on Lincoln Boulevard and south on the Marina Freeway.

Table 3.0-4
Neptune Marina Woodfin Suite Hotel and Timeshare Resort Project
Construction Assumptions

Project	Demolition Period (months)	Grading Period (months)	Construction Period (months)	Total Construction Time (months)	Operational Date	Cut/Fill/Soil Export (cubic yards)
Parcel 10R	2	~~3~~4	~~28~~24	~~33~~30	~~Sept~~November ~~2012~~2013	340 cy fill ~~112~~124,~~000~~ 650 cy cut ~~112~~124,~~000~~ 650 cy export
Parcel FF	0.5	~~3~~2	~~17~~21.5	~~21~~24	~~September~~ October ~~2012~~2013	35 cy fill ~~29~~31,600 cy cut ~~29~~31,600 cy export
Parcel 9U	0	~~3~~3	~~21~~27	~~24~~30	~~January~~ November ~~2011~~2013	0 cy fill ~~38~~44,000 cy cut ~~36~~42,200 cy export
Wetland Park	0	3	9	12	~~January~~ October ~~2011~~2012	4,500 cy fill 2,700 cy cut no export

Note:: Assumes that with the exception of the wetland park, all projects would commence construction following project approval no earlier than January 2009. The wetland park would commence construction approximately one year after the initiation of construction on Parcel 9U.

3.1.3.1.7.1 Demolition of Existing Landside Uses: Neptune Marina Parcels 10R and FF

Six months prior to any demolition activity, the property management company will prepare a notice that will be sent to all residential tenants occupying the Neptune Marina Parcel 10R site informing tenants of the proposed project's timing of construction. The management company will, at the time of notice, provide all interested tenants lease availability information for other Marina del Rey properties it currently manages. The management company will coordinate with other Marina del Rey property management companies to collect information for interested tenants on rental options in the Marina area. To further assist tenants, the Neptune Marina management company will schedule an on-site lease fair to provide Marina del Rey specific rental availability information to all interested tenants.

Prior to the commencement of demolition, appropriate testing for asbestos containing materials and lead-based paint within the existing structures will be completed. Abatement of identified materials would occur prior to building demolition. The initial stage of demolition requires that construction crews disconnect and remove all utilities. A variety of equipment would be employed during the demolition

phase including cranes, tractors, pneumatic hammers, drills, and similar types of equipment. Debris would be trucked from the site for disposal at unclassified landfills that accept these waste materials including, but not limited to, ~~S~~ the Azusa Land Reclamation Co. Landfill in Azusa, Nu Way Live Oak and Reliance Pit No. 2 Landfills in Irwindale, ~~unshine Canyon, Long Beach Southeast Resource Recovery (SERRF), Peck Road, or Reliance Pit #2 Landfills~~ or other appropriate landfills located within reasonable hauling distance from the project site, which may be located outside Los Angeles County. Building materials containing asbestos and lead based paint, if any, would be handled, transported, and disposed of in accordance with applicable laws and regulations prior to building removal.

3.1.3.1.7.2 Demolition of Existing Anchorage: Neptune Marina Parcel 10R.

Similar to the process followed for tenants of the existing apartment buildings, six months prior to any demolition activity associated with the existing anchorage, the management company will prepare a notice that will be sent to all boat space tenants informing tenants of the proposed project's timing of construction. The management company will, at the time of notice, provide all boat owners space availability information for the 16 other anchorages and the associated dock masters that occur within Marina del Rey. To further assist boat owners, the management company will schedule a meeting that would provide boat owners information regarding available dock space at other marinas proximal to Marina del Rey and appropriate contact points.

Concurrent with the landside demolition and construction activities for the Neptune Marina Parcel 10R, the existing Neptune Marina boat anchorage would be removed. Prior to dock and space demolition, utilities would be disconnected and all utility lines and surface dock attachments would be removed. Construction crews would work from the docks and from small boats using small mechanical hand tools to disassemble the docks into manageable pieces that can be floated to the seawall and removed from the water by a landside crane.

Once the majority of boat spaces and main walks have been removed, work would commence on the extraction of concrete guide piles. Guide piles would be removed utilizing clamping devices suspended from a crane on a floating barge, transferred to another barge, and transported by sea to a disposal site. To reduce marina sediments being stirred up during guide pile extraction, standard measures of surrounding the guide piles with the steel sheath would be used.

A debris boom would also be installed around all waterside construction areas to capture and control floating debris, and debris catchers would be utilized in places where falling debris is unavoidable. During pile removal, floating siltation curtains would be employed around the work area to reduce

and/or prevent sediment from crossing the curtains into surrounding waters. Water quality impacts associated with demolition of the existing marina are addressed in **Section 5.3, Hydrology and Drainage.**

Basins within the study area would remain open during demolition work. Navigational aids, buoys, and lights would be installed, as per US Coast Guard requirements, prior to demolition activity to ensure safe access within all channels of the small-craft harbor.

3.1.3.1.7.3 Demolition: Woodfin Suite Hotel and Timeshare Resort

Given that Parcel 9U is currently vacant, no demolition is required. Site clean-up and minor fine grading would be required prior to the initiation of grading activities.

3.1.3.1.7.4 Construction of Proposed Landside Uses: Neptune Marina Parcels 10R and FF

Following demolition of the existing improvements, excavation for the parking garages would commence. It is expected that construction of the parking garage would require de-watering during excavation. During construction, de-watering wells and pumps would be placed as needed to draw down the water table as necessary. If necessary, groundwater would be pumped to settling basins, filtered, and then pumped to the existing storm water drain system. These actions will require the applicant to obtain a separate National Pollutant Discharge Elimination System (NPDES) Permit for Ground Water Discharge from the Regional Water Quality Control Board (RWQCB). This permit ensures that water ultimately discharged to the small-craft harbor meets all NPDES requirements for suspended solids, organic material, and other water quality parameters. Permanent de-watering is not proposed. Water quality impacts associated with demolition of the existing marina are addressed in **Section 5.3, Hydrology and Drainage.**

Once excavation is complete, foundations would be constructed and framing of the proposed project would begin upon completion of the parking garage. Equipment and materials during construction would be stored on site in a construction-staging area as described below.

Construction Phasing and Staging: If Parcels 10R and FF receive simultaneous approval, then construction will commence as defined below.

Parcel FF will be used for parking and staging during landside demolition of improvements on Parcel 10R. Upon completion of the demolition phase, Parcel FF will be used for parking and staging during construction of the foundation system on Parcel 10R.

Upon completion of the foundation system construction on Parcel 10R, the same type of construction will commence on Parcel FF and any parking and/or staging that need to be moved will be temporarily re-located to Parcel 10R.

Upon completion of the foundation system on Parcel FF, shoring, de-watering, excavation, and garage construction operations will commence on Parcel 10R. Upon completion of this work on Parcel FF, all parking and staging will be re-located back to Parcel FF.

Parking structures on Parcel 10R will be completed in the following sequence: Building 3, Building 2, followed by Building 1. Upon completion of these structures, shoring, de-watering, excavation, and garage construction will commence on Parcel FF for Building 4. During this sequence of construction, staging will be provided on Parcel 10R at the pool and view corridor/drive aisle locations. Off-site parking may be required.

While garage construction commences on Parcel FF, framing operations will commence on Parcel 10R. As noted above, staging can be accomplished on Parcel 10R at the pool and view corridor locations, but off-site parking may be required unless vehicles are allowed to park within the completed garage structures at Building 1, 2, or 3.

Upon completion of the garage construction on Parcel FF, staging of materials will be re-located to the elevated courtyards on Building 4 and view corridor/drive aisle locations at Parcel FF to allow commencement of the pool and drive aisle construction on Parcel 10R. All construction parking will be in designated parking structures.

3.1.3.1.7.5 Construction of Proposed Anchorage: Neptune Marina Parcel 10R

The new Neptune Marina Anchorage (inclusive of private boat spaces situated adjacent to Parcel 10R and public-serving spaces situated adjacent to Parcel 9U) would be constructed concurrently with construction of the landside improvements on the site. All dock floatation elements would be pre-manufactured off site and trucked to the project site. Sections of the dock system would be assembled on land and hoisted onto the water for final assembly. A barge with crane and diesel hammer would be used to install the new guide piles. Utilities would then be installed in addition to accessories such as dock boxes, cleats, rub strips, etc. The gangway ramps to access the docks would be constructed concurrently. A debris boom would be installed around all waterside construction areas to capture any control floating debris, and debris catchers would be utilized in places where falling debris is unavoidable.

3.1.3.1.7.6 Construction of Woodfin Suite Hotel and Timeshare Resort

Construction of the Woodfin Suite Hotel and Timeshare Resort Project would not be phased. Construction is anticipated to take 24 months, beginning no earlier than ~~Januar~~May ~~2009~~2011. Given this schedule, anticipated buildout of the project would occur ~~in~~at the end ~~2011~~ 2013 at the earliest.

Following minor fine grading necessary to clear the project site, excavation for the parking garages would commence. Construction of the parking garage may require de-watering during excavation. During construction, de-watering wells and pumps would be placed as needed to draw down the water table as necessary. If necessary, groundwater would be pumped to settling basins, filtered, and then pumped to the existing storm water drain system. These actions will require the applicant to obtain a separate NPDES Permit for Ground Water Discharge from the RWQCB. This permit ensures that water ultimately discharged to the small-craft harbor meets all NPDES requirements for suspended solids, organic material, and other water quality parameters. Permanent de-watering is not proposed.

Once excavation is complete, the entire basement would be constructed, as well as shoring for the basement walls. After construction of the basement, the westerly portion of the basement would be used for material staging for the tower. The tower crane to be used for steel erection and material hauling would then be erected in the low rise building area (north end of Parcel 9U).

After the high-rise steel is fully erect, steel work on the low-rise building would be completed. During this phase on construction, delivery of the material to the site will occur parallel to the site on Via Marina. The promenade deck facing the marina will be built last, when the hotel tower frame is erected. After construction of the hotel and promenade deck is completed, then construction of the wetland park would be initiated. Staging for the construction of the wetland park will be done on the designated "park" property outside of the existing wetland area.

3.1.3.1.8 Wetland Restoration: Neptune Marina Project

With the change from "Open Space" " to "Residential" on Parcel FF, which would be developed with an apartment building, a restored wetland and public upland park would be constructed on the southern 1.46 acres of Parcel 9U. A public-serving anchorage adjacent to the park as described below is also included as a public recreational amenity. Consistent with project objectives, it is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the restored wetland and upland park and the public-serving boat spaces combine to create an interactive public node. Legacy Partners will fund 50 percent of the development costs associated with construction of the restored wetland and public upland park and 100 percent of the public-serving anchorage, while Woodfin Suite Hotels, LLC will fund the remaining 50 percent of the wetland and upland park (development costs only). Construction of the

wetland park will be shared between the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project lessees. ~~operation~~Operation and maintenance of the park would be the responsibility of the County of Los Angeles Department of Beaches and Harbors.

The restored wetland and public upland park will consist of a newly established muted tidal wetland in the southern portion of the park, surrounded by an upland buffer, portions of which could be used as public open space. The muted tidal wetland area will be approximately 0.47 acre in size; the minimum buffer, as measured from the edge of the salt marsh will be 25 feet. The upland buffer will be planted with appropriate transitional vegetation. A protective fence will be installed in a location and manner deemed appropriate for the biological and visitor functions. In the upland buffer, appropriate interpretive signage will be installed to enhance the visitor experience. Turf block areas would provide a sturdy space for group lectures, seating for visitors bringing lawn chairs for bird watching etc., and maintenance vehicles.

Expanded and enhanced seasonal pond habitat with fringing riparian scrub would be planted within the enhanced wetland area. These plant species would replace the non-native species currently found on site. The proposed seasonal pond habitat and fringing riparian scrub would be planted in zones of appropriate wetness. Variations in microtopography within the basin will allow for establishment of mosaic of seasonal pond habitat with associated fringing riparian scrub.

To provide seawater to the wetland based on tidal influence, a tidal exchange pipe would connect the wetland with the westernmost portion of Marina del Rey Basin B. At this time, it is anticipated that the pipe would be placed in an excavated trench and the pipe would pass through the existing seawall.

No lighting shall be permitted. No parking within the park is to be permitted. Monitoring of the vegetation for five years is an integral part of the wetland proposal. A wetland restoration plan is included as **Appendix ~~3~~5.~~0~~5.**

Provisions of the LCP allow the parkland beneath the hotel/timeshare resort's view corridor within the wetland park as appropriate compensation for the loss of the designated Parcel FF open space. The view corridor requirements of the Marina del Rey Specific Plan specify that such corridors maintain an unobstructed view of the bulkhead edge, masts, and horizon to pedestrians and passing motorists. Thus, it is the air space above the land that falls within the view corridor and not the land itself. Parking lots are expressly allowed beneath required view corridors per the LCP, provided that the required views are maintained. A project may satisfy parking requirements beneath a required view corridor, and, therefore, open space land uses may also be satisfying the view corridor requirement.

The Marina del Rey Specific Plan requires that new residential development provide compensatory recreational facilities to offset use of existing Marina park and recreational facilities. The Specific Plan expressly provides mitigation credit for public parkland inclusion. It also provides credit for those portions of public view corridors not designated for public access. Thus, the Specific Plan expressly allows view corridors to satisfy more than one regulatory requirement.

In addition, it is consistent with the California Environmental Equality Act for a single mitigation measure to address more than one impact. For example, a traffic demand management plan can reduce vehicle trips, parking demand, mobile emissions, and mobile noise impacts. Similarly, the wetland park and view corridor described above can address potential project impacts with respect to wetlands, open space, public recreation, and compatibility with land use plans.

3.1.3.1.9 Public Boat Spaces Adjoining Parcel 10R and 9U Neptune Marina Project

Legacy Partners will also fund and develop a public-serving anchorage to adjoin the Parcel 9U bulkhead. This anchorage would contain approximately 524 lineal feet of new public dock area (it is estimated that the public anchorage would provide berthing for between 7 and 11 transient vessels, depending on the vessels' size, inclusive of a dinghy berthing area at the northerly end of the anchorage). As planned, this project component would result in the construction of public dock space accommodating between seven and 11 boats plus dinghy moorage. The anchorage would provide four sewage pumpout stations with a single sewage pump that would drain to the existing sewer system. A plan illustrating the location and arrangement of these spaces is provided on **Figure 3.0-22, Public-Serving Boat Slip Plan**. These new public spaces would be compliant with ADA and new California Department of Boating and Waterways safety requirements.

3.1.3.1.10 Green Building Program

The County of Los Angeles has recently enacted a suite of three ordinances—Green Building, Drought-Tolerant Landscaping and Low Impact Development—designed to reduce long-term environmental impacts that will save on both water and energy costs; these ordinances became effective on January 1, 2009. Both the Neptune Marina Apartments and Anchorage and the Woodfin Hotel Suite and Timeshare Resort projects will comply with the provisions of the County's new Green Building and Drought-Tolerant Landscaping ordinances; however, the projects are exempt from the County's new Low-Impact Development (LID) ordinance, because the projects had received the Department of Beaches & Harbors' Design Control Board's conceptual approval prior to the January 1, 2009 effective date of the LID ordinance. With the incorporation of certain design features, the projects will benefit from a reduction in energy consumption of at least 15 percent, consistent with the requirements of the Green Building

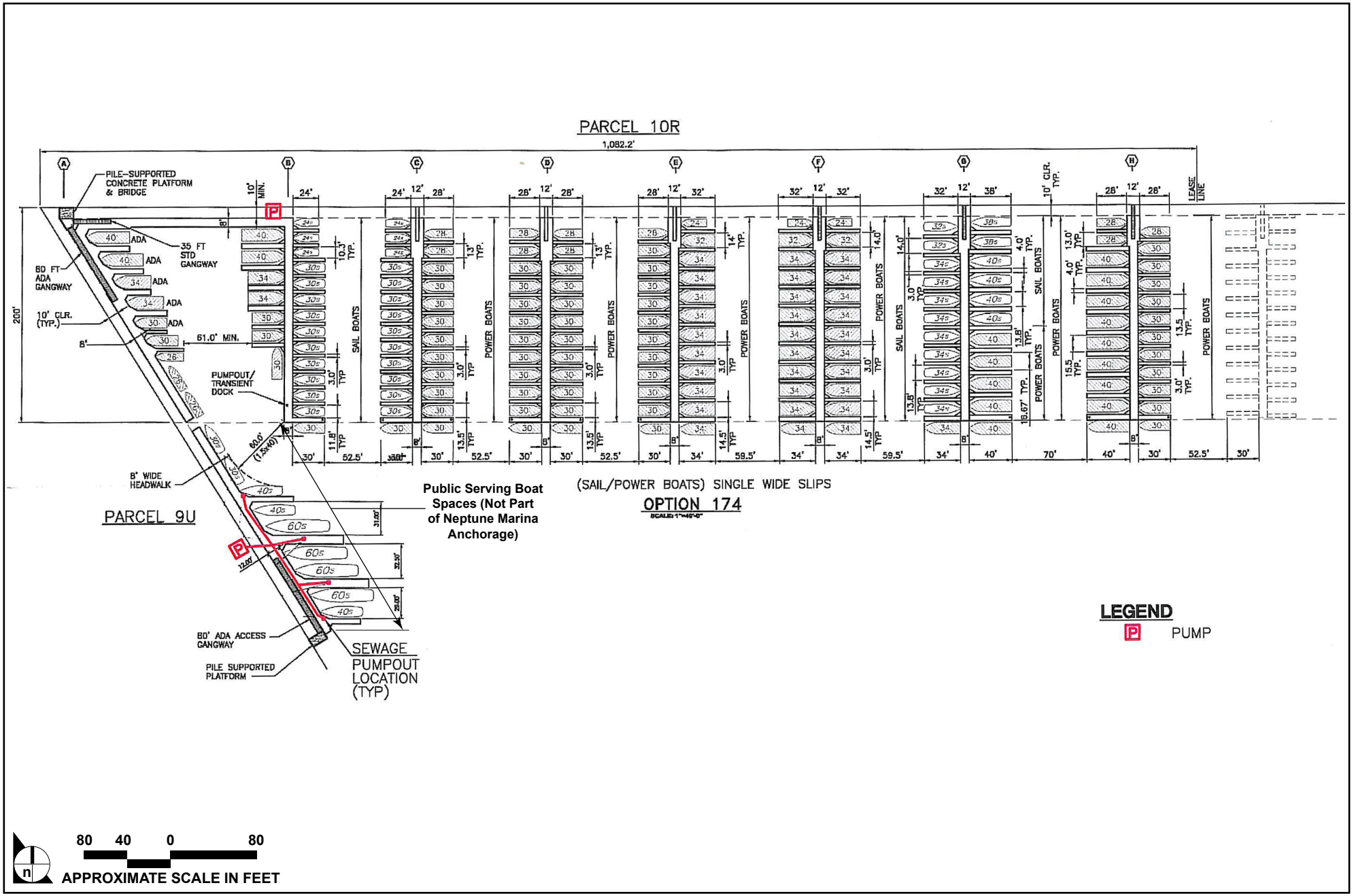
ordinance. The following project design features will be incorporated into the final building plans: alternative transportation considerations such as encouraging bicycle transit and fuel efficient vehicles; restore wetland habitat within dedicated open space area; reduce stormwater runoff through incorporation of best management practices; use of roofing materials with high solar reflectance index; water efficient landscaping through use of drought-tolerant species and smart irrigation controllers; use of high efficient toilets; use of energy efficient equipment and appliances; use of non-ozone depleting refrigerants; incorporation of recycled and rapidly renewable building materials; monitoring of ventilation systems; development of indoor air quality management plans; use of low-emitting volatile organic compound materials (e.g., in sealants and paints); and provision of individual control for lighting and comfort control systems.

3.1.3.2 Overview of Site Plan: Neptune Marina Parcel 10R

Figure 3.0-23, Site Plan: Neptune Marina Parcel 10R, illustrates a conceptual site plan for the proposed Neptune Marina Parcel 10R. The Neptune Marina Parcel 10R includes development on both the landside and waterside portions of Marina del Rey Parcel 10R. The landside component of the proposed project consists of a 400-unit, multi-family apartment community comprised of three structures. These structures front Marquesas Way and Via Marina and are located southeast of the intersection of those two marina streets.

Emphasis has been placed on a design that balances public and private views of the marina and enhancement of the pedestrian experience adjacent to the water. A major feature of the project that unifies and integrates the residential and adjacent marina is a pedestrian walkway between the buildings and the anchorage, the "Waterfront Stroll Promenade." Located along the waterside perimeter of marina Basin B, the 28-foot-wide Waterfront Stroll Promenade would feature color-patterned paving, landscaping, pedestrian seating and marina-styled fencing and lighting. The entire length of the Waterfront Stroll Promenade would be open to the public. The length of this feature adjacent to the southern and northern portions of the project site is approximately 1,437 feet. The proposed project would feature landscaped planters and other features constructed immediately adjacent to the public Waterfront Stroll Promenade and would also function as a fire lane.

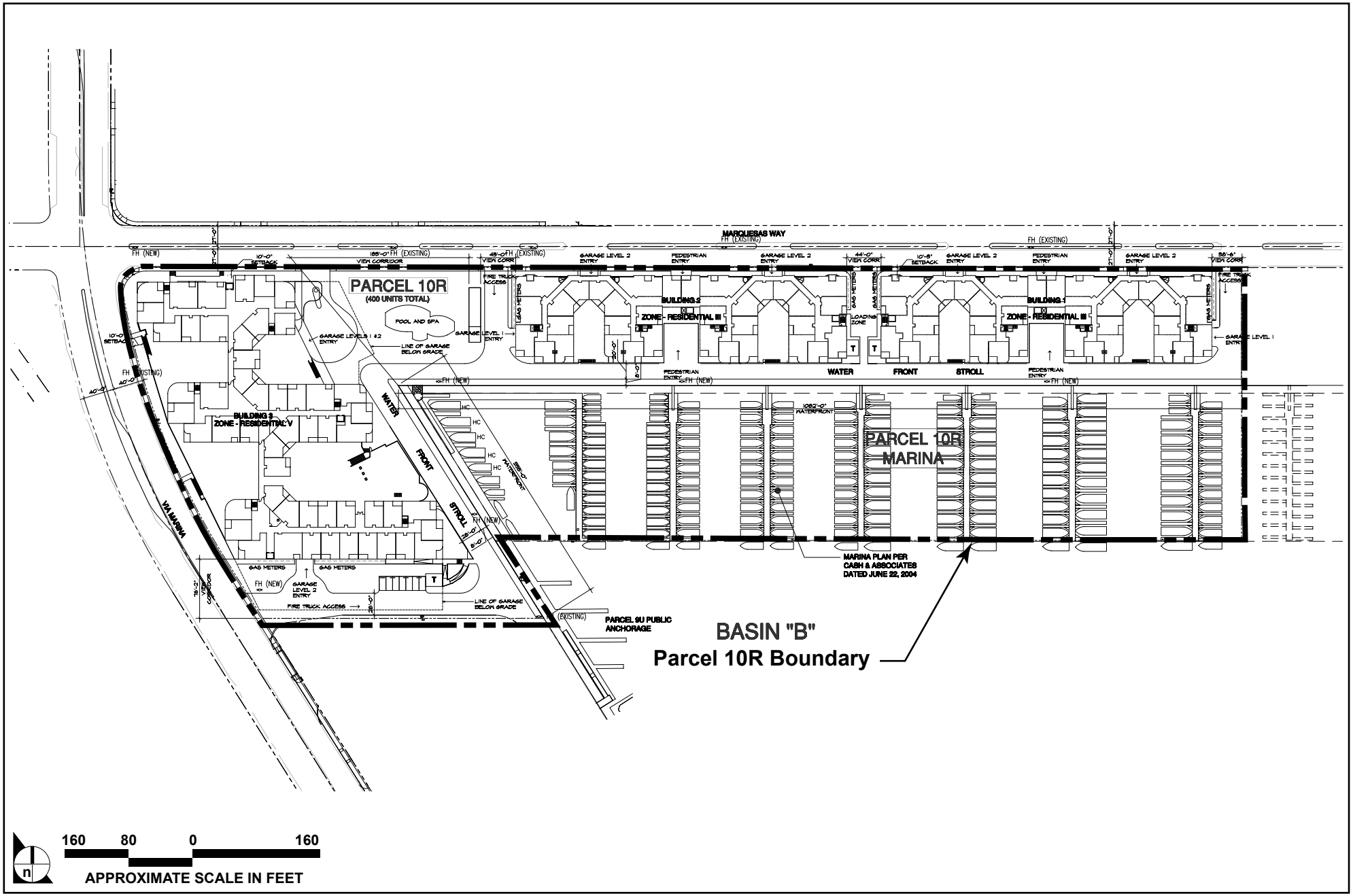
A total of three, four-story wood-framed structures (Building 1, 2, and 3) would house the 400 proposed residential units, with parking provided in two-level parking garages below the residences. Structure height would not exceed 55 feet for Buildings 1 and 2, and would not exceed 60 feet for Building 3 (exclusive of appurtenant, screened roof-top equipment) when measured per County standards.



SOURCE: C&A Architects. – May 2009

FIGURE **3.0-22**

Public-Serving Boat Slip Plan



SOURCE: Thomas P. Cox: Architects, Inc. – August 2008

FIGURE **3.0-23**

Site Plan: Neptune Marina Parcel 10R

The waterside portion of the project involves the construction of a new modern boat anchorage. The anchorage would provide users water and electrical service and a sewage pump out station. The 161 proposed boat slips are wide enough to accommodate modern boat design and boats of up to 40 feet. Larger boats could potentially be accommodated at 13 proposed end-tie spaces (161 + 13 = 174 total marina spaces).

The Neptune Marina Parcel 10R would, therefore, consist of 400 residential dwelling units and 174 boat spaces. As there are 136 existing apartments and 198 boat spaces presently on site, completion of the proposed project would result in a net increase of 264 apartment units and a net reduction of 24 boat spaces.

3.1.3.2.1 Residential Units: Neptune Marina Parcel 10R

As proposed, the Neptune Marina Parcel 10R consists of three new residential structures each being four stories above two levels of parking (**Figure 3.0-12**). Within the three structures, 400 residential units are proposed that include rental apartment and rental townhome units. The design of the residential component of the project emphasizes a relationship to the waterfront and was conceptually approved by the DCB on June 29, 2006. Apartment building orientations have been configured to ensure direct pedestrian access to the Waterfront Stroll Promenade, a portion of which fronts on the newly constructed Neptune Marina Anchorage. There are multiple points for the public to have unimpeded access to the Waterfront Stroll Promenade and the marina. The apartment structures have been separated to the maximum extent feasible to allow for unobstructed view corridors. The various vehicular, non-vehicular and fire access entries on the property would also provide pedestrian access to the promenade and are located between buildings. All access points would be treated with enhanced paving and landscaping open to the Waterfront Promenade Stroll.

One- and two-bedroom apartment and townhome rental units are proposed in 11 different floor-plan configurations. As defined above, 400 residential units are planned. Of these, 246 are one-bedroom apartment units (62 percent of the total) in four different floor-plan configurations; 70 are two-bedroom apartment units (18 percent of the total) in two different floor-plan configurations; and 84 are two-bedroom townhomes (21 percent of the total) in five different floor-plan configurations. **Table 3.0-5, Neptune Marina Parcel 10R – Description of Proposed Residential Units by Type**, provides a breakdown of the number of residential units by product type and their approximate size.

Table 3.0-5
Neptune Marina Parcel 10R
Description of Proposed Residential Units by Type

Type of Unit	Quantity Proposed	Size of Unit (sq. ft.)
1-Bedroom Apartment; Type A-1	146	716
1-Bedroom Apartment; Type A-2	48	650
1-Bedroom Apartment; Type A-3	48	849
1-Bedroom Apartment; Type A-4	4	745
2-Bedroom Apartment; Type B-1	42	1,122
2-Bedroom Apartment; Type B-2	28	1,282
2-Bedroom Townhome; Type T-1	20	1,359
2-Bedroom Townhome; Type T-1b	8	1,543
2-Bedroom Townhome; Type T-1c	10	1,529
2-Bedroom Townhome; Type T-2	20	1,691
2-Bedroom Townhome; Type T-3	26	1,653
TOTAL	**400**	

Figure 3.0-4 through **Figure 3.0-6** provide illustrations of conceptual floor plans for each of the three structures that comprise the Neptune Marina Parcel 10R. As stated above, the proposed new waterfront community would consist of three, four-story Type V, 1-hour, fully sprinklered, wood-framed residential buildings, which would be, constructed over a two-level parking garage. Structures are designed with open-air courtyards and perimeter landscaping which is incorporated into the public Waterfront Stroll Promenade. As noted, structure height would not exceed 55 feet for Buildings 1 and 2, and would not exceed 60 feet for Building 3 (exclusive of appurtenant, screened roof-top equipment) measured per County standards. **Figure 3.0-8** provides representative conceptual building elevations, while **Figure 3.0-10** illustrates representative conceptual building cross sections for each proposed structure.

3.1.3.2.2 Access and Parking: Neptune Marina Parcel 10R

For residents, vehicular access (**Figure 3.0-20**) to and from the proposed residential development would be taken from eight locations. Seven points of access are located off Marquesas Way and one point of vehicular access is located along Via Marina south of Marquesas Way. For residential visitors, vehicular access to the interior portions of the project is via three signed entrances on Marquesas Way. Vehicular access for boaters and users of the anchorage is via one entrance on Via Marina (to the south). Pedestrian

access to the public Waterfront Stroll Promenade is via a series of signed paved walkways between the buildings.

In each of the three proposed buildings, parking is provided in two-level garages built below each building. The lowest level of parking is entirely subterranean on the street side of the building while the upper level of parking would be built at ground level. All parking garages would be screened by architectural and landscaping features, primarily by terraced, landscaped planters along the street and by landscaping along the promenade.

A total of 908 parking spaces would be provided throughout the Neptune Marina Parcel 10R. Parking for apartment residents, their guests and the anchorage boaters would be segregated. Among the three user types, residents would be provided parking within the two-level garages through the use of security gate enclosures provided at both levels in all three buildings. Parking for guests is provided within the garages of each building. A parking area for boaters and users of the anchorage is provided in the southern end of the garage in Building 3 (Parcel 10R). **Table 3.0-6, Neptune Marina Parcel 10R – Description of Parking Facilities by Building**, shows the breakdown of parking spaces by building.

Table 3.0-6
Neptune Marina Parcel 10R
Description of Parking Facilities by Building

Building	Resident Spaces	Guest Spaces	Boater Spaces	Total
I (10R)	189	28	0	217
II (10R)	189	28	0	217
III (10R)	299	44	131	474
TOTAL	677	100	131	908

3.1.3.2.3 Boat Anchorage: Neptune Marina Parcel 10R

The proposed Neptune Marina Anchorage is situated to the waterside of Buildings 1, 2 and 3 and would be constructed concurrent with the apartment buildings. The existing 198-space anchorage would be removed and replaced with 174 new spaces (a net reduction of 24 spaces). A more complete description of the proposed Neptune Marina Anchorage is provided under heading **3.1.3.1.2**.

3.1.3.2.4 Amenities: Neptune Marina Parcel 10R

The residential component of the project would feature a variety of recreational amenities, including the following: a recreational lounge, game room, business center, and restrooms. In addition to these facilities, the residential component of the project would include offices for the harbormaster and leasing offices. A more complete description of project amenities is provided under heading **3.1.3.1.1**.

3.1.3.2.5 View Corridors: Neptune Marina Parcel 10R

The Neptune Marina Parcel 10R incorporates four view corridors. Of the four view corridors, three corridors allow vistas of Marina del Rey Basin B from Marquesas Way (southerly). The fourth view corridor allows vistas of Marina del Rey Basin B from Via Marina (easterly).

Provisions of the certified LCP tabulate the area of required view corridor based on the length of the parcel's water frontage and the proposed building height. Within Parcel 10R (based on the length of the parcel's water frontage and a proposed building heights of 55 and 60 feet), the LUP requires 360 linear feet of view corridor. As proposed, the project would provide 389 linear feet. As such, the project, as planned on Parcel 10R, is consistent with view corridor provisions of the Marina del Rey Land Use Plan that call for public and private views of the marina from perimeter roadways.

3.1.3.2.6 Infrastructure Improvements: Neptune Marina Parcel 10R

All infrastructure and utilities needed to serve the Neptune Marina Parcel 10R are located on site or in perimeter roadways. The project would construct or participate in the construction of all improvements necessary to serve the proposed project, including improvements to off-site facilities.

Water improvements consist of a looped fire main connecting to an existing 12-inch main located along Marquesas Way at the easterly end of the project site and a connection to an existing 12-inch water main located along Via Marina at the western end of the project. Once off-site and on-site improvements are completed, the existing and proposed water mains would have the capacity to adequately serve the Neptune Marina Parcel 10R. Planned off- and on-site improvements are described in detail in **Section 5.9, Water Service**, of this draft EIR.

Proposed sewer improvements would require the abandonment of approximately ~~1,044~~660~~0~~ linear feet within Parcel 10R and 54 feet within Marquesas Way right-of-way of existing 10-inch sewer main and 240 linear feet of an existing 8-inch line within Parcel 10R. Approximately 500 linear feet within Marquesas Way and 160 linear feet within Via Marina~~600 linear feet~~ of new 10-inch sewer would be constructed to service the project. An additional 180 linear feet of new 10-inch line and approximately

710 linear of a new 8-inch sewer line ~~The precise alignment of the proposed main has not been defined, but~~ would occur within existing site boundaries of Parcel 10R. These improvements are described in detail in **Section 5.8, Sewer Service,** of this draft EIR.

Other on-site improvements involve construction of the storm water drainage network and utility systems. All infrastructure would be designed and constructed in accordance with policies and standards defined by the County of Los Angeles Department of Public Works.

3.1.3.3 Overview of Site Plan: Neptune Marina Parcel FF

Figure 3.0-24, Site Plan: Neptune Marina Parcel FF, illustrates a conceptual site plan for the proposed Neptune Marina Parcel FF. The Neptune Marina Parcel FF includes development on the landside portion of Marina del Rey Parcel FF. The landside component of the proposed project consists of a 126-unit, multi-family apartment community comprised of one structure. The structure fronts Marquesas Way and Via Marina and is located northeast of the intersection of those two marina streets. It is important to note that implementation of Components 4 and 5, or other equivalent mitigation, are associated with the approval of development on the Neptune Marina Parcel FF (Component 2).

Emphasis has been placed on a design that balances public and private views of the marina and enhancement of the pedestrian experience adjacent to the water. A major feature of the project that unifies and integrates the residential and adjacent marina is a pedestrian walkway between the buildings and the existing marina, the "Waterfront Stroll Promenade." Located along the waterside perimeter of marina Basins C, the 28-foot-wide Waterfront Stroll Promenade would feature color-patterned paving, landscaping, pedestrian seating and marina-styled fencing and lighting. The entire length of the Waterfront Stroll Promenade would be open to the public and is connected to the existing unimproved marina walkway system. The length of this feature adjacent to the northern portion of the project site is approximately 200 feet in length. The proposed project would feature landscaped planters and other features constructed immediately adjacent to the public Waterfront Stroll Promenade.

One four-story wood-framed structure (Building 4) would house 126 proposed residential units, with parking provided in two-level parking garages below the structure. Structure height would not exceed 55 feet (exclusive of appurtenant, screened rooftop equipment, parapets and architectural features) when measured from finished grade elevations along Via Marina and Marquesas Way.

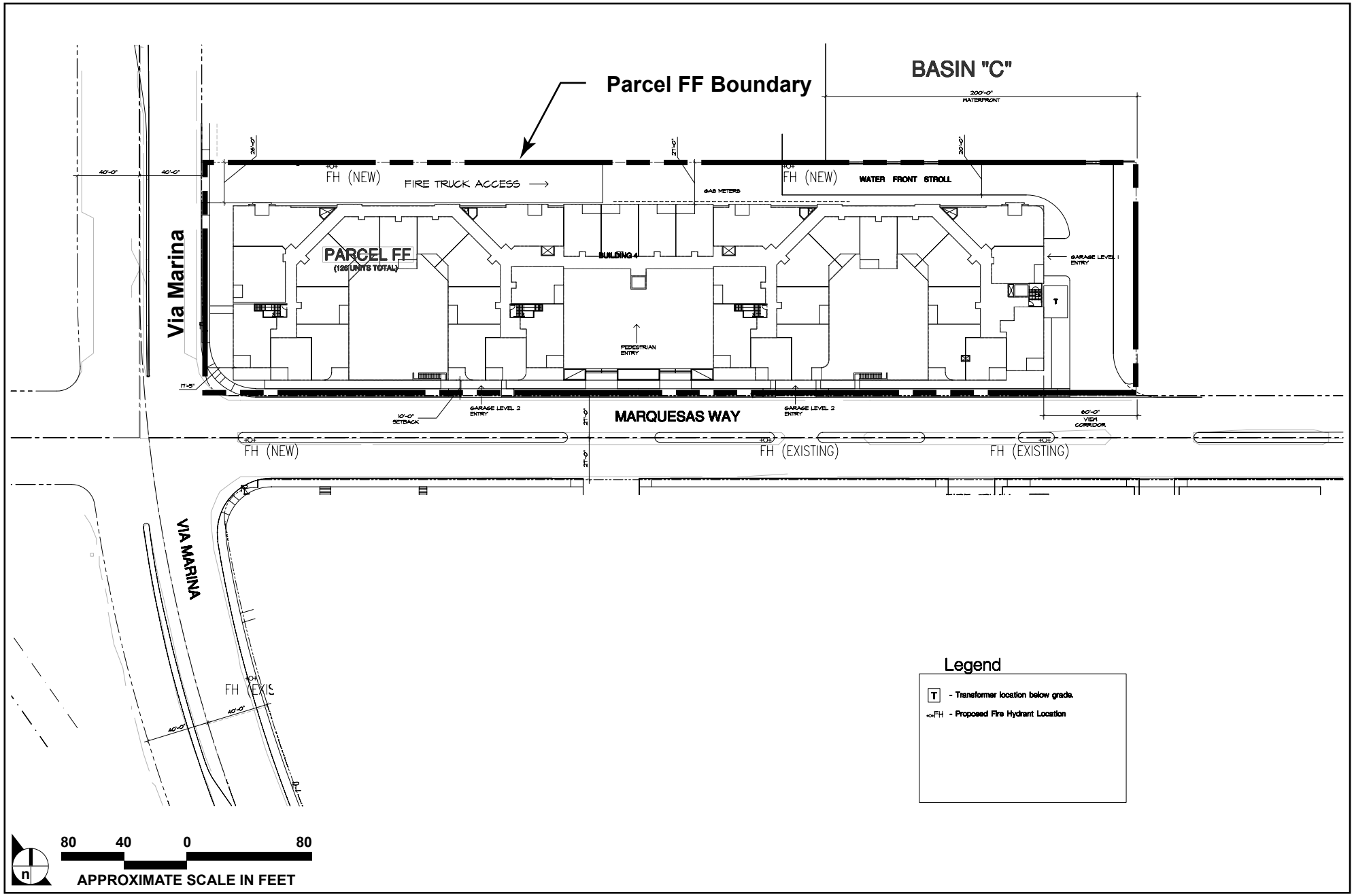
The Neptune Marina Parcel FF would, therefore, consist of 126 residential dwelling units. The project site is currently developed with an underutilized surface parking lot. Therefore, completion of the proposed project would result in a net increase of 126 apartment units.

3.1.3.3.1 Residential Units: Neptune Marina Parcel FF

As proposed, the Neptune Marina Parcel FF consists of one new residential structure being four stories above two levels of parking. Within the structure, 126 residential units are proposed that include apartment and townhome rental units. The design of the residential component of the project emphasizes a relationship to the waterfront with views to both Basins B and C within Marina del Rey. Apartment building orientations have been configured to provide pedestrian access to the Waterfront Stroll Promenade. There are multiple points for the public to have unimpeded access to the Waterfront Stroll Promenade and the marina. All drive aisles into the project provide views between the proposed buildings to the marina. The various vehicular, non-vehicular, and fire access entries on the property would also provide pedestrian access.

One- and two-bedroom apartment and townhome rental units are proposed in nine different floor-plan configurations. As defined above, 126 residential units are planned. Of these, 84 are one-bedroom apartment units (67 percent of the total) in four different floor-plan configurations; 18 are two-bedroom apartment units (14 percent of the total) in two different floor-plan configurations; and 24 are two-bedroom townhomes (19 percent of the total) in three floor-plan configurations. **Table 3.0-7, Neptune Marina Parcel FF – Description of Proposed Residential Units by Type**, provides a breakdown of the number of residential units by product type and their approximate size.

Figure 3.0-7 provides an illustration of the conceptual floor plan that comprises the Neptune Marina Parcel FF. As stated above, the proposed new waterfront community would consist of one, four-story Type V, 1-hour, fully sprinklered, wood-framed residential building which would be constructed over a two-level parking garage. The structure is designed with an open-air courtyard and perimeter landscaping that is incorporated into the public Waterfront Stroll Promenade. Structure height would not exceed 55 feet (exclusive of appurtenant, screened rooftop equipment) measured per County standards. **Figure 3.0-9** provides a representative building elevation, while **Figure 3.0-10** illustrates a representative building cross section.



SOURCE: Thomas P. Cox: Architects, Inc. – August 2008

FIGURE **3.0-24**

Site Plan: Neptune Marina Parcel FF

460-04•05/09

Table 3.0-7
Neptune Marina Parcel FF
Description of Proposed Residential Units by Type

Type of Unit	Quantity Proposed	Size of Unit (sq. ft.)
1-Bedroom Apartment; Type A-1	50	716
1-Bedroom Apartment; Type A-2	16	650
1-Bedroom Apartment; Type A-3	16	849
1-Bedroom Apartment; Type A-4	2	745
2-Bedroom Apartment; Type B-1	4	1,122
2-Bedroom Apartment; Type B-2	14	1,282
2-Bedroom Townhome; Type T-1	8	1,359
2-Bedroom Townhome; Type T-2	8	1,691
2-Bedroom Townhome; Type T-3	8	1,653
TOTAL	**126**	

Note: All project units are rental units.

3.1.3.3.2 Access and Parking: Neptune Marina Parcel FF

For residents, vehicular access (**Figure 3.0-20**) to and from the proposed residential development would be taken from three locations located off Marquesas Way. For visitors, vehicular access to the interior portions of the project is via signed entrances on Marquesas Way. Pedestrian access to the public Waterfront Stroll Promenade is via a series of signed paved walkways between the buildings.

In the proposed building, parking is provided in two-level garages built below the residences. The lowest level of parking is entirely subterranean on the street side of the building while the upper level of parking would be built at ground level. All parking garages would be screened by architectural and landscaping features, primarily by terraced, landscaped planters along the street and by landscaping along the promenade.

A total of 242 parking spaces would be provided throughout the Neptune Marina Parcel FF in the structured parking garage. Parking for apartment residents and their guests would be segregated. Among the two user types, residents would be provided parking within the two-level garages through the use of security gate enclosures. Parking for guests is provided in non-gated areas within the garage.

Table 3.0-8, Neptune Marina Parcel FF – Description of Parking Facilities by Building, shows the breakdown of parking spaces in the proposed project.

Table 3.0-8
Neptune Marina Parcel FF
Description of Parking Facilities by Building

Building	Resident Spaces	Guest Spaces	Boater Spaces	Total
IV (FF)	210	32	0	242
TOTAL	**210**	**32**	**0**	**242**

3.1.3.3.3 Amenities: Neptune Marina Parcel FF

The residential component of the project would feature a variety of recreational amenities, including the following: a recreational lounge, game room, business center, and restrooms. A more complete description of project amenities is provided under heading **3.1.3.1.1**.

3.1.3.3.4 View Corridors: Neptune Marina Parcel FF

The Neptune Marina Parcel FF incorporates a view corridor at the eastern end of the proposed structure (Building 4). View corridors allow vistas of Marina del Rey Basin C from Marquesas Way (northerly). Based on the length of the parcel's water frontage and a proposed building height of 55 feet, the LUP requires 53 linear feet of view corridor. As proposed, the project provides 60 linear feet. As such, the project as proposed on Parcel FF is consistent with view corridor provisions of the Marina del Rey Land Use Plan that call for public and private views of the marina from perimeter roadways.

3.1.3.3.5 Infrastructure Improvements: Neptune Marina Parcel FF

All infrastructure and utilities needed to serve the Neptune Marina Parcel FF are located on site or in perimeter roadways. The project would construct or participate in the construction of all improvements necessary to serve the proposed project, including improvements to off-site facilities.

Water improvements would consist of a looped fire main connecting to an existing 12-inch main located along Marquesas Way at the easterly end of the project site and connecting to an existing 12-inch water main located along Via Marina at the western end of the project. Once off- and on-site improvements are completed, the existing and proposed water mains would have the capacity to adequately serve the

Neptune Marina Parcel FF. Planned off- and on-site improvements are described in detail in the **Section 5.9, Water Service**, of this draft EIR.

Proposed sewer improvements would require the ~~abandonment of approximately 1,040 linear feet of~~connecting of a sewer lateral to an existing 10-inch sewer main within the boundaries of Parcel FF. In addition, approximately 130 linear feet of existing 10-inch sewer main within Parcel FF would be abandoned. ~~Approximately 600 linear feet of new 10-inch sewer would be constructed to serve the Neptune Marina Parcel FF. The precise alignment of the proposed main has not been defined, but would occur within existing site boundaries.~~ These improvements are described in detail in **Section 5.8, Sewer Service**, of this draft EIR.

Other on-site improvements involve construction of the storm water drainage network and utility systems. All infrastructure would be designed and constructed in accordance with policies and standards defined by the County of Los Angeles Department of Public Works.

3.1.3.4 Overview of Site Plan: Woodfin Suite Hotel and Timeshare Resort

Figure 3.0-25, Site Plan: Woodfin Suite Hotel and Timeshare Resort, illustrates a conceptual site plan for the proposed Woodfin Suite Hotel and Timeshare Resort. The project consists of a 19-story building with 288 hotel and timeshare units (a minimum of 152 hotel suites and 136 timeshare suites), meeting rooms, a restaurant and bar, a spa, an exercise room with a pool, and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities. The building would also feature an outdoor terrace and a large third floor deck with a pool, both of which would overlook the waters of the marina. The project includes a six-level parking garage adjoining the hotel/timeshare structure to the north (five parking levels above ground and one parking level underground), designed to accommodate up to 21 "self-park" parking spaces and 339 valet-only parking spaces (total of 360 parking spaces provided on site).

The intent of the site plan was to concentrate development on the northern portion of the project site and preserve the southern portion of Parcel 9U as a wetland park and adjacent upland buffer. All ground floor uses would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the wetland park, and the public-serving boat spaces combine to create an interactive public node.

Consistent with the certified LCP, the height of the hotel/timeshare structure would not exceed 225 feet (exclusive of appurtenant, screened rooftop equipment, parapets and architectural features) when measured from finished grade elevations along Via Marina. The structure would front Via Marina and

would be located south of the intersection of Via Marina and Marquesas Way and north of the intersection of Via Marina and Tahiti Way.

3.1.3.4.1 Proposed Hotel/Timeshare Resort Building Layout

Floors one, two and three of the hotel/timeshare resort structure would include all non-residential areas of the buildings, including loading areas, hotel lobby and offices, a restaurant and bar, a spa, an exercise room with a pool, outdoor function areas, meeting rooms and a large conference room/ballroom. Cross sections of the project are illustrated on **Figures 3.0-13** to **3.0-15**.

The ground floor of the project would include the lobby and registration/reception area, elevator bays (four bays), the business center, hotel/timeshare offices, a hotel restaurant and bar, kitchen, sundry shop, meeting rooms and restrooms. The exterior of the ground floor of the hotel/timeshare structure (**Figure 3.0-16**) would provide for hotel/timeshare ancillary uses consisting of outdoor dining areas, the motor court (drop-off and valet parking area), the entrance to the parking area, and service docks for truck loading. All ground floor uses would be accessible to the public. It is intended that the ground floor of the hotel/timeshare resort, the adjacent pedestrian promenade, restored wetland and upland park and the public-serving boat spaces combine to create an interactive public node.

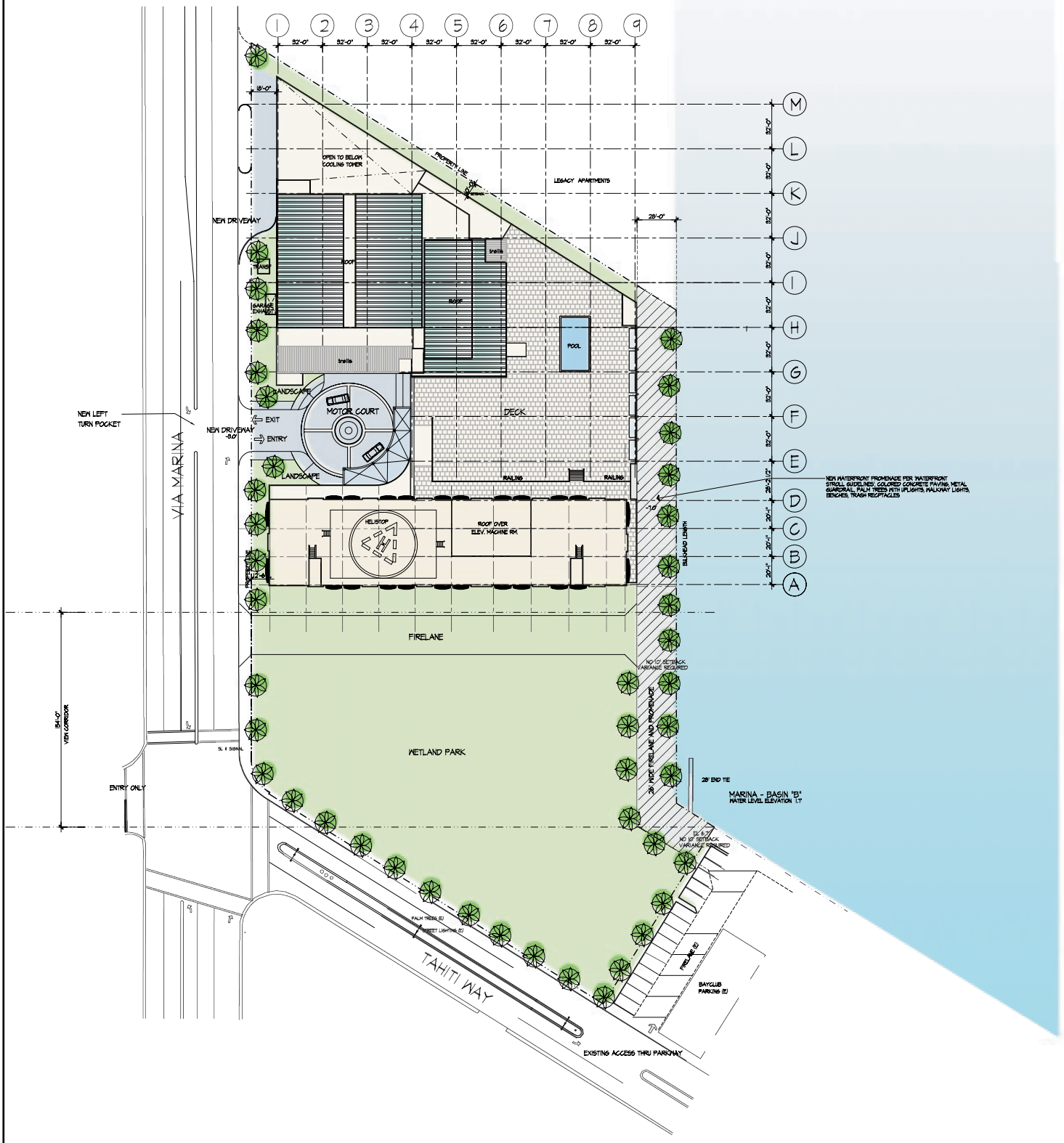
Second floor uses are illustrated on **Figure 3.0-17**. As shown, second floor uses would include a ballroom, meeting rooms, and banquet kitchen. The third floor of the building would contain an exercise room/spa that would open to the outdoor pool deck.

The hotel/timeshare portion of the building would incorporate portions of the second and third floors and floors 4 through 19. An example of the layout of these floors is presented in **Figure 3.0-18**. Other uses on floors 4 through 19 would include the elevator lobby, a service lobby, and housekeeping rooms.

An emergency helistop is proposed on the roof of the hotel/timeshare high-rise structure consistent with County Code requirements (Fire Code 1107.9). Other screened roof elements include mechanical equipment, chillers, cooling towers, a service lobby, elevator machine room, and an emergency generator and boiler.

3.1.3.4.2 Hotel and Timeshare Units

In total, 288 overnight residential units are proposed as part of the project. There are three general types of unit proposed for the building: hotel units, one-bedroom timeshare units and two-bedroom timeshare units. As proposed, there would be 152 hotel units, 68 one-bedroom timeshare units and 68 two-bedroom timeshare units. Each hotel and timeshare unit would have one to two bedrooms, a sitting area, kitchenette and bathroom, and an exterior balcony.



SOURCE: Gin Wong Associates – February 2006

FIGURE **3.0-25**

Site Plan: Woodfin Suite Hotel and Timeshare Resort

All of the project's proposed 136 timeshare suites are intended to and are designed to be used on a temporary basis by guests. Moreover, the Woodfin Suite Hotel and Timeshare Resort will be a full-service facility, with a single set of support facilities (check-in desk, reception, restaurants, cocktail lounge, etc.) for both timeshare and hotel users. Therefore, there will be no distinction in terms of services between hotel patrons and timeshare patrons.

The Woodfin Suite Hotel and Timeshare Resort will enhance visitor-serving uses by providing much needed additional overnight accommodations through both the hotel and timeshare component. Some key operational aspects of the project include:

- The timeshare suites will not be in a separate tower from the hotel suites; rather, both the hotel and timeshare suites will be on same floors (4 through 19).
- Rental of both the timeshare suites and hotel suites will be handled in a similar manner by on-site management (electronic keys issued by the front desk, concierge services, housekeeping, front-desk check-in/out).
- Timeshares will be made available to the general public through the hotel reservation system when not used by timeshare vacationers.
- Timeshare suites will be marketed through an exchange program and through the hotel, and will be rented at comparable rates to equivalent hotel suites.
- Timeshare suites will be sold in one week intervals.
- Stays in timeshare suites will be limited to no more than a total of four weeks annually.
- The Woodfin timeshare component will remain a commercial use and will comply with the timeshare laws governed by the California Department of Real Estate.

3.1.3.4.3 Access and Parking: Woodfin Suite Hotel and Timeshare Resort

Vehicular access to and from the Woodfin Suite Hotel and Timeshare Resort Project would be taken from two locations (refer to **Figure 3.0-21**). One access point located on Via Marina would provide an entry to the motor court and the parking garage. The second access point is also located along Via Marina (north of access to the motor court) that provides access to the service entry and loading docks.

Parking for the Woodfin Suite Hotel and Timeshare Resort would be provided in a six-level parking structure located north of the hotel/timeshare building. Five floors would be above and one floor would be below finished grade. The first three floors of the garage would connect with the ground, second and third floors of the hotel/timeshare building. The parking garage is designed to accommodate up to 21 fee-based "self-park" parking spaces open to the public and 339 valet-only parking spaces (total of 360 parking spaces provided on-site).

3.1.3.4.4 Amenities: Woodfin Suite Hotel and Timeshare Resort

3.1.3.4.4.1 Guest and Visitor Amenities

The Woodfin Suite Hotel and Timeshare Resort project would feature a variety of patron- and visitor-serving recreational amenities, including a restaurant and bar, a business center, meeting rooms, sundry shop, and exercise room/spa. Outdoor amenities would include pool facilities and a dining terrace overlooking the Waterfront Stroll Promenade and the Marina.

3.1.3.4.4.2 Public Amenities

A major feature of the project that unifies and integrates the hotel/timeshare resort with the Marina is the continuation of the Waterfront Stroll Promenade from Legacy Partners' project across the entire waterfront extent of Parcel 9U. Located along the waterside perimeter of the proposed hotel/timeshare resort and planned adjacent public wetland park project at Parcel 9U, the 28-foot-wide public Waterfront Stroll Promenade will feature special color-patterned paving, landscaping, pedestrian seating and marina-styled fencing and lighting and would also serve as fire access. The length of the Waterfront Stroll Promenade on Parcel 9U is approximately 386 feet. The hotel/timeshare structure will feature landscaped planters and other features constructed immediately adjacent to the public Waterfront Stroll Promenade. Landscaped areas are also proposed along the western, eastern, and southern margins of the project and in various perimeter areas surrounding the hotel/timeshare structure. Public access to the Marina and the Waterfront Stroll Promenade will be available along a walkway on the southeastern side of the building. This walkway would be treated with enhanced paving and landscaping similar to that of the Waterfront Stroll Promenade. As defined above, all ground floor uses would be accessible to the public. It is intended that the ground floor of the hotel, the adjacent pedestrian promenade, the wetland park, and the public-serving boat spaces combine to create an interactive public node.

3.1.3.4.5 View Corridors: Woodfin Suite Hotel and Timeshare Resort

The Woodfin Suite Hotel and Timeshare Resort Project (Parcel 9U), incorporates one view corridor on Parcel 9U, south of the hotel. The primary view corridor allows vistas of Marina del Rey Basin B from Via Marina through the Parcel 9U public park/wetland. Per the LCP, based on the proposed 225-foot height of the hotel structure (excluding appurtenant rooftop structures), a view corridor totaling 40 percent of the length of the site is required. For the 386-foot-long site, a minimum 154-foot-wide view corridor is required. The project plans for 154 linear feet of view corridor through the Parcel 9U public park/wetland to be situated to the south of the proposed hotel/timeshare resort structure. Because the project provides the required 154 feet of public view corridor on Parcel 9U (the minimum required in this instance to

achieve the proposed hotel/timeshare structure height), the project is consistent with provisions of the LCP that call for public and private views of the Marina from perimeter roadways.

3.1.3.4.6 Infrastructure Improvements: Woodfin Suite Hotel and Timeshare Resort

All infrastructure and utilities needed to serve the Woodfin Suite Hotel and Timeshare Resort Project are located proximal to each project site. The project would construct or participate in the construction of all improvements necessary to serve their proposed uses, including improvements to off-site facilities. Improvements proposed for Parcel 9U consist of a new fire main connecting to the existing 12-inch water main located on Tahiti Way. Given these improvements, the existing and proposed water mains would have the capacity to adequately service the project.

Proposed sewer improvements associated with project would require approximately 210 linear feet of new 8-inch sewer to service the Woodfin Suite Hotel and Timeshare Resort Project. The precise alignment of the proposed main has not been defined, but would occur within existing site boundaries. Other on-site improvements would involve the construction of the storm water drainage network, and utility systems. All infrastructure would be designed and constructed in accordance with the policies and standards set forth by the County of Los Angeles Department of Public Works.

3.1.3.5 Overview of Site Plan: Restored Wetland and Public Upland Park

3.1.3.5.1 Overview: Wetland Restoration/Public Open Space Area

Accompanying the change of "Open Space" designated land use of Parcel FF, which would be developed with an apartment building, negating the ability to potentially develop Parcel FF with a future public park, Legacy Partners Neptune Marina, LP, will help to fund the development of a public wetland and upland park of approximately 1.46 acres within the southern portion of Parcel 9U (Legacy Partners will fund 50 percent of the development costs associated with construction of the wetland and upland park, while Woodfin Suite Hotels, LLC will fund the remaining 50 percent of these development costs). A wetland restoration plan has been prepared and is attached in full as **Appendix ~~3~~5.~~5~~0**. The wetland park will consist of a newly established muted tidal wetland area in the southern portion of the park, surrounded by an upland buffer (**Figure 3.0-26, Conceptual Wetland Mitigation Plan**). The muted tidal wetland area shall be approximately 0.47 acre in size, while the upland buffer shall be 0.99 acre and planted in appropriate transitional vegetation. A protective fence shall be installed in a location and manner deemed appropriate for the biological and visitor functions. In the upland buffer, appropriate interpretive signage will be installed to enhance the visitor experience. Turf block areas would provide a sturdy space for group lectures, seating for visitors bringing lawn chairs for bird watching etc., and maintenance vehicles.

Expanded and enhanced seasonal pond habitat with fringing riparian scrub would be planted within the enhanced wetland area. These plant species would replace the non-native species currently found on site. The proposed seasonal pond habitat and fringing riparian scrub would be planted in zones of appropriate wetness. Variations in microtopography within the basin will allow for establishment of mosaic of seasonal pond habitat with associated fringing riparian scrub.

No lighting or parking will be permitted within the park. Parking for park visitors will be conveniently located within the adjacent hotel/timeshare resort's parking area (as noted, up to 21 fee-based self-parking spaces will be provided within the hotel/timeshare resort project, for use by the public). Until the hotel is built, a temporary parking lot would be allowed on the hotel portion of Parcel 9U in a non-paved area. Monitoring of the vegetation for five years is an integral part of the wetland proposal.

3.1.3.5.2 Infrastructure Improvements: Wetland Restoration Area/Public Open Space Area

All infrastructure and utilities needed to serve the wetland restoration/public open space area are located on site or in perimeter roadways. The project would construct or participate in the construction of all improvements necessary to serve the proposed project, including improvements to off-site facilities.

3.1.3.5.3 Construction Program: Wetland Restoration Area/Public Open Space Area

Construction of the wetland restoration area/public open space area would occur concurrently with development proposed on Parcel FF and prior to removal of the existing wetland on parcel 9U. As the project site Parcel 9U is vacant, no demolition is required. Construction of the project is anticipated to take 12 months to complete. Given this schedule, anticipated buildout of the project would occur in January of 2011.

3.1.3.6 Project Overview: Public Boat Spaces

To further compensate for the inability to potentially develop a public park on Parcel FF in the future, as a result of developing the parcel with an apartment building, Legacy Partners will fund and develop a public-serving anchorage to adjoin the Parcel 10R and 9U bulkhead. This anchorage would comprise approximately 49,000 square feet or 1.12 waterside or submerged acres in the southwestern portion of Basin B, and would contain approximately 524 lineal feet of new public dock area (it is estimated that the public anchorage would provide berthing for between 7 and 11 transient vessels, depending on the vessels' size, inclusive of berthing for dinghies at the northern end of the anchorage). The new public boat anchorage, which would be compliant with ADA and Department of Boating and Waterways standards, will constitute a significant public boater-serving amenity, as no such public anchorage currently exists with in the westerly "residential" portion of Marina del Rey. The anchorage would provide four sewage pumpout stations with a single sewage pump that would drain to the existing sewer system.

IRRIGATION CONTROLLER LOCATION

COASTAL SAGE SCRUB PLANTING AREAS WITH BERMS

28' WIDE BOMANITE GRASSCRETE FIRE ACCESS ROUTE WITH 72" WIDE CONCRETE PEDESTRIAN PATH. ACCESS ROUTE TO HAVE 18" WIDE CONCRETE BORDER ON NORTH SIDE AND CURB/GUTTER ON SOUTH SIDE OF FIRE LANES TO DELINEATE EDGE OF GRASSCRETE.

CATCH BASIN LOCATION (TYP)

PICNIC TABLE/ EATING AREA

30" HIGH SCREENING HEDGE

72" WIDE DECOMPOSED GRANITE PATH WITH MAX. CROSS SLOPE OF 1/4" PER FOOT, MAX. SLOPE OF 5%.

7' CONCRETE SIDEWALK (EXISTING)

PARK ENTRANCE AND EDUCATIONAL GATHERING AREA
- INFORMATIONAL SIGNAGE
- SEATING AREAS
- WOOD OVERHEAD TRELLIS
- VIEWING AREA

EXISTING LIGHT POLES

HOTEL EXIT STAIRS

HOTEL LOBBY
ELEV: +14.0'

HOTEL EXIT STAIRS

ELEV: +7.23' (PROMENADE LEVEL)

EXISTING BOAT SLIPS

VIA MARINA

ELEV: +12.43'

ELEV: +13.5'

3.76 %

1.0 %

GRADE BREAK

UP

HOTEL OUTDOOR TERRACE

28' WIDE FIRELANE AND WATERFRONT PROMENADE PER "WATERFRONT STROLL GUIDELINES"

28' WIDE BOMANITE GRASSCRETE FIRE ACCESS ROUTE WITH 72" WIDE CONCRETE PEDESTRIAN PATH. ACCESS ROUTE TO HAVE 18" WIDE CONCRETE BORDER ON NORTH SIDE AND CURB/GUTTER ON SOUTH SIDE OF FIRE LANES TO DELINEATE EDGE OF GRASSCRETE.

FIRE TRUCK TURNING AREA

FIRE HYDRANT LOCATION

CATCH BASIN LOCATION (TYP)

EDUCATIONAL GATHERING AREA
- INFORMATIONAL SIGNAGE
- SEATING AREAS
- WOOD OVERHEAD TRELLIS

COASTAL BLUFF SCRUB PLANTING AREAS WITH BERMS

CONNECTION PIPE TO PROVIDE TIDAL INFLUENCE

MARINA BASIN 'B' (WATER LEVEL)

ELEV: +7.21'

PICNIC TABLE/ EATING AREA

72" WIDE DECOMPOSED GRANITE PATH WITH MAX. CROSS SLOPE OF 1/4" PER FOOT, MAX. SLOPE OF 5%.

COASTAL PRAIRIE PLANTINGS AROUND PERIMETER OF SALTWATER MARSH

SALTWATER MARSH PLANTINGS

TAHITI WAY

PROPERTY LINE

LANDSCAPING

25' BUFFER AREA

CONCRETE CURB

MARITIME CHAPARRAL PLANTING AREAS

30" HIGH SCREENING HEDGE

PATH TO CONNECT TO FUTURE MOLE ROAD SIDEWALK

PHOTOGRAPHS OF CREATED SALTWATER MARSH HABITAT SIMILAR TO HABITAT PROPOSED FOR THE PARCEL P9U WETLAND PARK

32 16 0 32

APPROXIMATE SCALE IN FEET

Plant Palette for Coastal Prairie

Plant Species	Container Size	Spacing
Container Plants		
Wild hyacinth (Dichelostemma capitatum)	Rosepots	5 foot o.c. (scattered)
Coastal goldenbush (*Isocoma menziesii*)	1 gal	8 foot o.c. (scattered)
Mesa horkelia (*Horkelia cuneata*)	1 gal	3 foot o.c. (scattered)
Wishbone bush (*Mirabilis californica*)	1 gal	10 foot o.c. (scattered)
Coast range melic (*Melica californica*)	Liners	2 foot o.c. (clumped)
Purple needlegrass (*Nassella pulchra*)	Liners	2 foot o.c. (clumped)
Blue eyed grass (*Sisyrinchium bellum*)	Rosepots	2 foot o.c. (clumped)
Seed Mix		
Bentgrass (*Agrostis pallens*)	seed	
Common goldenstar (*Bloomeria crocea*)	seed	
California goldfields (*Lasthenia californica*)	seed	
Foothill needlegrass (*Nassella lepida*)	seed	
Dot seed plantain (*Plantago erecta*)	seed	
Blue eyed grass (*Sisyrinchium bellum*)	seed	

Plant Palette for Restored Coastal Salt Marsh

Plant Species	Container Size	Spacing
Low-Marsh		
California Cord Grass (Spartina foliosa)	1 gal	5 foot o.c. (clumped)
Saltwort (*Batis maritima*)	1 gal	6 foot o.c. (scattered)
Mid-Marsh		
Common Pickleweed (*Salicornia virginica*)	1 gal	3 foot o.c. (scattered)
Alkali Heath (*Frankenia salina*)	1 gal	3 foot o.c. (scattered)
Fleshy Jaumea (*Jaumea carnosa*)	1 gal	3 foot o.c. (scattered)
Saltgrass (*Distichlis spicata*)	1 gal	3 foot o.c. (clumped)
Upper-Marsh		
Parish's Saltwort (*Arthrocnemum subterminalis*)	1 gal	3 foot o.c. (perimeter)
Southwestern Spiny Rush (*Juncus acutus leopoldi*)	1 gal	3 foot o.c. (perimeter)

Plant Palette for Coastal Sage Scrub and Coastal Bluff Scrub

Plant Species	Container Size	Spacing
Container Plants		
California sagebrush (Artemisia californica)	1 gal	5 foot o.c. (scattered)
Brewer's saltbush (*Atriplex lentiformis breweri*)	1 gal	8 foot o.c. (scattered)
Encelia californica (*Encelia californica*)	1 gal	5 foot o.c. (scattered)
Buckwheat (*Eriogonum fasciculatum*)	1 gal	5 foot o.c. (scattered)
Sea cliff buckwheat (*Eriogonum parvifolium*)	1 gal	6 foot o.c. (scattered)
California Boxthorn (*Lycium californica*)	1 gal	6 foot o.c. (clumped)
Purple needlegrass (*Nassella pulchra*)	Liners	2 foot o.c. (clumped)
Coast prickly pear (*Opuntia parifera*)	1 gal	8 foot o.c. (clumped)
Lemonade berry (*Rhus integrifolia*)	1 gal	20 foot o.c. (clumped)
Seed Mix		
Wild hyacinth (*Dichelostema capitatum*)	seed	
Buckwheat (*Eriogonum fasciculatum*)	seed	
Foothill needlegrass (*Nassella lepida*)	seed	
Purple needlegrass (*Nassella pulchra*)	seed	
Blue eyed grass (*Sisyrinchium bellum*)	seed	

Plant Palette for Maritime Chaparral

Plant Species	Container Size	Spacing
Container Plants		
Big-pod ceanothus (*Ceanothus megacarpus*)	1 gal	8 foot o.c. (scattered)
Little-leaved Redberry (*Rhamnus crocea*)	1 gal	8 foot o.c. (scattered)
Toyon (*Heteromeles arbutifolia*)	1 gal	8 foot o.c. (scattered)
Lemonadeberry (*Rhus integrifolia*)	1 gal	8 foot o.c. (scattered)
Southern California checkerbloom (*Sidalcea hickmanii hickmanii*)	1 gal	4 foot o.c. (clumped)
California buckhin (*Yiplebrinum cereum*)	1 gal	3 foot o.c. (clumped)
Coast Buckwheat (*Eriogonum parvifolium*)	1 gal	5 foot o.c. (clumped)
Pacific flowering pawthorn (*Rhus spectosum*)	1 gal	10 foot o.c. (scattered)
Seed Mix		
Bentgrass (*Agrostis pallens*)	seed	
Common goldenstar (*Bloomeria crocea*)	seed	
Splendid mariposa lily (*Calochortus splendens*)	seed	
Pink gnaphalium (*Gnaphalium canescens/decurrens*)	seed	
Collard annual lupine (*Lupinus truncatus*)	seed	

SOURCE: Glenn Lukos Associates - July 2008

FIGURE **3.0-26**

Conceptual Wetland Mitigation Plan

460-004•08/08

3.1.4 Project Applications

Section 15124(d)(b) of the *State CEQA Guidelines* indicates that the project description shall include a list of permits and other approvals required to implement the project. A listing, by project component, of project applications required by the County of Los Angeles Department of Regional Planning is below.

Neptune Marina Parcel 10R

Amendment to the Marina del Rey Land Use Plan
Coastal Development Permit (CDP)
Coastal "Approval in Concept" (for Parcel 10R anchorage component) for separate CDP from the Coastal Commission
Conditional Use Permit
Variance

Neptune Marina Parcel FF

Amendment to the Marina del Rey Land Use Plan
Coastal Development Permit
Conditional Use Permit
Variance

Woodfin Suite Hotel and Timeshare Resort

Coastal Development Permit
Conditional Use Permit
Parking Permit
Tentative Tract Map
Variance

Wetland Restoration

Coastal Development Permit

Public-Serving Anchorage

Coastal "Approval in Concept" for a separate CDP from the Coastal Commission

3.1.5 Decision-Making Agencies

Section 15124(d)(a) of the *State CEQA Guidelines* indicates that the project description shall include a list of agencies that are expected to use the EIR in their decision making. Agencies are limited to the County of Los Angeles and the California Coastal Commission.

5.0 EXISTING CONDITIONS, PROJECT IMPACTS, AND MITIGATION MEASURES

PURPOSE

Section 5.0 of this ~~draft~~ Recirculated Draft EIR provides information on the project's existing conditions, the impact potential, pertinent mitigation measures, and cumulative issues. The existing conditions component defines the environmental conditions that currently exist on and near the project site(s); project impacts are defined as the project's effects on the existing environment. Mitigation measures are designed to reduce a project's impact potential. Each mitigation measure is identified as either one that is proposed as part of the project or one that is recommended by this EIR. Technical topics addressed in the EIR were defined by the Lead Agency. The purpose of this section is to inform readers of the type and magnitude of the project's environmental impact and how such impacts would affect the existing environment.

Section 5.0 of this draft EIR describes existing conditions on and near the **Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project** site. Due to the different types of permits required and Lead and Responsible Agency actions (reference **Section 3.0, Project Description**), four levels of impact analysis are provided in **Section 5.0**. Each of the six technical sections of this recirculated document (i.e., traffic, noise, air quality, visual ~~resources~~quality, ~~etc.~~sewer and solid waste services), analyzes impacts associated with the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project. This analysis is followed by individual analysis of impacts associated with the Neptune Marina Project Parcel 10R, Neptune Marina Project Parcel FF, Woodfin Suite Hotel/Timeshare Resort, a Wetland Park, and between ~~nine~~ 7 and 11 public ~~and transient~~ serving boat spaces adjacent to Parcel 9U.

5.2 NOISE

SUMMARY

The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project ~~"proposed project" or "project"~~ site is located in an urbanized area. Proposed development on the site and existing development in nearby off-site areas contain a variety of land uses, some of which are considered noise sensitive. Increases in noise of less than 3 decibels as measured on an A-weighted scale (dB(A)) Community Noise Equivalent Level (CNEL) are not usually perceptible to the human ear. However, changes from 3 to 5 dB(A) may be noticed by some individuals who are sensitive to changes in noise.

Construction noise would affect nearby noise sensitive residential uses ~~proximal to the site~~ and noise sensitive uses along the proposed haul route. Exterior noise levels during site construction of up to ~~94~~ 100 dB(A) could be experienced at some noise sensitive ~~receptor locations~~uses that would have ~~with~~ direct lines of sight to ~~the construction site~~pile driving. Noise levels generated ~~from the project~~ during construction ~~stages~~ would periodically exceed County standards for exterior noise levels during the workday. To mitigate construction noise, all construction activities would comply with the County of Los Angeles ~~Plans and Policies for noise control~~ Noise Control Ordinance (Ordinance No. 11773~~).~~) so that cConstruction noise would be limited to normal working hours when many residents in the Marina del Rey area ~~are~~ would be away from their homes. Nevertheless, construction noise would represent a temporary, but significant impact, as noise levels would periodically exceed County standards, even after mitigation.

During project operation, it is not anticipated that interior noise levels on or off the project site would exceed County standards. The primary source of noise during project operation would be ~~associated with vehicular~~project traffic~~, which could affect off-site noise sensitive uses along nearby roadways~~. Operation of the proposed project would introduce an additional 3,10~~4~~ daily vehicle trips ~~to~~ on local roadways ~~situated proximal to the project site~~ (1,01~~7~~~~45~~ trips from the Neptune Marina Apartments - Parcel 10R, 499 trips from the Neptune Marina Apartments - Parcel FF, and 1,5~~3~~88 trips from the Woodfin Suite Hotel and Timeshare Resort - ~~Neptune Marina~~ Parcel 9U, and the balance of the trips from the wetland park and public boat slips). Off-site noise level increases generated by proposed project traffic would be ~~up to 2~~less than 3.0 dB(A) CNEL. The largest change in noise levels would occur along Marquesas Way east of Via Marina along the project frontage. However, this increase would not be audible and would not exceed the ~~off-site mobile source~~community noise significance threshold~~of significance and would be below the level of human perception~~. Therefore, no significant on- or off-site noise impacts would occur as a result of project operation.

Noise level increases attributable to traffic generated by cumulative development would be less than 3 dB(A) CNEL at all modeled locations. Receptors within 50 feet of Marquesas Way would experience the greatest cumulative

traffic noise increase; however, this increase would not be audible and would not exceed the community noise significance threshold of 3.0 dB(A)~~have the largest change, where noise levels as a result of traffic generated by cumulative development would increase from 53.8 dB(A) to 56.7 dB(A), an increase of 2.9 dB(A). This increase would not exceed the off-site mobile source thresholds of significance for this analysis and would be below the level of human perception~~. Therefore, no significant off-site cumulative noise impacts would occur as a result of cumulative ~~projects~~development. However, cumulative noise impacts during construction would be significant and the project's contribution to these cumulative impacts would be cumulatively considerable.

5.2.1 INTRODUCTION

5.2.1.1 Characteristics of Noise

Noise is usually defined as unwanted sound. It is an undesirable by-product of human society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The definition of noise as unwanted sound implies that it has an adverse effect on people and their environment.

Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to very low and high frequencies than to medium frequencies that correspond with human speech. In response, the A-weighted noise level (or scale) has been developed. This A-weighted sound level, referenced in units of dB(A),~~It~~ corresponds better with people's subjective judgment of sound levels. ~~This A-weighted sound level is called the "noise level" referenced in units of dB(A).~~ Because noise is measured on a logarithmic scale, a doubling of sound energy results in a 3 dB(A) increase in noise levels. ~~However, changes~~ Changes in ~~a community~~ noise level of less than 3 dB(A) are not typically ~~noticed~~ perceived by the human ear.[1] Changes from 3 to 5 dB(A) may be noticed by some individuals who are sensitive to changes in noise. A 5 dB(A) increase is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound.

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites and 7.5 dB(A) at

---

1 California Department of Transportation, *Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol* (Sacramento, California: October 19980, p. N-41.~~*Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81~~.

acoustically "soft" sites.[2] For example, a 60 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be ~~54~~ 54 dB(A) at 100 feet from the source and 48 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dB(A) and 4.5 dB(A) per doubling of distance from the source to the receptor for hard and soft sites, respectively.[3] Sound levels can also be attenuated by man-made or natural barriers and elevational differences, as illustrated in **Figure 5.2-1, Noise Attenuation Barriers**. Solid walls, berms, or elevation differences typically reduce noise levels by 5 to 10 dB(A).[4] The noise attenuation provided by typical structures in California is provided below in **Table 5.2-1, Outside to Inside Noise Attenuation**.

Table 5.2-1
Outside to Inside Noise Attenuation

	Noise Reduction - dB(A)	
Building Type	Open Windows	Closed Windows[1]
Residences	12	25
Schools	12	25
Churches	20	30
Hospitals/Convalescent Homes	17	25
Offices	17	25
Theaters	20	30
Hotels/Motels	17	25

Note:[1] As shown, structures with closed windows can attenuate exterior noise by a minimum of 25 to 30 dB(A).
Source: Transportation Research Board, National Research Council, Highway Noise: *A Design Guide for Highway Engineers, National Cooperative Highway Research Program Report 117.* ~~*Source:* Highway Noise Fundamentals, *p. 117.*~~

When assessing community reaction to noise, there is an obvious need for a scale that averages varying noise exposures over time and quantifies the results in terms of a single number descriptor. Several scales have been developed that address community noise levels. Those that are applicable to this analysis are

2 California Department of Transportation, *Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol* (Sacramento, California: October 19980, p. N-27. ~~Ibid., p. 97.~~ A "hard" or reflective site does not provide any excess ground-effect attenuation and ~~is characteristic of~~typically includes asphalt, concrete, smooth bodies of water, and very hard packed soils. An acoustically "soft" or absorptive site is ~~characteristic of normal earth and most ground with vegetation~~characterized by plowed farmland, grass, crops, soft sand, etc..

3 California Department of Transportation, *Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol* (Sacramento, California: October 19980, p. N-27. ~~Ibid.~~

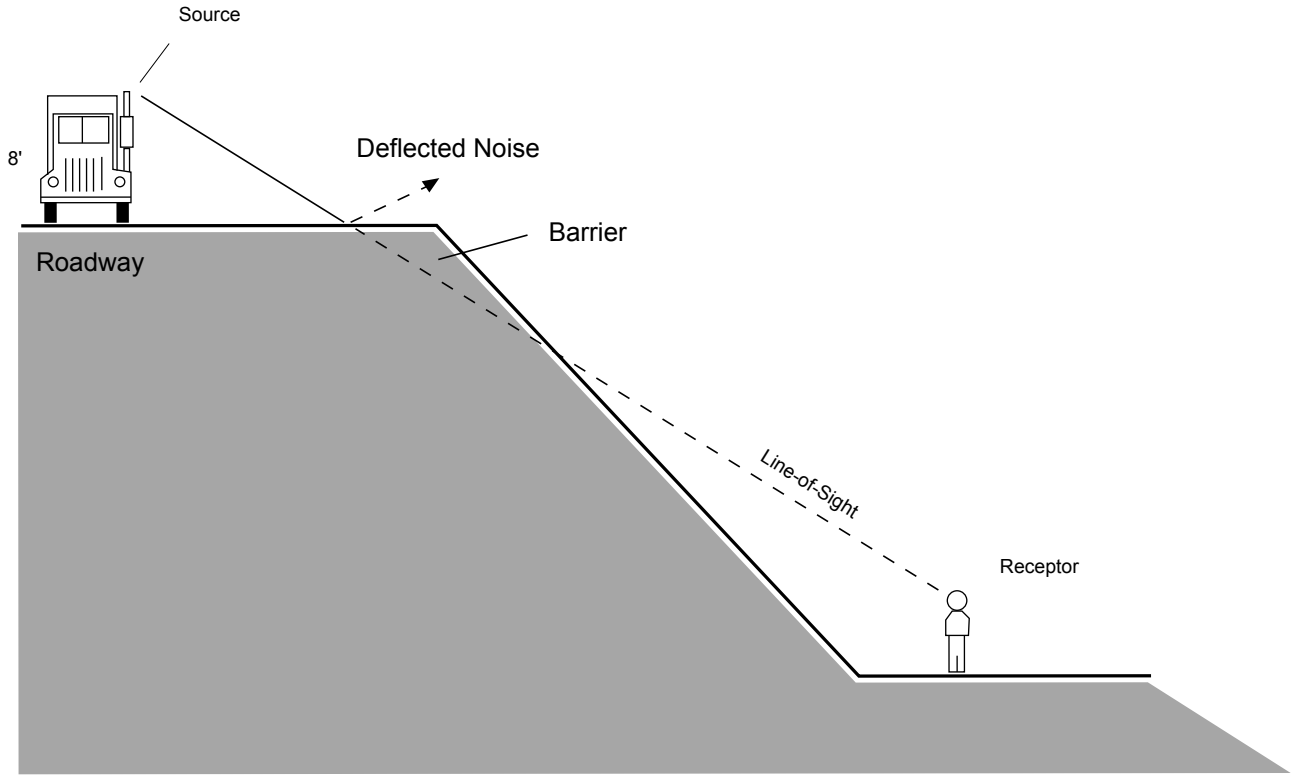
4 *Highway Noise Mitigation* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 18.

the Equivalent Noise Level (L_{eq}) and CNEL. L_{eq} is the average A-weighted sound level measured over a given time interval. L_{eq} can be measured over any period but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is another average A-weighted sound level measured over a 24-hour period and is adjusted to account for some individual's increased sensitivity to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained after adding 5 dB to hourly sound levels occurring during the evening hours from 7:00 PM to 10:00 PM and 10 dB to hourly sound levels occurring during the nighttime hours from 10:00 PM to 7:00 AM. The additional five and 10 ~~dB "penalties"~~ decibels are applied to account for peoples' increased sensitivity during the evening and nighttime hours. ~~For example, the logarithmic effect of these additions is that a 60 dB(A) 24-hour L_{eq} would result in a measurement of 66.7 dB(A) CNEL.~~

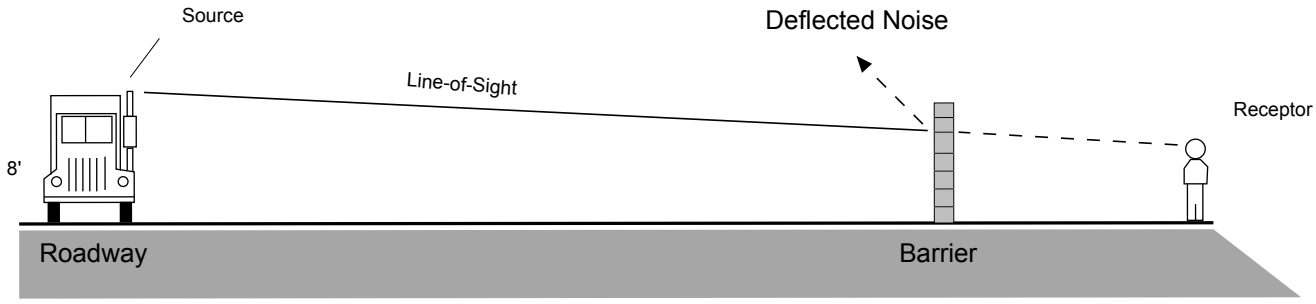
5.2.1.2 Characteristics of Vibration

Vibration is a unique form of noise in that its energy is carried through structures and the earth, whereas noise is carried through the air. Thus, vibration is generally felt and heard. Some vibration effects can be caused by noise; for example, the rattling of windows from truck pass-bys. This phenomenon is related to the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. ~~Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.~~

In general, vibration can be described in terms of displacement, velocity or acceleration. For the purpose of this analysis, vibration will be described in terms of velocity. The peak particle velocity (PPV) or the root mean square (RMS) velocities are usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the square root of the average of the squared amplitude of the signal. Units for PPV and RMS are described in inches per second. Vibration in terms of velocity can also be described in a decibel notation—the purpose of which is to compress the range of numbers required to describe vibration. **Figure 5.2-2, Typical Levels of Ground-Bo~~u~~rne Vibration**, identifies typical groundborne vibration levels in decibels, RMS velocity amplitude, and PPV.



"Barrier Effect" Resulting from Differences in Elevation.

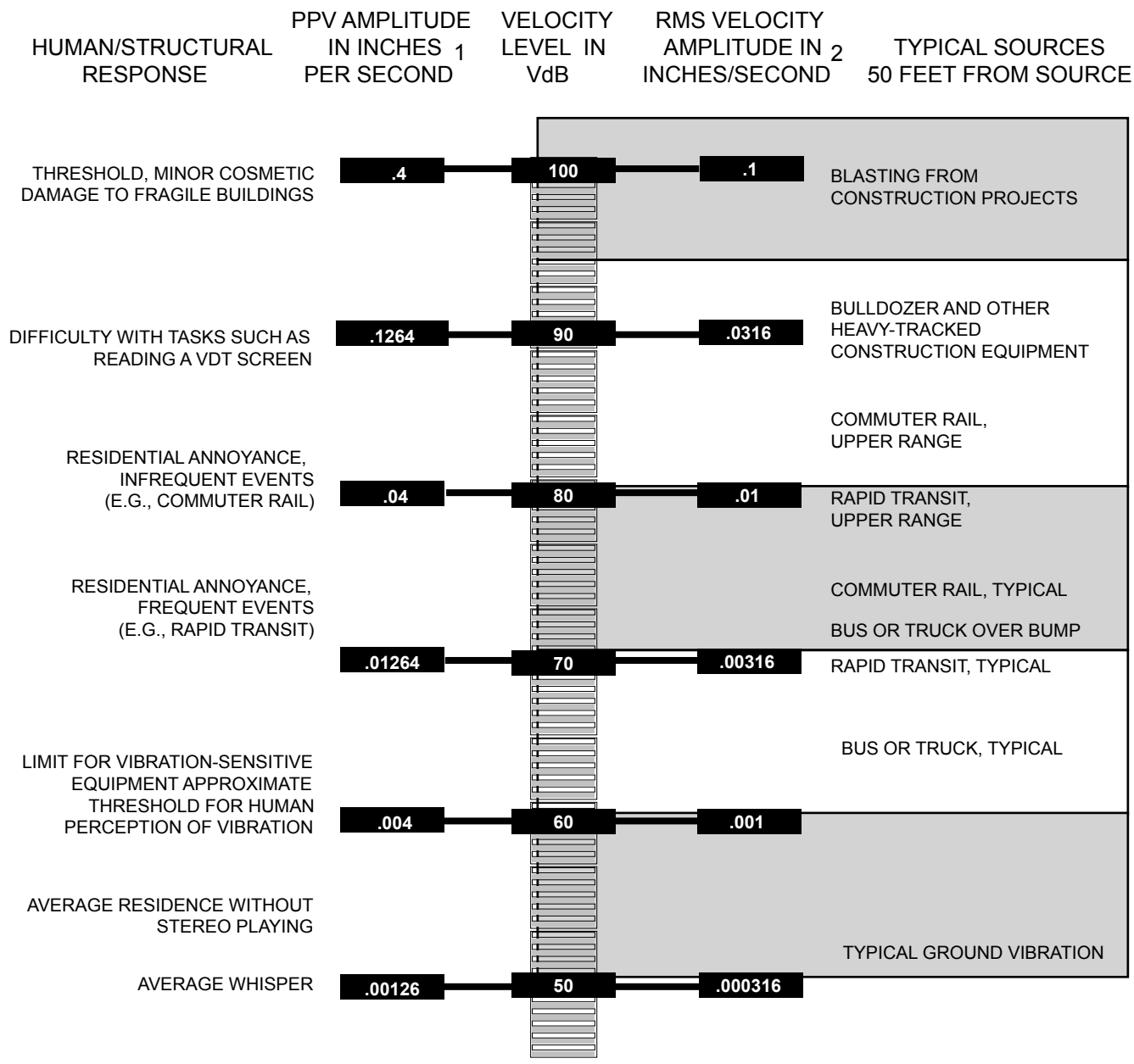


"Barrier Effect" Resulting from Typical Soundwall.

SOURCE: Impact Sciences, Inc. – May 2005

FIGURE **5.2-1**

Noise Attenuation Barriers



[1] PPV is typically a factor 1.7 to 6 times greater than RMS vibration velocity. A factor of 4 was used to calculate noise levels.

[2] Vibration levels in terms of velocity levels are defined as: $V=20 \times \log_{10} (a/r)$
V = velocity levels in decibels
a = RMS velocity amplitude
r = reference amplitude (accepted reference quantities for vibration velocity are 1×10^{-6} inches/second in the United States)

FIGURE **5.2-2**

Typical Levels of Ground-Bourne Vibration

The effect of vibration on structures and individuals varies depending on soil type, ground strata and receptor location. Sensitivity to vibration varies from person to person. Peak velocities of 0.01 inch per second RMS are not generally noticeable, while velocities of 0.1 inch per second RMS can be ~~troublesome~~ an annoyance to persons near the vibration source. Traffic-related vibrations and typical construction vibrations pose no threat to buildings and structures.[5] However, there is potential for architectural damage during continuous pile driving at a PPV somewhere between 0.2 and 2.0 inches/second.[6] ~~Damage to structures can occur above 0.04 inches per second RMS.~~

5.2.1.3 Noise Analysis Purpose and Methodology

5.2.1.3.1 Purpose of Analysis

The purpose of this noise analysis is twofold: (1) to evaluate the project in terms of design to ensure that the proposed land uses are planned appropriately from a noise perspective; and (2) to evaluate the noise impact of the project during both construction and operation on the surrounding (off-site) area.

5.2.1.3.2 Analysis Methodology

Analysis of the existing and future noise environments presented in this EIR section is based on technical reports, noise monitoring, and noise prediction modeling. Existing stationary noise data are identified based on reviews of available technical reports and noise monitoring. Noise level monitoring was conducted by Impact Sciences, Inc. using a Brüel and Kjær Type 2237 controller Integrating Sound Level Meter and a Larson Davis Model 720 Integrating Sound Level Meter. Both meters satisfy the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. Future noise levels for stationary activities and equipment were estimated based on available technical reports and literature cited in this EIR section. Noise modeling procedures involved the calculation of existing and future vehicular noise levels along individual roadway segments in the vicinity of the project site. This was accomplished using the Federal Highway Administration's *Highway Noise Prediction Model* (FHWA-RD-77-108). This model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site conditions. Average vehicle noise rates (energy rates) utilized in the FHWA ~~Model~~ model have been modified to reflect average vehicle noise rates

---

5 California Department of Transportation, *Transportation Related Earthborne Vibrations (Caltrans Experiences)*, Technical Advisory, Vibration TAV-02-01-R9601 (Sacramento, California: California Department of Transportation, February 20, 2002), p. 10.

6 California Department of Transportation, *Transportation Related Earthborne Vibrations (Caltrans Experiences)*, Technical Advisory, Vibration TAV-02-01-R9601 (Sacramento, California: California Department of Transportation, February 20, 2002), p. 12.

identified for California by the California Department of Transportation (Caltrans).[7] Caltrans data show that California automobile noise is 0.8 to 1 dB(A) louder than national levels and that medium and heavy truck noise is 0.3 to 3 dB(A) quieter than national levels.[8] Traffic volumes utilized as data inputs to the noise prediction model were calculated based on information provided by Crain & Associates, the project traffic engineer, and are consistent with the analysis provided in **Section 5.7, Traffic/Access**, of this EIR.

The primary concern regarding on-site noise is to determine whether on-site noise levels are compatible with proposed on-site land uses and land uses surrounding the site. In addition to evaluating on-site noise, this section also evaluates off-site post-project noise conditions at noise-sensitive locations along roadways that would accommodate project traffic. Noise sensitive locations would be those with planned and existing noise-sensitive uses, or those uses that would be most sensitive to an increase in noise levels. Noise sensitive locations are defined as residential uses, transient lodging, schools, libraries, ~~churches~~places of worship, hospitals, day care centers and nursing homes. At these locations, noise levels were modeled both with and without the project's traffic volumes to determine whether or not project-related traffic would significantly increase noise levels at these locations.

5.2.2 PLANS AND POLICIES

In advance of presenting the existing and future noise environments and the thresholds of significance utilized in this document, plans and policies which pertain to the noise and vibration conditions affecting and affected by the proposed project were reviewed and are discussed below. These plans and policies include (1) the *County of Los Angeles General Plan* Noise Element, (2) the *Los Angeles County Code*, (3) the State of California, Department of Health Services, Environmental Health Division *Guidelines for Noise and Land Use Compatibility,* and (4) the California Noise Insulation Standards of 1988.

~~**the County of Los Angeles Noise Control Ordinance (Ord. 11773 and 11778; Section 12.08 of the County Code); (2) the *State California Environmental Quality Act (CEQA) Guidelines*, Appendix G, Significant Effects; (3) The *Los Angeles General Plan* Noise Element; and (4) the State of California, Department of Health Services, Environmental Health Division *Guidelines for Noise and Land Use Compatibility*.**~~

5.2.2.1 County of Los Angeles General Plan Noise Element

The ~~general *General plan*~~ *Plan* Noise Element outlines basic goals and policies for the County and its constituent municipalities to follow. It states as a general goal that noise mitigation costs should be

---

7 Rudolf W. Hendriks, *California Vehicle Noise Emission Levels*, (Sacramento, California: California Department of Transportation, January 1987), NTIS, FHWA/CA/TL-87/03.

8 Ibid.

assessed to the producers of the noise. Policy 16 of the Noise Element states that the ~~county~~ County should "encourage cities to adopt definitive noise ordinances and policies that are consistent throughout the county." The Noise Element does not prescribe any specific standards for acceptable noise or vibration levels. Because the Marina del Rey area is in unincorporated Los Angeles County, the specific and applicable noise standards are addressed in the County Noise Control Ordinance (County Code Section 12.08). The Noise Control Ordinance prescribes standards for point ~~and stationary~~ source noise and construction-related noise, as well as general standards for vibration. The County Code does not regulate noise or vibration of motor vehicles. Vehicular noise is regulated under California Vehicle Code, Division 12, Chapter 5, Article 2.5, Sections 27159-27207. The vehicle code defines motor vehicle as "a [self-propelled] device by which any person or property may be propelled, moved, or drawn upon a highway."

5.2.2.2 County of Los Angeles Noise Control Ordinance (For Point ~~and Stationary~~ Source Noise)

The County Noise Control Ordinance (County Code Section 12.08) provides standards for both interior and exterior noise standards and sets guidelines for a variety of activities. Section 12.08.390 identifies exterior point source noise standards ~~for stationary and point noise sources~~, and ~~specific~~ specifies noise restrictions, exemptions and variances for ~~exterior point or stationary noise sources~~these noise sources.[9] Several of these standards are applicable to the project and are discussed below.

The County Noise Control Ordinance (Section 12.08.390) states that exterior point source noise levels ~~caused by stationary or point noise sources~~ shall not exceed the levels identified below in **Table 5.2-2, County of Los Angeles Exterior Point Source Noise Standards ~~for Stationary and Point Noise Sources~~**, or ~~the~~ a percentage of the ambient noise level,[10] whichever is greater.

~~The~~ For interior noise levels, the Noise Control Ordinance (Section 12.08.400 ~~of the County Code~~) also states that no activity in a multi-family dwelling unit can cause the interior noise level~~s (resulting from outside point or stationary sources) within multi-family residential units shall not~~ in a neighboring unit to exceed 45 dB(A) L_{eq} between 7:00 AM and 10:00 PM and 40 dB(A) L_{eq} between 10:00 PM and 7:00 AM. with windows in their normal seasonal configuration. ~~Conventional construction of buildings with the inclusion of fresh air supply systems or air conditioning will normally ensure that interior noise levels are acceptable (reference **Table 5.2-1** for noise reduction provided by conventional construction techniques).~~

---

9 All vehicles of transportation (with a few exceptions) that operate in a legal manner within the public right-of-way, railway, or air space, or on private property are exempt from the standards of the Noise Control Ordinance. These vehicles are regulated by the state.

10 Ambient noise level is defined as the existing background noise level at the time of measurement or prediction.

~~The table also includes the County's standards for acceptable exterior noise levels near receptor properties.~~ The exterior noise standards in **Table 5.2-2** do not apply to construction activities.

Table 5.2-2
County of Los Angeles Exterior Point Source Noise Standards ~~for Stationary and Point Noise Sources~~

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level dB(A) L_{eq}[1]
I	Noise Sensitive Area[2]	Anytime	45
II	Residential Properties	10:00 PM to 7:00 AM	45
		7:00 AM to 10:00 PM	50
III	Commercial Properties	10:00 PM to 7:00 AM	55
		7:00 AM to 10:00 PM	60
IV	Industrial Properties	Anytime	70

Source: County of Los Angeles Noise Control Ordinance, County Code Section 12.08.390.

[1] ***Standard No. 1*** *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient L_{50} exceeds the forgoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.*

Standard No. 2 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Standard No. 1 plus 5 dB(A); or, if the ambient L_{25} exceeds the forgoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.*

Standard No. 3 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 5 minutes in any hour. Standard No. 3 shall be the applicable noise level from Standard No. 1 plus 10 dB(A); or, if the ambient $L_{8.3}$ exceeds the forgoing level, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.*

Standard No. 4 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 1 minute in any hour. Standard No. 4 shall be the applicable noise level from Standard No. 1 plus 15 dB(A); or, if the ambient $L_{1.7}$ exceeds the forgoing level, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.*

Standard No. 5 *shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Standard No. 1 plus 20 dB(A); or, if the ambient L_0 exceeds the forgoing level, then the ambient L_0 becomes the exterior noise level for Standard No. 5.*

[2] *Not defined in the County Noise Ordinance. To be designated by the County Health Officer.*

5.2.2.3 County of Los Angeles Noise Control Ordinance (For Construction Noise)

The County Noise Control Ordinance (~~County Code~~ Section 12.08.440) identifies specific restrictions regarding construction noise. The operation of equipment used in construction, drilling, repair, alteration or demolition work is prohibited between weekday hours of 7:00 PM to 7:00 AM and anytime on Sundays or legal holidays if such noise would create a noise disturbance across a residential or

commercial real-property line.[11] The Noise Control Ordinance further states that the contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in **Table 5.2-3, County of Los Angeles Construction Equipment Noise Restrictions**. All mobile and stationary internal-combustion-powered equipment and machinery ~~is~~ are also required to be equipped with suitable exhaust and air-intake silencers in proper working order.

5.2.2.4 Los Angeles County Code Vibration Guidelines (Section 12.08.560)

The County Code prohibits the operation or permission of operation of any device that creates vibration above the vibration perception threshold (motion velocity of 0.01 in/sec over the range of 1 to 100 hertz) at or beyond the property boundary on private property, or at 150 feet from the source if on a public space or public right of way. These regulations~~guidelines~~ apply to impacts associated with both project construction and operation~~.~~, but do not apply to motor vehicles, which are regulated by the state.

Table 5.2-3
County of Los Angeles Construction Equipment Noise Restrictions

Residential Structures	Single-Family Residential	Multi-Family Residential	Commercial[1]
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	75 dB(A) L_{eq}	80 dB(A) L_{eq}	85 dB(A) L_{eq}
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	60 dB(A) L_{eq}	64 dB(A) L_{eq}	70 dB(A) L_{eq}
Stationary Equipment: Maximum noise level for repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment:			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dB(A) L_{eq}	65 dB(A) L_{eq}	70 dB(A) L_{eq}
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dB(A) L_{eq}	55 dB(A) L_{eq}	60 dB(A) L_{eq}
Business Structures			
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment:			
Daily, including Sunday and legal holidays, all hours		85 dB(A) L_{eq}	

Source: County of Los Angeles Noise Control Ordinance, County Code Section 12.08.440.

[1] *Refers to residential structures within a commercial area. This standard does not apply to commercial structures.*

11 Noise disturbance is not defined in the Noise Control Ordinance. The County Health Officer has the authority to define and determine the extent of a noise disturbance on a case-by-case basis.

5.2.2.5 California Department of Health Services ~~(For Operational Mobile Source Noise)~~

~~The County exempts all vehicles of transportation (with a few exceptions) that operate in a legal manner within the public right-of-way, railway, or air space, or on private property, from the standards of the Noise Control Ordinance. The County has no adopted ordinance regulating individual motor vehicle noise levels. These are regulated by the state.~~ The State of California, Department of Health Services, Environmental Health Division has published recommended guidelines for ~~mobile source~~ noise and land use compatibility. Each jurisdiction is required to consider these guidelines when developing its general plan noise element and determining the acceptable noise levels within its community. The County of Los Angeles defers to these guidelines when assessing a land use's compatibility ~~with motor vehicle noise sources~~with the existing or predicted noise environment. These guidelines are illustrated in **Figure 5.2-3, Land Use Compatibility Guidelines for Noise**.

Based on these guidelines, Los Angeles County typically considers an exterior noise level of 60 dB(A) CNEL to be ~~an~~ normally acceptable ~~level~~ for conventionally built single-family, duplex and mobile homes ~~(normally acceptable noise levels)~~. Exterior noise levels up to 65 dB(A) CNEL are ~~typically~~ considered normally acceptable for multi-family units and transient lodging without any special noise insulation requirements. Between these values and 70 dB(A) CNEL, exterior noise levels for both single-family and multi-family units are ~~typically~~ considered conditionally acceptable only if the buildings ~~are conditioned to~~ include noise insulation features ~~(conditionally acceptable noise levels)~~. An exterior noise level of 70 dB(A) CNEL is typically the dividing line between ~~an~~ conditionally acceptable and normally unacceptable exterior noise environments for all noise sensitive uses, including schools, libraries, ~~churches~~places of worship, hospitals, day care centers, and nursing homes ~~of conventional construction~~. Construction of noise-sensitive uses exposed to noise levels of 70 dB(A) CNEL or above is generally discouraged. Noise levels below 75 dB(A) CNEL are typically acceptable for office and commercial buildings, while levels up to 75 dB(A) CNEL are typically acceptable for industrial uses.

5.2.2.6 California Noise Insulation Standards

The California Noise Insulation Standards of 1988 (California Code of Regulations Title 24, Section 3501 et seq.) require that interior noise levels from exterior sources be reduced to 45 dB(A) or less in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Measurements are based on L_{dn}[12] or CNEL. Where exterior noise levels exceed 60 dB(A)

---

12 L_{dn} is another day/night weighted noise scale. Like CNEL, L_{dn} is a 24-hour L_{eq} with 10 dB(A) added during the nighttime hours (10:00 PM to 7:00 AM). It is, therefore, less restrictive than CNEL.

L_{dn}/CNEL, an acoustical analysis is required to show that the proposed construction will reduce interior noise levels to 45 dB(A) L_{dn}/CNEL.

5.2.3 EXISTING CONDITIONS

5.2.3.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project - On-Site Noise Levels

The project site is located in an urban environment and is exposed to a variety of noise sources typical of such a setting. Visitor-serving commercial, hotel, boating and residential uses are the predominant uses in Marina del Rey. To characterize the ambient noise environment for noise sensitive land uses in the project area, both noise monitoring and noise ~~prediction~~ modeling were conducted. The existing ambient noise environment for specific roadway segments adjacent to various noise-sensitive locations was modeled using the FHWA *Highway Noise Prediction Model* ~~off-site roadways was determined by calculating noise levels from vehicular traffic along specific roadway segments adjacent to various noise sensitive locations. Roadway segments evaluated are those that have been determined by the traffic study as being potentially affected by project related traffic~~.

Noise monitoring was also conducted at selected locations on Parcels 10R and FF and at off-site locations during midday hours (10:00 AM and 1:00 PM) on October 25, 2005. Monitoring on Parcel 9U was conducted at two on-site locations during the PM peak period (4:00 PM and 6:00 PM) on August 15, 2006. Consistent with County standards, noise readings were taken in L_{eq} 60-second periods with "A" frequency fast time weighting. Wind speeds during noise monitoring ranged from 5 to 7 miles per hour during monitoring on Parcels 10R and FF and 5 to 10 miles per hour during monitoring on Parcel 9U in August 2006. **Figure 5.2-4, Noise Monitoring Locations**, illustrates the locations of noise monitoring sites on each component of the project site.

5.2.3.1.1 Neptune Marina Apartments (Parcel 10R) ~~and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project~~

~~The project site is located in an urban environment and is exposed to a variety of noise typical of such a setting. Visitor-serving commercial, hotel, boating and residential uses are the predominant uses in Marina del Rey.~~ Parcel 10R currently contains 136 apartment units whose residents produce noises generally associated with human activity. Residents of the current apartment buildings both generate and are ~~the recipients of~~exposed to ~~on-site~~ noise from people talking, doors slamming, lawn care equipment operation, personal watercraft operation, stereos, ~~and~~ domestic animals, and traffic on adjacent roadways ~~noises. These noises do not typically exceed County criteria for residential land uses. The majority of noise measured on-site was generated by traffic on the adjacent roadways.~~

As shown in **Figure 5.2-4**, monitoring was conducted at two locations on Parcel 10R. The first location (Map Location 1) is ~~located~~ on the western portion of the ~~project site~~parcel, approximately 50 feet east of Via Marina. The average 60-second L_{eq} at this location was recorded at 61.5 dB(A). Noise sources at the time of monitoring included ~~human conversations~~ people talking and occasional traffic.

The second noise monitoring location (Map Location 2) is on the eastern portion of the parcel, approximately 50 feet from the eastern property line. The average 60-second L_{eq} at this location was recorded at 57.6 dB(A). Noise sources at the time of monitoring included ~~human conversations~~people talking, occasional traffic and construction activity on the adjacent property to the east, and boat motors.

5.2.3.1.2 Neptune Marina Apartments (Parcel FF)

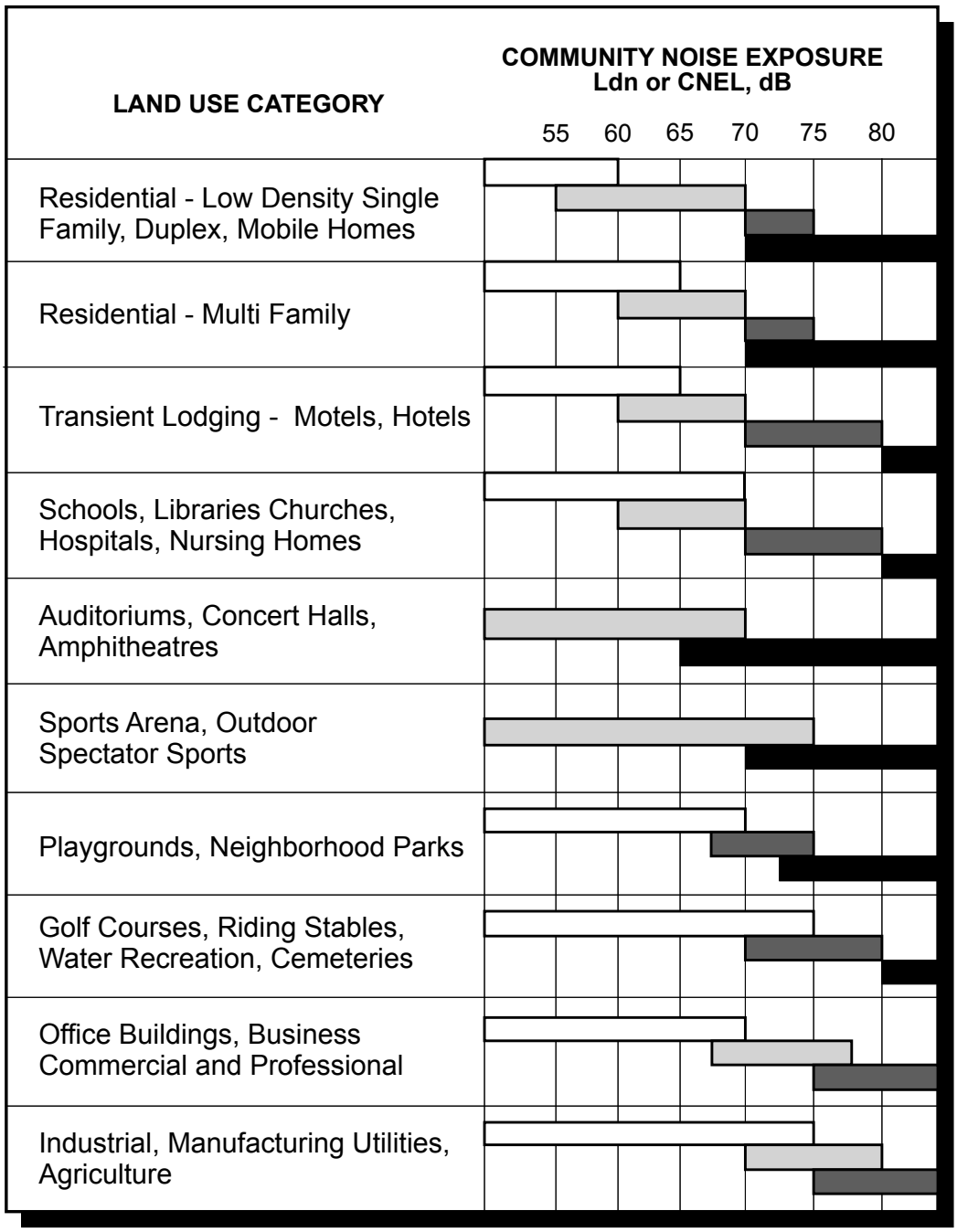
The only existing land use on Parcel FF is a 2-acre surface parking lot. Noise generated from the parking lot includes the starting of car engines, car alarms, doors shutting, people talking and car stereos. However, the majority of noise measured on site was generated by traffic from the adjacent roadways.

As shown in **Figure 5.2-4**, on-site monitoring was conducted at two locations on Parcel FF. The first location (Map Location 5) is ~~located~~ on the northwestern corner of the ~~project site~~parcel, near existing residential uses fronting Via Marina. The average 60-second L_{eq} at this location was recorded at 64.2 dB(A). Noise during the time of monitoring was dominated by traffic on Via Marina.

The second noise monitoring location (Map Location 4) is on the southwestern portion of the parcel, approximately 50 feet east of Via Marina and 50 feet north of Marquesas Way. The average 60-second L_{eq} at this location was recorded at 64.0 dB(A). Noise during the time of monitoring was dominated by traffic on Via Marina.

5.2.3.1.2 Woodfin Suite Hotel and Timeshare Resort (Parcel 9U)

Parcel 9U is currently undeveloped and the primary source of measured noise ~~measured on-site~~ was traffic on Via Marina and to a lesser degree on Tahiti Way. Noise was measured at two locations on Parcel 9U, represented by Map Locations 9 and 10 in **Figure 5.2-4**. The first monitoring location (Map Location 9) is located at the northeastern corner of Parcel 9U at the property boundary. ~~The first monitoring location (Map Location 9) is located at the northeastern corner of Parcel 9U.~~ The average 60-second L_{eq} at this location was recorded at 57.8 dB(A).



NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

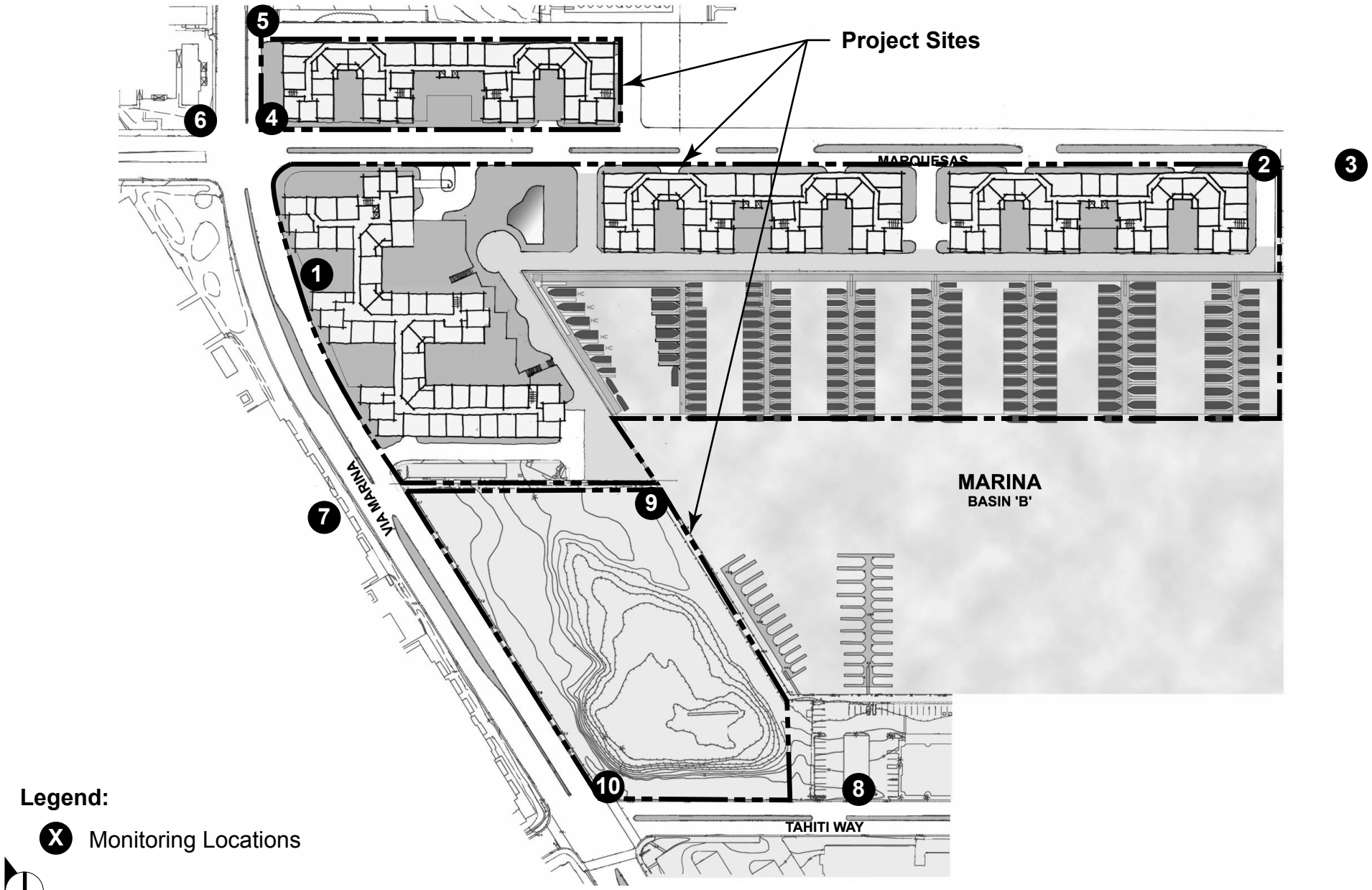
NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise reduction features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

SOURCE: California Department of Health, Office of Health Control, Guidelines for the Preparation and Content of Noise Elements of the General Plan, February 1976.

FIGURE **5.2-3**

Land Use Compatibility Guidelines for Noise



SOURCE: Impact Sciences, Inc. – May 2005

FIGURE **5.2-4**

Noise Monitoring Locations

The second noise monitoring location (Map Location 10) is located at the northeastern corner of Via Marina and Tahiti Way ~~or (~~the southwestern corner of Parcel 9U~~)~~. The meter was placed 50 feet from the centerline of both Via Marina and Tahiti Way. Noise readings were dominated by traffic along these roadways and the average 60-second L_{eq} at this location was recorded at 65.8 dB(A).

5.2.3.2 Off-Site Noise

As shown in **Figure 5.2-4**, additional noise readings were taken at four nearby noise-sensitive locations ~~off site from the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site and where noise sensitive uses are proximal~~. Readings were taken on October 25, 2005, between 10:00 AM and 1:00 PM.

Noise monitoring Location 3 is on Marquesas Way, approximately 100 feet east of the eastern boundary of the project site. The average 60-second L_{eq} at this location was recorded at 67.7 dB(A). Noise sources during monitoring included ~~human conversation~~people talking, traffic along Marquesas Way, and ~~new~~ building construction activity on Parcel 12. The construction activity elevated the noise level measured. It is estimated that the average 60-second L_{eq} at this location now that construction is completed would now be closer to 63 to 64 dB(A), which is similar to the noise levels at monitoring locations 6, 7, and 8 discussed below.

Noise monitoring Location 6 is approximately 100 feet northwest of the project site, across Via Marina and near residential uses. The average 60-second L_{eq} at this location was recorded at 63.9 dB(A). Noise sources during monitoring included traffic and ~~human conversation~~people talking.

Noise monitoring Location 7 is situated approximately 100 feet west/southwest of the project site, across Via Marina. The average 60-second L_{eq} at this location was recorded at 63.9 dB(A). Noise sources during monitoring included ~~human conversation~~people talking, construction activity, and traffic along Via Marina.

Noise monitoring Location 8 is situated approximately 500 feet south of the project site, across Basin B on Tahiti Way. The average 60-second L_{eq} at this location was recorded at 62.8 dB(A). Noise sources during monitoring included ~~human conversation~~people talking and traffic along Tahiti Way.

5.2.3.2.1 Modeled Off-Site Roadway Noise

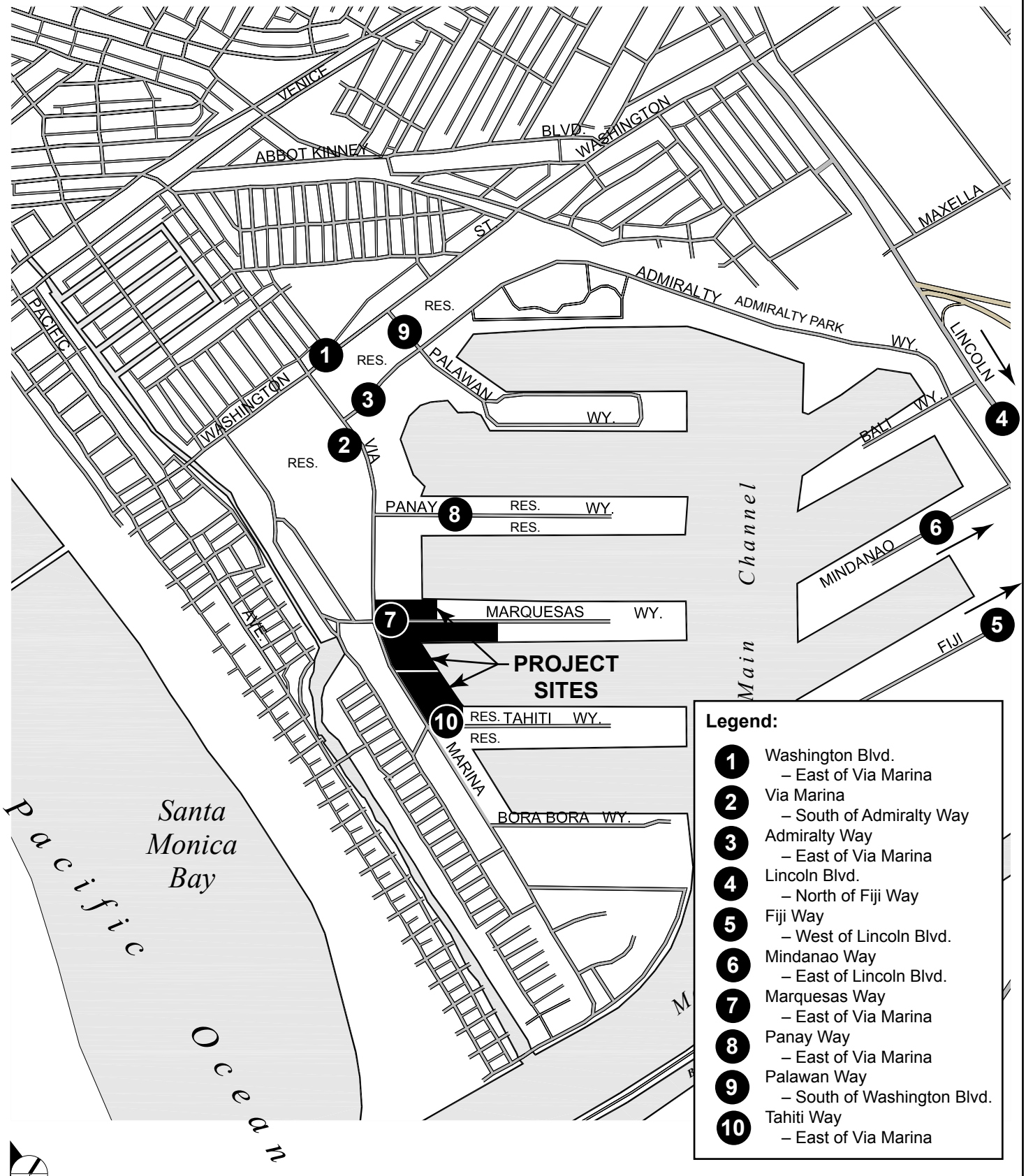
Figure 5.2-5, Noise Sensitive Uses Along Studied Roadway Segments, identifies the location of noise sensitive uses along studied roadway segments. As shown, noise-sensitive receptors near the project site include residential uses on Washington Boulevard, Via Marina, Mindanao Way, Fiji Way and a hospital

on Lincoln Boulevard. All of the noise sensitive uses are located a minimum of 50 feet from the centerline of ~~the~~ each roadway. ~~Existing~~ Modeled existing roadway noise levels are presented in **Table 5.2-4, Modeled Existing Off-Site Roadway Noise Levels at Noise-Sensitive Locations**. The noise levels ~~have been~~were calculated using the FHWA *Highway Noise Prediction Model* and ~~based on the~~ existing (2007) traffic volumes on ~~the studied~~adjacent roadways ~~within the project area using the FHWA *Highway Noise Prediction Model*~~. As shown, modeled existing roadway noise levels range from 53.8 dB(A) along Marquesas Way east of Via Marina to 71.7 dB(A) on Lincoln Boulevard north of Fiji Way.

Table 5.2-4
Modeled Existing Off-Site Roadway Noise Levels at Noise Sensitive Locations
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

ROADWAY •Segment	Existing and Planned Noise Sensitive Land Uses	dB(A) CNEL
WASHINGTON BOULEVARD	Residential (50 feet)	67.9*
• east of Via Marina		
VIA MARINA	Residential (50 feet)	67.4*
• south of Admiralty Way		
ADMIRALTY WAY	Admiralty Park (50 feet)	69.2
• east of Via Marina		
LINCOLN BOULEVARD	Daniel Freeman Hospital (50 feet)	72.5*
• north of Fiji Way		
FIJI WAY	Residential (50 feet)	66.3*
• west of Lincoln Boulevard		
MINDANAO WAY	Residential (50 feet)	66.2*
• east of Lincoln Boulevard		
MARQUESAS WAY	Residential	56.0
• east of Via Marina		
PANAY WAY	Residential/Recreation	59.4
• east of Via Marina		
PALAWAN WAY	Recreation	61.6
• south of Washington Boulevard		
TAHITI WAY	Residential (50 feet)	56.5
• east of Via Marina		

Source: Impact Sciences, Inc. Calculations are provided in Appendix 5.2. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.
** Roadway segments which exceed normally acceptable levels under the ~~County~~ Land Use Compatibility Guidelines for Noise.*



SOURCE: Impact Sciences, Inc. – June 2005

FIGURE **5.2-5**

Noise Sensitive Uses Along Studied Roadway Segments

5.2.3.2.2 Off-Site Roadway ~~Calculation~~ Noise Prediction Methodology

~~To determine future off-site roadway noise levels from existing conditions, a variety of scenarios are presented in the impact discussion to clearly show~~Using the FHWA *Highway Noise Prediction Model*, the following scenarios are evaluated in the impact analysis to determine the effect the project would have on surrounding sensitive receptors. ~~The following is a brief summary of the scenarios that are presented for the proposed project, the individual parcels that make up the project, and cumulative conditions.~~

- **Existing Plus Project**: This scenario ~~takes the CNEL levels described in **Table 5.2-4** and adds the project contribution to the overall CNEL level. Depending on the size of the project and the particular roadway segment being analyzed, this scenario could have a range of higher noise levels to no increase in CNEL. The Existing Plus project scenario presents~~evaluates the noise impact of project traffic on the existing mobile source noise environment and the immediate effect implementation of the project would have on surrounding sensitive receptors.

- **Future Without Project**: This scenario evaluates the mobile source noise environment in the project area in 2013, the year ~~presents the expected future noise environment at a horizon year when~~ the project would be completed. Ambient traffic growth is factored into this scenario and resulting ~~. For this project, 2011~~ 2013 ~~is the horizon year for implementation. These~~ noise levels represent the future baseline ~~for~~ against which to compare the noise impact of the proposed project.

- **Future With Project**: This scenario evaluates the noise impact of project traffic on the future 2013 baseline scenario discussed above~~This scenario takes the CNEL levels presented in the Future Without project scenario, in horizon year 2011~~2013~~, and adds the project contribution. Similar to the Existing Plus project scenario, depending on the size of the project and the particular roadway segment being analyzed, the increase in expected noise levels could vary. The overall incremental noise increase in the Future With project as compared to the Existing Plus project scenario could differ. This is due to the ambient growth factor that is assumed in the Future Without project scenario. The additional growth through 2011 2013 in this calculation could increase the expected CNEL, depending upon location, assumed for the future. Therefore, it can be anticipated that the Future With project increment would be the same or slightly less more than the Existing Plus project increment due to additional growth surrounding the project site~~.

- **Future With Project and Related Projects**: This scenario looks at the cumulative noise ~~conditions~~ impacts from ~~of~~ the 2013 ambient traffic growth, plus traffic from surrounding projects that are either pending approval or have been approved for construction, plus traffic from the proposed project. ~~The CNEL levels are calculated by factoring the expected noise levels from the proposed project and the expected noise levels from surrounding projects that are either pending approval or have been approved for construction~~. This ~~noise level presents the expected future noise level in combination with a more precise list of expected development.~~scenario is the most representative of future noise conditions on the project site and in its vicinity.

5.2.4 ENVIRONMENTAL IMPACTS

5.2.4.1 Project Improvements

Implementation of the proposed project would result in the development of 526 residential dwelling units, a 19-story building with 288 hotel and timeshare suites and an assortment of accessory patron- and visitor- serving uses, 174 private and between 7 and 11 public-serving boat spaces, and a 1.46-acre public park that would include~~s~~ a 0.47-acre restored wetland and a 0.99-acre upland buffer. There are 136 existing apartments and 198 boat spaces presently on site. Therefore, completion of the proposed project would result in a net increase of 390 apartment units, 288 hotel and timeshare suites with accessory patron- and visitor- serving uses, a net decrease of up to 17 boat spaces, a 1.46-acre public park that includes a 0.47-acre restored wetland and a 0.99-acre upland buffer.

5.2.4.2 Thresholds of Significance

Based on Appendix G of the most recent update of the *State CEQA Guidelines*, impacts related to noise and vibration are considered significant if the project

- would result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance;
- would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or
- would result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

5.2.4.3 Impact Analysis

The applicable thresholds of significance are listed below followed by ~~analysis of the significance of any potential impacts~~the noise impact analysis for the proposed project. Mitigation measures are also identified that would reduce or avoid potentially significant adverse impacts~~, if applicable~~.

5.2.4.3.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

5.2.4.3.1.1 Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance?

Threshold: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis: The significance of noise impacts is based on both the Land Use Compatibility Guidelines for Noise, identified in **Figure 5.2-3**, and typical community responses to changes in noise levels. Changes in the community noise level (CNEL) of less than 3 dB(A) ~~are~~ would not typically be noticed by the human ear. Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. Based on this information, a significant noise impact~~s~~ would occur when an increase of 3 dB(A) CNEL or greater ~~in noise level~~ would occur~~s from~~ as a result of project-related activities.

Additionally, if proposed on-site uses are subject to point source noise levels originating on or off the project site that are above County Noise Control Ordinance standards (identified in **Tables 5.2-2** and **5.2-3**), a significant on-site noise impact would occur. Note that the County Noise Control Ordinance does not govern individual motor vehicles. These are governed by the state.

Construction Impacts: ~~The~~ Each component of the project is proposed to be constructed in a single phase. Demolition and excavation ~~activities~~ on Parcel~~s~~ 10R ~~and FF~~ are expected to occur over a 5.5-month period ~~beginning to occur over a two- to three-month period and are anticipated to begin~~ in ~~Januar~~May ~~2009~~2011. ~~. Demolition~~Full ~~of existing uses and~~ construction of the new development on Parcel 10R~~project~~ is anticipated to take 3~~0~~3 months to complete and would be completed by November 2013. Demolition and excavation on Parcel FF are expected to begin in October 2011; completion of new development on

that parcel is anticipated to be within 24 months, or by October 2013. ~~Given this schedule, anticipated buildout of the project would occur in Sept2011~~Construction of the Woodfin Suite Hotel and Timeshare Resort (Parcel 9U) would take approximately 30 months, beginning in May 2011 with anticipated buildout of the parcel to occur at the end of 2013. Finally, construction of the wetland park and public-serving boat spaces is expected to primarily occur during 2012. Given this schedule, anticipated build out of the entire project would occur in November 2013.

In addition to construction on Parcels 10R, FF, and 9U, a new sewer line to serve the Parcel 10R development will be constructed in Marquesas Way and Via Marina, and approximately 1240 feet of water main would be installed within Via Marina to serve the project.

Construction of the proposed project would result in increases in ambient noise levels in the project area on an intermittent basis. This temporary increase in noise will likely be noticeable to nearby residents and on- and off-site employees, as well as visitors to Marina del Rey. It must be emphasized that noise levels would fluctuate depending on the construction activity, equipment type and duration of use, the distance between the noise source and receptor, and the presence or absence of noise attenuation barriers. ~~Construction activities will include the installation of a new sewer line main in Marquesas Way and Via Marina to serve the Parcel 10R development.~~

Construction of the project would involve the temporary use of heavy equipment, such as pile drivers, tractors (dozers), loaders, concrete mixers and cranes. Smaller equipment, such as jackhammers, pneumatic tools, saws and hammers, would also likely be used throughout the site during demolition and construction ~~stages~~.

The US Environmental Protection Agency (EPA) has compiled data regarding the noise-generating characteristics of specific types of construction equipment. Based on this data, **Table 5.2-5, Noise Levels of Typical Construction Equipment**, presents noise levels of typical construction equipment~~,~~ which could be used on site during various phases of construction. As shown, noise levels generated by heavy equipment can range from approximately ~~68~~ 76 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance.

Table 5.2-5
Noise Levels of Typical Construction Equipment

Equipment Type	Typical Equipment at 50 Feet (dB[A])	Quiet Equipment at 50 Feet (dB[A]) [1]
Air Compressor	81	71
Backhoe	85	80
Concrete Pump	82	80
Concrete Vibrator	76	70
Truck Crane	88	80
Dozer	87	83
Generator	78	71
Loader	84	80
Paver	88	80
Pneumatic Tools	85	75
Pile Driver	100	NA
Water Pump	76	71
Power Hand Saw	78	70
Shovel	82	80
Trucks	88	83

[1] *Quieted equipment can be designed with enclosures, mufflers, or other noise-reducing features.*

Based on a review of the site plan, construction activity would occur as close as 50 feet from existing ~~noise sensitive~~ residential uses ~~(now under construction)~~ located east of the project site. ~~U~~These uses ~~at these locations~~ could experience noise levels that reach ~~94~~ 100 dB(A) ~~for short time periods~~during pile driving, and noise levels up to 88 dB(A) during other construction activities. Construction activity on the project site ~~would~~ could also occur as close as 125 feet from existing residential uses located west of the project site along Via Marina, resulting in noise levels of up to ~~85~~ 82 dB(A) at these sensitive receptors. These, as well as any other ~~locations~~ residences with ~~that experience an~~ an ~~uninterrupted line of sight to the construction noise sources~~uninterrupted line of sight to the construction, could be temporarily exposed to exterior noise levels ~~which~~ that could exceed the County's Noise Control Ordinance standards for construction equipment as identified in **Table 5.2-3**. Therefore, construction noise is considered a temporary significant impact.

~~Construction noise would represent a short-term significant impact based on the potential to exceed County noise standards and the approximately near 30 month two and a half-year construction period.Mitigation measures for to reduce construction noise impacts are provided below.~~

Haul Route Noise Impacts: Project construction will require the use of heavy trucks to haul equipment and materials to the site, as well as transport debris and earth excavated during demolition of existing structures and grading of the site. During the initial two months of demolition and excavation, as many

as 284 truck trips would arrive to and leave the site daily. During the remainder of the project construction, the number of truck trips would range from 70 to 194 trips per day (Crain & Associates, January 29, 2008).

Off-site sensitive receptors along the truck route that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to 88 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the roadway and to any intervening topography and/or structures that may exist between them and the noise source. This noise impact would be temporary and instantaneous in nature as the trucks pass by the receptors. Truck traffic noise at the receptors would diminish rapidly as the trucks travel away from them.

To limit noise impacts associated with construction traffic on nearby land uses, truck haul routes have been established which route vehicles away from sensitive uses to the maximum extent feasible. As depicted in **Figure 5.2-6, Haul Route**, the haul route extends north on Via Marina to Washington Boulevard, then east on Lincoln Boulevard and south on the Marina Freeway.

To minimize potential neighborhood disruption and conflicts along the haul route, a construction traffic control plan will be developed for use during construction. The plan will identify all traffic control measures, signs and time limits to be implemented by the construction contractor ~~during the duration of demolition and construction activity~~for the duration of construction. All vehicles will be staged either within the property or at designated areas as established by a County approved haul route plan. ~~Measures likely to be used to reduce noise impacts include limitations on the hours and days in which construction activity may occur. All vehicles will be staged either within the property lines or at designated areas as established by a County approved haul route plan.~~

In short, heavy duty truck traffic associated with this project would be intermittent throughout the workday, restricted to daytime hours, would primarily travel along highways and major arterials where few noise sensitive uses are located, would not traverse residential areas or travel past sensitive receptors for extended periods of time, and would generate noise levels comparable to existing vehicle noise along other major arterials in the area. Neither the County Noise Element nor the County Noise Control Ordinance have standards that apply to individual motor vehicles (these are regulated by the California Vehicle Code).

~~Trucks on average are expected to enter and leave the site on a daily basis over the construction period, but only during working hours. The trips associated with trucks traveling off-site are based on the URBEMIS 2002~~2007 ~~assumptions associated with proposed land uses proposed for the project. According to URBEMIS 2002~~2007 ~~calculations prepared for the project, trucks entering and exiting the site would~~

~~make approximately 42 round440 PCE7.530 miles each trip during demolition and excavation. During site-grading, trucks entering and exiting the site would similarly travel approximately 20 up to 30 miles round each trip, and would make approximately 131 round440 PCE trips per day. The Los Angeles County Department of Public Works (LACDPW), Construction Division, limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. This reduces the impact on local residents by restricting most construction-based noise generation to hours when most residents are at work and not generally home. The number of truck trips traveling along the designated haul route will vary daily, depending on the nature of the construction activity. Employment of standard noise attenuation practices would be implemented as required by the LACDPW. A~~However, ~~a~~s previously discussed, noise sensitive land uses located along the haul route are primarily residential in nature. Based on the information contained in **Table 5.2-5**, sensitive receptors~~uses~~ within 50 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant impact would result from trucks traveling to and from the project site along the haul route during the projected buildout of the project. Employment of standard noise attenuation practices would be implemented as required by the LACDPW (see Mitigation Measure 5.2-1).

Construction workers, who would generally arrive to the construction site at the beginning of the workday and leave at the end of the workday, would contribute to increases in peak and pre-peak hour traffic along roadways in the project study area. Construction worker traffic, which would be largely comprised of passenger vehicles and light pick-up trucks, would not represent a substantial percentage of peak hour volumes in the area and would not cause an audible increase in community noise levels. Therefore, noise from construction-worker traffic would be less than significant.

Vibration Impacts: The primary vibration source associated with development of the proposed project involves the potential use of pile drivers during foundation construction; lesser ~~severe~~ vibration impacts could result from the use of other heavy equipment on~~–~~ the project site. There is also the potential for off-site vibration impacts from ~~and off-site due to~~ haul trucks passing on streets adjacent to sensitive receptors. Various types of construction equipment have been measured under a wide variety of construction activities; average source levels reported in terms of velocity levels are provided in **Table 5.2-6, Vibration Source Levels for Construction Equipment**. Although **Table 5.2-6** gives one level of vibration for each piece of equipment, it should be noted that there is a considerable variation in reported ground vibration levels from construction activities. Nonetheless, the values in the table represent a reasonable average of vibration levels for an array of equipment operating on a range of soil types and conditions.

Table 5.2-6
Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft (in/sec)	Approximate VdB at 25 ft.
Pile Driver (impact)	upper range	1.518	112
	typical	0.644	104
Pile Driver (sonic)	upper range	0.734	105
	typical	0.170	93
Clam shovel drop (slurry wall)		0.202	94
Hydro mill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Harris Miller Miller & Hanson, Inc., Noise and Vibration During Construction *(www.hmmh.com/cmsdocuments~~rail/ch~~FTA_CH_12.pdf), p. 12-129. These data are based on U.S. Department of Transportation, Federal Transit Administration, data (1995).*

~~Pile drivers are the pieces of construction equipment most likely to cause potential off site vibration impacts.~~ Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. ~~Because the use of pile driving equipment is required for foundation construction, vibration impacts that would occur are considered significant and unavoidable, but temporary in type.~~

Pile driving could result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code (greater than 0.01 in/sec over the range of 1 to 100 Hertz), and is within the range for architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary groundborne vibration during pile driving would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts would be significant. A certified structural engineer shall be retained to submit evidence that pile driving activities would not result in any structural damage to nearby structures (see Mitigation Measure 5.2-5).

A loaded heavy-duty haul truck can generate a level of vibration 0.076 inches/second PPV at 25 feet. The perception of truck traffic vibration would depend upon several factors, including road condition, vehicle speed, vehicle weight, vehicle suspension system, soil type and stratification, and distance between the truck and the receptor. Perceptible truck vibration would be intermittent and instantaneous as it would have a rapid onset and a rapid decay as the truck moves toward and away from the receptor. Section 12.08.560 of the County Code applies to any device, including motor vehicles, and, therefore, truck traffic vibrations exceed the threshold of significance and a significant impact can be concluded.

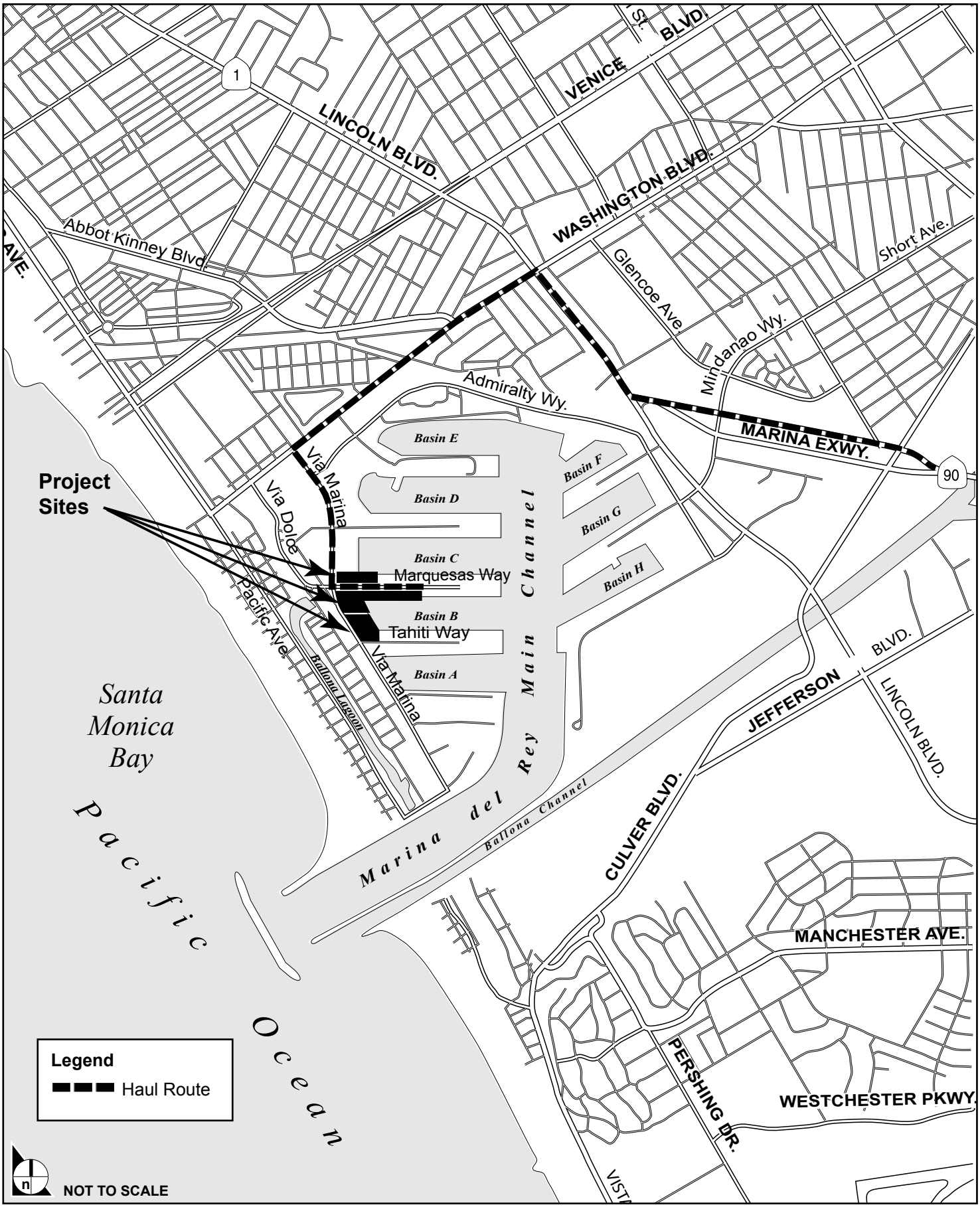
Operation Impacts; Point ~~and Stationary~~ Source Noise: ~~On-site residential uses are considered sensitive and could be affected by on- and off-site point source noise.~~ Operation of the proposed project is expected to result in increased noise due to the net increase in resident population on the site ~~and associated vehicular traffic~~, affecting both future on-site receptors and existing off-site receptors.

Point ~~and stationary~~source ~~noise experienced at~~ noise at on- and off-site locations would consist of intermittent sounds associated with human activity, such as people talking, doors slamming, lawn care equipment operation, stereos, domestic animals, etc. ~~Noise levels generated by these~~ These sources typically generate noise levels ~~of~~ between 52 ~~to~~ and 62 dB(A) ~~CNEL~~. Such noises are typical of ~~a~~ residential areas and are comparable to the types and levels of noise presently experienced at the site and in the project area. ~~All~~ Off-site noise-sensitive receptors are located a minimum of 50 feet from the project site and it is expected that most of the point source noise generated on the site would ~~during project operation on site will have attenuated~~ attenuation and would, therefore, not have ~~an~~ a significant impact on these ~~off-site~~ receptors. ~~As shown in **Table 5.2-6, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Neptune Marina**, the existing dB(A) CNEL measured at all monitoring locations exceed County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources for the applicable designated noise zone land use. The County Noise Control Ordinance states that exterior noise levels caused by stationary or point noise sources shall not exceed the levels identified in **Table 5.2-2,** or the ambient noise level,[13] whichever is greater. Therefore, the levels monitored have become the standard. As stated in **5.2.1.1, Characteristics of Noise**, changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear.[14] As shown in **Table 5.2-6**, all expected noise increases resulting from the proposed project would be less than 3 dB(A). As a result, noise generated by point or stationary sources on the project site would be consistent with County of Los Angeles noise standards. Thus, noise impacts generated by the new residents located on the project site would not constitute a significant impact to on- or off-site receptors.~~

~~[13] Ambient noise level is defined as the existing background noise level at the time of measurement or prediction.~~

~~[14] *Highway Noise Fundamentals,* (Springfield, Virginia: US Department of Transportation, Federal Highway Administration, September 1980), p. 81.~~

Operation Impacts; Mobile Source Noise: Development of the project would increase the traffic volumes along local roadways. To evaluate potential noise impacts associated with increased vehicle trips, noise prediction modeling was conducted for ~~study~~ selected roadway segments adjacent to noise-sensitive land uses that could be affected by project traffic ~~roadway segments that are bordered by noise sensitive land uses~~. Roadway segments include Washington Boulevard east of Via Marina, Via Marina south of Admiralty Way, Admiralty Way east of Via Marina, Lincoln Boulevard north of Fiji Way, Fiji Way west of Lincoln Boulevard, Mindanao Way east of Lincoln Boulevard, Panay Way east of Via Marina, Tahiti Way east of Via Marina, Marquesas Way east of Via Marina and Palawan Way east of Via Marina. Roadway geometrics and traffic volumes ~~segments~~ were obtained from Crain and Associates, the preparers of the traffic study for the proposed project. Scenarios modeled for these roadways are (1) existing (2007) traffic volumes; (2) existing plus project traffic volumes; and (3) future (year ~~2011~~2013) traffic volumes plus project and without project. The results of the noise modeling are shown in ~~the~~ **Table 5.2-6~~7~~, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations**.



SOURCE: Impact Sciences, Inc. – May 2005

FIGURE **5.2-6**

Haul Route

460-04•12/07

Table 5.2-67
Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Existing Plus Project dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?	Future Without Project dB(A) CNEL	Future With Project dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9*	68.0*	0.1	NO	68.0*	68.1*	0.1	NO
Via Marina (south of Admiralty)	Residential, 50 feet	67.4*	68.0*	0.6	NO	67.6*	68.1*	1.5	NO
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	69.4	0.2	NO	69.3	69.6	0.3	NO
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	72.5*	72.5*	0.0	NO	72.7*	72.7*	0.0	NO
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3*	66.4*	0.1	NO	66.5*	66.5*	0.0	NO
Mindanao Way (east of Lincoln)	Residential, 50 feet	66.2*	66.5*	0.3	NO	66.4*	66.6*	0.2	NO
Marquesas Way (east of via marina)	Residential, 50 feet	56.0	57.3	1.3	NO	56.1	57.4	1.3	NO
Panay Way (east of Via Marina	Residential, 50 feet	59.4	59.4	0.0	NO	59.5	59.5	0.0	NO
Palawan Way (south of Washington)	Recreation	61.6	61.6	0.0	NO	61.7	61.7	0.0	NO
Tahiti Way (east of Via Marina)	Residential, 50 feet	56.5	56.5	0.0	NO	56.7	56.7	0.0	NO

Source: Impact Sciences, Inc. Calculations are provided in ***Appendix 5.2****. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed normally acceptable levels under the Land Use Compatibility Guidelines for Noise.*

~~Noise~~ As shown, noise level increases attributable to project traffic under the second and third scenarios ~~generated by cumulative development~~ would be less than the 3 dB(A) ~~CNEL~~ threshold at all locations. ~~As previously stated, increases of less than 3 dB(A) CNEL would not exceed the off-site mobile source thresholds of significance for this analysis and would not generally be perceptible to the human ear.,while increases between 3 dB(A) and 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise.~~ Therefore, no significant off-site noise impacts would occur as a result of project operation ~~when compared with existing conditions~~.

Conclusion:

Construction Impacts: Significant;

Haul Route Noise Impacts: Significant (temporary);

Vibration Impacts: Significant, especially during pile driving;

Operational Impacts; Point ~~and Stationary Sources~~Source Noise: Less than significant;

Operational Impacts; Mobile Source Noise: Less than significant.

Mitigation Measures:

Existing Regulations and Standards Applicable to the project: ~~The LACDPW, Construction Division,~~Section 12.12.030 of the County Code limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The Los Angeles County Department of Health Services has the authority to restrict construction activities to between the hours of 7:00 AM and 7:00 PM and no time on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line. In addition, a haul route will be reviewed and approved by the County ~~in order to~~that would limit neighborhood disturbance to the degree feasible. ~~A~~ To further limit off-site construction noise impacts, a ~~construction~~ staging area for the storage of equipment and material will be ~~identified~~ located on the project site as far as feasible~~possible~~ from existing ~~residential uses~~residences ~~for the storage of equipment and material but will remain on the project site~~. With regard to operations, all ~~stationary and~~ point sources of noise occurring on the project site must adhere to the requirements of ~~the County of Los Angeles Ordinance No. 11773,~~ Section 12.08.390 of the County Code. Even with these measures in place, it would not be possible to reduce construction noise impacts within the standards set forth in the County Code, particularly during pile driving.

Mitigation Measures Recommended by the EIR:

5.2-1. All construction equipment, fixed or mobile, that is utilized on the site for more than two working days shall be in proper operating condition and fitted with standard factory ~~silencing features~~mufflers, as feasible. Stationary source noises (such as generators and air compressors) within 100 feet of residential land uses shall be completely enclosed in temporary portable noise structures, such as a plywood fence or acoustic noise curtain. If determined necessary and feasible by the County of Los Angeles Building and Safety Division, temporary sound walls shall be constructed between the construction activity and nearby occupied residences. The sound walls shall be continuous with no breaks, and shall be of such height to break the line-of-sight to the first floor occupants of the nearby residences. ~~To ensure that mobile and stationary equipment is properly maintained and meets all federal, state and local standards, the applicant shall maintain an equipment log. The log shall document the condition of equipment relative to factory specifications and identify the measures taken to ensure that all construction equipment is in proper tune and fitted with an adequate muffling device. The log shall be submitted to the Los Angeles Department of Public Works for review and approval on a quarterly basisIn areas where construction equipment (such as generators and air compressors) is left stationary and operating for more than one day within 100 feet of residential land uses, temporary portable noise structures, such as a plywood fence or noise curtain, shall be built. These barriers shall be located between the piece of equipment and sensitive land uses. As the project is constructed, the use of building structures as noise barrier would be sufficient. The County building official or a designee should spot check to ensure compliance.~~

5.2-2. All exterior construction activity, including grading, transport of material or equipment and warming-up of equipment, shall be limited to between the hours of 8:00 AM to 5:00 PM, except for concrete pours, and shall not occur during weekend periods unless approved by the Los Angeles County Department of Public Works. Construction activity associated with pile driving shall be limited to the hours of 8:00 AM and 4:30 PM. The work schedule shall be posted at the construction site and modified as necessary to reflect deviations approved by the Los Angeles County Building and Safety Division. The County building official or a designee should spot check and respond to complaints.

5.2-3. The project applicant shall post a notice at the construction site ~~and along the proposed truck haul route. The notice~~that shall contain information on the type of project, ~~and~~ anticipated duration of construction activity, locations of haul routes, and shall provide a

phone number where people can register questions and complaints. The applicant shall keep a record of all complaints and take appropriate action to minimize noise generated by the offending activity where feasible. A monthly log of noise complaints shall be maintained by the applicant and submitted to the County of Los Angeles Department of Public Health.

5.2-4. To the extent feasible, the project developer shall utilize cast-in-drilled-hole or auger cast piles in lieu of pile driving.

Pile drilling is an alternate method of pile installation where a hole is drilled into the ground up to the required elevations and concrete is then cast into it. The estimated noise level of pile drilling at 50 feet is 80 to 95 dB(A) L_{eq} compared to 90 to 105 dB(A) L_{eq} of conventional pile driving.[15] Therefore, pile drilling generally produces less vibration and noise levels that are approximately 10 to 15 decibels lower than pile driving.

5.2-5. A certified structural engineer shall be retained to submit evidence that pile driving activities would not result in any structural damage to nearby structures.

Conclusion:

Construction Impacts After Mitigation: Significant and unavoidable

Haul Route Noise Impacts After Mitigation: Significant and unavoidable

Vibration Impacts After Mitigation: Significant and unavoidable

Operational Impacts; Point ~~and Stationary~~ Sources (No Mitigation Required): Less than significant

Operational Impacts; Mobile Source Noise (No Mitigation Required): Less than significant

15 U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 1971.

5.2.4.3.2 Neptune Marina Parcel 10R Project

The applicable thresholds of significance are listed below followed by ~~analysis of the significance of any potential impacts~~the noise impact analysis for Parcel 10R. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts~~, if applicable~~.

5.2.4.3.2.1 Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance?

Threshold: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis: The significance of noise impacts is based on both the Land Use Compatibility Guidelines for Noise, identified in **Figure 5.2-3**, and typical community responses to changes in noise levels. Additionally, if proposed ~~on-site~~ uses on Parcel 10R are subject to point source noise levels originating on or off the project site that are above County Noise Control Ordinance standards (identified in **Tables 5.2-2** and **5.2-3**), a significant ~~on-site~~ noise impact would occur. Note that the County Noise Control Ordinance does not govern individual motor vehicles. These are governed by the California Vehicle Code.

Construction Impacts: Construction of the Neptune Marina Parcel 10R would not be phased. Demolition and excavation activities on ~~the existing project site~~this parcel are expected to occur over a ~~two- to three-~~5.,5-month period and are anticipated to begin in ~~Januar~~ May ~~2009~~2011. Demolition of existing uses and construction of the Neptune Marina Parcel 10R is anticipated to take ~~33~~ 30 months to complete. Given this schedule, anticipated buildout of the project would occur in ~~Sept~~November ~~2011~~2013. Construction of the proposed project would result in increases in ambient noise levels in the project area on an intermittent basis. This temporary increase in noise will likely be noticeable to nearby residents and on- and off-site employees, as well as visitors to Marina del Rey. It must be emphasized that noise levels would fluctuate depending on the construction activity, equipment type and duration of use, the distance between the noise source and receptor and the presence or absence of noise attenuation barriers.

Construction ~~of the project~~on Parcel 10R would involve the temporary use of heavy equipment, such as pile drivers, tractors (dozers), loaders, concrete mixers and cranes. Smaller equipment, such as jackhammers, pneumatic tools, saws and hammers, would also likely be used throughout the site during demolition and construction stages. Construction activities will also include the installation of a new sewer line~~main~~ in Marquesas Way and Via Marina, and approximately 500 feet of water main would be installed within Via Marina to serve the Parcel 10R.

The EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment. **Table 5.2-5, Noise Levels of Typical Construction Equipment**, shown above, presents noise levels of typical construction equipment, which could be used on site during various phases of construction. As shown, noise levels generated by heavy equipment can range from approximately ~~68~~ 76 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance.

Based on a review of the site plan, construction activity would occur as close as 50 feet from existing noise sensitive residential uses ~~(now in construction)~~ located east of ~~the project site~~Parcel 10R. Uses at these locations could experience noise levels that reach ~~94~~ up to 100 dB(A) ~~for short time periods~~during pile driving and up to 88 dB(A) during other construction activities. Construction activity on ~~the project site~~Parcel 10R ~~would~~ could also occur as close as 125 feet from existing residential uses located to the west ~~of the project site~~ along Via Marina, resulting in noise levels of up to ~~85~~ 82 dB(A). These, as well as any other locations ~~that experience an~~with an ~~uninterrupted line of sight to the construction noise sources~~uninterrupted line of sight to the construction, could be temporarily exposed to exterior noise levels ~~which~~ that could exceed the County's Noise Control Ordinance standards for construction equipment noise levels identified in **Table 5.2-3**. Therefore, construction noise ~~is considered a temporary significant impact.~~

~~Construction noise~~ would ~~represent~~ result in a short-term significant impact ~~based on the potential to exceed County noise standards and the near two and a half-year~~during the thirty-month construction period for Parcel 10R.

Haul Route Noise Impacts: ~~Project c~~Construction on Parcel 1~~0~~0R will require the use of heavy trucks to haul equipment and materials to the site, as well as transport debris and earth excavated during demolition of existing structures and grading ~~of the site~~. During the initial 5.5 months of demolition and excavation, as many as 140 truck trips would arrive to and leave the parcel daily. During the remainder of Parcel 10R construction, the maximum number of daily truck trips would be 70 (Crain & Associates, January 29, 2008).

Off-site sensitive receptors along the truck route that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to 88 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the roadway and to any intervening topography and/or structures that may exist between them and the noise source. This noise impact would be temporary and instantaneous in nature as the trucks pass by the receptors. Truck traffic noise at the receptors would diminish rapidly as the trucks travel away from them.

To limit noise impacts associated with construction traffic on nearby land uses, truck haul routes have been established which route vehicles away from sensitive uses to the maximum extent feasible. As depicted in **Figure 5.2-6**, the haul route extends north on Via Marina to Washington Boulevard, then east on Lincoln Boulevard and south on the Marina Freeway.

To minimize potential neighborhood disruption and conflicts along the haul route, a construction traffic control plan will be developed for use during construction. The plan will identify all traffic control measures, signs and time limits to be implemented by the construction contractor ~~during the duration of demolition and construction activity~~for the duration of construction. All vehicles will be staged either within the property or at designated areas as established by a County approved haul route plan.

In short, heavy duty truck traffic associated with this project would be intermittent throughout the workday, restricted to daytime hours, would primarily travel along highways and major arterials where few noise sensitive uses are located, would not traverse residential areas or travel past sensitive receptors for extended periods of time, and would generate noise levels comparable to existing vehicle noise along other major arterials in the area. Neither the County Noise Element nor the County Noise Control Ordinance have standards that apply to individual motor vehicles (these are regulated by the California Vehicle Code).

~~. Measures likely to be used to reduce noise impacts include limitations on the hours and days in which construction activity may occur. All vehicles will be staged either within the property lines or at designated areas as established by a County approved haul route plan.~~

~~Trucks are expected to enter and leave the site on a daily basis over the 30-month construction period, but only during working hours. The trips associated with trucks traveling off-site are based on the URBEMIS 20022007 assumptions associated with land uses proposed for Parcel 10R. According to the calculations in URBEMIS 20022007, trucks entering and exiting the site would make 140 541 round PCE trips per day (not accounting for the 1069 daily trips lost with the removal of existing residential units on Parcel 10R), traveling up to 7.530 miles each trip during the five and one-half two-month demolition and excavation phase. During the three-month site-grading phase, truck entering and exiting the site would travel~~

~~approximately 20~~up to 30 ~~miles round-each~~ trip, and would make 85 round~~541 PCE~~ trips per day. The ~~LACDPW, Construction Division, limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. This reduces the impact on local residents by restricting most construction-based noise generation to hours when most residents are at work and not generally home. The number of truck trips traveling along the designated haul route will vary daily, depending on the nature of the construction activity. Employment of standard noise attenuation practices would be implemented as required by the LACDPW. A~~However, as previously discussed, noise sensitive land uses located along the haul route are primarily residential in nature. Based on the information contained in **Table 5.2-5**, sensitive receptors~~uses~~ within 50 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant impact would result from trucks traveling to and from the project site along the haul route during the projected buildout of the project. Employment of standard noise attenuation practices would be implemented as required by the LACDPW.

Construction workers, who would generally arrive to the construction site at the beginning of the workday and leave at the end of the workday, would contribute to increases in peak and pre-peak hour traffic along roadways in the project study area. Construction worker traffic, which would be largely comprised of passenger vehicles and light pick-up trucks, would not represent a substantial percentage of peak hour volumes in the area and would not cause an audible increase in community noise levels. Therefore, noise from construction-worker traffic would be less than significant.

Vibration Impacts: The primary vibration source associated with development of the Neptune Marina Parcel 10R involves the use of pile drivers during foundation construction. ~~Less severe~~Lesser vibration impacts could result from the use of other heavy equipment on the parcel. There is also the potential for off-site vibration impacts from haul trucks passing on streets adjacent to sensitive receptors.

~~on- and off-site due to haul trucks passing on streets adjacent to sensitive receptors.~~ Pile drivers used on the parcel, however, are the pieces of construction equipment most likely to exceed Section 12.08.560 of the County Code and cause potential off-site vibration impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone.

As shown in **Table 5.2-6, Vibration Source Levels for Construction Equipment**, pile driving can result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code, and is within the range for

architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary ground-borne vibration during pile driving would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts would be significant. A certified structural engineer shall be retained to submit evidence that pile driving activities would not result in any structural damage to nearby structures.

A loaded heavy-duty haul truck can generate a level of vibration 0.076 inches/second PPV at 25 feet. The perception of truck traffic vibration would depend upon several factors, including road condition, vehicle speed, vehicle weight, vehicle suspension system, soil type and stratification, and distance between the truck and the receptor. Perceptible truck vibration would be intermittent and instantaneous as it would have a rapid onset and a rapid decay as the truck moves toward and away from the receptor. Section 12.08.560 of the County Code applies to any device, including motor vehicles, and, therefore, truck traffic vibrations exceed the threshold of significance and a significant impact can be concluded.

~~Pile drivers are the pieces of construction equipment most likely to cause potential off-site impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. Because the use of pile driving equipment is required for foundation construction, vibration impacts that would occur are considered significant and unavoidable, but temporary in type.~~ **Operation Impacts; Point ~~and Stationary~~ Source~~s~~ Noise:** ~~On site new residential uses are considered sensitive and could be affected by on- and off-site point source noise.~~ ~~Operation~~ Upon build out and occupation of the proposed Neptune Marina Parcel 10R~~,~~ ~~is expected to result in increased~~ noise increases would be due to the net increase in resident population on the site ~~and associated vehicular traffic~~, ~~to~~ affecting both future on-site receptors and existing off-site receptors. ~~Noise experienced at~~ Noise at on- and off-site locations would consist of intermittent sounds associated with human activity, such as people talking, doors slamming, lawn care equipment operation, stereos, domestic animals, etc. ~~Noise levels generated by these~~ These sources typically generate noise levels ~~of~~ between 52 ~~to~~ and 62 dB(A) ~~CNEL~~. Such noises are typical of ~~a~~ residential areas and are comparable to the types of noise presently experienced at the site. All off-site noise sensitive receptors are located a minimum of 50 feet from the ~~project site~~parcel and it is expected that most of the point source noise generated ~~on site will have attenuated and~~ would ~~, therefore,~~ not have a~~n~~ significant impact on these receptors. ~~As shown in **Table 5.2-7, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Neptune Marina Parcel 10R**, the existing dB(A) CNEL measured at all monitoring locations exceed County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources for the applicable designated noise zone land use. The County Noise Control Ordinance states that exterior noise~~

~~levels caused by stationary or point noise sources shall not exceed the levels identified in **Table 5.2-2, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources**, or the ambient noise level,[16] whichever is greater. Therefore, the levels monitored have become the standard. As stated in **5.2.1.1, Characteristics of Noise**, changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear.[17] As shown in **Table 5.2-7**, all expected noise increases resulting from the Neptune Marina Parcel 10R would be less than 3 dB(A). As a result, noise generated by point or stationary sources on the project site would be consistent with County of Los Angeles noise standards. Thus, noise impacts generated by the new residents located on the project site would not constitute a significant impact to on- or off-site receptors~~.

Operation Impacts; Mobile Source Noise: Development of the Neptune Marina Parcel 10R would increase the traffic volumes along local roadways. To evaluate potential mobile source impacts associated with increased vehicle trips, noise prediction modeling was conducted for ~~study roadway segments that are bordered by noise sensitive land~~ selected roadway segments adjacent to noise-sensitive land uses that could be affected by project traffic~~uses~~. Roadway segments include Washington Boulevard east of Via Marina, Via Marina south of Admiralty Way, Admiralty Way east of Via Marina, Lincoln Boulevard north of Fiji Way, Fiji Way west of Lincoln Boulevard, Mindanao Way east of Lincoln Boulevard, Panay Way east of Via Marina, Tahiti Way east of Via Marina, Marquesas Way east of Via Marina and Palawan Way east of Via Marina. Roadway geometrics and traffic volumes segments were obtained from Crain and Associates, the preparers of the traffic study for the proposed project. Scenarios modeled for these roadways are (1) existing (2007) traffic volumes; (2) existing plus project traffic volumes; and (3) future (year ~~2011~~2013) traffic volumes plus project and without project. The results of the noise modeling are shown in the **Table 5.2-7~~8~~, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Neptune Marina Parcel 10R**.

~~16 Ambient noise level is defined as the existing background noise level at the time of measurement or prediction.~~

~~17 *Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.~~

Table 5.2-8
Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations
Neptune Marina Parcel 10R

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Existing Plus Parcel 10R dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?	Future Without Parcel 10R dB(A) CNEL	Future With Parcel 10R dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9*	67.9*	0.0	NO	68.0*	68.0*	0.0	NO
Via Marina (south of Admiralty)	Residential, 50 feet	67.4*	67.6*	0.2	NO	67.6*	67.8*	0.2	NO
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	69.3	0.1	NO	69.3	69.4	0.1	NO
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	72.5*	72.5*	0.0	NO	72.7*	72.7*	0.0	NO
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3*	66.3*	0.0	NO	66.5*	66.5*	0.0	NO
Mindanao Way (east of Lincoln)	Residential, 50 feet	66.2*	66.3*	0.1	NO	66.4*	66.5*	0.1	NO
Marquesas Way (east of via marina)	Residential, 50 feet	56.0	56.8	0.8	NO	56.1	56.9	0.8	NO
Panay Way (east of Via Marina	Residential, 50 feet	59.4	59.4	0.0	NO	59.5	59.5	0.0	NO
Palawan Way (south of Washington)	Recreation	61.6	61.6	0.0	NO	61.7	61.7	0.0	NO
Tahiti Way (east of Via Marina)	Residential, 50 feet	56.5	56.5	0.0	NO	56.7	56.7	0.0	NO

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed normally acceptable levels under the Land Use Compatibility Guidelines for Noise.*

As shown, noise level increases attributable to Parcel 10R traffic under the second and third scenarios would be less than the 3 dB(A) threshold at all locations. Therefore, no significant off-site noise impacts would occur as a result of Parcel 10R operation.

~~As shown, noise level increases associated with project generated traffic are predicted to be less than 3 dB(A) CNEL at all locations. As previously stated, increases of less than 3 dB(A) CNEL would not exceed the off-site mobile source thresholds of significance for this analysis and would not generally be perceptible to the human ear while increases between 3 dB(A) and 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. Therefore, no significant off-site noise impacts would occur as a result of project operation when compared with existing conditions.~~

~~Table 5.2-7~~
~~Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations~~
~~Neptune Marina Parcel 10R~~

~~Roadway Segment~~	~~Sensitive Land Uses Adjacent to Roadway; Distance from Roadway Centerline~~	~~Existing dB(A) CNEL~~	~~Existing Plus Project dB(A) CNEL~~	~~Increase in CNEL~~	~~Future Without Project CNEL~~	~~Future With Project CNEL~~	~~Increase in CNEL with Project~~	~~Significant Impact?~~
~~Washington Blvd. (east of Via Marina)~~	~~Residential, 50 feet~~	~~67.9~~	~~67.9~~	~~0.0~~	~~68.0~~	~~68.0~~	~~0.0~~	~~NO~~
~~Via Marina (south of Admiralty)~~	~~Residential, 50 feet~~	~~67.4~~	~~67.6~~	~~0.2~~	~~67.5~~	~~67.7~~	~~0.2~~	~~NO~~
~~Admiralty Way (east of Via Marina)~~	~~Admiralty Park, 50 feet~~	~~69.2~~	~~69.3~~	~~0.1~~	~~69.3~~	~~69.4~~	~~0.1~~	~~NO~~
~~Lincoln Boulevard (north of Fiji Way)~~	~~Daniel Freeman Hospital, 50 feet~~	~~71.7*~~	~~71.7~~	~~0.0~~	~~71.8~~	~~71.8~~	~~0.0~~	~~NO~~
~~Fiji Way (west of Lincoln)~~	~~Residential, 50 feet~~	~~66.3~~	~~66.3~~	~~0.0~~	~~66.4~~	~~66.4~~	~~0.0~~	~~NO~~
~~Mindanao Way (east of Lincoln)~~	~~Residential, 50 feet~~	~~65.0~~	~~65.1~~	~~0.1~~	~~65.3~~	~~65.4~~	~~0.1~~	~~NO~~
~~Marquesas Way (east of via marina)~~	~~Residential 50 feet~~	~~53.8~~	~~55.1~~	~~1.3~~	~~53.9~~	~~55.2~~	~~1.3~~	~~NO~~
~~Panay Way (east of Via Marina~~	~~Residential 50 feet~~	~~56.4~~	~~56.4~~	~~0.0~~	~~56.5~~	~~56.5~~	~~0.0~~	~~NO~~
~~Palawan Way (south of Washington)~~	~~Recreation~~	~~61.6~~	~~61.6~~	~~0.0~~	~~61.7~~	~~61.7~~	~~0.0~~	~~NO~~
~~Tahiti Way (east of Via Marina)~~	~~Residential 50 feet~~	~~54.6~~	~~54.6~~	~~0.0~~	~~54.7~~	~~54.7~~	~~0.0~~	~~NO~~

~~*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*~~
~~** Roadway segments which exceed the County Land Use Compatibility Guidelines for Noise.*~~

Conclusion:

Construction Impacts: Significant

Haul Route Noise Impacts: Significant (temporary)

Vibration Impacts: Significant, especially during pile driving

Operational Impacts; Point ~~and Stationary~~ Sources Noise: Less than significant

Operational Impacts; Mobile Source Noise: Less than significant

Mitigation Measures:

Existing Regulations and Standards Applicable to ~~the project~~Parcel 10R: ~~The LACDPW, Construction Division,~~Section 12.12.030 of the County Code limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The Los Angeles County Department of Health Services has the authority to restrict construction activities to between the hours of 7:00 AM and 7:00 PM, and no time on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line. In addition, a haul route will be reviewed and approved by the County that would limit neighborhood disturbance to the degree feasible. To further limit off-site construction noise impacts, a staging area for the storage of equipment and material will be located on Parcel 10R as far as feasible from existing residences. With regard to operations, all point sources of noise occurring on the parcel must adhere to the requirements of Section 12.08.390 of the County Code. Even with these measure in place, it would not be possible to reduce construction noise impacts within the standards set forth in the County Code, particularly during pile driving.~~in order to limit neighborhood disturbance to the degree feasible. A construction staging area will be identified as far as possible from existing residential uses for the storage of equipment and material while still on the project site. With regard to operations, all stationary and point sources of noise occurring on the project site must adhere to the requirements of the County of Los Angeles Ordinance No. 11773, Section 12.08.390.~~

Mitigation Measures Recommended by the EIR:

The project application shall implement **Mitigation Measures 5.2-1** through **5.2-~~3~~ 5** to reduce significant noise and vibration impacts to ~~less than significant levels~~the extent feasible.

Conclusion:

Construction Impacts: Significant and unavoidable;

Haul Route Noise Impacts: Significant and unavoidable;

Vibration Impacts: Significant and unavoidable;

Operational Impacts; Point ~~and Stationary Sources~~Source Noise: Less than significant;

Operational Impacts; Mobile Source Noise: Less than significant ~~after mitigation~~.

5.2.4.3.3 Neptune Marina Parcel FF Project

The applicable thresholds of significance are listed below followed by ~~analysis of the significance~~ the noise impact analysis for Parcel FF~~of any potential impacts~~. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts~~, if applicable~~.

5.2.4.3.3.1 Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance?

Threshold: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis: The significance of noise impacts is based on both the Land Use Compatibility Guidelines for Noise~~,~~ identified in **Figure 5.2-3**, and typical community responses to changes in noise levels. Additionally, if proposed ~~on-site~~ uses within Parcel FF are subject to point source noise levels originating on or off ~~the project site~~the parcel that are above County Noise Control Ordinance standards (identified in **Tables 5.2-2** and **5.2-3**), a significant ~~on-site~~ noise impact would occur. Note that the County Noise Control Ordinance does not govern individual motor vehicles. These are governed by the California Vehicle Code.

Construction Impacts: Construction of the Neptune Marina Parcel FF would not be phased. Demolition and excavation activities ~~on the existing project site~~ are expected to occur over a ~~one month~~2.5-month period and are anticipated to begin in ~~April~~October ~~2010~~2011. ~~Demolition of existing uses and~~Buildout ~~construction~~ of the Neptune Marina Parcel FF is anticipated to take ~~18~~ 24 months to complete. Given this schedule, anticipated buildout of the project would occur in ~~Septem~~October ~~2011~~2013. Construction of the proposed project would result in increases in ambient noise levels in the project area on an intermittent basis. This temporary increase in noise will likely be noticeable to nearby residents and on- and off-site employees, as well as visitors to Marina del Rey. It must be emphasized that noise levels would fluctuate depending on the construction activity, equipment type and duration of use, the distance between the noise source and receptor and the presence or absence of noise attenuation barriers.

Construction of the project would involve the temporary use of heavy equipment, such as pile driving, tractors (dozers), loaders, concrete mixers, and cranes. Smaller equipment, such as jackhammers, pneumatic tools, saws and hammers, would also likely be used throughout the site during demolition

and construction stages. Construction activities will also include the installation of approximately 170 feet of water main to be installed within Via Marina to serve the Parcel FF.

The EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment. Based on this data, **Table 5.2-5, Noise Levels of Typical Construction Equipment**, presents noise levels of typical construction equipment, which could be used on site during various phases of construction. As shown in **Table 5.2-5**, noise levels generated by heavy equipment can range from approximately ~~68~~ 76 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance.

Based on a review of the site plan, construction activity would occur as close as 50 feet from existing noise sensitive residential uses located east of ~~the project site~~Parcel FF. Uses at these locations could experience noise levels that reach ~~94~~ 100 dB(A) ~~for short time~~ during pile driving, and noise levels up to 88 dB(A) during other construction activities~~periods~~. Construction activity on ~~the project site~~Parcel FF would also occur as close as 125 feet from existing residential uses located west of the project site along Via Marina, resulting in noise levels of up to 8~~2~~5 dB(A). These, as well as any other locations ~~that experience an~~with an ~~uninterrupted line of sight to the construction noise sources~~uninterrupted line of sight to the construction, could be temporarily exposed to exterior noise levels which could exceed the County's Noise Control Ordinance standards for construction equipment noise levels identified in **Table 5.2-3**. Therefore, construction noise is considered a temporary significant impact. ~~Mitigation measures for construction noise impacts are provided below.~~

~~Construction noise would represent a short-term significant impact based on the potential to exceed County noise standards and the near two-year construction period.~~

Haul Route Noise Impacts: Project construction will require the use of heavy trucks to haul equipment and materials to the site, as well as transport debris and earth excavated during demolition of existing structures and grading of the site. During the initial 2.5 months of demolition and excavation, as many as 74 truck trips would arrive to and leave the site daily. During the remainder of Parcel FF construction, the maximum number of daily truck trips would be 40 (Crain & Associates, January 29, 2008).

Off-site sensitive receptors along the truck route that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to 88 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the roadway and to any intervening topography and/or structures that may exist between them and the noise source. This noise impact would be temporary and instantaneous in nature as the trucks pass by the receptors. Truck

traffic noise at the receptors would diminish rapidly as the trucks travel away from them.~~Construction of the Neptune Marina Parcel FF will require the use of heavy trucks to haul equipment and materials to the site, as well as transport debris and earth excavated during demolition of existing structures and grading of the site.~~

To limit noise impacts associated with construction traffic on nearby land uses, truck haul routes have been established which route vehicles away from sensitive uses to the maximum extent feasible. As depicted in **Figure 5.2-6**, the haul route extends north on Via Marina to Washington Boulevard, then east on Lincoln Boulevard and south on the Marina Freeway.

To minimize potential neighborhood disruption and conflicts along the haul route, a construction traffic control plan will be developed for use during construction. The plan will identify all traffic control measures, signs and time limits to be implemented by the construction contractor ~~during the duration of demolition and construction activity~~for the duration of construction. All vehicles will be staged either within the property or at designated areas as established by a County approved haul route plan.

In short, heavy duty truck traffic associated with this project would be intermittent throughout the workday, restricted to daytime hours, would primarily travel along highways and major arterials where few noise sensitive uses are located, would not traverse residential areas or travel past sensitive receptors for extended periods of time, and would generate noise levels comparable to existing vehicle noise along other major arterials in the area. Individual truck trips are point sources of noise. Neither the County Noise Element nor the County Noise Control Ordinance have standards that apply to individual motor vehicles (these are regulated by the California Vehicle Code).

~~. Measures likely to be used to reduce noise impacts include limitations on the hours and days in which construction activity may occur. All vehicles will be staged either within the property lines or at designated areas as established by a County approved haul route plan.~~

~~Trucks are expected to enter and leave the site on a daily basis over the near two-year construction period, but only during working hours. The trips associated with trucks traveling off site are based on the URBEMIS 2002~~2007~~ assumptions associated with land uses proposed for Parcel FF. According to URBEMIS 2002~~2007~~ calculations prepared for the project, trucks entering and exiting the site would make one round ~~74 40 PCE~~ trips per day, traveling 7.5~~up to 30~~ miles each trip during the ~~two and~~ half-month demolition ~~and excavation~~ phase. During the three-month site-grading phase, trucks entering and exiting the site would travel approximately 20~~up to 30~~ miles round-~~each~~ trip, and would make 22.4 round~~288 PCE~~ trips per day. The LACDPW, Construction Division, limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. This reduces the~~

~~impact on local residents by restricting most construction-based noise generation~~ construction noise ~~to hours when~~ to when ~~most~~ residents are at work and not generally home. ~~The number of truck trips traveling along the designated haul route will vary daily, depending on the nature of the construction activity. Employment of all standard noise attenuation practices would be implemented as required by the LACDPW. A~~However, as previously discussed, noise sensitive land uses located along the haul route are primarily residential in nature. Based on the information contained in **Table 5.2-5**, ~~uses~~ sensitive receptors within 50 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant impact would result from trucks traveling to and from the project site along the haul route during the projected buildout of the project. Employment of all standard noise attenuation practices would be implemented as required by the LACDPW.

Construction workers, who would generally arrive to the construction site at the beginning of the workday and leave at the end of the workday, would contribute to increases in peak and pre-peak hour traffic along roadways in the project study area. Construction worker traffic, which would be largely comprised of passenger vehicles and light pick-up trucks, would not represent a substantial percentage of peak hour volumes in the area and would not cause an audible increase in community noise levels. Therefore, noise from construction-worker traffic would be less than significant.

Vibration Impacts: The primary vibration source associated with development of the Neptune Marina Parcel FF involves the use of pile drivers during foundation construction. Lesser vibration impacts could result from the use of other heavy equipment on the parcel. There is also the potential for off-site vibration impacts from haul trucks passing on streets adjacent to sensitive receptors.

Vibration from pile drivers is expected to exceed the perception threshold identified in Section 12.08.560 of the County Code and to cause potential off-site vibration impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. A certified structural engineer shall be retained to submit evidence that pile driving activities would not result in any structural damage to nearby structures.

As shown in **Table 5.2-6, Vibration Source Levels for Construction Equipment**, pile driving can result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code, and is within the range for architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary ground-

borne vibration during pile driving would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts would be significant.

~~Less severe vibration impacts could result from the use of other heavy equipment on- and off-site due to haul trucks passing on streets adjacent to sensitive receptors. Pile drivers are the pieces of construction equipment most likely to cause potential off-site impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. Because the use of pile driving equipment is required for foundation construction, vibration impacts that would occur are considered significant and unavoidable but temporary in type.~~ A loaded heavy-duty haul truck can generate a level of vibration 0.076 inches/second PPV at 25 feet. The perception of truck traffic vibration would depend upon several factors, including road condition, vehicle speed, vehicle weight, vehicle suspension system, soil type and stratification, and distance between the truck and the receptor. Perceptible truck vibration would be intermittent and instantaneous as it would have a rapid onset and a rapid decay as the truck moves toward and away from the receptor. Section 12.08.560 of the County Code applies to any device, including motor vehicles, and, therefore, truck traffic vibrations exceed the threshold of significance and a significant impact can be concluded.

Operation Impacts; Point ~~and Stationary~~ Source Noise: ~~On site new r~~Residential uses are considered sensitive and residences on Parcel FF could be affected by on- and off-site point source noise. Operation of the proposed Neptune Marina Parcel FF is expected to ~~result in increased~~generate new point source noises~~ due to the introduction of a residential population on the site and associated vehicular traffic, to both future~~that could be audible ~~on-site receptors and existing off-site receptors~~elsewhere on the project site and at off-site locations. ~~Noise~~ The point source ~~experienced at~~ noise ~~on- and off-site locations~~ would consist of intermittent sounds associated with human activity, such as people talking, doors slamming, lawn care equipment operation, stereos, domestic animals, etc. ~~Noise levels generated by t~~These sources typically generate noise levels ~~of~~ between 52 ~~to~~ and 62 dB(A) ~~CNEL~~. Such noises are typical of ~~a~~ residential areas and are comparable to the types of noise presently experienced at the site and in the surrounding area. All sensitive receptors are located a minimum of 50 feet from the project site and it is expected that most of the point source noise generated on site will have attenuated and would, therefore, not have a~~n~~ significant impact on these receptors. ~~As shown in **Table 5.2-8, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Neptune Marina Parcel FF**, the existing dB(A) CNEL measured at all monitoring locations exceed County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources for the applicable designated noise zone land use. The County Noise Control Ordinance states that exterior noise levels caused by stationary or point noise sources shall not exceed the levels identified in **Table 5.2-2, County of Los Angeles Exterior Noise Standards for**~~

~~**Stationary and Point Noise Sources**, or the ambient noise level,[18] whichever is greater. Therefore, the levels monitored have become the standard. As stated in **5.2.1.1, Characteristics of Noise**, changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear.[19] As shown in **Table 5.2-8**, all expected noise increases resulting from the Neptune Marina Parcel FF would be less than 3 dB(A). As a result, noise generated by point or stationary sources on the project site would be consistent with County of Los Angeles noise standards. Thus, noise impacts generated by the new residents located on the project site would not constitute a significant impact to on- or off-site receptors.~~

Operation Impacts; Mobile Source Noise: Development of the project would increase the traffic volumes along local roadways. To evaluate potential noise impacts associated with increased vehicle trips, noise prediction modeling was conducted for selected roadway segments adjacent to noise-sensitive land uses that could be affected by project traffic~~study roadway segments that are bordered by noise sensitive land uses~~. Roadway segments include Washington Boulevard east of Via Marina, Via Marina south of Admiralty Way, Admiralty Way east of Via Marina, Lincoln Boulevard north of Fiji Way, Fiji Way west of Lincoln Boulevard, Mindanao Way east of Lincoln Boulevard, Panay Way east of Via Marina, Tahiti Way east of Via Marina, Marquesas Way east of Via Marina and Palawan Way east of Via Marina. Roadway geometrics and traffic volumes segments were obtained from Crain and Associates, the preparers of the traffic study for the proposed project. Scenarios modeled for these roadways are (1) existing (2007) traffic volumes; (2) existing plus project traffic volumes; and (3) future (year ~~2011~~2013) traffic volumes plus project and without project. The results of the noise modeling are shown in the **Table 5.2-8~~9~~, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Neptune Marina Parcel FF**.~~-~~

~~**Table 5.2-8**~~
~~**Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations**~~
~~**Neptune Marina Parcel FF**~~

~~Roadway Segment~~	~~Sensitive Land Uses Distance from Roadway Centerline~~	~~Existing dB(A) CNEL~~	~~Existing Plus Project dB(A) CNEL~~	~~Increase in CNEL~~	~~Future Without Project CNEL~~	~~Future With Project CNEL~~	~~Increase in CNEL with Project~~	~~Significant Impact?~~
~~Washington Blvd. (east of Via Marina)~~	~~Residential, 50 feet~~	~~67.9~~	~~67.9~~	~~0.0~~	~~68.0~~	~~68.0~~	~~0.0~~	~~NO~~
~~Via Marina (south of Admiralty)~~	~~Residential, 50 feet~~	~~67.4~~	~~67.5~~	~~0.1~~	~~67.5~~	~~67.6~~	~~0.1~~	~~NO~~
~~Admiralty Way (east of Via Marina)~~	~~Admiralty Park, 50 feet~~	~~69.2~~	~~69.2~~	~~0.0~~	~~69.3~~	~~69.3~~	~~0.0~~	~~NO~~

~~18 Ambient noise level is defined as the existing background noise level at the time of measurement or prediction.~~

~~19 *Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.~~

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Existing Plus Project dB(A) CNEL	Increase in CNEL	Future Without Project CNEL	Future With Project CNEL	Increase in CNEL with Project	Significant Impact?
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	71.7*	71.7	0.0	71.8	71.8	0.0	NO
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3	66.3	0.0	66.4	66.4	0.0	NO
Mindanao Way (east of Lincoln)	Residential, 50 feet	65.0	65.2	0.2	65.3	65.3	0.2	NO
Marquesas Way (east of via marina)	Residential, 50 feet	53.8	54.7	0.9	53.9	54.8	0.9	NO
Panay Way (east of Via Marina	Residential 50 feet	56.4	56.4	0.0	56.5	56.5	0.0	NO
Palawan Way (south of Washington)	Recreation	61.6	61.6	0.0	61.7	61.7	0.0	NO
Tahiti Way (east of Via Marina)	Residential, 50 feet	54.6	54.6	0.0	54.7	54.7	0.0	NO

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed the County Land Use Compatibility Guidelines for Noise.*

As shown, noise level increases associated with project generated traffic are predicted to be less than 3 dB(A) CNEL at all locations. As previously stated, increases of less than 3 dB(A) CNEL would not exceed the off-site mobile source thresholds of significance for this analysis and would not generally be perceptible to the human ear while increases between 3 dB(A) and 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. Therefore, no significant off-site noise impacts would occur as a result of project operation when compared with existing conditions.

Table 5.2-9
Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations
Neptune Marina Parcel FF

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Existing Plus Parcel FF dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?	Future Without Parcel FF dB(A) CNEL	Future With Parcel FF dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9*	67.9*	0.0	NO	68.0*	68.0*	0.0	NO
Via Marina (south of Admiralty)	Residential, 50 feet	67.4*	67.5*	0.1	NO	67.6*	67.7*	0.1	NO
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	69.2	0.0	NO	69.3	69.4	0.1	NO
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	72.5*	72.5*	0.0	NO	72.7*	72.7*	0.0	NO
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3*	66.3*	0.0	NO	66.5*	66.5*	0.0	NO
Mindanao Way (east of Lincoln)	Residential, 50 feet	66.2*	66.3*	0.1	NO	66.4*	66.4*	0.0	NO
Marquesas Way (east of via marina)	Residential, 50 feet	56.0	56.6	0.6	NO	56.1	56.7	0.6	NO
Panay Way (east of Via Marina	Residential, 50 feet	59.4	59.4	0.0	NO	59.5	59.5	0.0	NO
Palawan Way (south of Washington)	Recreation	61.6	61.6	0.0	NO	61.7	61.7	0.0	NO
Tahiti Way (east of Via Marina)	Residential, 50 feet	56.5	56.5	0.0	NO	56.7	56.7	0.0	NO

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed normally acceptable levels under the Land Use Compatibility Guidelines for Noise.*

As shown, noise level increases attributable to Parcel FF traffic under the second and third scenarios would be less than the 3 dB(A) threshold at all locations. Therefore, no significant off-site noise impacts would occur as a result of Parcel FF operation.

Conclusion:

Construction Impacts: Significant;

Haul Route Noise Impacts: Significant (temporary);

Vibration Impacts: Significant, especially during pile driving;

Operational Impacts; Point ~~and Stationary Sources~~Source Noise: Less than significant;

Operational Impacts; Mobile Source Noise: Less than significant.

Mitigation Measures:

Existing Regulations and Standards Applicable to ~~the Project~~Parcel FF: Section 12.12.030 of the County Code~~The LACDPW, Construction Division,~~ limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The Los Angeles County Department of Health Services has the authority to restrict construction activities to between the hours of 7:00 AM and 7:00 PM and no time on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line. In addition, a haul route will be reviewed and approved by the County that would limit neighborhood disturbance to the degree feasible. To further limit off-site construction noise impacts, a staging area for the storage of equipment and material will be located on Parcel FF as far as feasible from existing residences. With regard to operations, all point sources of noise occurring on the parcel must adhere to the requirements of Section 12.08.390 of the County Code. Even with these measure in place, it would not be possible to reduce construction noise impacts within the standards set forth in the County Code, particularly during pile driving.~~in order to limit neighborhood disturbance to the degree feasible. A construction staging area will be identified within each parcel as far as possible from existing residential uses for the storage of equipment and material. With regard to operations, all stationary and point sources of noise occurring on the project site must adhere to the requirements of the County of Los Angeles Ordinance No. 11773, Section 12.08.390.~~

Mitigation Measures Recommended by the EIR:

The project application shall implement mitigation measures 5.2-1 through 5.2-~~3~~ 5 to reduce significant noise and vibration impacts to ~~less than significant levels~~the extent feasible.

Conclusion:

Construction Impacts: Significant and unavoidable;

Haul Route Noise Impacts: Significant and unavoidable;

Vibration Impacts: Significant and unavoidable;

Operational Impacts; Point ~~and Stationary Sources~~Source Noise: Less than significant;

Operational Impacts; Mobile Source Noise: Less than significant ~~with implementation of mitigation~~.

5.2.4.3.4 Woodfin Suite Hotel and Timeshare Resort Project (Parcel 9U)

The applicable thresholds of significance are listed below followed by ~~analysis of the significance of any potential impacts~~the noise impact analysis for Parcel 9U. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts~~, if applicable~~.

5.2.4.3.4.1 Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance?

Threshold: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis: The significance of noise impacts is based on both the Land Use Compatibility Guidelines for Noise, identified in **Figure 5.2-3**, and typical community responses to changes in noise levels. Additionally, if proposed on-site uses are subject to point source noise levels originating on or off the ~~project site~~parcel that are above County Noise Control Ordinance standards (identified in **Tables 5.2-2** and **5.2-3**), a significant ~~on-site~~ noise impact would occur. Note that the County Noise Control Ordinance does not govern individual motor vehicles. These are governed by the California Vehicle Code.

Construction Impacts: Construction of the Woodfin Suite Hotel and Timeshare Resort would not be phased. Construction is anticipated to take approximately ~~24~~ 30 months, beginning in May ~~2009~~2011. Given this schedule, anticipated buildout of the project would occur late in ~~2011~~2013 Construction of the proposed project would result in increases in ambient noise levels in the project area on an intermittent basis. This temporary increase in noise will likely be noticeable to nearby residents and on- and off-site employees, as well as visitors to Marina del Rey. It must be emphasized that noise levels would fluctuate depending on the construction activity, equipment type and duration of use, the distance between the noise source and receptor, and the presence or absence of noise attenuation barriers.

Construction on Parcel 9U ~~of the project~~ would involve the temporary use of heavy equipment, such as pile drivers, tractors (dozers), loaders, concrete mixers, and cranes. Smaller equipment, such as jackhammers, pneumatic tools, saws, and hammers, would also likely be used throughout the site during demolition and construction ~~stages~~. Although not required for the Woodfin Suite Hotel and Timeshare

Resort project, approximately 570 feet of water main will be installed within Via Marina that would serve Parcel 9U as part of the water supply infrastructure improvements in Marina del Rey.

The EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment. Based on this data, **Table 5.2-5, Noise Levels of Typical Construction Equipment**, presents noise levels of typical construction equipment, which could be used on site during various phases of construction. As shown in **Table 5.2-5**, noise levels generated by heavy equipment can range from approximately ~~68~~ 76 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance.

Based on a review of the site plan, construction activity would occur as close as 125 feet from existing noise sensitive residential uses located west of the ~~project site~~parcel along Via Marina. These, as well as any other locations ~~that experience an~~with an ~~uninterrupted line of sight to the construction noise sources~~uninterrupted line of sight to the construction, could be temporarily exposed to exterior noise levels which could exceed the County's Noise Control Ordinance standards for construction equipment noise levels identified in **Table 5.2-3**. Therefore, construction noise is considered a temporary significant impact. ~~Mitigation measures for construction noise impacts are provided below.~~

Construction noise would represent a short-term significant impact based on the potential to exceed County noise standards ~~and~~ over the ~~near two-year~~230-month construction period.

Haul Route Noise Impacts: Project construction will require the use of heavy trucks to haul equipment and materials to the site, as well as transport debris and earth excavated during demolition of existing structures and grading of the site. During the initial 1.5 months of demolition and excavation, as many as 144 truck trips would arrive to and leave the site daily. During the remainder of Parcel 9U construction, the maximum number of daily truck trips would be 20 (Crain & Associates, January 29, 2008).

Off-site sensitive receptors along the truck route that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to 88 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the roadway and to any intervening topography and/or structures that may exist between them and the noise source. This noise impact would be temporary and instantaneous in nature as the trucks pass by the receptors. Truck traffic noise at the receptors would diminish rapidly as the trucks travel away from them.~~Construction of the Woodfin Suite Hotel and Timeshare Resort will require the use of heavy trucks to haul equipment and materials to the site, as well as transport earth excavated during site grading.~~

To limit noise impacts associated with construction traffic on nearby land uses, truck haul routes have been established which route vehicles away from sensitive uses to the maximum extent feasible. As depicted in **Figure 5.2-6**, the haul route extends north on Via Marina to Washington Boulevard, then east on Lincoln Boulevard and south on the Marina Freeway.

To minimize potential neighborhood disruption and conflicts along the haul route, a construction traffic control plan will be developed for use during construction. The plan will identify all traffic control measures, signs and time limits to be implemented by the construction contractor ~~throughout~~ for the duration of construction. All vehicles will be staged either within the parcel or at designated areas as established by a County approved haul route plan.

In short, heavy duty truck traffic associated with this project would be intermittent throughout the workday, restricted to daytime hours, would primarily travel along highways and major arterials where few noise sensitive uses are located, would not traverse residential areas or travel past sensitive receptors for extended periods of time, and would generate noise levels comparable to existing vehicle noise along other major arterials in the area. Neither the County Noise Element nor the County Noise Control Ordinance have standards that apply to individual motor vehicles (these are regulated by the California Vehicle Code).

~~duration of construction activity. Measures likely to be used to reduce noise impacts include limitations on the hours and days in which construction activity may occur. All vehicles will be staged either within the property lines or at designated areas as established by a County approved haul route plan.~~

~~Trucks are expected to enter and leave the site on a daily basis over the nearly two-year construction period, but only during working hours. The trips associated with trucks traveling off-site are based on the URBEMIS 2002~~2007 ~~assumptions associated with land uses proposed for Parcel 9U. According to URBEMIS 2002~~2007 ~~calculations prepared for the project, trucks entering and exiting the site would travel approximately 20~~up to 30 ~~miles round-~~each trip, ~~and would make 23.8 round~~ 78352 PCE trips per day ~~during the three-~~ three one and a half months ~~demolition and excavation~~ site-grading phase. ~~The LACDPW, Construction Division, limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. This reduces the impact on local residents by restricting most construction-based noise generation~~ construction noise to hours when ~~to when~~ most ~~residents are at work and not generally home. The number of truck trips traveling along the designated haul route will vary daily, depending on the nature of the construction activity. Employment of all standard noise attenuation practices would be implemented as required by the LACDPW. A~~However, as previously discussed, noise sensitive land uses located along the haul route are primarily residential in nature. Based on the information contained in **Table 5.2-5**, ~~uses~~ sensitive receptors within 50 feet of the

haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant impact would result from trucks traveling to and from the project site along the haul route during the projected buildout of the project. Employment of all standard noise attenuation practices would be implemented as required by the LACDPW.

Construction workers, who would generally arrive to the construction site at the beginning of the workday and leave at the end of the workday, would contribute to increases in peak and pre-peak hour traffic along roadways in the project study area. Construction worker traffic, which would be largely comprised of passenger vehicles and light pick-up trucks, would not represent a substantial percentage of peak hour volumes in the area and would not cause an audible increase in community noise levels. Therefore, noise from construction-worker traffic would be less than significant.

Vibration Impacts: The primary vibration source associated with development of the Woodfin Suite Hotel and Timeshare Resort involves the use of pile drivers during foundation construction. Lesser vibration impacts could result from the use of other heavy equipment on the parcel. There is also the potential for off-site vibration impacts from haul trucks passing on streets adjacent to sensitive receptors.

Vibration from pile drivers used on the parcel would likely to exceed Section 12.08.560 of the County Code and cause potential off-site vibration impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone.

As shown in **Table 5.2-6, Vibration Source Levels for Construction Equipment**, pile driving can result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code, and is within the range for architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary groundborne vibration during pile driving would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts would be significant. A certified structural engineer shall be retained to submit evidence that pile driving activities would not result in any structural damage to nearby structures.

~~Less severe vibration impacts could result from the use of other heavy equipment on- and off-site due to haul trucks passing on streets adjacent to sensitive receptors. Pile drivers are the pieces of construction equipment most likely to cause potential off-site impacts. Pile drivers create a high intensity, repetitious~~

noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. Because the use of pile driving equipment is required for foundation construction, vibration impacts that would occur are considered significant and unavoidable, but temporary in type. A loaded heavy-duty haul truck can generate a level of vibration 0.076 inches/second PPV at 25 feet. The perception of truck traffic vibration would depend upon several factors, including road condition, vehicle speed, vehicle weight, vehicle suspension system, soil type and stratification, and distance between the truck and the receptor. Perceptible truck vibration would be intermittent and instantaneous as it would have a rapid onset and a rapid decay as the truck moves toward and away from the receptor. Section 12.08.560 of the County Code applies to any device, including motor vehicles, and, therefore, truck traffic vibrations exceed the threshold of significance and a significant impact can be concluded.

Operation Impacts; Point and Stationary Source Noise: Operation of Upon buildout and occupation, the proposed Woodfin Suite Hotel and Timeshare Resort is expected to result in increased noise due to the introduction of a transient population on the site parcel and associated vehicular traffic, that would be audible to both future on-site receptors and existing off-site receptors. Noise experienced at Noise at on-site and off-site locations would consist of intermittent sounds associated with human activity similar to a residential use, such as people talking, doors slamming, lawn care equipment operation, stereos, etc. Noise levels generated by t These sources typically generate noise levels of between 52 to and 62 dB(A) CNEL. Such noises are typical of a residential area and are comparable to the types of noise presently experienced from existing surrounding residential uses at the site and in the surrounding area. All sensitive receptors are located a minimum of 50 feet from the project site and it is expected that most of the noise generated on site the parcel will have attenuated and would, therefore, not have an a significant impact on these receptors. As shown in **Table 5.2-9, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Woodfin Suite Hotel and Timeshare Resort**, the existing dB(A) CNEL measured at all monitoring locations exceed County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources for the applicable designated noise zone land use. The County Noise Control Ordinance states that exterior noise levels caused by stationary or point noise sources shall not exceed the levels identified in **Table 5.2-2, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources**, or the ambient noise level,[20] whichever is greater. Therefore, the levels monitored have become the standard. As stated in **5.2.1.1, Characteristics of Noise**, changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear.[21] As shown in

[20] Ambient noise level is defined as the existing background noise level at the time of measurement or prediction.

[21] *Highway Noise Fundamentals,* (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.

~~**Table 5.2-9**, all expected noise increases resulting from the Woodfin Suite Hotel and Timeshare Resort would be less than 3 dB(A). As a result, noise generated by point or stationary sources on the project site would be consistent with County of Los Angeles noise standards. Thus, noise impacts generated by the transient population located on the project site would not constitute a significant impact to on-site or off-site receptors.~~

Operation Impacts; Mobile Source Noise: Development of the project would increase the traffic volumes along local roadways. To evaluate potential impacts associated with increased vehicle trips, noise prediction modeling was conducted for ~~study~~ selected roadway segments adjacent to noise-sensitive land uses that could be affected by project traffic ~~roadway segments that are bordered by noise sensitive land uses~~. Roadway segments include Washington Boulevard east of Via Marina, Via Marina south of Admiralty Way, Admiralty Way east of Via Marina, Lincoln Boulevard north of Fiji Way, Fiji Way west of Lincoln Boulevard, Mindanao Way east of Lincoln Boulevard, Panay Way east of Via Marina, Tahiti Way east of Via Marina, Marquesas Way east of Via Marina and Palawan Way east of Via Marina. Roadway geometrics and traffic volumes segments were obtained from Crain and Associates, the preparers of the traffic study for the proposed project. Scenarios modeled for these roadways are (1) existing (2007) traffic volumes; (2) existing plus project traffic volumes; and (3) future (year ~~2011~~2013) traffic volumes plus project and without project. The results of the noise modeling are shown in the **Table 5.2-~~9~~10, Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations, Woodfin Suite Hotel and Timeshare Resort (Parcel 9U)**.

Table 5.2-9
Predicted Future Off-Site Roadway Noise Levels at Noise-Sensitive Locations
Woodfin Suite Hotel and Timeshare Resort

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Existing Plus Project dB(A) CNEL	Increase in CNEL	Future Without Project CNEL	Future With Project CNEL	Increase in CNEL with Project	Significant Impact?
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9	67.9	0.0	68.0	68.0	0.0	NO
Via Marina (south of Admiralty)	Residential, 50 feet	67.4	67.7	0.3	67.5	67.8	0.3	NO
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	69.3	0.1	69.3	69.4	0.1	NO
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	71.7*	71.7	0.0	71.8	71.8	0.0	NO
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3	66.3	0.0	66.4	66.4	0.0	NO
Mindanao Way (east of Lincoln)	Residential, 50 feet	65.0	65.1	0.1	65.3	65.4	0.1	NO
Marquesas Way (east of via marina)	Residential, 50 feet	53.8	53.8	0.0	53.9	53.9	0.0	NO
Panay Way (east of Via Marina	Residential 50 feet	56.4	56.4	0.0	56.5	56.5	0.0	NO
Palawan Way (south of Washington)	Recreation	61.6	61.6	0.0	61.7	61.7	0.0	NO
Tahiti Way (east of Via Marina)	Residential, [Format] 50 feet	54.6	54.6	0.0	54.7	54.7	0.0	NO

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed the County Land Use Compatibility Guidelines for Noise.*

As shown, noise level increases associated with project generated traffic are predicted to be less than 3 dB(A) CNEL at all locations. As previously stated, increases of less than 3 dB(A) CNEL would not exceed the off-site mobile source thresholds of significance for this analysis and would not generally be perceptible to the human ear while increases between 3 dB(A) and 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. Therefore, no significant off-site noise impacts would occur as a result of project operation when compared with existing conditions.

Table 5.2-10
Off-Site Roadway Noise Levels at Noise-Sensitive Locations
Woodfin Suite Hotel and Timeshare Resort (Parcel 9U)

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Existing Plus Parcel 9U dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?	Future Without Parcel 9U dB(A) CNEL	Future With Parcel 9U dB(A) CNEL	Increase in dB(A) CNEL	Significant Impact?
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9*	67.9*	0.0	NO	68.0*	68.1*	0.1	NO
Via Marina (south of Admiralty)	Residential, 50 feet	67.4*	67.7*	0.3	NO	67.6*	67.8*	0.2	NO
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	69.3	0.1	NO	69.3	69.4	0.1	NO
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	72.5*	72.5*	0.0	NO	72.7*	72.7*	0.0	NO
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3*	66.3*	0.0	NO	66.5*	66.5*	0.0	NO
Mindanao Way (east of Lincoln)	Residential, 50 feet	66.2*	66.4*	0.2	NO	66.4*	66.5*	0.1	NO
Marquesas Way (east of via marina)	Residential, 50 feet	56.0	56.0	0.0	NO	56.1	56.1	0.0	NO
Panay Way (east of Via Marina	Residential, 50 feet	59.4	59.4	0.0	NO	59.5	59.5	0.0	NO
Palawan Way (south of Washington)	Recreation	61.6	61.6	0.0	NO	61.7	61.7	0.0	NO
Tahiti Way (east of Via Marina)	Residential, 50 feet	56.5	56.5	0.0	NO	56.7	56.7	0.0	NO

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed normally acceptable levels under the Land Use Compatibility Guidelines for Noise.*

As shown, noise level increases attributable to Parcel 9U traffic under the second and third scenarios would be less than the 3 dB(A) threshold at all locations. Therefore, no significant off-site noise impacts would occur as a result of Parcel 9U operation.

Conclusion:

Construction Impacts: Significant;

Haul Route Noise Impacts: Significant (temporary);

Vibration Impacts: Significant, especially during pile driving;

Operational Impacts; Point ~~and Stationary Sources~~Source Noise: Less than significant;

Operational Impacts; Mobile Source Noise: Less than significant.

Mitigation Measures:

Existing Regulations and Standards Applicable to ~~the Project~~Parcel 9U: Section 12.12.030 of the County Code~~The LACDPW, Construction Division,~~ limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The Los Angeles County Department of Health Services has the authority to restrict construction activities to between the hours of 7:00 AM and 7:00 PM and no time on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line. In addition, a haul route will be reviewed and approved by the County that would limit neighborhood disturbance to the degree feasible. To further limit off-site construction noise impacts, a staging area for the storage of equipment and material will be located on Parcel 9U as far as feasible from existing residences. With regard to operations, all point sources of noise occurring on the parcel must adhere to the requirements of Section 12.08.390 of the County Code. Even with these measure in place, it would not be possible to reduce construction noise impacts within the standards set forth in the County Code, particularly during pile driving.~~in order to limit neighborhood disturbance to the degree feasible. A construction staging area will be identified within each parcel as far as possible from existing residential uses for the storage of equipment and material while still on the project site. With regard to operations, all stationary and point sources of noise occurring on the project site must adhere to the requirements of the County of Los Angeles Ordinance No. 11773, Section 12.08.390.~~

Mitigation Measures Recommended by the EIR:

The project application shall implement mitigation measures 5.2-1 through 5.2-~~3~~ 5 to reduce significant noise and vibration impacts to ~~less than significant levels~~the extent feasible.

Conclusion:

Construction Impacts: Significant and unavoidable, particularly during pile driving;

Haul Route Noise Impacts: Significant and unavoidable;

Vibration Impacts: Significant and unavoidable;

Operational Impacts; Point ~~and Stationary Sources~~Source Noise: Less than significant;

Operational Impacts; Mobile Source Noise: Less than significant.

5.2.4.3.5 Wetland Park Project (Parcel 9U)

The applicable thresholds of significance are listed below followed by ~~analysis of the significance of any potential impacts~~the noise impact analysis for the Wetland Park Project. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts~~, if applicable~~.

5.2.4.3.5.1 Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance?

Threshold: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis: The significance of noise impacts is based on both the Land Use Compatibility Guidelines for Noise, identified in **Figure 5.2-3**, and typical community responses to changes in noise levels. Additionally, if proposed ~~on-site~~ uses are subject to point source noise levels originating on or off the ~~proje~~Wetland Park that are above County Noise Control Ordinance standards for noise-sensitive uses (identified in **Tables 5.2-2** and **5.2-3**), a significant ~~on site~~ noise impact would occur. Note that the County Noise Control Ordinance does not govern individual motor vehicles. These are governed by the California Vehicle Code.

Construction Impacts: A restored wetland and public upland park are proposed on the southern 1.46 acres of Parcel 9U. ~~Construction~~ Development of the ~~1.46-acre~~ wetland park would not be phased. ~~Construction is limited to the grading necessary for construction of the 1.46-acre wetland and upland buffer. Construction~~ Grading would occur over a three-month period beginning in October 2011 and construction ~~of the project would involve the temporary (approximately three months~~would occur over a nine-month period. Park completion would occur by October 2012. Park development would require the use of heavy equipment, such as tractors~~,~~ (dozers) and loaders. ~~As stated above, the EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment.~~ **Table 5.2-5, Noise Levels of Typical Construction Equipment**, ~~shown above, presents noise levels of typical construction equipment, which could be used on site during various phases of construction. As shown, noise levels generated by heavy~~ demonstrates that noise levels from this equipment can range from approximately ~~68~~ 84 dB(A) to ~~noise levels in excess of 100~~87 dB(A) when measured at 50 feet.

However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance.

Construction activity on ~~the project~~ Wetland Park site would occur as close as 125 feet from existing residential uses located west of the project site along Via Marina and south along Tahiti Way, resulting in noise levels of up to approximately ~~85~~ 80 dB(A). ~~These, as well as any other locations that experience an uninterrupted line of sight to the construction noise sources, could be temporarily exposed to~~This exterior noise level~~s which could~~does not exceed the County's Noise Control Ordinance standards for ~~construction equipment noise levels~~multi-family residences (~~identified in~~see **Table 5.2-3**). Therefore, construction noise ~~is considered a temporary~~ impacts would be less than significant ~~impact~~.

~~Construction noise would represent a short-term significant impact based on the potential to exceed County noise standards and the near two and a half~~ eleven month ~~one~~-year construction period.

Haul Route Noise Impacts: Wetland Park construction will require the use of heavy trucks to haul equipment and materials to the site, as well as transport construction debris. During the initial 3 months of excavation and grading, as many as 10 truck trips would arrive to and leave the site daily. During the remainder of the park construction, the maximum number of truck trips would be 10 trips per day (Crain & Associates, January 29, 2008).

Off-site sensitive receptors along the truck route that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to 88 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the roadway and to any intervening topography and/or structures that may exist between them and the noise source. This noise impact would be temporary and instantaneous in nature as the trucks pass by the receptors. Truck traffic noise at the receptors would diminish rapidly as the trucks travel away from them.

To limit noise impacts associated with construction traffic on nearby land uses, truck haul routes have been established which route vehicles away from sensitive uses to the maximum extent feasible. As depicted in **Figure 5.2-6, Haul Route**, the haul route extends north on Via Marina to Washington Boulevard, then east on Lincoln Boulevard and south on the Marina Freeway.

To minimize potential neighborhood disruption and conflicts along the haul route, a construction traffic control plan will be developed for use during construction. The plan will identify all traffic control measures, signs and time limits to be implemented by the construction contractor for the duration of construction. All vehicles will be staged either within the property or at designated areas as established by a County approved haul route plan.

In short, heavy duty truck traffic associated with this project would be intermittent throughout the workday, restricted to daytime hours, would primarily travel along highways and major arterials where few noise sensitive uses are located, would not traverse residential areas or travel past sensitive receptors for extended periods of time, and would generate noise levels comparable to existing vehicle noise along other major arterials in the area. Neither the County Noise Element nor the County Noise Control Ordinance have standards that apply to individual motor vehicles (these are regulated by the California Vehicle Code). However, as previously discussed, noise sensitive land uses located along the haul route are primarily residential in nature. Based on the information contained in **Table 5.2-5**, sensitive receptors within 50 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant impact would result from trucks traveling to and from the project site along the haul route during the projected buildout of the project. Employment of all standard noise attenuation practices would be implemented as required by the LACDPW.

Construction workers, who would generally arrive to the construction site at the beginning of the workday and leave at the end of the workday, would contribute to increases in peak and pre-peak hour traffic along roadways in the project study area. Construction worker traffic, which would be largely comprised of passenger vehicles and light pick-up trucks, would not represent a substantial percentage of peak hour volumes in the area and would not cause an audible increase in community noise levels. Therefore, noise from construction-worker traffic would be less than significant.

Vibration Impacts: Construction of the 1.46-acre wetland park would involve limited site grading and would not require the use of equipment, such as pile drivers. Vibration from construction equipment would not be perceptible to the nearest residential uses located west of the project site along Via Marina and south along Tahiti Way and impacts would be less than significant~~that would generate substantial ground vibration. As such, vibration impacts would be less than significant.~~

Operation Impacts: New on-site uses are expected to be limited to those associated with passive recreation. Operation of the proposed wetland park is expected to result in a minor increase in noise due to the net increase in the human population on the site~~ to both future on-site receptors and existing off-site receptors~~. ~~Noise experienced at~~ Audible noise at on-site and off-site locations would consist of intermittent sounds associated with human activity, such as people talking, ~~and~~ domestic animals (if permitted within the wetland park), etc. ~~Noise levels generated by t~~These sources typically generate noise levels ~~of~~ between 52 ~~to~~ and 62 dB(A) ~~CNEL~~. Such noises are typical of urban areas and are comparable to the types of noise presently experienced at the project site. Operation of the wetland park is not expected to result in significant noise impacts during project operation.

Conclusion:

Construction Impacts: ~~Significant~~~~Less than s~~Significant;

Haul Route Noise Impacts: Significant (temporary)

Vibration Impacts: Less than significant;

Operational Impacts: Less than significant.

Mitigation Measures:

Existing Regulations and Standards Applicable to ~~the Project~~Wetland Park Project: Section 12.~~08~~12.030 of the County Code~~The LACDPW, Construction Division,~~ limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The Los Angeles County Department of Health Services has the authority to restrict construction activities to between the hours of 7:00 AM and 7:00 PM, and no time on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line. In addition, a haul route will be reviewed and approved by the County that would limit neighborhood disturbance to the degree feasible. To further limit off-site construction noise impacts, a staging area for the storage of equipment and material will be located on the Wetland Park site as far as feasible from existing residences. With regard to operations, all point sources of noise occurring on the parcel must adhere to the requirements of Section 12.08.390 of the County Code.

Mitigation Measures Recommended by the EIR:

The project application shall implement mitigation measures 5.2-1 through 5.2-3 to reduce significant noise and vibration impacts to the extent feasible and reasonable.~~in order to limit neighborhood disturbance to the degree feasible. A construction staging area will be identified as possible from existing residential uses for the storage of equipment and material while still remaining on the project site. With regard to operations, all stationary and point sources of noise occurring on the project site must adhere to the requirements of the County of Los Angeles Ordinance No. 11773, Section 12.08.390.~~

~~**Mitigation Measures Recommended by the EIR:**~~

~~The project application shall implement mitigation measures 5.2-1 through 5.2-3 to reduce significant noise impacts to less than significant levels.~~

Conclusion:

Construction Impacts: ~~Significant and unavoidable~~Less than significant; other than haul trucks.

Haul Route Noise Impacts: Significant (temporary)

Vibration Impacts: Less than significant;

Operational Impacts: Less than significant.

5.2.4.3.6 Public-Serving Boat Space Project

The applicable thresholds of significance are listed below followed by ~~analysis of the significance of any potential impacts~~the noise impact analysis for the Public-Serving Boat Space project. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts~~, if applicable~~.

5.2.4.3.6.1 Threshold: Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance?

Threshold: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Threshold: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis: The significance of noise impacts is based on both the Land Use Compatibility Guidelines for Noise, identified in **Figure 5.2-3**, and typical community responses to changes in noise levels. Additionally, if the proposed public-serving boat spaces ~~on-site~~ uses are subject to point source noise levels originating on or off the site ~~project site~~ that are above County Noise Control Ordinance standards for commercial uses (identified in **Tables 5.2-2** and **5.2-3**), a significant ~~on-site~~ noise impact would occur. Note that the County Noise Control Ordinance does not govern individual motor vehicles. These are governed by the California Vehicle Code.

Construction Impacts: Construction of the public-serving boat spaces~~Public Serving Boat Spaces~~ would not be phased. As no landside demolition is required, construction would be limited to the development of the 7 to 11 public-serving spaces ~~proposed adjacent to Parcel 9U in Marina del Rey Basin B~~.

Construction of the public-serving boat spaces ~~project~~ would involve the temporary use of heavy equipment, such as pile drivers, tractors (dozers), loaders, and concrete mixers. Smaller equipment, such as pneumatic tools, saws and hammers, would also likely be used ~~throughout the site~~ during construction of the boat spaces.

As stated above, the EPA has compiled data regarding the noise-generating characteristics of specific types of construction equipment. **Table 5.2-5, Noise Levels of Typical Construction Equipment**, shown above, presents noise levels of typical construction equipment, which could be used on site during various phases of construction. As shown, noise levels generated by heavy equipment can range from

approximately 76 dB(A) to noise levels in excess of 100 dB(A) when measured at 50 feet. However, much of this noise would diminish rapidly with distance from the construction site at a rate of approximately 6 dB(A) per doubling of distance.

Based on a review of the site plan, construction activity (in the marina) would occur as close as 125 feet from existing residential uses located south of the project site along Tahiti Way. These, as well as any other locations with an uninterrupted line of sight to the construction, could be temporarily exposed to exterior noise levels which could exceed the County's Noise Control Ordinance standards for construction equipment noise levels identified in **Table 5.2-3**. Therefore, construction noise is considered a temporary significant impact. ~~. These, as well as any other locations that experience an uninterrupted line of sight to the construction noise sources, could be temporarily exposed to exterior noise levels which could exceed the County's Noise Control Ordinance standards for construction equipment noise levels identified in **Table 5.2-3**. As this component would use similar equipment to the other components, construction noise levels at off-site sensitive receptors are anticipated to be similar to those generated by construction of the other components. Therefore, construction noise is considered a temporary significant impact.~~

~~Construction noise would represent a short-term significant impact based on the potential to exceed County noise standards and the~~ near ~~two and a half~~eleven month one-year ~~construction period.~~

Vibration Impacts: The primary vibration source associated with development of the ~~Public~~ public-serving ~~Boat~~ boat ~~Spaces~~spaces would be ~~involves the use of~~ pile drivers ~~during~~ used in the construction in the marina. Pile drivers are the pieces of construction equipment most likely to exceed Section 12.08.560 of the County Code and cause potential off-site vibration impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone.

Pile driving could result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code, and is within the range for architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary groundborne vibration during pile driving would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts would be significant. A certified structural engineer shall be retained to submit evidence that pile driving activities would not result in any structural damage to nearby structures.

~~Pile drivers are the pieces of construction equipment most likely to cause potential off-site impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. Because the use of pile driving equipment is required for foundation construction, vibration impacts that would occur are considered significant and unavoidable, but temporary in type.~~ **Operation Impacts**: New on-site uses are expected to be limited to those associated with passive recreation. Operation of the proposed ~~Public~~ public-serving ~~Boat~~ boat ~~Spaces~~ spaces is expected to result in a minor increase in noise due to the net increase in the human population on the site ~~to both future on-site receptors and existing off-site receptors~~. Because these public-serving boat slips are intended for transient use, noise sources would come from water-side activities. ~~Noise experienced at~~ All sensitive receptors are located a minimum of 125 feet from the ~~P~~public-serving boat spaces. Audible noise ~~on-site and off-site locations~~ would consist of intermittent sounds associated with human activity, such as people talking, domestic animals, and the sound of boat engines. While noise levels generated by human activity generally range ~~Noise levels generated by these sources typically generate noise levels of~~ between 52 ~~to~~and ~~62~~ 62 dB(A) ~~CNEL~~ and are not expected to not have a significant impact on nearby receptors, outboard motors will be substantially louder. Neither the County Noise Element nor the County Noise Control Ordinance have standards that apply to point source motor vehicles (these are regulated by the California Vehicle Code); however, ~~no threshold of significance applies to boat engine noise and a statement of impact significance cannot be made~~operational impacts from the public-serving boat spaces are less than ~~signficiant~~significant. ~~Such noises are typical of urban areas and are comparable to the types of noise presently experienced at the site. All sensitive receptors are located a minimum of 125 feet from the project site and it is expected that most of the noise generated on site will have attenuated and would, therefore, not have an impact on these receptors. Operation of the Public Boat Spaces are~~ is not expected to result in significant noise ~~impacts during project operation.~~

Conclusion:

Construction Impacts: ~~Signifiant~~Significant during pile driving;

Vibration Impacts: Significant during pile driving~~Less than significant~~;

Operational Impacts: Less than significant.

Mitigation Measures:

Existing Regulations and Standards Applicable to ~~the Project~~Public Serving Boat Space Project: Section 12.12.030 of the County Code~~The LACDPW, Construction Division,~~ limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The Los Angeles County Department of Health Services has the authority to restrict construction activities to between the hours of 7:00 AM and 7:00 PM, and no time on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line. In addition, a haul route will be reviewed and approved by the County that would limit neighborhood disturbance to the degree feasible. To further limit off-site construction noise impacts, a staging area for the storage of equipment and material will be located on the parcel as far as feasible from existing residences. With regard to operations, all point sources of noise occurring on the parcel must adhere to the requirements of Section 12.08.390 of the County Code. Even with these measure in place, it would not be possible to reduce construction noise impacts within the standards set forth in the County Code, particularly during pile driving.~~in order to limit neighborhood disturbance to the degree feasible. A construction staging area will be identified as possible from existing residential uses for the storage of equipment and material while still remaining on the project site. With regard to operations, all stationary and point sources of noise occurring on the project site must adhere to the requirements of the County of Los Angeles Ordinance No. 11773, Section 12.08.390.~~

Mitigation Measures Recommended by the EIR:

The project application shall implement **Mitigation Measures 5.2-1** through **5.2-~~3~~ 5** to reduce significant noise and vibration impacts the extent feasible~~to less than significant levels~~.

Conclusion:

Construction Impacts: Significant and unavoidable during pile driving;

Vibration Impacts: Significant and unavoidable during pile driving~~Less than significant~~;

Operational Impacts: Less than significant.

5.2.5 CUMULATIVE IMPACTS

5.2.5.1 Cumulative Noise Construction Impacts

In the event that project ~~The proposed project along~~construction occurs concurrently with construction of ~~associated cumulative~~other projects within the immediate area, a significant cumulative construction noise impact could occur at existing off-site noise-sensitive receptors and at on-site receptors constructed and occupied during earlier phases of development. ~~will increase noise, due to construction activities, for surrounding sensitive receptors such as the existing residential units on the western side of Via Marina if the proposed project and associated cumulative project located in the same vicinity begin development (demolition, grading and construction) during the same time period. Increased cumulative noise levels would occur from the proposed project and from t~~Two adjacent ~~cumulative~~ projects include ~~:~~ ~~T~~the Venice Pumping Plant Dual Force Main Project[22] (approximately 12 months of construction); and The Shores Project[23] (up to 28 months of construction). ~~The primary increase in cumulative noise levels will be individual on-site use of construction equipment such as~~Construction of each project would require bulldozers, tractors, trucks, pavers, excavators, generators, electric saws, and other equipment associated with demolition, paving and construction ~~of the proposed project and nearby cumulative projects.~~ Construction of The Shores Project would require the use of pile drivers.

One alignment of the Venice Pumping Plant Dual Force Main Project ~~will~~would result in the construction of a portion of the force main sewer beneath Marquesas Way and Via Marina, ~~–~~ and along the project site's ~~adjacent to the proposed project, along its~~ northern and western boundary~~ies, respectively~~. The Venice Pumping Plant Dual Force Main Project was analyzed ~~for vibration impacts~~ using two types of construction methods: Open Trench Method and Micro-Tunneling Method.[24] Construction of the proposed 3,200-foot long Marquesas Way/Via Marina Alignment ~~will~~would result in temporary increases in noise levels in the vicinity ~~of construction sites~~ for a period of up to 3 weeks around each active open

---

22 The Venice Pumping Plant Dual Force Main Project is a project proposed by the City of Los Angeles to construct a new 54-inch diameter force main sewer extending from the Venice Pumping Plant to a junction structure at the North Outfall Sewer under Vista Del Mar, approximately 240 feet south of Waterview Street in Playa Del Rey. A portion of the force main sewer will be located beneath Marquesas Way and Via Marina, adjacent to the proposed project, along its northern and western boundary, respectively.

23 The Shores Project, is situated in the western portion of the Marina del Rey small craft harbor, at the northwest corner of the intersection of Via Marina and Marquesas Way (approximately 100 feet to the west of the proposed project site). The Shores Project will provide 544 residential units and 1,114 parking spaces; as there are 202 existing apartments on the site, completion of The Shores Project will result in a net increase of 342 apartment units and 809 parking spaces.

24 URS, Venice Pumping Plant Dual Force Main Project Draft Environmental Impact Report, City of Los Angeles, Bureau of Engineering, Department of Public Works, December 20, 2005. 5-120 - 5-121.

trench zone, and up to 2 months around tunneling, jacking and extraction shaft operations.[25] According to the analysis of the Venice Pumping Plant Dual Force Main Project, the Marquesas Way/Via Marina construction portion would result in open-trench construction activities that would take place within approximately 25 feet of ~~adjacent~~ residences. The southwest corner of Marquesas Way and Via Marina is proposed as a shaft site. ~~This would result in residences that are directly~~Residences immediately adjacent to this construction activity ~~to~~would experience noise levels of approximately 93 to 96 dB(A), which would exceed~~s~~ the County of Los Angeles ~~Noise~~ standards for multi-family residential exposure to construction ~~activities~~noise and result in a significant cumulative noise impact.[26] ~~However, The Venice Pumping Plant Dual Force Main Project has~~the analysis included~~s~~ mitigation measures that would help reduce this noise impact,[27] such as adding noise-reducing features to construction equipment.

The Shores Project, located adjacent to the western boundary of the proposed project site, could ~~increase~~also contribute to cumulative construction noise levels in the area ~~due to construction activities~~. Construction of The Shores Project will involve the temporary use of heavy equipment, such as pile drivers, tractors (dozers), excavators, loaders, concrete mixers, and cranes. ~~Smaller equipment, such as jackhammers, pneumatic tools, saws and hammers will also likely be used throughout the site during demolition and construction stages.~~ Based on analysis, construction activity for The Shores Project would occur as close as 50 feet from existing ~~noise-sensitive residential uses~~multi-family residences located to the east. ~~of The Shores Project site, and~~ Noise levels at these ~~locations could experience noise levels that~~residences could reach 94100 dB(A) during pile driving, which ~~. Although this~~ would exceed ~~the~~ County of Los Angeles ~~noise~~ noise standards for ~~construction~~these uses and result in a significant cumulative noise impact. The impact analysis for The Shore Project includes ~~, the temporary nature of the construction activity, and~~ mitigation measures that ~~is proposed for The Shores Project will~~would minimize these impacts.

As described above the proposed project will include the temporary use of heavy equipment, such as pile drivers, tractors (dozers), excavators, loaders, concrete mixers, and cranes. ~~Smaller equipment, such as jackhammers, pneumatic tools, saws and hammers, would also most likely be used throughout the site during demolition and construction stages.~~ ~~C~~Temporary construction activity ~~of~~on the proposed project site would occur as close as 50 feet from existing ~~noise-sensitive residential uses~~ residences located to the west and east. ~~of the project site~~ Noise levels at these residences could~~, and these receptors could experience noise levels that~~ reach 94 dB (A) which would exceed County of Los Angeles noise standards for these uses ~~for short periods of time~~and result in a significant project and cumulative noise impact.

---

25 Ibid. 5-120

26 Ibid. 5-120.

27 Ibid. 5-128.

Construction activity on the project site would also occur as close as 125 feet from existing ~~residential uses~~residences located to the west ~~of the project site~~ along Via Marina, resulting in temporary construction noise levels of up to 85 dB~~–~~(A). Additionally, the proposed project will include the installation of a sewer line within Marquesas Way which will also result in increased construction noise for adjacent sensitive receptors. ~~-~~To mitigate construction noise impacts, ~~T~~the proposed project is required to comply with the County of Los Angeles' Noise Control Ordinance. This EIR section also includes ~~has included~~ **Mitigation Measures 5.2-1** through **5.2-3** ~~along with compliance with the County of Los Angeles Noise Ordinance for construction activities~~ to reduce the impact of construction noise on adjacent sensitive receptors to the extent feasible. ~~Although the proposed project has included these measures~~Despite implementation of these measures, the combined cumulative construction noise impacts ~~associated with construction~~ of this project, the Venice Pumping Plant Dual Force Main Project, and The Shores Project would result in ~~and other two above discussed projects within the vicinity, will result in~~ a significant and unavoidable cumulative construction noise impact to sensitive receptors located within the vicinity ~~of the proposed project and associated cumulative projects. Therefore, the proposed project would cumulatively contribute to this increase in construction noise associated with its development.~~ Although the cumulative construction noise impacts ~~are~~would be significant and unavoidable, ~~the cumulative noise impact will occur on a temporary basis, only during construction, and will not occur over the lifetime of the proposed or cumulative projects within the vicinity~~they would be intermittent and temporary.

5.2.5.2 Cumulative Noise from Construction Haul Routes

In the event that project construction occurs concurrently with construction of other projects within the area, a cumulative mobile source noise impact could occur at noise-sensitive receptors along roadway segments utilized as haul routes for construction trucks. Heavy trucks would be used to haul excavation materials, demolition wastes, construction wastes, and building materials. Heavy trucks would also be used to deliver construction equipment to each site once and then to pick it up once it is no longer needed. ~~The proposed project along with cumulative projects within its vicinity will cumulatively increase noise levels perceivable by sensitive receptors, due to the cumulative effect of truck hauling and delivery truck traffic associated with the construction of the proposed project and cumulative projects.~~ During construction ~~activities, proposed~~each projects would establish a construction truck haul route plan in order to minimize associated increases in noise levels due to trucks entering and leaving construction sites, and travelling along and ~~past sensitive receptors~~past sensitive receptors, such as ~~residential buildings~~residences.~~–~~ ~~T~~Construction truck traffic from the proposed project, the Venice Pumping Plant Dual Force Main Project, and The Shores Project would~~along with known cumulative projects within close proximity to each other, will~~ increase ~~the noise experienced by local residential~~

~~units~~noise levels at residences located along Via Marina and Marquesas Way during construction operations.

~~The Venice Pumping Plant Dual Force Main Project, would include construction activities along Via Marina and Marquesas Way, that will involve the use of construction vehicles using these streets to haul in and out construction equipment and waste during its construction period. The incremental increase in traffic volumes associated with the~~ Open Trench Construction of the Venice Pumping Plant Dual Force Main Project would require an estimated 15 round-trip truckloads per day for excess material and supplies~~, was analyzed for the potential to increase off-site construction noise levels.[28] Analysis concluded that the estimated 15 round-trip truckloads per day for excess material and supplies would not constitute a noise impact, given the relatively high traffic volumes along the designated truck routes that the construction trucks would use for the Venice Pumping Plant Dual Force Main Project.[29] Similarly, t~~The Venice Pumping Plant Dual Force Main Project, u~~Under the Micro-Tunneling Method, ~~was~~an estimated ~~to have~~ eight round-trip truckloads per day for excess material and supplies ~~during its construction period~~would be required during construction. ~~Analysis concluded that this amount of trucks along the designated truck route would not increase noise levels to a significant impact, given the relatively high traffic volumes already occurring on Via Marina and Marquesas Way.~~ Sensitive receptors within 50 feet of the haul route could experience temporary noise events up to 88 dB (A).

The haul route for the Shores Project ~~will use a haul route that will~~ would include ~~the use of~~ Via Marina, Washington Boulevard, Lincoln Avenue and the 90 "Marina" Freeway to ~~access~~ the Puente Hills Landfill for disposal~~, to dispose~~ of construction related debris~~waste~~ and excess cut material. ~~Analysis of the haul route for The Shores Project concluded that noise impacts from construction traffic~~During demolition, up to 100 round trips per average working day ~~would be greatest during the demolition phase of its development, when trucks~~ are expected ~~to make up to 100 (round) trips on average per working day~~ to haul debris from the site. An additional 64 truck trips~~/~~ per day would be necessary for the export of 25,940 cubic yards of earth material ~~coming from the Shores Project site~~. Sensitive receptors within 50 feet of the haul route could experience temporary noise events ~~ranging from 83~~up to 88 dB (A)~~, which will exceed the County of Los Angeles Noise construction standards. However, the export of 25,940 cubic yards of earth material would not exceed 83 to 88 dB (A) for sensitive uses along the haul route.~~

The proposed project has designated a haul route similar to that of the Shores ~~Apartment~~ Project and overlapping on Via Marina with the route proposed for the Venice Pumping Plant Dual Force Main

28 ~~URS, Venice Pumping Plant Dual Force Main Project Draft Environmental Impact Report, City of Los Angeles, Bureau of Engineering, Department of Public Works, December 20, 2005. 5-121.~~

29 ~~Ibid. 5-121~~

Project. The proposed project would use Via Marina, Washington Boulevard and Lincoln Boulevard to haul export material from the proposed project site to the Puente Hills Landfill. As mentioned above, a construction traffic control plan will be developed for use during the construction phases of the proposed project to minimize potential neighborhood disruption and conflicts along the haul route. During the initial two months of demolition and excavation on Parcels 10R and 9U, as many as 284 truck trips would arrive to and leave the site daily. During the remainder of the project construction, the number of truck trips would range from 70 to 194 trips per day (Crain & Associates, January 29, 2008).

Off-site sensitive receptors along the truck routes that would have a direct line of sight to the trucks would experience temporary, instantaneous noise levels up to 88 dB(A) at 50 feet from the roadway. Receptors located further away would experience less noise due to their greater distance from the roadway and to any intervening topography and/or structures that may exist between them and the noise source. This noise impact would be temporary (during construction only) and instantaneous in nature as the trucks pass by sensitive receptors. Truck traffic noise at the receptor locations would diminish rapidly as the trucks travel away from them.

Neither the County Noise Element nor the County Noise Control Ordinance governs individual motor vehicles. These are governed by the California Vehicle Code. However, as previously discussed, noise sensitive land uses located along the haul route are primarily residential in nature. Sensitive receptors within 50 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB(A) from trucks, which exceeds County standards outlined above. Therefore, a temporary significant cumulative impact would result from trucks traveling to and from the cumulative project sites along the haul route during the projected buildout of the projects, and the project's contribution would be considerable.

~~Measures proposed to reduce noise impacts would include limitations on the hours and days during which construction activity may occur. Trucks entering and exiting the site would make approximately 42 roundsa maximum of 584 PCE trips per day, traveling up to 30 miles each trip during demolition. During site grading, trucks entering and exiting the site would travel approximately 20 up to 30 miles round each trip, and would make a maximum of 218 584 PCEapproximately 131 round trips per day. The sensitive residential uses along Via Marina and Marquesas Way, within 30 feet of the haul route could experience temporary noise events ranging from 83 to 88 dB (A) from trucks, which exceeds the Los Angeles County Noise construction standards.~~

~~Therefore, the proposed project would cumulatively contribute to the noise experienced by sensitive use areas around the proposed project site and the projects in the immediate area if construction were to occur during the same time frame. Additionally, the noise impacts associated with the proposed project~~

~~and cumulative projects within the proposed project area will represent a cumulative increase to noise experienced by the residential units along Via Marina and Marquesas Way. Assuming construction occurs within the same timeframe, construction trucks traveling on Via Marina, Marquesas Way and Washington Blvd. would expose sensitive receptors in the vicinity of those roadways to increased noise levels, as a result of the increase in construction truck traffic that will be utilizing Via Marina and Marquesas way to export construction debris and excess cut material from off these project sites, and to the Puente Hills Landfill. Therefore, impacts would be considered cumulatively significant and unavoidable. However, this cumulative significant and unavoidable impact will be short-term and would occur only during the short-term construction and demolition phases of these projects, and will not occur cumulatively over the lifetime, after buildout of the proposed project and associated cumulative projects in the area.~~

5.2.5.3 Cumulative Vibration Impacts

~~Vibration consists of waves transmitted through solid material. The solid medium can be excited by forces, movements, or pressure fields. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may comprise a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum" of many frequencies, and generally are classified as broadband or random vibrations. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration often is measured in terms of the peak particle velocity (PPV) in inches per second (in/sec).~~

~~Ground-borne vibration can be perceived without instrumentation within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough ground-borne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low-frequency airborne noise or ground characteristics.~~

Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans. ~~Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans. The associated vibrations due to the development of cumulative projects during the same time frame as the development of the proposed project could also increase the likelihood that~~

~~sensitive receptors surrounding the proposed project site, and sensitive receptors in the vicinity of the cumulative projects, could experience an increase in vibrations due to construction activities.~~

~~The timing of the development of the proposed project could coincide with that of two additional projects within the area. The Venice Pumping Plant Dual Force Main Project[30] is a project proposed by the City of Los Angeles , that will include the construction and installation of a new 54-inch diameter force main sewer extending from the Venice Pumping Plant (VPP) to a junction structure at the North Outfall Sewer under Vista Del Mar, approximately 240 feet south of Waterview Street in Playa Del Rey.[31] A portion of the force main sewer will be located beneath Marquesas Way and Via Marina, adjacent to the proposed project, along its northern and western boundary, respectively.~~ The Venice Pumping Plant Dual Force Main Project was analyzed for vibration impacts using two types of construction methods: Open Trench Method and Micro-Tunneling Method.[32] Under the Open Trench Method, the ~~of development this~~ pipeline alignment along the Marquesas Way/Via Marina Alignment ~~portion of the Venice Pumping Plant Dual Force Main Project would result in open-trench construction activities taking place~~would be within approximately 25 feet of adjacent residences.[33] ~~The analysis concluded that this type of construction would result in the residents adjacent to the development of the pipeline to experience vibration that~~resulting in construction vibrations that would ~~exceeds~~exceed the Los Angeles County vibration standard of 0.01 inches per second at a distance of 150 feet as specified in Section 12.08.560 of the County Code, which would be a significant impact.[34] ~~However, m~~Mitigation measures ~~were~~ included in ~~the Venice Pumping Plant Dual Force Main Project that~~this project would reduce these impacts to ~~these sensitive receptors to a~~ less than significant ~~level~~.[35] Under the Micro-Tunneling Method ~~of construction for the Venice Pumping Plant Dual Force Main Project~~, construction activities ~~(including vibration producing activities)~~ would occur within 50 ~~feet (at the receiving pit located at the southern end of Via Marina)~~ to 100 feet ~~(at the receiving pit located near the VPP at Hurricane Street)~~ of ~~adjacent~~ residences.[36] ~~The analysis under the Venice Pumping Plant Dual Force Main Project concluded that r~~Residencies located 50 feet from active micro-tunneling work areas would experience vibration levels no

~~30 URS, Venice Pumping Plant Dual Force Main Project Draft Environmental Impact Report, City of Los Angeles, Bureau of Engineering, Department of Public Works, December 20, 2005.~~

~~31 Ibid. 2-5.~~

32 Ibid. 5-126.

33 Ibid. 5-126.

34 Ibid. 5-126.

35 Ibid. 5-126 and 5-129.

36 Ibid. 5-126.

greater than the vibration standards set forth in Section 12.08.560 of the County Code and less than significantthe Los Angeles County Code standards for vibration.[37]. [38]

The second cumulative project of concern, The Shores Project, is situated in the western portion of the Marina del Rey small craft harbor, at the northwest corner of the intersection of Via Marina and Marquesas Way (approximately 100 feet to the west of the proposed project site). The Shores Project will provide 544 residential units and 1,114 parking spaces; as there are 202 existing apartments on the site, completion of The Shores Project will result in a net increase of 342 apartment units and 809 parking spaces. The primary potentially significant source of vibration source associated with development of the Shores Project willwould include the use ofbe the pile drivers used during foundation construction. Lesser vibration impacts could result from the use of other heavy equipment on the parcel and the haul trucks along the haul route. Pile drivers used on the parcel and haul trucks are the pieces of construction equipment most likely to exceed Section 12.08.560 of the County Code and cause potential off-site vibration impacts. Pile drivers create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone.

As shown in **Table 5.2-6, Vibration Source Levels for Construction Equipment**, pile driving can result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code, and is within the range for architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary groundborne vibration during pile driving for The Shores Project would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts for The Shores Project would be significant. In addition, a loaded heavy-duty haul truck can generate a level of vibration 0.076 inches/second PPV at 25 feet, and, therefore, truck traffic vibrations would exceed the threshold of significance.

Pile drivers will be the only on-site machine used for construction of The Shores Project that could cause potential significant off-site vibration impacts [. Similar to the proposed project, The Shores Project, will utilize pile drivers that create a high intensity, repetitious noise that is disturbing and can result in substantial ground vibrations. Since The Shores Project will use pile drivers during its construction phase, vibration impacts to surrounding residential units would exceed the Los Angeles County Code

---

37 Ibid. 5-126URS, Venice Pumping Plant Dual Force Main Project Draft Environmental Impact Report, City of Los Angeles, Bureau of Engineering, Department of Public Works, December 20, 2005, 5-126.

38 URS, Venice Pumping Plant Dual Force Main Project Draft Environmental Impact Report, City of Los Angeles, Bureau of Engineering, Department of Public Works, December 20, 2005, 5-126.

~~vibration standards; however, these vibration impacts due to the construction activity taking place on The Shores Project will also be temporary in nature.~~

As discussed above, the primary source of vibration associated with development of the proposed project ~~involves the potential use of~~would be from pile drivers used during foundation construction; ~~less severe~~minor vibration impacts could also result from ~~the use of other heavy equipment on-and off-site due to~~ haul trucks passing on streets adjacent to sensitive receptors. Pile driving could result in a maximum vibration level of 1.518 inches/second PPV at 25 feet. This level of vibration is above the perception threshold identified in Section 12.08.560 of the County Code, and is within the range for architectural damage risk, which is between 0.2 and 2.0 inches/second. Therefore, temporary ground-borne vibration during pile driving would exceed the threshold of perception and would have the potential to cause damage to nearby structures. Pile driving vibration impacts would be significant.

As stated previously, Section 12.08.560 of the County Code applies to any device, including motor vehicles. Therefore, ~~there is no threshold of significance for~~ truck traffic vibrations ~~and a statement of impact significance cannot be made~~would cause a significant impact.~~The pile drivers that would be utilized for development of the proposed project create high intensity, repetitious noise that is disturbing and can result in ground vibration. Usually, peak ground vibrations occur during the initial blows of the hammer and pile through the compacted soil zone. Once the compacted soil layer at the surface is penetrated, the pile typically slides more easily through the ground water saturated zone. Because of the location of the proposed project site is adjacent to residencies (located approximately 50 to 100 feet from the northern, and western borders of the proposed project) the likelihood that these residencies will experience periodic increases in vibration levels exceeding the Los Angeles County Code standards will increase. However, these vibration increases experienced by the sensitive receptors adjacent to the proposed project site, will be temporary in nature, and will not occur on a continuous basis.~~

A loaded heavy-duty haul truck can generate a level of vibration 0.076 inches/second PPV at 25 feet. The perception of truck traffic vibration would depend upon several factors, including road condition, vehicle speed, vehicle weight, vehicle suspension system, soil type and stratification, and distance between the truck and the receptor. Perceptible truck vibration would be intermittent and instantaneous as it would have a rapid onset and a rapid decay as the truck moves toward and away from the receptor. Section 12.08.560 of the County Code applies to any device, including motor vehicles, and, therefore, truck traffic vibrations exceed the threshold of significance and a significant impact can be concluded.

If pile driving or hauling operations for the Venice Pumping Plant Dual Force Main Project or The Shores project occur at the same time that such operations occur for the proposed project, temporary cumulative vibration impacts would occur and the proposed project's contribution would be considerable.

~~Although these vibration levels will occur during a temporary time period, the combined cumulative impacts associated with the above discussed cumulative projects and the proposed project, if development for all three of them would occur during the same time frame, will result in a significant and unavoidable cumulative impact in regards to vibration, on a temporary basis as construction activities are occurring.~~

5.2.5.4 Cumulative Operational Noise Impacts

~~Cumulative noise impacts would occur as a result of construction activity taking place within Marina del Rey, as well as increased vehicle traffic generated by cumulative development. All construction activities would be subject to the requirements of the "County of Los Angeles Construction Equipment Noise Standards," County of Los Angeles Noise Control Ordinance (County Code Section 12.08.440) as identified earlier in **Table 5.2-3**. Compliance with the ordinance along with incorporation of mitigation recommended as part of each project's environmental review would reduce the project's contribution to any cumulative construction related noise impacts.~~

Cumulative operational noise impacts would primarily occur as a result of increased traffic on local roadways due to ambient growth, the proposed project, and other developments in the area as identified in **Section 5.7, Traffic/Access**, of this EIR. To evaluate potential cumulative traffic noise impacts, noise prediction modeling was conducted for selected roadway segments adjacent to noise-sensitive land uses that could be affected by project traffic. Roadway segments include Washington Boulevard east of Via Marina, Via Marina south of Admiralty Way, Admiralty Way east of Via Marina, Lincoln Boulevard north of Fiji Way, Fiji Way west of Lincoln Boulevard, Mindanao Way east of Lincoln Boulevard, Panay Way east of Via Marina, Tahiti Way east of Via Marina, Marquesas Way east of Via Marina and Palawan Way east of Via Marina. Roadway geometrics and traffic volumes segments were obtained from Crain and Associates, the preparers of the traffic study for the proposed project. The noise levels that would be generated by these traffic volumes adjacent to noise sensitive land uses within the project study area are identified in **Table 5.2-~~10~~11**, **Predicted Cumulative Roadway Noise Levels at Noise Sensitive Locations**.

As shown, community noise level increases attributable to traffic generated by cumulative development would be less than 3 dB(A) ~~CNEL~~ at all locations. ~~The intersection with the greatest increase in noise, Marquesas Way, would increase from 53.8 dB(A) to 56.7 dB(A), an increase of 2.9 dB(A). This increase is below the 3dB(A) threshold of detection.~~ Therefore, significant cumulative operational noise impacts would not occur.

5.2.6 UNAVOIDABLE SIGNIFICANT IMPACTS

The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would not have a project specific or cumulative operational noise impact on- or off-site ~~with respect to operational noise~~, but will have a short-term noise and vibration impact during construction. Cumulative construction noise and vibration impacts would also be significant.

Construction activity associated with the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project may expose nearby sensitive receptors to periodic noise levels in excess of the County's Noise Control Ordinance standards for construction equipment, as well as significant vibration impacts. While mitigation measures have been provided to reduce this impact to the maximum degree feasible, this impact would remain unavoidably significant. This impact is expected to be ~~periodic in nature,~~intermittent and confined to normal working hours ~~during the 30~~3 months of project buildout for the 30-month duration of project construction.

Table 5.2-11
Predicted Cumulative Roadway Noise Levels at Noise Sensitive Locations

Roadway Segment	Sensitive Land Uses Distance from Roadway Centerline	Existing dB(A) CNEL	Cumulative Without dB(A) CNEL	Cumulative With Project dB(A) CNEL	Cumulative Increase in dB(A) Over Existing Conditions	Significant Impact?	Project Contribution dB(A)
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9*	68.6*	68.7*	0.8	NO	0.1
Via Marina (south of Admiralty)	Residential, 50 feet	67.4*	68.4*	68.8*	1.4	NO	0.4
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	69.9	70.1*	0.9	NO	0.2
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	72.5*	73.3*	73.3*	0.8	NO	0.0
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3*	67.0*	67.0*	0.7	NO	0.0
Mindanao Way (east of Lincoln)	Residential, 50 feet	66.2*	67.0*	67.2*	1.0	NO	0.2
Marquesas Way (east of via marina)	Residential, 50 feet	56.0	57.7	58.6	2.6	NO	0.9
Panay Way (east of Via Marina	Residential, 50 feet	59.4	60.4	60.4	1.0	NO	0.0
Palawan Way (south of Washington)	Recreation	61.6	62.8	62.9	1.3	NO	0.1
Tahiti Way (east of Via Marina)	Residential, 50 feet	56.5	56.7	56.7	0.2	NO	0.0

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*
** Roadway segments which exceed normally acceptable levels under the Land Use Compatibility Guidelines for Noise.*

Table 5.2-10
Predicted Cumulative Roadway Noise Levels at Noise Sensitive Locations
Measured at 50 Feet from Center of Roadway

Roadway Segment	Sensitive Land Uses Adjacent to Roadway and Distance from Roadway Centerline	Existing dB(A) CNEL	Future (2011) with Project plus Related Projects dB(A) CNEL	Change in dB(A) CNEL
Washington Blvd. (east of Via Marina)	Residential, 50 feet	67.9	68.6	0.7
Via Marina (south of Admiralty)	Residential, 50 feet	67.4	68.8	1.4
Admiralty Way (east of Via Marina)	Admiralty Park, 50 feet	69.2	70.0	0.8
Lincoln Boulevard (north of Fiji Way)	Daniel Freeman Hospital, 50 feet	71.7	72.6	0.9
Fiji Way (west of Lincoln)	Residential, 50 feet	66.3	67.0	0.7
Mindanao Way (east of Lincoln)	Residential, 50 feet	65.0	66.5	1.5
Marquesas Way (east of via marina)	Residential, 50 feet	53.8	56.7	2.9
Panay Way (east of Via Marina	Residential 50 feet	56.4	57.1	0.7
Palawan Way (south of Washington)	Recreation	61.6	62.8	1.2
Tahiti Way (east of Via Marina)	Residential, 50 feet	54.6	54.7	0.1

*Source: Impact Sciences, Inc. Calculations are provided in **Appendix 5.2**. Noise levels are calculated for the nearest edge of the nearest existing building to the roadway.*

5.4 AIR QUALITY

SUMMARY

Implementation of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project (Parcels 10R, FF and Parcel 9U) would result in the development of four, four-story apartment buildings totaling 526 units, 288 hotel/vacation suites within a 19-story hotel structure, the construction of 174 boat spaces and end-tie spaces adjacent to Parcel 10R, between 7 and 11 public/transient boat spaces adjacent to Parcel 9U and a 2,023-foot public Waterfront Stroll Promenade. A total of 1,510 parking spaces would be provided throughout the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project. These would include 1,150 spaces in two-level structured parking garages below the apartment buildings and 360 spaces in a six-level structured parking garage with one level below the hotel structure. The Neptune Marina/Woodfin Suite Hotel and Timeshare Resort Project also incorporates a restored wetland and upland buffer area on a portion of Parcel 9U. The Neptune Marina Project (Parcel 10R only) would require the removal of 136 existing residential units and 198 boat spaces. The Parcel 10R development would include construction of a new 10-inch sewer line ~~for approximately 500 linear feet~~ within Marquesas Way and ~~160 linear feet~~ within Via Marina, and construction of a~~n additional 180 linear feet of~~ new 10-inch line and ~~approximately 710 linear feet of a~~ new 8-inch sewer line within existing site boundaries of Parcel 10R. Parcel 10R would also include the installation of approximately 500 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances. Parcel FF would include the installation of approximately 170 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances. Installation of approximately 570 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances may occur during the construction of the Woodfin Suite Hotel and Timeshare Resort. Although this is not required for the Parcel 9U (North) project, the air quality analysis is included here in the event that installation occurs during construction on Parcel 9U. Recommended South Coast Air Quality Management District (SCAQMD) thresholds for construction emissions would be exceeded for oxides of nitrogen (NO_X) during construction of the project. In addition, localized ambient air quality impacts would occur during project construction for particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and nitrogen dioxide (NO_2). Recommended thresholds for operational emissions would not be exceeded.

5.4.1 ENVIRONMENTAL SETTING

5.4.1.1 Regional Climate

Air quality is affected by both the rate and location of pollutant emissions. It is also heavily influenced by meteorological conditions that affect the movement and dispersal of pollutants. Atmospheric conditions

such as wind speed, wind direction, and air temperature gradients, along with local topography, strongly affect the relationship between pollutant emissions and air quality. Atmospheric pollution potential of an area is largely dependent on winds, atmospheric stability, solar radiation, and topography. The combination of low wind speeds and low inversions produce the greatest concentration of air pollutants. Smog potential is greatly reduced on days without inversions or on days with winds averaging over 15 miles per hour (mph).[1]

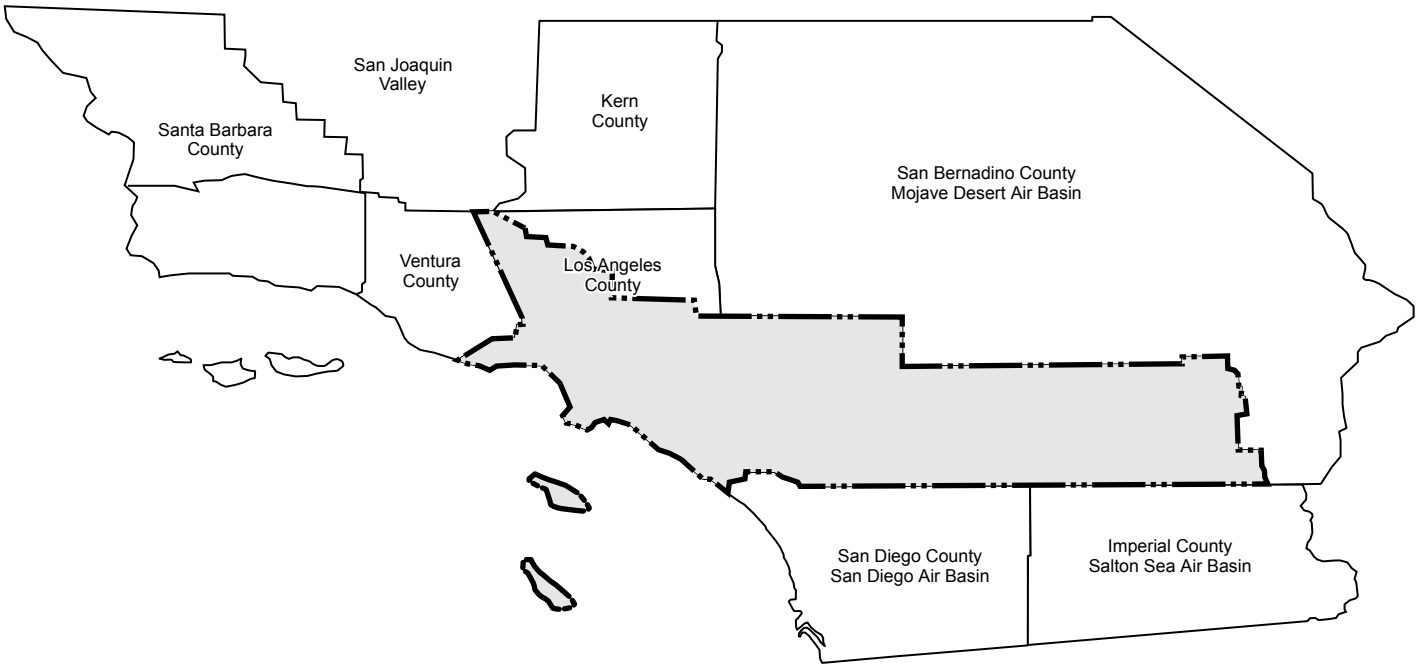
The proposed project lies within the South Coast Air Basin (the basin). The basin, shown in **Figure 5.4-1**, **South Coast Air Basin**, consists of all or portions of four counties, including all of Orange County, most of Los Angeles County, and the western, non-desert portions of San Bernardino and Riverside Counties. The regional climate significantly influences the air quality in the basin. Temperature, wind, humidity, precipitation, and even the amount of sunshine influence the quality of the air. In addition, the basin is frequently subjected to an inversion layer that traps air pollutants. Annual average temperatures throughout the basin vary from the low to middle 60s Fahrenheit (°F). However, due to decreased marine influence, the eastern portion of the basin shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the basin, and annual average minimum temperatures are 56°F in downtown Los Angeles, 49°F in San Bernardino, and 55°F in Long Beach. July and August are the warmest months in the basin, and annual average maximum temperatures are 83°F in downtown Los Angeles, 95°F in San Bernardino, and 85°F in Long Beach. All portions of the basin have recorded maximum temperatures above 100°F.

Although climate of the basin can be characterized as semi arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of Basin climate. Humidity restricts visibility in the basin, and the conversion of sulfur dioxide (SO_2) to sulfates is heightened in air with high relative humidity. The marine layer is an excellent environment for that conversion process, especially during the spring and summer months. The annual average relative humidity is 71 percent along the coast and 59 percent inland. Because the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the basin's rainfall occurs from November through April. Annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thundershowers near the coast and slightly heavier shower activity in the eastern portion of the region near the mountains.

---

1 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, (Diamond Bar, California: South Coast Air Quality Management District, November 1993), p A8-1.



SOURCE: Impact Sciences, Inc. – May 2005

FIGURE **5.4-1**

South Coast Air Basin

5.4.1.2 Local Climate

The project site lies within the western portion of the 6,600-square-mile air basin. Predominant meteorological conditions in the basin are primarily light winds and shallow vertical mixing due to low-altitude temperature inversion. These conditions, when coupled with the surrounding mountain ranges, hinder the regional dispersion of air pollutants. The strength and location of a semi-permanent, high-pressure cell over the northern Pacific Ocean is the primary climatological influence on the basin, as is the ocean, which moderates the local climate by acting like a large heat reservoir. As a result of these influences, warm summers, mild winters, infrequent rainfall and moderate humidity typify climatic conditions through most of the basin. These meteorological conditions, in combination with regional topography, are also conducive to the formation and retention of ozone (O_3).

In the immediate project vicinity, climatic conditions are characterized by mild summers, mild winters, infrequent rainfall, moderate afternoon breezes and generally fair weather. Average annual temperature range from the low- to mid-60s °F. Summer daytime temperatures often reach over 76 degrees °F, and winter daytime temperatures often drop to 45 °F. Due to its proximity to the coast, temperatures in the project vicinity are on average lower than further inland due to the moderating effect of the ocean.

This microclimate is influenced by a marine layer that is characterized by fog or low stratus clouds. This marine layer occurs frequently throughout the year, but is most prevalent during the non-summer months. The stratus clouds generally recede seaward (or "burn off") during the morning and afternoon and then return during the late afternoon and evening. The project site also experiences a high annual mean relative humidity of 71 percent as compared with some of the more inland areas that have mean relative humidities in the 60s. Average rainfall at Los Angeles International Airport, located within 2 miles of the project site, is approximately 12.5 inches per year.

Figure 5.4-2, Wind Patterns, illustrates the typical observed wind direction and average speed in the basin for both daytime and nighttime wind conditions during the annual seasons. Daytime wind patterns exhibit relatively strong onshore winds from the west and southwest at 3 to 12 miles per hour (mph) in July and January. Daytime wind velocities are on average lower in the months around January as compared with July. Nighttime wind patterns differ from those during the day and are characterized by lower wind velocities and a change in wind direction. As illustrated for nighttime in January, winds flow offshore to the south and southwest at 2 to 8 mph. During many days in July, the onshore wind directions occurring during the day continue throughout the night at 2 to 5 mph, with the exception of the areas near the San Gabriel Mountains where the winds blow down the slopes of the mountains in response to radiational cooling.

Long-term diurnal wind patterns in the general vicinity of the project site are dominated by higher-velocity on-shore daytime winds of 5 to 12 mph from the south and southeast. Diurnal winds from the south and southeast are created by pressure differences between the relatively cold ocean and the unevenly heated land. Nocturnal winds are weaker and flow at speeds of 3 to 5 mph from the north and northeast. Nocturnal winds are created when air along the mountain slopes cools and descends into the lower elevations of the basin towards the ocean. These diurnal and nocturnal wind patterns play an important role in dispersing air pollutants and moderating the temperatures throughout the basin and the project vicinity.[2]

5.4.1.3 Regional Air Quality

Air pollutants within the basin are primarily generated by two categories of sources: stationary and mobile. Stationary sources are known as "point sources," which have one or more emission sources at a single facility, or "area sources," which are widely distributed and produce many small emissions. Point sources are usually associated with manufacturing and industrial uses and include sources such as refinery boilers or combustion equipment that produces electricity or process heat. Examples of "area sources" include residential water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products, such as barbecue lighter fluid or hair spray. "Mobile sources" refer to operational and evaporative emissions from motor vehicles. In 2006, mobile sources accounted for over 95 percent of the carbon monoxide (CO) emissions, approximately 58 percent of the oxides of sulfur (SO_X) emissions, over 91 percent of the NO_X emissions, and over 60 percent of the volatile organic compounds (VOC) found within the basin.[3,4] Smog is formed when VOC and NO_X undergo photochemical reactions in sunlight to form O_3.

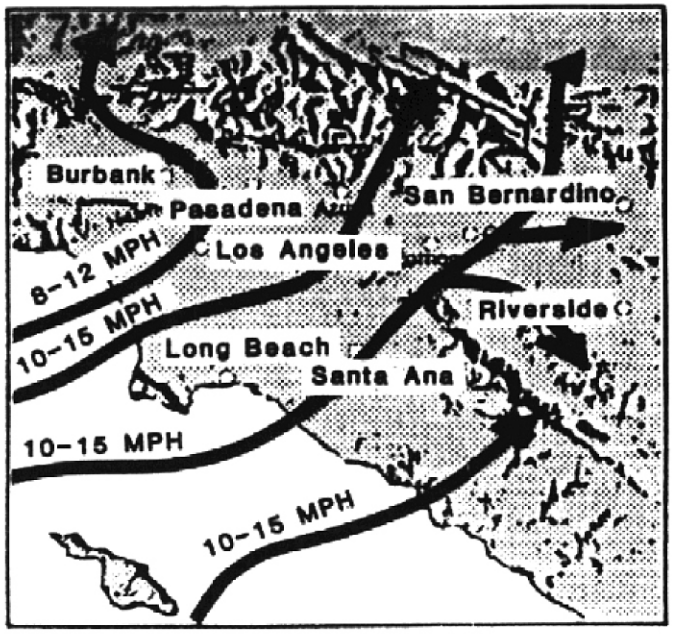
The determination of whether a region's air quality is healthful or unhealthful is evaluated by comparing contaminant levels in ambient air samples to national and state standards. Health-based air quality standards have been established by California and the federal government for the following seven "criteria" air pollutants: (1) O_3, (2) CO, (3) NO_2, (4) SO_2, (5) PM_{10}, (6) $PM_{2.5}$, and (7) lead. These standards

---

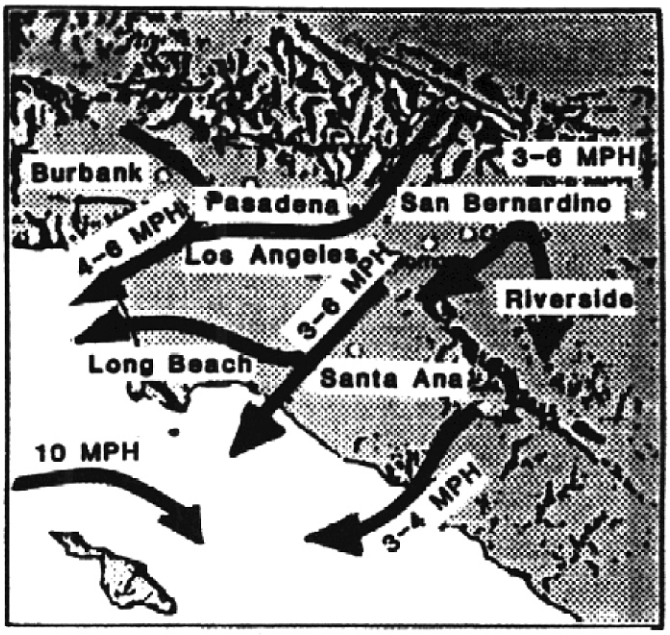
2 Because of these wind patterns, the Basin both transports and receives air pollutants from the coastal portions of Ventura and Santa Barbara counties that are located in the South Central Coast Air Basin. The South Central Coast Air Basin also receives air pollutants from oil and gas development operations on the outer continental shelf. The 1997 AQMP does not specifically address the control requirements for these adjacent areas. However, the control measures in this plan meet both the CAA and CCAA transport requirements and will assist downwind areas in complying with the federal O3 air quality standard (South Coast Air Quality Management District, 1997 AQMP, November 1996, p. I-23.).

3 California Air Resources Board. "2006 Estimated Basin Data – South Coast Air Basin." http://www.arb.ca.gov/ei/maps/basins/abscmap.htm. 2006.

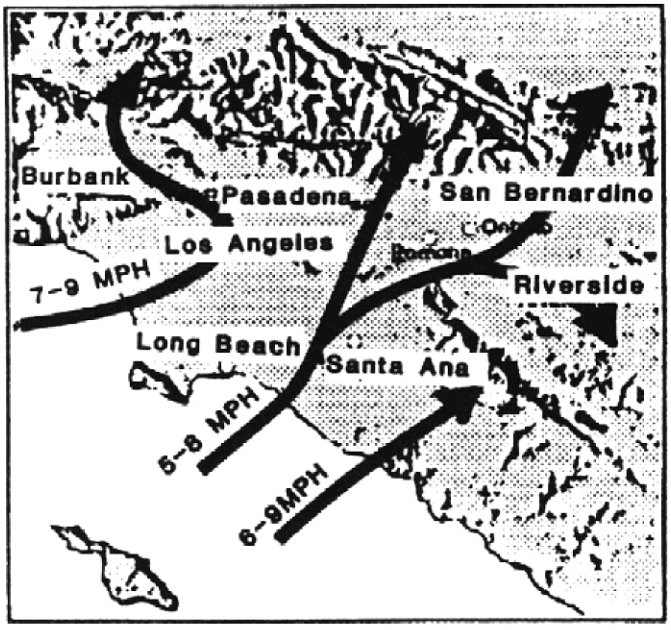
4 Percentages do not include natural sources.



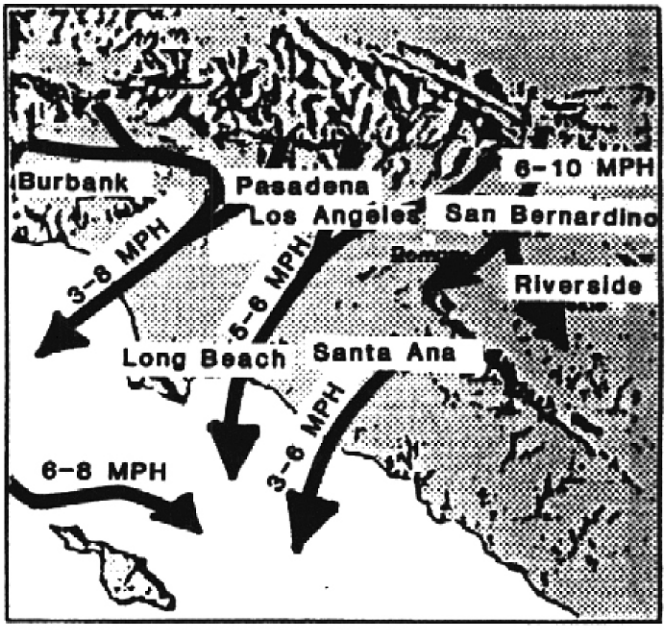
Typical Summer Daytime Ocean Winds
(noon to 7:00 pm)



Typical Summer Night Drainage Winds
(midnight to 5:00 am)



Typical Winter Daytime Ocean Winds
(noon to 7:00 pm)



Typical Winter Night Drainage Winds
(midnight to 5:00 am)

NOT TO SCALE

SOURCE: South Coast Air Quality Management District, CEQA Air Quality Handbook

FIGURE **5.4-2**

Wind Patterns

were established to protect sensitive receptors from adverse health impacts due to exposure to air pollution with a margin of safety. California standards are more stringent than the federal standards and in the case of PM_{10} and SO_2, much more stringent. California has also established standards for sulfates, visibility reducing particles, hydrogen sulfide and vinyl chloride, none of which have corresponding federal standards. Generally, the sources for hydrogen sulfide emissions include decomposition of human and animal wastes and industrial activities, such as food processing, coke ovens, kraft paper mills, tanneries, and petroleum refineries. There are no such uses or sources generated by the proposed project. Similarly, the sources for vinyl chloride emissions include manufacturing of plastic products, hazardous waste sites, and landfills; and, there are no such uses or sources generated by the proposed project. As a result, there is no need for any further evaluation of the hydrogen sulfide or vinyl chloride emissions associated with this project. In addition, according to the SCAQMD 2003 Air Quality Management Plan, the sulfate and visibility reducing particle standards have not been exceeded anywhere in the basin; and, therefore, due to its size and associated types of air pollution sources, the project is not expected to have any direct impact on those pollutants. Accordingly, this air quality analysis will focus primarily on the seven "criteria" air pollutants identified above.

Each of the air pollutants, inclusive of volatile organic compounds that are relevant to this project and that are of concern in the basin is briefly described below.

- Ozone (O_3). O_3 is a gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

- Carbon Monoxide (CO). CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, and motor vehicles operating at slow speeds are the primary source of CO in the basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- Nitrogen Dioxide (NO_2). A reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO_2 is also a byproduct of fuel combustion. The principle form of NO_X produced by combustion is NO, but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 referred to as NO_X. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_X is only potentially irritating. NO_2 absorbs blue light; the result of which is a brownish-red cast to the atmosphere and reduced visibility.

- Volatile Organic Compounds (VOCs). VOCs are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by VOCs, but rather by

reactions of VOCs to form secondary air pollutants, including ozone. VOCs are also referred to as reactive organic compounds (ROCs) or reactive organic gases (ROGs). VOCs themselves are not "criteria" pollutants; however, they contribute to formation of O_3.

- Respirable Particulate Matter (PM_{10}). PM_{10} consists of extremely small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of PM_{10}, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM_{10} is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.

- Fine Particulate Matter ($PM_{2.5}$). $PM_{2.5}$ refers to particulate matter that is 2.5 micrometers or smaller in size. The sources of $PM_{2.5}$ include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as sulfur dioxide, NO_X, and VOCs are transformed in the air by chemical reactions.

- Sulfur dioxide (SO_2). SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4).

- Lead (Pb). Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles such as racecars that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Air quality of a region is considered to be in attainment of the state standards if the measured ambient air pollutant levels for O_3, CO, NO_2, PM_{10}, $PM_{2.5}$, SO_2 (1- and 24-hour), and lead are not exceeded, and all other standards are not equaled or exceeded at any time in any consecutive three-year period. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant.

The basin is currently designated as nonattainment for O_3, PM_{10}, and CO (federal). These violations are largely due to automotive vehicle emissions from the Los Angeles metropolitan area. Once designated as nonattainment, the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require the particular air basin to develop a plan that will reach attainment status. This usually involves the local air quality district (e.g., the SCAQMD), along with the California Air Resources Board (CARB) and the US Environmental Protection Agency (US EPA) adopting emission control measures to cumulatively reduce a particular pollutant emission. Those criteria pollutants currently in attainment within the basin are expected to continue to decrease as control measures and strategies are developed to improve air quality.

The state and national ambient air quality standards for each of the "criteria" pollutants and their effects on health are summarized in **Table 5.4-1**, **Ambient Air Quality Standards**. **Table 5.4-1** also sets forth the state ambient air quality standards and health effects applicable to sulfates, visibility reducing particles, hydrogen sulfide and vinyl chloride, even though such pollutants are generally not applicable to the proposed uses on the project site.

Table 5.4-1
Ambient Air Quality Standards

Air Pollutant	Concentration/Averaging Time		Most Relevant Health Effects
	State Standard	Federal Primary Standard	
Ozone	0.070 ppm, 8-hr. avg. 0.09 ppm, 1-hr avg.	0.075 ppm, 8-hr avg. (3-year average of annual 4th-highest daily maximum)	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage
Carbon Monoxide	9.0 ppm, 8-hr avg. 20 ppm, 1-hr avg.	9 ppm, 8-hr avg. 35 ppm, 1-hr avg.	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses
Nitrogen Dioxide	0.18 ppm, 1-hr avg. 0.030 ppm, annual arithmetic mean	0.053 ppm, annual arithmetic mean	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration
Sulfur Dioxide	0.04 ppm, 24-hr avg. 0.25 ppm, 1-hr avg.	0.030 ppm, annual arithmetic mean 0.14 ppm, 24-hr avg.	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in person with asthma
Respirable Particulate Matter (PM_{10})	20 μg/m³, annual arithmetic mean 50 μg/m³, 24-hr avg.	150 μg/m³, 24-hr avg.	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly

Air Pollutant	Concentration/Averaging Time: State Standard	Concentration/Averaging Time: Federal Primary Standard	Most Relevant Health Effects
Fine Particulate Matter ($PM_{2.5}$)	12 μg/m³, annual arithmetic mean	15 μg/m³, annual arithmetic mean (3-year average) 35 μg/m³, 24-hr avg. (3-year average of 98th percentile)	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
Sulfates	25 μg/m³, 24-hr avg.	None	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and (f) Property damage
Lead*	1.5 μg/m³, 30-day avg.	0.15 μg/m³, rolling 3-month average	(a) Increased body burden; and (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	In sufficient amount to produce extinction of 0.23 per kilometer due to particles when relative humidity is less than 70%, 8-hour average (10 AM – 6 PM)	None	Visibility impairment on days when relative humidity is less than 70 percent
Hydrogen Sulfide	0.03 ppm, 1-hr avg.	None	Odor annoyance
Vinyl Chloride*	0.01 ppm, 24-hr avg.	None	Known carcinogen

Source:

[1] *California Air Resources Board. "Air Quality Standards." http://www.arb.ca.gov/research/aaqs/aaqs.htm. 2009.*

[2] *Source: South Coast Air Quality Management District,* Final Program Environmental Impact Report for the 2007 Air Quality Management Plan*, (2007) Table 3.1-1, p. 3.1-3.*

~~*South Coast Air Quality Management District. Final Program Environmental Impact Report to the 2003 Draft AQMP (Diamond Bar, California: South Coast Air Quality Management District, August 2003), Table 3.1-1, p. 3.1-2. This report may be reviewed on the SCAQMD website at http://www.aqmd.gov/ceqa/documents/2003/aqmd/finalEA/aqmp/AQMP_FEIR.html.*~~

μg/m³ = microgram per cubic meter.

ppm = parts per million by volume.

* *CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.*

Diesel particulate matter (DPM) is a specific type of particulate pollution. DPM is a subset of PM_{10} and consists of particulate pollution from the combustion of diesel fuel. CARB has not established a separate ambient air quality standard specifically for DPM. However, CARB has designated DPM as a toxic air contaminant (TAC). Pollutants designated as TACs are regulated under state and local regulations that specifically address TACs. CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have established a cancer risk and a chronic non-cancer hazard index for DPM. Neither CARB nor OEHHA has established an acute hazard index for DPM.

5.4.1.4 Local Air Quality

To monitor the concentrations of the pollutants, the SCAQMD has divided the basin into Source Receptor Areas (SRAs) in which 33 air quality monitoring stations are operated. The project site is located in the Northwest Coastal Los Angeles County SRA (SRA 2). The monitoring station for this area is located at the Veterans Administration Hospital in West Los Angeles. This station monitors emission levels of O_3, CO, NO_2 and sulfate. The nearest station that monitors SO_2 and PM_{10} is the Hawthorne station in the Southwest Coastal Los Angeles County SRA (SRA 3).[5] The nearest station monitoring $PM_{2.5}$ and lead is the North Main Street station in the Central Los Angeles County SRA (SRA 1).

Table 5.4-2, Ambient Pollutant Concentrations Registered in SRA 2, lists the ambient pollutant concentrations registered and the violations of state and federal standards that have occurred at the abovementioned monitoring stations from 2003 through 2007. As shown, the monitoring station has registered values above state and federal standards for O_3. However, the station has not registered any exceedances of the state or federal CO and NO_2 standards in the past five years. Concentrations of sulfur dioxide and lead have not been exceeded anywhere within the basin for several years.

Table 5.4-2
Ambient Pollutant Concentrations Registered in SRA 2

Pollutant	Standards [1]	Year				
		2003	2004	2005	2006	2007
OZONE (O_3)						
Maximum 1-hr concentration (ppm)		0.134	0.107	0.114	0.10	0.117
Maximum 8-hr concentration (ppm)		0.105	0.089	0.090	0.074	0.087
Number of days exceeding state 1-hr standard	0.09 ppm	11	5	7	3	2
Number of days exceeding federal 8-hr standard [2]	0.075 ppm	1	1	1	0	1
CARBON MONOXIDE (CO)						
Maximum 1-hr concentration (ppm)		5	4	3	3	3
Maximum 8-hr concentration (ppm)		2.7	2.3	2.1	2.0	1.9

5 The Hawthorne (SRA 3) monitoring station was moved to Los Angeles in 2004. Air monitoring data from 2004, 2005, 2006, and 2007 are from the Los Angeles monitoring station.

Pollutant	Standards [1]	Year				
		2003	2004	2005	2006	2007
Number of days exceeding state 8-hr standard	9.0 ppm	0	0	0	0	0
Number of days exceeding federal 8-hr standard	9 ppm	0	0	0	0	0
NITROGEN DIOXIDE (NO_2)						
Maximum 1-hr concentration (ppm)		0.12	0.09	0.08	0.08	0.08
Annual arithmetic mean concentration (ppm)		0.0231	0.0198	0.0178	0.0173	0.0200
Number of days exceeding state 1-hr standard [3]	0.18 ppm	0	0	0	0	0
SULFUR DIOXIDE (SO_2) [4]						
Maximum 1-hr concentration (ppm)		0.03	0.02*	0.04	0.02	0.02
Maximum 24-hr concentration (ppm)		0.006	0.007*	0.012	0.006	0.09
Annual arithmetic mean concentration (ppm)		0.001	0.003*	0.006	0.002	0.003
Number of days exceeding state 1-hr standard	0.25 ppm	0	0	0	0	0
Number of days exceeding state 24-hr standard	0.04 ppm	0	0	0	0	0
Number of days exceeding federal 24-hr standard	0.14 ppm	0	0	0	0	0
PARTICULATE MATTER (PM_{10}) [4]						
Maximum 24-hr concentration ($\mu g/m^3$)		58	47*	44	45	96
Annual arithmetic mean concentration ($\mu g/m^3$)		29.7	25.1*	22.9	26.5	27.7
Number of samples exceeding state 24-hr std.	50 $\mu g/m^3$	3	0	0	0	2
Number of samples exceeding federal 24-hr std.	150 $\mu g/m^3$	0	0	0	0	0
PARTICULATE MATTER ($PM_{2.5}$) [5]						
Maximum 24-hr concentration ($\mu g/m^3$)		83.7	75.0	73.7	56.2	64.2
Annual arithmetic mean concentration ($\mu g/m^3$)		21.3	19.6	18.1	15.6	16.8
Number of samples exceeding federal 24-hr std. [6]	35 $\mu g/m^3$	5	2	2	0	0
LEAD [5]						
Maximum 30-day average concentration ($\mu g/m^3$)		0.15	0.03	0.02	0.02	na
Maximum quarterly average concentration ($\mu g/m^3$)		0.15	0.03	0.02	0.01	na
Number of months exceeding the state standard	1.5 $\mu g/m^3$	0	0	0	0	na
SULFATE						
Maximum 24-hr concentration ($\mu g/m^3$)		14.3	11.4	11.7	12.2	na
Number of days exceeding state standard	25 $\mu g/m^3$	0	0	0	0	na

na = not available

** = Less than 12 full months of data. May not be representative.*

Sources:

(i) South Coast Air Quality Management District, Air Quality Data (for 2003, 2004, 2005, 2006. and 2007), (Diamond Bar, California: South Coast Air Quality Management District, 2003, 2004, 2005, 2006, and 2007); http://www.aqmd.gov/smog/historicaldata.htm.

(ii) California Air Resources Board Air Quality Database http://www.arb.ca.gov/adam/welcome.html. 2009.

(iii) U.S Environmental Protection Agency Air Quality Database http://www.epa.gov/air/data/. 2009.

[1] *Parts by volume per million of air (ppm), micrograms per cubic meter of air ($\mu g/m^3$), or annual arithmetic mean (aam).*

[2] *The federal 8-hour ozone standard was changed to 0.075 ppm in 2008. Statistics shown on are based on the previous 0.08 ppm standard.*

[3] *The state NO_2 standard was revised to 1-hour average of 0.18 ppm and a new annual arithmetic mean standard of 0.030 ppm was adopted in March 2008. Statistics shown are based on the previous 1-hour standard of 0.25 ppm. The federal standard is annual arithmetic mean (AAM) of 0.053 ppm.*

[4] *Pollutant is monitored at Southwest Coastal L.A. County (SRA 3), which is the nearest monitoring station to monitor the particular pollutant. In 2004, the SRA 3 monitoring station was moved from 534 W. 120th St in Hawthorne to 7201 W. Westchester Parkway in Los Angeles. Statistics for 2004 are based on the Los Angeles monitoring station, which accounted for a majority of the monitoring data. Nevertheless, data from 2004 does not contain 12 months of full data and therefore may not be representative.*

[5] *Pollutant is monitored at Central L.A. County (SRA 1), which is the nearest monitoring station to monitor the particular pollutant.*

[6] *The federal standard for $PM_{2.5}$ was changed to 35 $\mu g/m^3$ in 2006. Statistics shown are based on the 65$\mu g/m^3$ standard. However, in 2006 and 2007, the SRA 1 monitoring station registered 11 and 20 samples, respectively, that exceeded the 35 $\mu g/m^3$ standard.*

Hydrogen sulfide, vinyl chloride and visibility reducing particles were not monitored by CARB or the SCAQMD in Los Angeles County during the period of 2003 to 2007.

The vicinity of the project site is characterized by residential and visitor-serving commercial uses, including a number of hotels, restaurants and marine-oriented commercial development. Emissions sources include stationary activities, such as space heating, cooking and water heating, and mobile activities, primarily automobile and truck traffic.

5.4.1.5 Global Climate Change

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer).[6] Climate change may result from

- natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

5.4.1.5.1 Description of the Greenhouse Effect

~~Heat retention within our atmosphere is an essential process to sustain life on Earth.~~ The natural process through which heat is retained in the troposphere[7] is called the "greenhouse effect.". ~~The~~ The greenhouse effect traps heat in the troposphere through a three-fold process as follows: (1) Short-wave radiation emitted by the Sun is absorbed by the Earth; (2) long-wave radiation re-emitted by the Earth ~~emits a portion of this energy in the form of long-wave radiation~~; and (3) greenhouse gases (GHGs) in the upper atmosphere absorbing or trapping the ~~this~~ long-wave radiation and re-emitting it back towards the Earth and ~~this long-wave radiation~~ into space ~~and toward the Earth~~. This re-emitting ~~"trapping"~~ of the long-wave (i.e., thermal) radiation by GHGs ~~emitted~~ back towards the Earth is the underlying process of the greenhouse effect. Without the greenhouse effect, the Earth's average temperature would be approximately -18 degrees Celsius (°C) (0° F) instead of its present 14°C (57°F).[8] While ~~The most abundant~~

---

6 U.~~nited~~ S.~~tates~~ Environmental Protection Agency, ~~"~~"Glossary of Climate Change Terms," ~~"~~ http://www.epa.gov/climatechange/glossary.html#Climate_change. 2008.

7 The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers). In general, day-to-day weather is confined to the troposphere (*e.g.*, clouds, rain, convection, etc.).

8 National Climatic Data Center, ~~"~~"Global Warming Frequently Asked Questions," ~~"~~ http://www.ncdc.noaa.gov/oa/

~~GHGs are~~ water vapor and carbon dioxide (CO_2) are the most abundant GHGs~~. Many~~ other trace gases have greater ability to absorb and re-radiate long-wave radiation~~; however, these gases are not as plentiful~~. ~~For this reason, and t~~To gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-emit~~radiate~~ long-wave radiation over a specified time. The GWP of a gas is determined using CO_2~~carbon dioxide~~ as the reference gas with a GWP of 1 over 100 years. For example, a gas with a GWP of 10 is 10 times more potent than CO_2 over 100 years. The use of GWP allows GHG emissions to be reported using CO_2 as a baseline. The sum of each GHG multiplied by its associated GWP is referred to as carbon dioxide equivalents (CO_2e). This essentially means that 1 metric ton of a GHG with a GWP of 10 has the same climate change impacts as 10 metric tons of CO_2.

5.4.1.5.2 Greenhouse Gases

5.4.1.5.2.1 Primary Greenhouse Gases

Greenhouse gases include, but are not limited to, the following[9]:

- Water vapor (H_2O). ~~Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect.~~Water vapor and clouds contribute approximately 66 to 85 percent of the greenhouse effect (water vapor alone contributes 36 to 66 percent).[10] Natural processes such as evaporation from oceans and rivers and transpiration from plants contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively.[11] The primary human-related source of water vapor comes from fuel combustion in motor vehicles; however, this is not believed to contribute a significant amount (less than 1 percent) to atmospheric concentrations~~ of water vapor~~.[12] Therefore, the control and reduction of water vapor emissions is not within reach of human actions. The Intergovernmental Panel on Climate Change (IPCC) has not determined a GWP for water vapor.

- Carbon dioxide (CO_2). Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250

---

climate/globalwarming.html. 2008.

9 All Global Warming Potentials (GWPs) are given as 100-year GWP. Unless noted otherwise, all GWPs were obtained from the Intergovernmental Panel on Climate Change. Climate Change 1995: The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the IPCC. Cambridge (UK): Cambridge University Press. 1996.

10 Gavin A. Schmidt,~~Real Climate.~~ "Water Vapour: Feedback or Forcing?"~~,~~ http://www.realclimate.org/index.php?p=142. 2005.

11 U~~nited S~~tates Geological Survey~~,~~ "The Water Cycle: Evaporation~~,"~~ http://ga.water.usgs.gov/edu/watercycleevaporation.html. 2007.

12 Energy Information Administration~~,~~ "Alternatives to Traditional Transportation Fuels 1994~~,"~~ http://www.eia.doe.gov/cneaf/alternate/page/environment/exec2.html. 2008.

years, the concentration of carbon dioxide in the atmosphere has increased 35 percent.[13] Carbon dioxide is the most widely emitted GHG and is the reference gas (GWP of 1) for determining GWPs for other GHGs. In 2004, 83.8 percent of California's GHG emissions were carbon dioxide.[14]

- Methane (CH_4). Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of methane come from landfills, natural gas systems, and enteric fermentation.[15] Methane is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. The GWP of methane is 21.

- Nitrous oxide (N_2O). Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 310.

- Hydrofluorocarbons (HFCs). HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing as the continued phase-out of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) gains momentum. The GWP of HFCs range from 140 for HFC-152a to 6,300 for HFC-236fa.

- Perfluorocarbons (PFCs). Perfluorocarbons are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semi-conductor manufacturing. Perfluorocarbons are potent GHGs with a GWP several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years).[16] The GWP of PFCs range from 5,700 to 11,900.

- Sulfur hexafluoride. Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride is the most potent GHG that has been evaluated by the IPCC with a GWP of 23,900. However, its global warming contribution is not as high as the GWP would indicate due to its low mixing ratio compared to carbon dioxide (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm]).[17]

---

13 U.~~nited~~ S.~~tates~~ Environmental Protection Agency, "Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2006," ~~2008.~~ http://www.epa.gov/climatechange/emissions/usinventoryreport.html. 2008.

14 California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004*, Figure 2, (2006). ~~2006.http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF.~~

15 U.~~nited~~ S.~~tates~~ Environmental Protection Agency, "Methane: Sources and Emissions," http://www.epa.gov/methane/sources.html. n.d.

16 Energy Information Administration, "Other Gases: Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride," ~~2001.~~ http://www.eia.doe.gov/oiaf/1605/gg00rpt/other_gases.html. n.d.

17 U.~~nited~~ S.~~tates~~ Environmental Protection Agency, "High GWP Gases and Climate Change," http://www.epa.gov/highgwp/scientific.html#sf6. n.d.

5.4.1.5.2.2 Other Greenhouse Gases

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric ozone depletors; therefore, their gradual phase-out is currently in effect. A few of these compounds are discussed below:

- Hydrochlorofluorocarbons (HCFCs). HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the protocol are subject to a consumption cap and gradual phase-out of HCFCs. The United States is scheduled to reduce its consumption to the allowed~~achieve a 100 percent reduction to the~~ cap by 2030. The GWPs of HCFCs range from 93 for HCFC-123 to 2,000 for HCFC-142b.[18]

- 1,1,1-trichloroethane. 1,1,1-trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. In 1992, the US EPA issued Final Rule 57 FR 33754 scheduling the phase out of methyl chloroform by 2002.[19] This was later accelerated to a 1995 phase-out~~Therefore, the threat posed by methyl chloroform as a GHG will diminish~~. ~~Nevertheless, t~~The GWP of methyl chloroform is 110~~ times that of carbon dioxide~~.[20]

- Chlorofluorocarbons (CFCs). CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the US EPA's Final Rule 57 FR 3374 for the phase out of ozone depleting substances. ~~Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents.~~ Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with GWPs ranging from 4,600 for CFC-11 to 14,000 for CFC-13.[21]

- Ozone. Ozone occurs naturally in the stratosphere where it is largely responsible for filtering harmful ultraviolet (UV) radiation. In the troposphere, ozone acts as a GHG by absorbing and re-radiating the infrared energy emitted by the Earth. As a result of the industrial revolution and rising emissions of NO_x and volatile organic compounds (VOCs) (ozone precursors), the concentrations of ozone in the troposphere have increased.[22] Due to the short life span of ozone in the troposphere, its concentration

---

18 U.~~nited S.tates~~ Environmental Protection Agency,~~.~~ "Protection of Stratospheric Ozone: Listing of Global Warming Potential for Ozone-Depleting Substances,"~~.~~ http://www.epa.gov/fedrgstr/EPA-AIR/1996/January/Day-19/pr-372.html. 1996.

19 U.~~nited S.tates~~ Environmental Protection Agency,~~.~~ "The Accelerated Phase-Out of Class 1 Ozone-Depleting Substances,"~~.~~ http://www.epa.gov/ozone/title6/phaseout/accfact.html. 2007.

20 U.~~nited S.tates~~ Environmental Protection Agency,~~.~~ "Protection of Stratospheric Ozone: Listing of Global Warming Potential for Ozone-Depleting Substances,"~~.~~ http://www.epa.gov/fedrgstr/EPA-AIR/1996/January/Day-19/pr-372.html. 1996.

21 U.~~nited~~ S.tates Environmental Protection Agency,~~.~~ "Class I Ozone Depleting Substances,"~~.~~ http://www.epa.gov/ozone/ods.html. 2006.

22 Intergovernmental Panel on Climate Change,~~.~~ "Climate Change 2001: Tropospheric Ozone,"~~.~~ http://www.grida.no/ climate/ipcc_tar/wg1/142.htm. n.d.

and contribution as a GHG is not well established. However, the greenhouse effect of tropospheric ozone is considered small, as the radiative forcing[23] of ozone is 25 percent of that of carbon dioxide.[24]

5.4.1.5.3 Contributions to Greenhouse Gas Emissions

5.4.1.5.3.1 Global

Anthropogenic GHG emissions worldwide as of 2005 (the latest year for which data are available for Annex I countries) totaled approximately 37,40830,800 ~~CO_2 equivalent~~ million metric tons of CO_2e ($MMTCO_2Ee$).[25] It should be noted that global emissions inventory data are not all from the same year and may vary depending on the source of the emissions inventory data.[26] The top five ~~Six~~ countries and the European Union~~Community accounted for approximately 70 percent of the total global emissions~~ are listed in ~~(See~~ **Table 5.4-3, ~~Six~~ Top Five GHG Producer Countries and the European Union~~Community~~**). The GHG emissions in more recent years may be substantially different than those shown in **Table 5.4-3**.

23 Radiative forcing, measured in Watts/m^2, is an externally imposed perturbation (e.g., stimulated by greenhouse gases) in the radiative energy budget of the Earth's climate system (i.e., energy and heat retained in the troposphere minus energy passed to the stratosphere).

24 Intergovernmental Panel on Climate Change, "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf. 2007.

25 The CO_2 equivalent emissions are commonly expressed as "million metric tons of carbon dioxide equivalent ($MMTCO_2Ee$)" The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP, such that $MMTCO_2Ee$ = (million metric tons of a GHG) x (GWP of the GHG). For example, the GWP for methane is 21. This means that emissions of one million metric tons of methane are equivalent to emissions of 21 million metric tons of CO_2.

26 The global emissions are the sum of Annex I and non-Annex I countries without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries that 2004 data were unavailable, the UNFCCC data for the most recent year were used. United Nations Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," http://unfccc.int/ghg_emissions_data/ghg_data_from_unfccc/time_series_annex_i/items/3841.php and "Flexible GHG Data Queries" with selections for total GHG emissions excluding LULUCF/LUCF, all years, and non-Annex I countries, http://unfccc.int/di/FlexibleQueries/Event.do?event=showProjection n.d.

Table 5.4-3
~~Six~~ Top Five GHG Producer Countries and the European Union~~Community~~

Emitting Countries	GHG Emissions[1] (MMTCO$_2$~~E~~e)*
China~~United States~~	7,250~~7,241.5~~[1]
United States~~China~~	7,098~~4,882.7~~[2]
European Union~~Community~~ (EU), 27 Member States	5,342~~4,192.6~~[1]
Russian Federation	1,992~~2,132.5~~[1]
India	1,863~~1,606.5~~[2]
Japan	1,383~~1,359.9~~[1]
~~Germany~~[3]	~~1,001.5~~[1]
Total	24,928~~21,415.7~~

Sources:
[1] World Resources Institute, "Climate Analysis Indicators Tool (CAIT)," http://cait.wri.org/. 2009. Excludes emissions and removals from land use, land-use change and forestry (LULUCF).

~~*Sources:*~~
~~*[1] United Nations Framework Convention on Climate Change http://unfccc.int/ghg_emissions_data/ghg_data_from_unfccc/time_series_annex_i /items/3841.php*~~
~~*[2] GHG emissions for China and India (Calendar Year 2000) were obtained from the World Resources Institute's*~~

5.4.1.5.3.2 United States

As noted in **Table 5.4-3**, the United States was the number two~~top~~ producer of global greenhouse gas emissions, as of 2005. ~~Based on GHG emissions in 2004, six of the states—Texas, California, Pennsylvania, Ohio, Illinois, and Florida, in ranked order—would each rank among the top 30 GHG emitters internationally.[27]~~ The primary greenhouse gas emitted by human activities in the United States was CO_2, representing approximately 84 percent of total greenhouse gas emissions.[28] Carbon dioxide from fossil fuel combustion, the largest source of US greenhouse gas emissions, accounted for approximately 80 percent of US GHG emissions.[29]

27 World Resources Institute. "How U.S. State GHG Emissions Compare Internationally." http://earthtrends wri org /updates/node/106.

28 U.~~nited~~ S.~~tates~~ Environmental Protection Agency. "Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2006,~~.~~" http://www.epa.gov/climatechange/emissions/usinventoryreport.html. 2008.

29 Ibid.~~United States Environmental Protection Agency. "Inventory of U.S. Greenhouse Gas Emissions."~~

5.4.1.5.3.3 California

Based upon the 2004 GHG inventory data (the latest year available) compiled by CARB for the California 1990 greenhouse gas emissions inventory, California emitted emissions of 484 $MMTCO_2E$, including emission resulting from out-of-state electrical generation.[30] Based on the CARB inventory and GHG inventories for countries contributing to the worldwide GHG emissions inventory compiled by the World Resources InstituteUnited Nations Framework Convention on Climate Change (WRIUNFCCC) for 2005, California's GHG emissions rank second in the United States (Texas is number one) with emissions of 423 $MMTCO_2E$ (excluding emissions related to imported power) and internationally between Ukraine (418.9 $MMTCO_2E$) and Spain (460.6 $MMTCO_2E$).[31]

A California Energy Commission (CEC) emissions inventory report placed CO_2 produced by fossil fuel combustion in California as the largest source of GHG emissions in 2004, accounting for 81 percent of the total GHG emissions.[32] CO_2 emissions from other sources contributed 2.8 percent of the total GHG emissions, methane emissions 5.7 percent, nitrous oxide emissions 6.8 percent, and the remaining 2.9 percent was composed of emissions of high-GWP gases.[33] These high GWP gases are largely composed of refrigerants and a small contribution of sulfur hexafluoride (SF_6) used as insulating materials in electricity transmission and distribution.

The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources; industry; agriculture and forestry; and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions are presented in **Table 5.4-4, GHG Sources in California**.

---

30 California Air Resources Board. *California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit*. November 16, 2007.

31 World Resources Institute, "Climate Analysis Indicators Tool (CAIT) US Version 3.0," http://cait.wri.org/cait-us.php. 2009.United Nations Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," http://unfccc.int/ghg_emissions_data/ghg_data_from_unfccc/time_series_annex_i/ items/3841.php.

32 California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004*, (2006) Figure 2.

33 California Energy Commission. *Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004*Ibid.

Table 5.4-4
GHG Sources in California[1]

Source Category	Annual GHG Emissions ($MMTCO_2E$)[a]	Percent of Total	Annual GHG Emissions ($MMTCO_2E$)[b]	Percent of Total
Agriculture	27.9	5.8%	27.9	6.6%
Commercial Uses	12.8	2.6%	12.8	3.0%
Electricity Generation	119.8	24.7%	58.5	13.8%
Forestry (excluding sinks)	0.2	0.0%	0.2	0.0%
Industrial Uses	96.2	19.9%	96.2	22.7%
Residential Uses	29.1	6.0%	29.1	6.9%
Transportation	182.4	37.7%	182.4	43.1%
Other[c]	16.0	3.3%	16.0	3.8%
Totals	484.4	100.0%	423.1	100.0%

Sources:
[1] *California Air Resources Board.* California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit. *November 16, 2007.*
[a] *Includes emissions associated with imported electricity, which account for 61.3 $MMTCO_2E$ annually.*
[b] *Excludes emissions associated with imported electricity.*
[c] *Unspecified combustion and use of ozone-depleting substances.*

~~It should be noted that emissions from each of these economic sectors are not confined to emissions from a single process, since there is cross over with other sectors. For example, the GHG emissions from cement production places clinker manufacturing in its own category and the fuel used to heat the cement production process within the industrial fuel category. In the case of landfills, methane emissions and CO_2 emissions and sinks are reported in their respective portions of the inventory. Taken together, the CO_2 sinks approximately offset the landfill methane emissions. Additionally, fuel related GHG emissions from transporting wastes to landfills are included in transportation fuels.~~

~~**5.4.1.5.4 Global Climate Change**~~

~~Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer).[34] Climate change may result from:~~

[34] United States Environmental Protection Agency. Glossary of Climate Change Terms. http://www.epa.gov /climatechange/glossary.html#Climate_change.

~~•Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;~~

~~•Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and~~

~~•Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).~~

5.4.1.5.4.1 Influences of Industrialization and Human Activities~~Indications of Anthropogenic Influences~~

Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of carbon dioxide, methane, and nitrous oxide from before the start of the industrialization, around 1750, to over 650,000 years ago. For that period, it was found that carbon dioxide concentrations ranged from 180 ppm to 300 ppm. For the period from around 1750 to the present, global carbon dioxide concentrations increased from a pre-industrialization period concentration of 280 ppm to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.[35] Global methane and nitrous oxide concentrations show similar increases for the same period (see **Table 5.4-5, Comparison of Global Pre-Industrial and Current GHG Concentrations**).

Table 5.4-5
Comparison of Global Pre-Industrial and Current GHG Concentrations

Greenhouse Gas	Early Industrial Period Concentrations (ppm)	Natural Range for Last 650,000 Years (ppm)	2005 Concentrations (ppm)
Carbon Monoxide (CO)	280	180 to 300	379
Methane (CH_4)	715	320 to 790	1774
Nitrous Oxide (N_2O)	270	NA	319

Source: Intergovernmental Panel on Climate Change, Climate Change 2007: The Physical Science Basis, Summary for Policymakers, *(2007).*

The impact of anthropogenic activities on global climate change is readily apparent in the observational record. For example, surface temperature data shows that 11 of the 12 years from 1995 to 2006 rank

35 Intergovernmental Panel on Climate Change, "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf. 2007.

among the 12 warmest since 1850, the beginning of the instrumental record for global surface temperature.[36] In addition, the atmospheric water vapor content has increased since at least the 1980s over land, sea, and in the upper atmosphere, consistent with the capacity of warmer air to hold more water vapor; ocean temperatures are warmer to depths of 3,000 feet; and a marked decline has occurred in mountain glaciers and snow pack in both hemispheres, polar ice and ice sheets in both the arctic and Antarctic regions.[37]

~~**5.4.1.5.4.2 Influence of Industrialization**~~

~~Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of carbon dioxide, methane, and nitrous oxide from before the start of the industrialization, around 1750, to over 650,000 years ago. For that period, it was found that carbon dioxide concentrations ranged from 180 ppm to 300 ppm. For the period from around 1750 to the present, global carbon dioxide concentrations increased from a pre industrialization period concentration of 280 ppm to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre industrial period range.[38] Global methane and nitrous oxide concentrations show similar increases for the same period (see **Table 5.4-5, Comparison of Global Pre-Industrial and Current GHG Concentrations**).~~

~~**Table 5.4-5**~~
~~**Comparison of Global Pre-Industrial and Current GHG Concentrations[1]**~~

~~Greenhouse Gas~~	~~Early Industrial Period Concentrations (ppm)~~	~~Natural Range for Last 650,000 Years (ppm)~~	~~2005 Concentrations (ppm)~~
~~Carbon Monoxide~~	~~280~~	~~180 to 300~~	~~379~~
~~Methane~~	~~715~~	~~320 to 790~~	~~1774~~
~~Nitrous Oxide~~	~~270~~	~~NA~~	~~319~~

~~*Sources:*~~
~~*[1] Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers. February 2007.*~~

36 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers. http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf.~~Ibid.

37 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.~~Ibid.

38 Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.

5.4.1.5.5 Effects of Global Climate Change

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2° Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005.[39] Climate change modeling using 2000 emission rates shows that further warming would occur, which would induce further changes in the global climate system during the current century.[40] Changes to the global climate system and ecosystems and to California would include, but would not be limited to

- declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[41]
- rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets;[42]
- changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;[43]
- declining Sierra snowpack levels, which account for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;[44]

39 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.~~Ibid.

40 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.~~Ibid.

41 Ibid.

42 Ibid.

43 Ibid.

44 California Environmental Protection Agency, Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature,* (2006).

- increasing the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas located in the Southern California area and the San Joaquin Valley by the end of the 21st century;[45]

- increasing the potential for erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Delta and associated levee systems due to the rise in sea level;[46]

- increasing pest infestation making California more susceptible to forest fires; [47] and

- increasing the demand for electricity by 1 to 3 percent by 2020 due to rising temperatures resulting in hundreds of millions of dollars in extra expenditures. [48]

- ~~the loss of sea ice and mountain snow pack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[49]~~

- ~~rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps, the Greenland and Antarctic ice sheets;[50]~~

- ~~changes in weather that includes, widespread changes in precipitation, ocean salinity, and wind patterns, and more energetic and aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;[51]~~

- ~~decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;[52]~~

- ~~increase in the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas of Los Angeles and the San Joaquin Valley by the end of the 21st century;[53] and~~

45 Ibid.

46 Ibid.

47 Ibid.

48 Ibid.

49 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.~~Ibid.

50 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.~~Ibid.

51 ~~Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis, Summary for Policymakers.~~Ibid.

52 California Environmental Protection Agency, Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, ~~(Executive Summary). March~~ (2006).

53 ~~California Environmental Protection Agency, Climate Action Team. Climate Action Team Report to Governor Schwarzeneger and the Legislature (Executive Summary).~~Ibid.

~~•high potential for erosion of California's coastlines and sea water intrusion into the Delta and levee systems due to the rise in sea level.[54]~~

5.4.1.6 Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. Any facilities that house these sensitive receptors are considered sensitive land uses. Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time. It is, therefore, a primary goal to avoid subjecting these populations to sustained exposure of any pollutants. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions that can magnify the damage caused by air pollution. Industrial and commercial workers are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent due to a majority of the workers staying indoors. In addition, the working population is generally the healthiest segment of the public.

Sensitive receptors within the project vicinity include residential uses along Tahiti Way, Marquesas Way, Panay Way, Via Marina, Washington Boulevard, Mindanao Way and Fiji Way and the Centinela Freeman Regional Medical Center Marina Campus at 4650 Lincoln Boulevard.

5.4.2 REGULATORY AGENCIES AND RESPONSIBILITIES

The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county Basin (Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The project site is located within the basin, which is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino and San Jacinto mountains to the north and east (see **Figure 5.4-1, South Coast Air Basin**).

Air quality within the basin is addressed through the efforts of various federal, state, regional and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy making, education and a variety of programs. The agencies primarily responsible for improving the air quality within the basin are discussed below along with their individual responsibilities.

---

54 ~~California Environmental Protection Agency, Climate Action Team. Climate Action Team Report to Governor Schwarzeneger and the Legislature (Executive Summary).~~ Ibid.

5.4.2.1 US Environmental Protection Agency

The US EPA is responsible for enforcing the federal CAA and the NAAQS that it establishes. These standards identify levels of air quality for seven "criteria" pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The threshold levels are considered to be the maximum concentration of ambient (background) air pollutants determined safe (within an adequate margin of safety) to protect the public health and welfare. The federal ambient air quality standards are listed in **Table 5.4-1**. As indicated, the averaging times for the various pollutants range from 1 hour to annual. The standards are reported as a concentration, in ppm, by volume, or as a weighted mass of material per a volume of air, in micrograms of pollutant per cubic meter of air ($\mu g/m^3$).

The 1990 CAA Amendments were enacted in order to better protect the public's health and create more efficient methods of lowering pollutant emissions. The major areas of improvement from the amendments include air basin designations, automobile/heavy duty engine emissions, and toxic air pollutants. The US EPA designates air basins as being in "attainment" or "nonattainment" for each of the seven "criteria" pollutants. Nonattainment air basins are ranked (marginal, moderate, serious, severe, or extreme) according to the degree of the threshold violation. The air basin is then required to submit a State Implementation Plan (SIP) that describes how the state will achieve the federal standards by specified dates. The stringency of emission control measures in a given SIP depends on the severity of the air quality within specific air basin. The status of the basin with respect to NAAQS attainment is summarized in **Table 5.4-6**, **National Ambient Air Quality Standards and Status – South Coast Air Basin**.

Table 5.4-6
National Ambient Air Quality Standards and Status
South Coast Air Basin (Los Angeles County)

Pollutant	Averaging Time	Designation/Classification
Ozone (O_3)	8 Hour	Nonattainment/Severe 17
Carbon Monoxide (CO)	1 Hour, 8 Hour	Attainment
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	Attainment/Unclassifiable
Sulfur Dioxide (SO_2)	24 Hour, Annual Arithmetic Mean	Attainment
Respirable Particulate Matter (PM_{10})	24 Hour	Nonattainment/Serious
Fine Particulate Matter ($PM_{2.5}$)	24 Hour, Annual Arithmetic Mean	Nonattainment
Lead (Pb)	Calendar Quarter	Attainment

Source: Environmental Protection Agency. "Region 9: Air Programs, Air Quality Maps." http://www.epa.gov/region9/air/maps/maps_top.html.

In response to the rapid population growth and its subsequent rise in automobile operations, the 1990 CAA Amendments address tailpipe emissions from automobiles, heavy-duty engines, and diesel fuel engines. The 1990 Amendments established more stringent standards for hydrocarbons, NO_X, and CO emissions in order to reduce ozone and carbon monoxide levels in heavily populated areas. Fuels became more strictly regulated by requiring new fuels to be less volatile, contain less sulfur (regarding diesel fuels), and have higher levels of oxygenates (oxygen-containing substances to improve fuel combustion). The US EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking.

Due to the lack of toxic emissions reduction by the 1977 CAA, the 1990 CAA Amendments listed 189 hazardous air pollutants (HAPs) that are carcinogenic, mutagenic, and/or reproductive toxins to be reduced. Title III of the 1990 federal CAA Amendments amended Section 112 of the CAA to replace the former program with an entirely new technology-based program. This program involves identifying all major sources (greater than 10 tons/year of a single HAP or 25 tons/year of combined HAPs) and area sources (i.e., non-major sources) in order to implement maximum achievable control technology (MACT) that will reduce health impacts.

5.4.2.2 California Air Resources Board

CARB, a branch of the California Environmental Protection Agency (Cal/EPA), oversees air quality planning and control throughout California. It is primarily responsible for ensuring implementation of the CCAA, responding to the federal CAA requirements and for regulating emissions from motor vehicles and consumer products within the state. CARB has established emission standards for vehicles sold in California and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The CCAA established a legal mandate to achieve the California ambient air quality standards by the earliest practicable date. These standards apply to the same seven criteria pollutants as the federal CAA and also include sulfates, visibility reducing particles, hydrogen sulfide and vinyl chloride. They are also more stringent than the federal standards and, in the case of PM_{10} and SO_2, far more stringent.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. These designation criteria provide the basis for CARB to designate areas of the state as "attainment," "nonattainment," or "unclassified" for the state standards. In addition, Health and Safety Code Section 39608 requires CARB to use the designation criteria to designate areas of California and to annually review those area designations. CARB makes area designations for 10 criteria pollutants:

O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, sulfates, lead, hydrogen sulfide and visibility-reducing particles.[55] The status of the basin with respect to attainment with the California Ambient Air Quality Standards (CAAQS) is summarized in **Table 5.4-7, California Ambient Air Quality Standards and Status – South Coast Air Basin,** below.

Table 5.4-7
California Ambient Air Quality Standards and Status
South Coast Air Basin

Pollutant	Averaging Time	Designation/Classification
Ozone (O_3)	1 Hour, 8 Hour	Nonattainment[1]
Carbon Monoxide (CO)	1 Hour, 8 Hour	Attainment
Nitrogen Dioxide (NO_2)	1 Hour	Attainment
Sulfur Dioxide (SO_2)	1 Hour, 24 Hour	Attainment
Respirable Particulate Matter (PM_{10})	24 Hour, Annual Arithmetic Mean	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	Nonattainment
Lead (Pb)[2]	30 Day Average	Attainment
Sulfates (SO_4)	24 Hour	Attainment
Hydrogen Sulfide (H_2S)	1 Hour	Unclassified
Vinyl Chloride[2]	24 Hour	Unclassified
Visibility Reducing Particles	8 Hour (10 AM–6 PM)	Unclassified

Source: California Air Resources Board. "Area Designations Maps/State and National." http://www.arb.ca.gov/desig/adm/adm.htm.

[1] *CARB has not issued area classifications based on the new state 8-hour standard. The previous classification for the 1-hour ozone standard was Extreme.*

[2] *CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined.*

5.4.2.3 Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments for the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. As a regional planning agency, SCAG serves as a forum for regional issues relating to transportation, the economy, community development and the environment. SCAG also serves as the regional clearinghouse for

55 California Air Resources Board. "Area Designations (Activities and Maps)." http://www.arb.ca.gov/desig/desig.htm; Written communication with Marcy Nystrom, California Air Resources Board, 24 December 2003, stating that state law states requires ARB to make area designations for pollutants with state standards listed in California Code of Regulations, Title 17, Section 70200. However, vinyl chloride is not included in this section of the California Code of Regulations; therefore, the ARB does not make area designations for vinyl chloride.

projects requiring environmental documentation under federal and state law. In this role, SCAG reviews projects to analyze their impacts on SCAG's regional planning efforts.

Although SCAG is not an air quality management agency, it is responsible for several air quality planning issues. Specifically, as the designated Metropolitan Planning Organization (MPO) for the Southern California region, it is responsible, pursuant to Section 176(c) of the 1990 amendments to the CAA, for providing current population, employment, travel and congestion projections for regional air quality planning efforts.

5.4.2.4 South Coast Air Quality Management District

The management of air quality in the basin is the responsibility of the SCAQMD. This responsibility was given to SCAQMD by the California Legislature's adoption of the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Lewis-Presley Air Quality Act, SCAQMD is responsible for bringing air quality in the areas under its jurisdiction into conformity with federal and state air quality standards. Specifically, SCAQMD is responsible for monitoring ambient air pollutant levels throughout the basin and for developing and implementing attainment strategies to ensure that future emissions will be within federal and state standards. The SCAQMD adopts rules, control measures, and permitting programs that are appropriate for their specific region according to technical feasibility, cost effectiveness, and the severity of nonattainment. The SCAQMD must then implement and enforce compliance with those rules and programs.

5.4.2.4.1 SCAQMD Air Quality Management Plan

The SCAQMD and SCAG have the responsibility of preparing an air quality management plan (AQMP) that addresses both federal and state CAA requirements. The AQMP must specify goals, policies, and programs for improving air quality, and it establishes thresholds for daily operation emissions. A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the US EPA, CARB, local governments, SCAG, and the SCAQMD. Environmental review of individual projects within the region must demonstrate whether daily construction and operational emissions exceed thresholds established by the SCAQMD.

The SCAQMD is required to produce plans describing how air quality will be improved. The CCAA requires that these plans be updated triennially in order to incorporate the most recent available technical information. In addition, the US EPA requires that transportation conformity budgets be established based on the most recent planning assumptions (i.e., within the last five years). Plan updates are

necessary to ensure continued progress toward attainment and to avoid a transportation conformity lapse and associated federal funding losses. On November 8, 2005, the US EPA issued a final rule outlining the requirements for a new plan to achieve the 8-hour standard. The plan was to be submitted to the US EPA by June 15, 2007 (three years after the attainment designation).

To meet the planning requirements for the 8-hour standard, the SCAQMD published the Draft Final 2007 AQMP, which was adopted by the SCAQMD Governing Board on June 1, 2007. The purpose of the 2007 AQMP for the basin (and those portions of the Salton Sea Air Basin under the SCAQMD's jurisdiction) is to set forth a comprehensive program that will lead these areas into compliance with federal and state air quality planning requirements for ozone and $PM_{2.5}$. In addition, as part of the 2007 AQMP, the SCAQMD is requesting US EPA's approval of a "bump-up" to the "extreme" nonattainment classification for the basin, which would extend the attainment date to 2024 and allow for the attainment demonstration to rely on emission reductions from measures that anticipate the development of new technologies or improvement of existing control technologies. Although $PM_{2.5}$ plans for nonattainment areas are due in April 2008, the 2007 AQMP also focuses on attainment strategies for the $PM_{2.5}$ standard through stricter control of sulfur oxides, directly emitted $PM_{2.5}$, NO_X, and VOCs. The need to commence $PM_{2.5}$ control strategies before April 2008 is due to the attainment date for $PM_{2.5}$ (2015) being much earlier than that for ozone (2021 for the current designation of severe-17 or 2024 for the extreme designation). Control measures and strategies for $PM_{2.5}$ will also help control ozone generation in the region because $PM_{2.5}$ and ozone share similar precursors (e.g., NO_X). The District has integrated $PM_{2.5}$ and ozone reduction control measures and strategies in the 2007 AQMP. In addition, the AQMP focuses on reducing VOC emissions, which have not been reduced at the same rate as NO_X emissions in the past. Hence, the basin has not achieved the reductions in ozone as were expected in previous plans. The AQMP was based on assumptions provided by both CARB and SCAG in the new EMFAC2007 motor vehicle model and the most recent demographics information, respectively. On September 27, 2007, the CARB Board adopted the 2007 SCAQMD AQMP as part of the SIP.

5.4.2.4.2 SCAQMD Rules and Regulations

The SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the basin by various stationary, area and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board, which limit the emissions that can be generated by various uses/activities and that identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the federal and state criteria pollutants but also toxic air contaminants (TACs) and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the proposed project are Rule 403, Fugitive Dust, Rule 1113, Architectural Coatings and Rule 1403, Asbestos Emissions from Demolition/Renovation Activities. Rule 403 requires the use of stringent best available control measures to minimize PM_{10} emissions during grading and construction activities. Rule 1113 will require reductions in the VOC content of coatings, with a substantial reduction in the VOC content limit for flat coatings in July 2008. Compliance with SCAQMD Rule 1403 requires that the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and provide notification to the SCAQMD prior to commencing demolition activities.

Stationary emissions sources subject to these rules are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD also monitors the amount of stationary emissions being generated and uses this information in developing the 2007 AQMP. The project would be subject to SCAQMD rules and regulations to reduce specific emissions and to mitigate potential air quality impacts.

5.4.2.4.3 SCAQMD CEQA Air Quality Handbook

In 1993, the SCAQMD prepared its *CEQA Air Quality Handbook* to assist local government agencies and consultants in preparing environmental documents for projects subject to CEQA. There has been one full update to the document in November 1993, and it is currently undergoing an update process. The document describes the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental documents. The handbook recommends thresholds of significance in order to determine if a project will have a significant adverse environmental impact. Other important contents are methodologies for predicting project emissions and mitigation measures that can be taken to avoid or reduce air quality impacts. Although the Governing Board of the SCAQMD has adopted the *CEQA Air Quality Handbook*, it does not, nor does it intend to, supersede a local jurisdiction's CEQA procedures.

The *CEQA Air Quality Handbook* is currently undergoing revision. As of June 2007, the *CEQA Air Quality Handbook* was still undergoing revision. However, the air quality significance thresholds have been revised, and a new procedure referred to as "localized significance thresholds," has been added. The *CEQA Air Quality Handbook* and these revised methodologies were used in preparing the air quality analysis in this EIR section.

5.4.2.5 Local Governments

Local governments have the authority and responsibility to reduce air pollution through their police power and land use decision-making authority. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation

control measures as outlined in the AQMP.[56] The AQMP assigns local governments certain responsibilities to assist the basin in meeting air quality goals and policies. In general, a first step toward implementation of a local government's responsibility is accomplished by identifying air quality goals, policies and implementation measures in its general plan, such as the Air Quality section in the County of Los Angeles General Plan. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality, by requiring such improvements as bus turnouts, energy-efficient streetlights and synchronized traffic signals.[57] In accordance with the CEQA requirements and the CEQA review process, local governments assess air quality impacts, require mitigation of potential air quality impacts by conditioning discretionary permits, and monitor and enforce implementation of such mitigation.[58]

5.4.2.5.1 County of Los Angeles Green Building Program

In January 2007, the Los Angeles County Board of Supervisors adopted the Countywide Energy and Environmental Policy (Policy), which provides guidelines for sustainability and green building design within County departments. The Policy states that the County will join the California Climate Action Registry (CCAR) to establish goals for reducing GHG emissions. The Policy also incorporates a sustainable building program into County capital improvement Projects and seeks to integrate energy efficient and sustainable designs into future County building plans.

In addition, the court settlement in August 2007 regarding the lack of GHG mitigation strategies in the San Bernardino County General Plan prompted Los Angeles County to pursue more immediate and formal mitigation strategies. Accordingly, the County prepared its "Report on the Impact of the State Action Against San Bernardino County Regarding its General Plan Update," which contains numerous recommendations for future requirements to combat global warming. The report has four main sections: (1) energy efficiency and water efficiency program; (2) green buildings/low impact development program; (3) environmental stewardship program; and (4) public outreach and education program.

On January 16, 2007, the County Board of Supervisors instructed the Directors of Regional Planning and Public Works to create a green building program that would incorporate green building standards into all appropriate industrial, commercial, and residential development Projects within all unincorporated areas of the county. An inter-departmental Task Force was formed to develop and review draft ordinance in support of the Board's request. The Task Force designed a Green Building Program that includes the

---

56 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, ~~(Diamond Bar, California: South Coast Air Quality Management District, April~~ (1993)~~, p.~~ 2-2.

57 Ibid.~~South Coast Air Quality Management District. *CEQA Air Quality Handbook*. p. 2-2.~~

58 Ibid.~~South Coast Air Quality Management District. *CEQA Air Quality Handbook*. p. 2-2.~~

green building ordinance, low impact development ordinance and drought-tolerant landscape ordinance. These ordinances were approved by the Board on November 18, 2008, and became effective on January 1, 2009.

The green building ordinance requires the incorporation of green building practices in the construction of new projects. The green building practices are intended to: (1) conserve energy, water, and natural resources; (2) divert waste from landfills; (3) minimize impacts to existing infrastructure; and (4) promote a healthier environment. The green building standards ordinance would apply to four categories of development, with corresponding requirements for each: (i) small residential and nonresidential projects; (ii) medium-sized residential projects; (iii) medium-sized (i.e., 10,000 to 25,000 square feet) nonresidential, commercial, mixed-use, or first-time tenant improvement projects; and (iv) large nonresidential, commercial, mixed-use, or first-time tenant improvement projects greater than 25,000 square feet, and all new high-rise buildings greater than 75 feet in height. In addition, the proposed ordinance also would contain minimum standards for all applicable projects:

- Energy: 15 percent better than Title 24;
- Water: Smart controller in landscaped areas, 75 percent of the landscaped area to use drought-tolerant plants, turf restrictions, hydrozones;
- Resources: Minimum 50 percent waste diversion during construction; and
- Trees: Minimum of 2 trees planted per single family home, 1 tree planted per 5,000 square feet of lot area for multi-family projects, 3 trees planted per 10,000 square feet of lot area for nonresidential projects; and
- Low Impact Development: Single-family residences to use three (3) of seven (7) approved low-impact development best management practices.

The low impact development (LID) ordinance requires the use of LID principles in development projects. LID encourages site sustainability and smart growth in a manner that respects and preserves the characteristics of the County's watersheds, drainage paths, water supplies and natural resources.

The drought-tolerant landscaping ordinance establishes minimum standards for the design and installation of landscaping using drought-tolerant and native plants that require minimal use of water. The requirements ensures that the County conserves water resources by requiring landscaping that is appropriate to the region's climate and nature of the use.

5.4.2.~~6~~3 Greenhouse Gas Regulatory Programs

5.4.2.~~3~~6.1 International Activities

5.4.2.~~3~~6.1.1 Kyoto Protocol

The original Kyoto Protocol was negotiated in December 1997 and came into force on February 16, 2005. ~~As of May 2008, 181 countries and the European Economic Community have ratified the agreement.[59] Notably however, the US has not ratified the protocol.~~ Participating nations are separated into Annex 1 (i.e., industrialized countries) and Non-Annex 1 (i.e., developing countries) countries that have different requirements for GHG reductions. The goal of the protocol is to achieve overall emissions reduction targets for six GHGs by the period 2008 to 2012. The six GHGs regulated under the protocol are carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, HFCs, and PFCs. Each nation has an emissions reduction target for which they must reduce GHG emissions a certain percentage below 1990 levels (e.g., 8 percent reduction for the European Union, 6 percent reduction for Japan). The average reduction target for nations participating in the Kyoto Protocol is approximately 5 percent below 1990 levels.[60] Although the United States has not ratified the protocol, it has established an 18 percent reduction in GHG emissions intensity by 2012.[61] Greenhouse gas intensity is the ratio of GHG emissions to economic output (i.e., gross domestic product).

5.4.2.~~3~~6.1.2 Intergovernmental Panel on Climate Change

The World Meteorological Organization (WMO) and United Nations Environmental Program (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988. The goal of the IPCC is to evaluate the risk of climate change caused by human activities. Rather than performing research or monitoring climate, the IPCC relies on peer-reviewed and published scientific literature to make its assessment. The IPCC assesses information (i.e., scientific literature) regarding human-induced climate change, impacts of human-induced climate change, and options for adaptation and mitigation of climate change. The IPCC reports its evaluation through special reports called "assessment reports." The latest assessment report (i.e., Fourth Assessment Report, consisting of three working group reports and a synthesis report based on the first three reports) was published in 2007.[62]

---

59 United Nations Framework Convention on Climate Change, "Status of Ratification," http://unfccc.int/kyoto_protocol/background/status_of_ratification/items/2613.php. n.d.

60 Pew Center on Global Climate Change. Bush Policy vs. Kyoto. http://www.pewclimate.org/what_s_being_done/in_the_world/bush_intensity_targe_2.cfm

61 The White House. Addressing Global Climate Change. http://www.whitehouse.gov/ceq/global-change.html

62 The IPCC's Fourth Assessment Report is available online at http://www.ipcc.ch/.

5.4.2.~~3~~6.2 Federal Activities

In *Massachusetts vs. EPA,* the Supreme Court held that US EPA has the statutory authority under Section 202 of the CAA to regulate GHGs from new motor vehicles. The court did not hold that the US EPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs from motor vehicles cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. Upon the final decision, President Bush signed Executive Order 13432 on May 14, 2007, directing the US EPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. The order requires the US EPA to coordinate closely with other federal agencies and to consider the president's Twenty-in-Ten plan in this process. The Twenty-in-Ten plan would establish a new alternative fuel standard that would require the use of 35 billion gallons of alternative and renewable fuels by 2017. The US EPA will be working closely with the Department of Transportation in developing new automotive efficiency standards.

In December 2007, then President Bush signed the Energy Independence and Security Act of 2007, which sets a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022 and sets a national fuel economy standard of 35 miles per gallon by 2020. The Act also contains provisions for energy efficiency in lighting and appliances and for the implementation of green building technologies in federal buildings. The act is positioned as a response to President Bush's Twenty-in-Ten plan.

On July 11, 2008, the U.S. EPA issued an Advanced Notice of Proposed Rulemaking (ANPRM) on regulating GHGs under the Clean Air Act. The ANPRM reviews the various CAA provisions that may be applicable to the regulation of GHGs and presents potential regulatory approaches and technologies for reducing GHG emissions. On April 10, 2009, the US EPA published the Proposed Mandatory Greenhouse Gas Reporting Rule in the *Federal Register*.[63] The U.S. EPA has also proposed rules for geologic sequestration of CO_2. The sequestration rule is undergoing further development.

On May 19, 2009, the Obama Administration announced a new national policy intended to reduce fuel consumption and GHG emissions. The proposed standards cover model years 2012-2016 and will require an average fuel economy standard of 35.5 mpg in 2016 (39 mpg for cars, 30 mpg for trucks), or approximately 250 grams of CO_2 per mile. This policy is in contrast to the Corporate Average Fuel Economy (CAFE) standards established under 2007 legislation, which specified a minimum of 35 miles per gallon (mpg) by 2020. Both the US EPA and the National Highway Traffic Safety Administration

63 U.S. Environmental Protection Agency, "Climate Change," http://www.epa.gov/climatechange/. 2009.

(NHTSA) issued a Notice of Upcoming Joint Rulemaking to Establish Vehicle GHG Emissions and CAFE Standards the same day as the announcement in order to establish a consistent national policy pursuant to the separate statutory frameworks under which US EPA and Department of Transportation (DOT) operate (NHTSA is a division of DOT).

5.4.2.~~3~~6.3 California Activities

5.4.2.~~3~~6.3.1 Assembly Bill 1493

In a response to the transportation sector accounting for more than half of California's CO_2 emissions, Assembly Bill 1493 (AB 1493, Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for model year 2009 and later passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. ~~The bill required that CARB set the GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers.~~ CARB adopted the standards in September 2004. ~~These standards are intended to reduce emissions of carbon dioxide and other greenhouse gases (e.g., nitrous oxide, methane).~~ The new standards would phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009 through 2012) standards will result in reduction of about 22 percent in greenhouse gas emissions compared to the emissions from the 2002 fleet, while the mid-term (2013 through 2016) standards will result in a reduction of about 30 percent. ~~Some currently used technologies that achieve GHG reductions include small engines with superchargers, continuously variable transmissions, and hybrid electric drive.~~

In December 2004, these regulations were challenged in federal court by the Alliance of Automobile Manufacturers, who claimed that the law regulated vehicle fuel economy, a duty assigned to the federal government. The case had been put on hold by a federal judge in Fresno pending the US Supreme Court's decision in *Massachusetts vs. EPA*. The US Supreme Court's ruling in favor of the state of Massachusetts has been discussed as a likely vindication of state efforts to control GHG emissions. In December 2007, ~~Judge Ishii of~~ the US District Court for the Eastern District dismissed the case by the Alliance of Automobile Manufacturers. However, before these regulations may go into effect, the US EPA must grant California a waiver under the federal Clean Air Act, which ordinarily preempts state regulation of motor vehicle emission standards. ~~Following the issuance of the *Massachusetts vs. EPA* decision, the US EPA announced that it would decide whether to grant California a waiver by December 2007.~~ On December 19, 2007, ~~Stephen Johnson,~~ the US EPA ~~Administrator,~~ denied the waiver citing the need for a national approach to reducing greenhouse gas emissions, the lack of a "need to meet

compelling and extraordinary conditions," and the benefits to be achieved through the Energy Independence and Security Act of 2007.[64] The California Attorney General subsequently filed suit in January 2008 to overturn the administrator's decision. Most recently, ~~and~~ the Obama Administration has issued an executive order requiring the US EPA to reconsider granting the waiver. A decision from the US EPA has not yet been announced. In light of the May 19, 2009 announcement by the Obama Administration establishing a target of 35.5 mpg by 2016, California—and states adopting California emissions standards—have agreed to defer to the proposed national standard through model year 2016 if granted a waiver by the US EPA to implement the Pavley standards. The 2016 endpoint of the two standards are similar, although the national standard ramps up slightly more slowly than required under the California standard..

5.4.2.~~3~~6.3.2 Executive Order S-3-05

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050. The Secretary of Cal/EPA is required to coordinate efforts of various agencies in order to collectively and efficiently reduce GHGs. ~~Some of the agencies involved in the GHG reduction plan include Secretary of Business, Transportation and Housing Agency, Secretary of Department of Food and Agriculture, Secretary of Resources Agency, Chairperson of CARB, Chairperson of the Energy Commission, and the President of the Public Utilities Commission.~~ Representatives from these~~each of the aforementioned~~ agencies comprise the Climate Action Team.

The Climate Action Team is responsible for implementing global warming emissions reduction programs. ~~In order to achieve these goals, the Climate Action Team is organized into two subgroups: the market based options subgroup and the scenario analysis subgroup.~~ The Cal/EPA secretary is required to submit a biannual progress report from the Climate Action Team to the governor and state legislature disclosing the progress made toward GHG emission reduction targets ~~. In addition, another biannual report must be submitted illustrating~~ and the impacts of global warming on California's water supply, public health, agriculture, the coastline, and forestry, and reporting possible mitigation and adaptation plans to combat these impacts. The Climate Action Team has fulfilled both of these report requirements through its March 2006 Climate Action Team Report to Governor Schwarzenegger and the legislature.[65]

---

64 Letter to Governor Arnold Schwarzenegger from Stephen L. Johnson, December 19, 2007.

65 Climate Action Team, *Climate Action Team Report.*

The 2006 report contains recommendations and strategies to reduce emissions of GHGs and associated impacts. Some strategies currently being implemented by state agencies include CARB introducing vehicle climate change standards and diesel anti-idling measures, the Energy Commission implementing building and appliance efficiency standards, and the Cal/EPA implementing their green building initiative. The Climate Action Team also recommends future emission reduction strategies, such as using only low-GWP refrigerants in new vehicles, developing ethanol as an alternative fuel, reforestation, solar power initiatives for homes and businesses, and investor-owned utility energy efficiency programs. According to the report, implementation of current and future emission reduction strategies have the potential to achieve the goals set forth in Executive Order S-3-05. The report also describes potential impacts, as previously listed. A draft of the 2008 report was released on April 1, 2009 and the final version is still pending.~~Some strategies currently being implemented by state agencies include CARB introducing vehicle climate change standards and diesel anti-idling measures, the Energy Commission implementing building and appliance efficiency standards, and the Cal/EPA implementing their green building initiative. The Climate Action Team also recommends future emission reduction strategies, such as using only low-GWP refrigerants in new vehicles, developing ethanol as an alternative fuel, reforestation, solar power initiatives for homes and businesses, and investor-owned utility energy efficiency programs. According to the report, implementation of current and future emission reduction strategies have the potential to achieve the goals set forth in Executive Order S-3-05.~~

5.4.2.~~3~~6.3.3 Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted Assembly Bill 32 (AB 32, Nunez), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. The foremost objective of CARB is to adopt regulations that require the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. The first GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted. In order to advise CARB, it must convene an Environmental Justice Advisory Committee and an Economic and Technology Advancement Advisory Committee. By January 2008, the first deadline for AB 32, a statewide cap for

2020 emissions based on 1990 levels and mandatory reporting rules for significant sources of GHGs must be adopted. The following year (January 2009), CARB must adopt a scoping plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions.

The first action under AB 32 resulted in the adoption of a report listing early action greenhouse gas emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. These early action GHG reduction measures are to be adopted and enforced before January 1, 2010, along with 32 other climate-protecting measures CARB is developing between now and 2011. The report divides early actions into three categories:

- Group 1 - GHG rules for immediate adoption and implementation
- Group 2 - Several additional GHG measures under development
- Group 3 - Air pollution controls with potential climate co-benefits

The original three adopted early action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" include:

- A~~a~~ low-carbon fuel standard to reduce the "carbon intensity" of California fuels;
- R~~r~~eduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants; and
- I~~i~~ncreased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early action regulations adopted on October 25, 2007, also meeting the narrow legal definition of "discrete early action GHG reduction measures," include:

- R~~r~~eduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology;
- R~~r~~eduction of auxiliary engine emissions of docked ships by requiring port electrification;
- R~~r~~eduction of perfluorocarbons from the semiconductor industry;
- R~~r~~eduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products);
- R~~r~~equirements that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency; and

- R~~r~~estriction on the use of sulfur hexafluoride (SF_6) from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 greenhouse gas emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO_2~~E~~e. The inventory revealed that in 1990 transportation, with 35 percent of the state's total emissions, was the largest single sector, followed by industrial emissions, 24 percent; imported electricity, 14 percent; in-state electricity generation, 11 percent; residential use, 7 percent; agriculture, 5 percent; and commercial uses, 3 percent (these figures represent the 1990 values, compared to **Table 5.4-4**, which represent 2004 values). AB 32 does not require individual sectors to meet their individual 1990 GHG emissions inventory; the total statewide emissions are required to meet the 1990 threshold by 2020.

In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of greenhouse gases for large facilities on December 6, 2007. The mandatory reporting regulations require annual reporting from the largest facilities in the state, which account for 94 percent of greenhouse gas emissions from industrial and commercial stationary sources in California. About 800 separate sources that fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 tons of carbon dioxide each year from on-site stationary combustion sources. Transportation sources, which account for 38 percent of California's total greenhouse gas emissions, are not covered by these regulations but will continue to be tracked through existing means. Affected facilities will begin tracking their emissions in 2008, to be reported beginning in 2009 with a phase-in process to allow facilities to develop reporting systems and train personnel in data collection. Emissions for 2008 may be based on best available emission data. Beginning in 2010, however, emissions reports will be more rigorous and will be subject to third-party verification. Verification will take place annually or every three years, depending on the type of facility.

As indicated above, AB 32 requires CARB to adopt a scoping plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions. CARB released the Climate Change Proposed Scoping Plan in October 2008, which contains an outline of the proposed state strategies to achieve the 2020 greenhouse gas emission limits. The CARB Governing Board approved the Proposed Scoping Plan on December 11, 2008. Key elements of the Scoping Plan include the following recommendations:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;

- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;

- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;

- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and

- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation.

Under the Scoping Plan, approximately 85 percent of the state's emissions are subject to a cap-and-trade program where covered sectors are placed under a declining emissions cap. The emissions cap incorporates a margin of safety whereas the 2020 emissions limit will still be achieved even in the event that uncapped sectors do not fully meet their anticipated emission reductions. Emissions reductions will be achieved through regulatory requirements and the option to reduce emissions further or purchase allowances to cover compliance obligations. It is expected that emission reduction from this cap-and-trade program will account for a large portion of the reductions required by AB 32.

Table 5.4-8, AB 32 Scoping Plan Measures, lists CARB's preliminary recommendations for achieving greenhouse gas reductions under AB 32 along with a brief description of the requirements and applicability.

Table 5.4-8
AB 32 Scoping Plan Measures

Scoping Plan Measure	Description
SPM-1: California Cap-and-Trade Program linked to Western Climate Initiative	Implement a broad-based cap-and-trade program that links with other Western Climate Initiative Partner programs to create a regional market system. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms. Capped sectors include transportation, electricity, natural gas, and industry. Projected 2020 business-as-usual emissions are estimated at 512 $MTCO_2e$; preliminary 2020 emissions limit under cap-and-trade program are estimated at 365 $MTCO_2e$ (29 percent reduction).
SPM-2: California Light-Duty Vehicle GHG Standards	Implement adopted Pavley standards and planned second phase of the program. AB 32 states that if the Pavley standards (AB 1493) do not remain in effect, CARB shall implement equivalent or greater alternative regulations to control mobile sources.

Scoping Plan Measure	Description
SPM-3: Energy Efficiency	Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts. The Proposed Scoping Plan considers green building standards as a framework to achieve reductions in other sectors, such as electricity.
SPM-4: Renewables Portfolio Standard	Achieve 33 percent Renewables Portfolio Standard by both investor-owned and publicly owned utilities.
SPM-5: Low Carbon Fuel Standard	Develop and adopt the Low Carbon Fuel Standard (LCFS). CARB identified the LCFS as a Discrete Early Action item and is developing a regulation for Board consideration in late 2008. In January 2007, Governor Schwarzenegger issued Executive Order S-1-07, which called for the reduction of the carbon intensity of California's transportation fuels by at least 10 percent by 2020.
SPM-6: Regional Transportation-Related Greenhouse Gas Targets	Develop regional greenhouse gas emissions reduction targets for passenger vehicles. SB 375 requires CARB to develop, in consultation with metropolitan planning organizations (MPOs), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010. SB 375 requires MPOs to prepare a sustainable communities strategy to reach the regional target provided by CARB.
SPM-7: Vehicle Efficiency Measures	Implement light-duty vehicle efficiency measures. CARB is pursuing fuel-efficient tire standards and measures to ensure properly inflated tires during vehicle servicing.
SPM-8: Goods Movement	Implement adopted regulations for port drayage trucks and the use of shore power for ships at berth. Improve efficiency in goods movement operations.
SPM-9: Million Solar Roofs Program	Install 3,000 MW of solar-electric capacity under California's existing solar programs.
SPM-10: Heavy/Medium-Duty Vehicles	Adopt heavy- and medium-duty vehicle and engine measures. Measures targeting aerodynamic efficiency, vehicle hybridization, and engine efficiency are recommended.
SPM-11: Industrial Emissions	Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
SPM-12: High Speed Rail	Support implementation of a high-speed rail (HSR) system. This measure supports implementation of plans to construct and operate a HSR system between Northern and Southern California serving major metropolitan centers.
SPM-13: Green Building Strategy	Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
SPM-14: High GWP Gases	Adopt measures to reduce high global warming potential gases. The Proposed Scoping Plan contains 6 measures to reduce high GWP gases from mobile sources, consumer products, stationary sources, and semiconductor manufacturing.

Scoping Plan Measure	Description
SPM-15: Recycling and Waste	Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.
SPM-16: Sustainable Forests	Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The federal government and California's Board of Forestry and Fire Protection has the regulatory authority to implement the Forest Practice Act to provide for sustainable management practices. This measure is expected to play a greater role in the 2050 goals.
SPM-17: Water	Continue efficiency programs and use cleaner energy sources to move water. California will also establish a public goods charge for funding investments in water efficiency that will lead to as yet undetermined reductions in greenhouse gases.
SPM-18: Agriculture	In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020. Increase efficiency and encourage use of agricultural biomass for sustainable energy production. CARB has begun research on nitrogen fertilizers and will explore opportunities for emission reductions.

Source: California Air Resources Board, Climate Change Proposed Scoping Plan, (2008).

5.4.2.~~3~~6.3.4 Senate Bill 1368

~~Governor Schwarzenegger, just two days after signing AB 32, reiterated California's commitment to reducing GHGs by signing~~ Senate Bill 1368 (SB 1368, Perata) was signed into law two days after AB 32. SB 1368 requires the CEC and the California Public Utilities Commission (CPUC) to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. The CEC ~~must~~ adopted its ~~the~~ standards ~~on~~ on May 23, 2007 and the CPUC adopted its standard on January 25,007~~or before June 30, 2007~~. SB 1368 includes measures that protect energy customers from financial risks by allowing new capital investments in power plants with GHG emissions that are as low as or lower than new combined-cycle natural gas plants, requiring imported electricity from out-of-state to meet GHG performance standards in California, and requiring that the standards be developed and adopted in a public process.[66] ~~These standards must be consistent with the standards adopted by the Public Utilities Commission. This effort will help to protect energy customers from financial risks associated with investments in carbon intensive generation by allowing new capital investments in power plants whose GHG emissions are as low or lower than new combined-cycle natural gas plants, by requiring imported electricity to meet GHG performance standards in California and requiring that the standards be developed and adopted in a public process.~~

66 The adopted SB 1368 regulations are available on the California Energy Commission's website at: http://www.energy.ca.gov/emission_standards/regulations/index.html.

5.4.2.~~3~~6.3.5 Executive Order S-1-07

On January 18, 2007, California ~~further solidified its dedication to reducing GHGs by s~~et~~ting~~ a new Low Carbon Fuel Standard (LCFS) for transportation fuels sold within the state. Executive Order S-1-07 sets a declining standard for GHG emissions measured in CO_2-equivalent gram per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The LCFS will apply to refiners, blenders, producers, and importers of transportation fuels and will use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods. CARB identified the LCFS as an early action item under AB 32 and adopted the regulation on April 23, 2009. ~~the final regulation will be adopted and implemented by 2010.~~The Executive Order requires the Secretary of the CalEPA to coordinate with actions of the California Energy Commission (CEC), CARB, the University of California, and other agencies to develop a protocol to measure the "life cycle carbon intensity" of transportation fuels. CARB is anticipated to complete its review of the LCFS protocols no later than June 2007 and implement the regulatory process for the new standard by December 2008.

5.4.2.~~3~~6.3.6 S~~enate B~~ill 97

In August 2007, ~~as part of the legislation accompanying the state budget negotiations, t~~he legislature enacted SB 97 (Dutton), which directs the Governor's Office of Planning and Research (OPR) to develop guidelines under ~~California Environmental Quality Act (~~CEQA~~)~~ for the mitigation of greenhouse gas emissions. ~~OPR is to develop proposed guidelines by July 1, 2009, and t~~The Resources Agency is directed to adopt the guidelines by January 1, 2010. OPR submitted its *Proposed Draft CEQA Guideline Amendments for Greenhouse Gas Emissions* to the Secretary for Natural Resources on April 13, 2009. The Natural Resources Agency will conduct formal rulemaking in 2009. The proposed guideline amendments do not identify thresholds of significance or specific mitigation measures. Rather, the Guideline amendments are consistent with the existing CEQA framework allowing lead agencies discretion in making determinations based on substantial evidence. OPR has requested that CARB recommend a statewide method for setting thresholds of significance that lead agencies may adopt.~~On June 19, 2008, OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities, should be identified and estimated. The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures that are necessary to reduce GHG emissions to a less than significant level. The advisory did not recommend a specific threshold of significance—either quantitative or qualitative—leaving this to the lead agency's judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable.~~

5.4.2.6.3.7 Senate Bill 375

The California Legislature passed SB 375 (Steinberg) on September 1, 2008, which requires CARB to set regional GHG reduction targets after consultation with local governments. The target must then be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy. SB 375 also requires each region's Regional Housing Needs Assessment (RHNA) to be adjusted based on the Sustainable Communities Strategy in its RTP. Additionally, SB 375 reforms the environmental review process to create incentives to implement the strategy, especially transit priority projects. The Governor signed SB 375 into law on September 30, 2008. CARB is not expected to issue regional GHG reduction targets to local governments until 2010.

5.4.2.6.3.8 California Climate Action Registry

The California Climate Action Registry (CCAR) is a private non-profit organization formed by the State of California and serves as a voluntary GHG registry to protect and promote early actions to reduce GHG emissions by organizations. The CCAR was formally established by law through SB 1771 (Sher) and SB 527 (Sher). The CCAR began with 23 Charter Members and currently has over 300 corporations, universities, cities and counties, government agencies and environment organizations voluntarily measuring, monitoring, and publicly reporting their GHG emissions using the CCAR protocols. The CCAR has published a General Reporting Protocol, as well as project- and industry-specific protocols for landfill activities, livestock activities, the cement sector, the power/utility sector, and the forest sector. The protocols provide the principles, approach, methodology, and procedures required for participation in the CCAR.

5.4.2.6.3.9 CARB Draft GHG Significance Thresholds

On October 24, 2008, CARB staff released its *Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*, which is a preliminary staff draft proposal for determining whether the emissions related to proposed new projects are significant impacts under CEQA. While the proposal is focused on helping lead agencies determine under which conditions a project may be found exempt from the preparation of an EIR, the proposal also provides a guide for establishing significance thresholds for projects for which EIRs would be prepared regardless of the project's climate change impact. According to this proposal, the threshold for determining whether a project's emissions are significant is not zero emissions, but must be a stringent performance-based threshold to meet the requirements of AB 32. If the project meets certain specific yet to be developed performance standards for several categories of emissions, including construction emissions, building

energy use, water use, solid waste, and transportation ***and*** the project emits no more than a certain to be determined amount of metric tons of carbon equivalents per year, the project's impact would not be significant. According to CARB, California Energy Commission Tier II building energy use standards are proposed to be used, which generally require a reduction in energy usage of 30 percent beyond Title 24 building code requirements. CARB has also proposed a 7,000 metric ton carbon dioxide equivalent ($MTCO_2e$) threshold for industrial projects, but has not yet proposed thresholds for residential and commercial projects. The annual threshold does not include emissions associated with construction- and transportation-related activities.

5.4.3 ENVIRONMENTAL IMPACTS

5.4.3.1 Site-Specific Emissions

The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site is currently developed with 136 apartment units and 198 boat spaces (Parcel 10R) and a surface parking lot (Parcel FF). Parcel 9U is an undeveloped vacant lot. All developed land uses would be removed in order to construct the proposed project.

Under existing conditions, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site generates the following air emissions summarized in **Table 5.4-89, Existing Project Site Air Emissions**.

Table 5.4-98
Existing Project Site Air Emissions

	Emissions in Pounds per Day					
Emissions Source	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summertime Emissions[1]						
Operational (Mobile) Sources	132.77	13.67	13.93	0.10	16.41	3.20
Area Sources	4.01	7.88	1.37	0.00	0.01	0.01
Summertime Emission Totals:	136.78	21.55	15.30	0.10	16.42	3.21
Wintertime Emissions[2]						
Operational (Mobile) Sources	129.37	13.59	16.91	0.08	16.41	3.20
Area Sources	0.57	7.59	1.33	0.00	0.00	0.00
Wintertime Emission Totals:	129.94	21.18	18.24	0.08	16.41	3.20

Source: Impact Sciences, Inc. Emissions calculations are provided in ***Appendix 5.4****.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] *"Summertime Emissions" are representative of worst-case conditions that may occur during O_3 season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).*

In addition, the existing sources generated GHG emissions, which were quantified using the methods described in **subsection 5.4.3.4.1.7**. Direct emissions of GHG due to fuel combustion in motor vehicles and building heating systems are associated with the existing uses. In addition, indirect GHG emissions are associated with the electrical demand, as well as with the electrical demand resulting from the provision of water to the existing uses, electrical demand and process emissions due to wastewater treatment, and decomposition of solid waste generated by the existing uses. The existing GHG emissions are summarized in **Table 5.4-10~~9~~, Existing Operational Greenhouse Gas Emissions**.

Table 5.4-10~~9~~
Existing Operational Greenhouse Gas Emissions

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Direct GHG Emissions	
Operational (Mobile) Sources	1,651
Area Sources	284
Total Direct GHG Emissions	1,935
Indirect GHG Emissions	
Electrical Generation	380
Water Supply	8
Wastewater Treatment	20
Solid Waste	16
Total Indirect GHG Emissions	424
Existing GHG Emissions	2,359

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

5.4.3.2 Project Improvements

Implementation of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in the development of 526 residential dwelling units, a 19-story building with 288 hotel and timeshare suites with an assortment of accessory patron- and visitor- serving uses, 174 private and between 7 and 11 public/transient boat spaces and a restored public wetland and upland park area. There are 136 existing apartments and 198 boat spaces presently on site. Therefore, completion of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in a net increase of 390 apartment units, 288 hotel and timeshare suites, a net decrease of up to 17 boat spaces, a 0.47-acre public wetland and 0.99-acre upland park area.

The project would include the following sewer improvements to serve the new development on Parcel 10R: (a) the abandonment of approximately 650 linear feet of existing 10-inch sewer main and 240 linear

feet of an existing 8-inch line within the boundaries of Parcel 10R; (b) construction of approximately 500 linear feet within Marquesas Way and 160 linear feet within Via Marina of new 10-inch sewer to service the Parcel 10R development; and (c) construction of an additional 180 linear feet of new 10-inch line and approximately 710 linear of a new 8-inch sewer line within existing site boundaries of Parcel 10R. The emissions associated with this new sewer line are analyzed as part of the analysis of the Parcel 10R development that the new line would serve.

Parcel 10R would also include the installation of approximately 500 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances. Parcel FF would include the installation of approximately 170 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances. Installation of approximately 570 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances may occur during the construction of the Woodfin Suite Hotel and Timeshare Resort. Although this is not required for the Parcel 9U (North) project, the air quality analysis is included here in the event that installation occurs during construction on Parcel 9U.

5.4.3.3 Thresholds of Significance

New and modified projects will often affect regional air quality, both directly and indirectly. When determining the extent of a project's environmental impact and the significance of such impact, the project should be compared with established thresholds of significance. The following discusses the thresholds set forth by the SCAQMD for both construction and operational emissions that would be generated by the project.

5.4.3.3.1 Construction Emission Thresholds

The SCAQMD recommends that projects with construction-related emissions that exceed any of the following emissions thresholds should be considered significant:

- 550 pounds per day of CO;
- 75 pounds per day of VOC;
- 100 pounds per day of NO_X;
- 150 pounds per day of SO_X;
- 150 pounds per day of PM_{10}; and
- 55 pounds per day of $PM_{2.5}$.

In addition to the above listed emission-based thresholds, the SCAQMD also recommends that the potential impacts on ambient air concentrations due to construction emissions be evaluated. The SCAQMD has adopted localized significance thresholds for short-term concentrations of NO_2, CO, PM_{10}, and $PM_{2.5}$. The methodology to evaluate the localized impacts is presented in the SCAQMD's *Final Localized Significance Threshold Methodology* (LST Methodology)[67]. This evaluation requires that anticipated ambient air concentrations, determined using a computer-based air quality dispersion model, be compared to localized significance thresholds for PM_{10}, $PM_{2.5}$, NO_2 and CO.[68] The LST Methodology is based on short-term standards for PM_{10}, $PM_{2.5}$, NO_2, and CO and does not require an evaluation of long-term concentrations or for other pollutants, such as SO_2 and lead. The Basin is well under the standards for SO_2 and lead and emissions of both pollutants from development of the project would result in only trivial emissions. Nonetheless, PM_{10}, $PM_{2.5}$, and NO2 annual impacts are assessed utilizing methodology similar to that for the LST analysis.

The SCAQMD's concentration-based PM_{10} threshold from its ~~Localized Significance Threshold Methodology (~~LST Methodology~~)~~[69] is a 24-hour average concentration of 10.4 micrograms per cubic meter ($\mu g/m^3$) based on compliance with Rule 403 (Fugitive Dust). The threshold for $PM_{2.5}$, which is also 10.4 $\mu g/m^3$, is intended to constrain emissions so as to aid in progress toward attainment of the ambient air quality standards.[70] The thresholds for NO_2 and CO are based on the maximum concentrations that occurred during the last three years (2005 through 2007) as shown in **Table 5.4-1~~0~~1**, **Localized Significance Thresholds for SRA 2**. These thresholds represent the allowable increase in NO_2 and CO concentrations above background levels in the vicinity of the project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. The localized significance thresholds for SRA 2 (Northwest Coastal Los Angeles) along with the relevant CAAQS or NAAQS are shown in **Table 5.4-10**.

---

67 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, July 2008.

68 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, July~~June~~ 2008. This methodology includes "lookup tables" that can be used to determine the maximum allowable emissions that would satisfy the localized significance criteria; however, these tables may be used only for project sites less than 5 acres in overall area.

69 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, July~~June~~ 2008.

70 South Coast Air Quality Management District, *Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds*, October 2006.

Table 5.4-1~~0~~1
Localized Significance Thresholds for SRA 2

Pollutant	Averaging Period	CAAQS/NAAQS[1] µg/m³	CAAQS/NAAQS[1] ppm	Peak Conc. in ppm	LST Criteria[2] µg/m³	LST Criteria[2] ppm
Respirable Particulate Matter (PM_{10})	24 hours	50	NA	NA	10.4	NA
Fine Particulate Matter ($PM_{2.5}$)	24 hours	35	NA	NA	10.4	NA
Nitrogen Dioxide (NO_2)	1 hour	~~338~~339	0.18	0.08	188	0.10
Carbon Monoxide (CO)	1 hour	23,000	20	3	19,454	17
Carbon Monoxide (CO)	8 hours	10,000	9.0	2.1	7,896	6.9

Source: *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *June 2008.*

[1] *California has not adopted a 24-hour AAQS for $PM_{2.5}$; the 24-hour $PM_{2.5}$ AAQS shown is the national standard. All other standards are the California standards.*

[2] *LST Criteria for NO_2 and CO are the difference between CAAQS and the Peak Concentrations during the last three years (see **Table 5.4-2**).*

Although the LST Methodology does not require an evaluation of long-term concentrations for NO_2, PM_{10} and $PM_{2.5}$, CARB has established annual ambient air quality standards for these criteria pollutants. , Annual concentration impacts of NO_2, PM_{10}, and $PM_{2.5}$ are assessed using the same methodology used in the LST analysis. **Table 5.4-12, Annual Concentration Thresholds for SRA 2**, lists the thresholds for the annual impacts from project construction. As noted in the table, the area already exceeds the PM_{10} and $PM_{2.5}$ state annual standards.

Table 5.4-12
Annual Concentration Thresholds for SRA 2

Pollutant	Averaging Period	CAAQS µg/m³	CAAQS ppm	Peak Conc. µg/m³	Annual Criteria[1] µg/m³	Annual Criteria[1] ppm
Respirable Particulate Matter (PM_{10})	Annual	20	NA	27.7	4.2	NA
Fine Particulate Matter ($PM_{2.5}$)	Annual	12	NA	18.1	4.2	NA
Nitrogen Dioxide (NO_2)	Annual	57	0.030	38	19	0.010

[1] *The annual Criteria for NO_2 is the difference between CAAQS and the Peak Concentrations during the last three years (see Table 5.4-2). Because the region already exceeds the standard, the annual criteria for PM_{10} was determined by multiplying the 24-hour threshold by the ratio of the 24-hour and annual state standards (20/50), This result in a criteria of 4.2 µg/m³. The state does not have a 24-hour PM2.5 standard; therefore, the PM2.5 criteria was set at the same threshold as PM_{10}, similar to the LST thresholds.*

5.4.3.3.2 Operational Emission Thresholds

The SCAQMD has recommended two types of air pollution thresholds to assist lead agencies in determining whether or not the operational phase of a project's development would be significant. These are identified in the following discussion under **Emission Significance Thresholds** and **Other Indicators of Potential Air Quality Impacts**. The SCAQMD recommends that a project's impacts be considered significant if either of these thresholds are exceeded.

5.4.3.3.2.1 Emission Significance Thresholds

The SCAQMD has established these thresholds, in part based on Section 182(e) of the Federal CAA, which identifies 10 tons a year of VOC or NO_X as the significance threshold for stationary sources of emissions in extreme nonattainment areas for O_3.[71] As discussed earlier, VOC and NO_X undergo photochemical reactions in sunlight to form O_3. The basin was an extreme nonattainment area for O_3 at the time the significance thresholds were established. This emission threshold has been converted to a pound-per-day threshold for the operational phase of a project. Thresholds for other emissions have been identified based on regulatory limits set by the SCAQMD. Because they are converted from a CAA threshold, the SCAQMD believes that these thresholds are based on scientific and factual data.[72] Therefore, the SCAQMD recommends that the following thresholds be used by lead agencies in making a determination of operation-related project significance:

- 550 pounds per day of CO;
- 55 pounds per day of VOC;
- 55 pounds per day of NO_X;
- 150 pounds per day of SO_X;
- 150 pounds per day of PM_{10}; and
- 55 pounds per day of $PM_{2.5}$.

5.4.3.3.2.2 Other Indicators of Potential Air Quality Impacts

The SCAQMD recommends that projects meeting any of the following criteria also be considered to have significant air quality impacts:

---

71 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 6-1.

72 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 6-1.

- The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

- The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

- The project could generate vehicle trips that cause a CO hotspot or project could be occupied by sensitive receptors that are exposed to a CO hotspot.

- The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

- The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety.

- The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list.

- The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401.

- The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in one million.

An evolving air quality issue is the impact of a project's greenhouse gas emissions on global climate. To date, no state or local air quality agencies have established numerical or qualitative thresholds for assessing this issue. Nonetheless, the project's contribution of greenhouse gases will be estimated to the extent feasible, and this issue will be evaluated.

The following discussion reviews the project's potential impacts relative to each of the recommended significance criteria identified above.

5.4.3.3.2.3 Wind Impacts

The certified Marina del Rey Land Use Plan restricts development of structures that would significantly impede wind access to the boats in Marina del Rey. Therefore, if the proposed project significantly affects wind patterns in the small-craft harbor to the disadvantage of boat traffic, it would result in a significant wind impact. This criterion will also be evaluated as a whole and for each project component.

5.4.3.4 Impact Analysis

The applicable thresholds of significance are listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts, if applicable.

5.4.3.4.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

5.4.3.4.1.1 Threshold: The project will generate air pollutant quantities in excess of established SCAQMD emissions thresholds.

Analysis: Development of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would generate air emissions from a wide variety of stationary, area, and mobile sources. Fugitive dust (PM_{10} and $PM_{2.5}$) would be generated by on-site construction activities. Once the proposed uses are occupied, emissions would be generated by stationary and area sources such as water and space heaters, landscape maintenance equipment and consumer products. Stationary and source emissions could also result from the operation of certain types of commercial business, such as restaurants, within the project site. Mobile source emissions would be generated by motor vehicle travel associated with construction activities and occupancy of the proposed development. An assessment of construction and operational emissions are presented below based on the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook*.

Demolition, Excavation/Grading and Construction Impacts: During development of the proposed project, criteria pollutant emissions would be generated due to heavy-duty construction equipment, grading activities, construction-worker trips, and construction material vendor trips. In addition, VOC emissions would consist of evaporative emissions from architectural coatings, asphalt paving, and building materials (i.e., paints, solvents, roofing materials, etc.). This analysis assumed that only readily available surface-coating materials meeting all current SCAQMD rules would be used to paint the surfaces of the proposed structures (materials not meeting SCAQMD rules are not available for sale or use within the basin). As discussed below, the emissions associated with demolition, excavation and grading, and construction of all the project components would exceed the SCAQMD emission thresholds of significance for NO_X, as well as cause localized significant ambient air quality impacts for PM_{10}, $PM_{2.5}$, and NO_2. If only one of these project components were constructed at a time, the emissions would still exceed these significance thresholds, and the construction phase would cause significant short-term air quality impacts. **Table 5.4-13~~1~~, Estimated Unmitigated Demolition, Excavation/Grading, and Construction Emissions – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project**, identifies maximum daily emissions occurring in a construction year for each development parcel based on information provided by the project applicants and default construction

values generated by URBEMIS2007 Version 9.2.4. URBEMIS2007 is a land use and transportation model that estimates construction equipment and emissions for development projects. Emissions associated with the sewer line -and water line construction are included in the analysis. It should be noted that the maximum daily emissions from each parcel would not necessarily overlap and **Table 5.4-113** provides a conservative estimate of project-related construction emissions.

Table 5.4-131
Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

	Emissions in Pounds per Day					
Construction Year/Parcel	**CO**	**VOC**	**NOx**	**SOx**	**PM10**	**PM2.5**
20092011						
Parcel 10R	76.9544.71	12.259.38	90.9588.71	0.065	27.7141.73	5.0811.96
Parcel FF	33.47	7.05	58.92	0.02	11.62	4.85
Woodfin Suite Hotel	65.4871.45	13.2420.01	100.45113.21	0.012	0.0013.81	5.335.98
Wetland Park	9.88	2.22	18.66	0.00	0.00	0.86
Maximum 2009-2011 Emissions	185.78116.16	34.7629.39	268.98201.92	0.079	39.3355.54	16.1217.94
20102012						
Parcel 10R	63.1780.78	14.5314.95	68.97112.68	0.060.07	4.0547.72	3.5813.81
Parcel FF	32.847.11	6.591.51	54.6111.75	0.020.00	11.921.51	4.570.78
Woodfin Suite Hotel	51.8556.83	25.5919.40	79.0490.16	0.010.01	4.104.76	3.734.34
Wetland Park	15.1616.21	2.943.36	19.5822.39	0.000.01	1.451.65	1.321.50
Maximum 2010-2012 Emissions	163.02160.93	49.6539.22	222.20236.98	0.090.09	21.5255.64	13.2020.43
20112013						
Parcel 10R	60.2266.40	13.9014.15	63.2875.27	0.06	3.634.37	3.203.87
Parcel FF	22.7834.26	6.116.84	31.9852.85	0.02	1.5313.69	1.374.39
Maximum 2011-2013 Emissions	83.00100.66	20.0120.99	95.26128.12	0.08	5.1618.06	4.578.26
2012						
Parcel 10R	63.15	13.58	68.97	0.06	4.05	3.58
Parcel FF	23.82	6.61	34.74	0.02	1.71	1.53
Maximum 2012 Emissions	86.97	20.19	103.71	0.08	5.76	5.11
Maximum Emissions in Any Year	185.78160.93	49.6539.22	268.98236.98	0.090.09	39.3355.64	16.1220.43
SCAQMD Thresholds	550	75	100	150	150	55
Exceeds Thresholds?	NO	NO	**YES**	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Note: Emissions for each parcel represent the maximum daily emissions occurring in the particular construction year.
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

As shown, the recommended threshold of significance for NO_X would be exceeded during 2011 and 2012~~each year of construction activities~~ primarily due to the operation of heavy-duty construction equipment. ~~Nevertheless,~~ O~~o~~ther construction-related sources such as construction worker trips and vendor trips would also generate NO_X emissions. As shown in **Table 5.4-11~~3~~**, ~~no other~~mass emission significance thresholds for other criteria pollutants are not ~~is~~ anticipated to be exceeded during construction of the proposed project; however, construction of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort would cause significant impacts for NO_X-.

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: An analysis of the impacts of the emissions resulting from the concurrent construction of the Neptune Marina Parcel 10R, the Neptune Marina Parcel FF, Woodfin Suite Hotel and Timeshare Resort Project, and Restored Wetland and Upland Buffer on ambient concentrations of PM_{10}, $PM_{2.5}$, NO_2 and CO was conducted. This analysis determined the ambient air quality impacts due to construction activities on the day with the highest estimated daily mass emission rates. For this analysis, a more detailed evaluation of the construction activities (e.g., demolition, grading, building construction, and/or asphalt paving) that would occur simultaneously was performed. The methodology and results are described in detail in **Appendix 5.4**. The results of the dispersion modeling analysis are compared to the localized significance thresholds in **Table 5.4-12~~4~~, Localized Significance Thresholds Analysis – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project**. As shown, the construction of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort would cause localized significant impacts for PM_{10}, $PM_{2.5}$, and NO_2.

Table 5.4-1~~4~~2
Localized Significance Thresholds Analysis
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

Pollutant	Averaging Period	Modeling Results µg/m3	Modeling Results ppm	LST Criteria µg/m3	LST Criteria ppm	Exceeds Threshold?
Respirable Particulate Matter (PM_{10})	24 hours	34.01~~75.8~~	NA	10.4	NA	**YES**
Respirable Particulate Matter (PM_{10})	Annual	2.73	NA	4.2	NA	NO
Fine Particulate Matter ($PM_{2.5}$)	24 hours	16.33~~26.4~~	NA	10.4	NA	**YES**
Fine Particulate Matter ($PM_{2.5}$)	Annual	1.40	NA	4.2	NA	NO
Nitrogen Dioxide (NO_2)	1 hour	228~~351~~	0.192	188	0.10	**YES**
Nitrogen Dioxide (NO_2)	Annual	2.09	0.00	19	0.01	NO
Carbon Monoxide (CO)	1 hour	1,712~~6,373~~	1.50~~5.6~~	19,454	17	NO
Carbon Monoxide (CO)	8 hours	451~~3,398~~	0.39~~3.0~~	7,896	6.9	NO

Source: *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *June 2008.*

[1] *LST Criteria for NO_2 and CO are the difference between CAAQS and the Peak Concentrations during the last three years (see* ***Table 5.4-2****).*

Project construction would involve the demolition and removal of existing structures located on the Parcel 10R site. Demolition of the existing structures would be a potential hazard if the buildings contained asbestos fibers. The existing buildings were constructed in the 1960s. Typically, buildings built before 1978 are considered to have a higher probability of containing asbestos fibers; however, under SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities), all buildings must be properly inspected for the presence of asbestos. Demolition of all existing structures must comply with the precautionary requirements specified in Rule 1403. All structures must be stabilized and removed in accordance with applicable regulations including Rule 1403. This rule is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the US EPA NESHAP and provides additional requirements to cover non-NESHAP areas. The rule requires that the SCAQMD be notified before any demolition or renovation activity occurs. This notification includes a description of the structures and methods utilized to determine the presence or absence of asbestos. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity. As part of project implementation, the project applicant must comply with the requirements of Rule 1403. Project compliance with Rule 1403 would ensure that asbestos-containing materials would be removed and disposed of appropriately. With adherence to this applicable regulation, the potential for significant adverse health impacts would be reduced to less than significant level.

Operational Impacts; Daily Emissions: Operational emissions would be generated by area, mobile, and possibly stationary, sources as a result of normal day-to-day activities at the project site. Although the development of the 1.46-acre Restored Wetland and Upland Buffer and between 7 and 11 public/transient boat spaces would only generate approximately 50 vehicle trips per day, the operational emissions generated by these components were included in this analysis as a conservative estimate. Project area and mobile source emissions from Neptune Marina Parcel 10R, the Neptune Marina Parcel FF, Woodfin Suite Hotel and Timeshare Resort Project, and the Restored Wetland and Upland Buffer as estimated using URBEMIS2007 for the operational year 2013[73] (project buildout year) are shown in **Table 5.4-13~~5~~, Estimated Operational Emissions without Mitigation – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project**. The values shown are the total of those values in **Table 5.4-22~~0~~, Estimated Operational Emissions without Mitigation – Neptune Marina Parcel 10R, Table 5.4-26~~8~~, Estimated Operational Emissions without Mitigation – Neptune Marina Parcel FF**, **Table 5.4-32~~4~~, Estimated Operational Emissions without Mitigation – Woodfin Suite Hotel and Timeshare Resort**, and **Table 5.4-38~~40~~, Estimated Operational Emissions Without Mitigation –**

73 Although some components of the proposed project would be completed prior to 2013 (e.g., Woodfin Suite Hotel and Timeshare Resort would be built out by 2011), all components of the proposed project would be fully operational in 2013.

Restored Wetland and Upland Buffer. Due to the demolition of the existing apartments on the site on which the Neptune Marina Parcel 10R would be constructed, the emissions associated with the existing land uses and the net emissions are also shown in **Table 5.4-13~~5~~** and **Table 5.4-20~~2~~**.

Table 5.4-13~~5~~
Estimated Operational Emissions without Mitigation
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

	Emissions in Pounds per Day					
Emissions Source	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summertime Emissions[1]						
Operational (Mobile) Sources	326.64	30.09	35.67	0.42	69.00	13.40
Area Sources	11.88	29.89	7.56	0.00	0.05	0.05
Summertime Emission Totals:	338.52	59.98	43.23	0.42	69.05	13.45
Emissions Due To Existing Land Uses:	136.78	21.55	15.30	0.10	16.42	3.21
Net Increase In Emissions	201.74	38.43	27.93	0.32	52.63	10.24
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO
Wintertime Emissions[2]						
Operational (Mobile) Sources	310.39	30.00	42.99	0.34	69.00	13.40
Area Sources	4.14	29.28	7.46	0.00	0.01	0.01
Wintertime Emission Totals:	314.53	59.28	50.45	0.34	69.01	13.41
Emissions Due To Existing Land Uses:	129.94	21.18	18.24	0.08	16.41	3.20
Net Emissions	184.59	38.10	32.21	0.26	52.60	10.21
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] *"Summertime Emissions" are representative of worst-case conditions that may occur during the O_3 season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).*

As shown in **Table 5.4-15~~3~~**, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project at full buildout and operation would not generate a net increase in emissions that would exceed SCAQMD recommended thresholds for any criteria pollutants. Therefore, the operational emissions of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would not result in a significant air quality impact.

Operational Impacts; Wind: Rowan Williams Davies & Irwin, Inc. (RWDI) prepared a wind study for the proposed projects to assess the project's development and/or building placement on wind patterns within the marina, loss of surface winds used by birds and sailboats and general air circulation (this report is included in **Appendix 5.4** in its entirety). The study concluded:

> *From the results of this wind study, it has been concluded that the proposed Neptune Marina will produce similar wind conditions over a majority of the areas of Marina del Rey. There will be localized areas of altered wind directions and speeds at the west end of Basins B and C. The change in wind conditions noted at the west end of Basins B and C is assumed not to be significant as boats would be under power at this location in the marina. The overall wind conditions predicted with the proposed and expected future developments are similar to those presently experienced in and around the marina and, therefore, the general air circulation patterns and the use of surface winds by birds will not be affected.*

Operational Impacts; Additional Indicators: As previously discussed, the SCAQMD lists criteria indicating when a project may create potential air quality impacts. These criteria are listed below along with an analysis of whether or not the project meets any of them. If a project meets any one of the criteria, project air quality impacts would be significant relative to that criterion.

5.4.3.4.1.2 Threshold: The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

Analysis: SCAQMD's *CEQA Air Quality Handbook* indicates that an air quality modeling analysis would need to be performed to identify the project's impact on ambient air quality.[74] In order for a project to be found consistent with applicable AQMP, the analysis would have to demonstrate that the project's emissions would not increase the frequency or the severity of existing air quality violations, or contribute to a new violation.[75] The CO analysis for traffic emissions described below assesses the potential ambient air quality impacts with respect to this pollutant. Furthermore, URBEMIS2007 was used to calculate project emissions for comparison with thresholds addressing regional significance. The estimated operational emissions due to proposed project are found to be less than significant. Hence, the project is not expected to violate ambient air quality standards or contribute to an existing or projected air quality violation.

---

74 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-3.

75 South Coast Air Quality Management District. *CEQA Air Quality Handbook*. p. 12-3.

5.4.3.4.1.3 Threshold: The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

Analysis: As discussed earlier in this analysis, the 2007 AQMP is designed to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to achieve the federal 8-hour ozone standard by 2021[76] and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP do not interfere with attainment and do not contribute to the exceedance of an existing air quality violation because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds. The following analysis discusses the project's consistency with the AQMP.

Projects that are consistent with the projections of population forecasts identified in the Growth Management Chapter of the *Regional Comprehensive Plan and Guide* (RCPG) are considered consistent with the AQMP growth projections. This is because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP.

As discussed in **Section 5.16, Population and Housing**, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project is considered to be consistent with the future population and employment figures projected for the site's census tract. The project would not increase population over that which has been planned for the area, would be consistent with the AQMP forecasts for this area, would be considered consistent with the air quality-related regional plans and should not jeopardize attainment of state and federal ambient air quality standards in the basin.

Another measurement tool in determining AQMP consistency is to determine how a project accommodates the expected increase in population and employment. Generally, if a project is planned in a way that results in the minimization of vehicle miles traveled (VMT) both within the project and in the community in which it is located and consequently the minimization of air pollutant emissions, that project is consistent with the AQMP.[77]

The nature of the project and its location within the Marina del Rey and surrounding urban areas with supporting commercial and office uses would minimize the need for or distance of some automobile

---

76 The 2007 AQMP has determined that the basin will still exceed the federal 8-hour ozone standard in 2021 even with implementation of 2007 AQMP control measures.

77 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-5.

trips, thereby, reducing automotive emissions from such trips. This type of development is consistent with the goals of the AQMP for reducing motor vehicle emissions. In addition, the project site is located in proximity to existing job centers that provide employment opportunities to many Marina del Rey residents. With these job centers, many local residents do not have to commute to distant employment centers. The project site is also linked to various employment, shopping and recreation areas throughout the Los Angeles Basin through the local transit system. Use of these facilities could reduce the need for some motor vehicle trips. As a result of reduced commutes and other vehicle trips, VMT and, consequently, air pollutant emissions could be further reduced.

5.4.3.4.1.4 Threshold: The project could generate vehicle trips that cause a CO hotspot or the project could be occupied by sensitive receptors that are exposed to a CO hotspot.

Analysis: Motor vehicles are the primary source of pollutants within the project vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient CO concentrations exceed state and/or federal standards are termed CO "hotspots." There are no notable stationary sources generating CO emissions in the local area; thus, local area CO emissions result primarily from vehicles traveling along local roadways.

Section 9.4 of the *CEQA Air Quality Handbook* identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. Sensitive receptors are populations that are more susceptible to the effects of air pollution than is the population at large.[78] The SCAQMD identifies the following as sensitive receptors: long-term healthcare facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, childcare centers and athletic facilities.[79]

This impact analysis evaluates ten intersections located in the project study area for the presence of existing CO hotspots. These intersections, identified by the project traffic engineer as those that are affected adversely by project-related traffic, include the following:

1. Admiralty Way/Mindanao Way
2. Lincoln Boulevard/Fiji Way
3. Lincoln Boulevard/Marina Expressway (SR-90)
4. Lincoln Boulevard/Mindanao Way

---

78 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 5-1.

79 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 5-7.

5. Lincoln Boulevard/Washington Boulevard
6. Marina Expressway (SR-90) eastbound/Mindanao Way
7. Palawan Way/Admiralty Way
8. Palawan Way/Washington Boulevard
9. Via Marina/Admiralty Way
10. Via Marina/Washington Boulevard

Maximum existing CO concentrations for project study intersections were calculated for peak hour traffic volumes at each of these intersections using CALINE4, a dispersion model for predicting CO concentrations near roadways. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening model developed by the Bay Area Air Quality Management District (BAAQMD). The simplified model is intended as a screening analysis that identifies a potential CO hotspot. If a hotspot is identified, the complete CALINE4 model is then utilized to precisely determine the CO concentrations predicted at the intersections in question. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway and 90 degrees to the secondary road, wind speed of less than 1 meter per second and extreme atmospheric stability) and provides a screening of maximum, worst-case, CO concentrations. The simplified approach is acceptable to the SCAQMD as long as it is used consistently with the *BAAQMD Guidelines*.[80]

The simplified CALINE4 screening procedure was used to predict future CO concentrations at 0 and 25 feet from the intersections in the study area for future traffic and the proposed project without the cumulative related projects. The CO concentrations shown on the following page in **Table 5.4-164**, **Carbon Monoxide Concentrations Future with Project Traffic (2013)**, are a result of ambient traffic volume growth in 2013 and traffic generated by the proposed project (i.e., Parcels 10R, FF, and Woodfin Suite Hotel and Timeshare Resort and Wetland Park). Ambient traffic volumes for the analysis year, 2013, were estimated by applying an annual traffic growth rate factor of 0.6 to existing traffic volumes.[81]

80 Personal communication with Steve Smith, Program Supervisor, South Coast Air Quality Management District, Diamond Bar, California, 12 May 2004.

81 Crain & Associates, *Traffic Analysis for a Proposed 526-Unit Residential Development, 288-Room Hotel/Timeshare Resort, and 1.46-Acre Public Park on Parcels 10R, FF and 9U in Marina del Rey* (Los Angeles, California: Crain & Associates, December 2007).

Table 5.4-1~~6~~4
Carbon Monoxide Concentrations
Future with Project Traffic (2013)
(parts per million)

Intersection	LOS	0 Feet		25 Feet	
		1-Hour[1]	8-Hour[2]	1-Hour[1]	8-Hour[2]
Admiralty Way & Mindanao Way	D	7.4	4.3	6.5	3.7
Lincoln Blvd. & Fiji Way	C	8.4	5.0	7.3	4.2
Lincoln Blvd. & Marina Expressway (SR-90)	C	7.8	4.6	6.8	3.9
Lincoln Blvd. & Mindanao Way	E	7.7	4.5	6.8	3.9
Lincoln Blvd. & Washington Blvd.	F	9.0	5.4	7.7	4.5
Marina Expressway (SR-90 EB) & Mindanao Way	C	6.5	3.6	5.9	3.3
Palawan Way & Admiralty Way	B	7.2	4.1	6.3	3.6
Palawan Way & Washington Blvd.	C	6.8	3.9	6.1	3.4
Via Marina & Admiralty Way	D	5.5	3.0	5.4	2.9
Via Marina & Washington Blvd.	D	7.1	4.1	6.2	3.5

Source: Impact Sciences, Inc. The CO concentration calculations are provided in ***Appendix 5.4****.*
Note: Not all intersections would operate at a level of service (LOS) that could generate a CO hotspot (i.e., D or worse). However, for consistency purposes all ten intersections that were adversely affected during the "Cumulative with Project" scenario were analyzed for a potential CO hotspot.
[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*
[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*

As shown, the state and federal 1- and 8-hour CO standards would not be exceeded at any of the modeled intersections at project buildout during future conditions with the contribution of project-related traffic. Therefore, CO hotspots are not predicted to occur near these intersections with the contribution of ambient growth in the area and the proposed project's traffic. The impact of the proposed project's traffic to these intersections would be considered less than significant.

As was done to assess CO concentrations with the future and proposed project traffic, the simplified CALINE4 screening procedure was also used to predict future CO concentrations at 0 and 25 feet from the intersections in the study area for cumulative related projects and the proposed project. If it can be demonstrated that no CO hotspots would occur even with all anticipated traffic, then the project itself would not result in exceedances of the CO standards. The results of the screening model for the project study area are shown in **Table 5.4-1~~7~~5, Carbon Monoxide Concentrations Cumulative with Project Traffic (2013)**. The values in this table reflect the traffic impact on ambient air quality from 41 related projects (i.e., cumulative projects), ambient growth in the area, and from the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project as predicted in the traffic

impact analysis for the project.[82] It should be noted that although ambient traffic growth is anticipated to account for all traffic increases in the area, traffic from related projects were also added for the purpose of a conservative analysis.[83] Project traffic volumes would diminish outside of the project study area, thereby reducing the potential for project-related CO hotspots outside the study area.

Table 5.4-1~~7~~5
Carbon Monoxide Concentrations
Cumulative with Project Traffic (2013)
(parts per million)

Intersection	LOS	0 Feet		25 Feet	
		1-Hour[1]	8-Hour[2]	1-Hour[1]	8-Hour[2]
Admiralty Way & Mindanao Way	F	7.8	4.6	6.7	3.8
Lincoln Blvd. & Fiji Way	E	8.9	5.4	7.6	4.4
Lincoln Blvd. & Marina Expressway (SR-90)	D	8.2	4.9	7.1	4.1
Lincoln Blvd. & Mindanao Way	F	8.1	4.8	7.1	4.1
Lincoln Blvd. & Washington Blvd.	F	9.5	5.8	8.0	4.7
Marina Expressway (SR-90 EB) & Mindanao Way	D	6.7	3.8	6.0	3.4
Palawan Way & Admiralty Way	D	7.5	4.4	6.5	3.7
Palawan Way & Washington Blvd.	E	7.1	4.1	6.3	3.5
Via Marina & Admiralty Way	E	5.5	3.0	5.4	2.9
Via Marina & Washington Blvd.	E	7.2	4.2	6.4	3.6

Source: Impact Sciences, Inc. The CO concentration calculations are provided in ***Appendix 5.4.***

[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*

[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*

As shown, the state and federal 1- and 8-hour CO standards would not be exceeded at any of the modeled intersections at project buildout with related projects' traffic and ambient traffic growth. Therefore, CO hotspots are not predicted to occur near these intersections in the future with the contribution of related projects, and the proposed project traffic-related CO at these intersections would not be considered significant. Furthermore, the proposed project would not expose any sensitive receptors to substantial CO concentrations.

It should be noted that the project would not be wholly responsible for all of the traffic at these intersections; rather, at most intersections, the project would contribute only a fraction of the traffic. The

82 Crain & Associates, *Traffic Analysis for a Proposed 526-Unit Residential Development, 288-Room Hotel/Timeshare Resort, and 1.46-Acre Public Park on Parcels 10R, FF and 9U in Marina del Rey* (Los Angeles, California: Crain & Associates, December 2007).

83 Crain & Associates, *Traffic Analysis for a Proposed 526-Unit Residential Development, 288-Room Hotel/Timeshare Resort, and 1.46-Acre Public Park on Parcels 10R, FF and 9U in Marina del Rey* (Los Angeles, California: Crain & Associates, December 2007).

remaining traffic would consist of existing (ambient) traffic, ambient growth in the area, and traffic from related projects that would be developed and on line by project buildout, all of which would contribute to the carbon monoxide concentrations at these intersections (see Table 8 of the project traffic study in **Appendix 5.7** for a listing of the projects that have been included in the project buildout year traffic modeling by Crain & Associates).

5.4.3.4.1.5 Threshold: The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

Analysis: Residential uses associated with the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project are not expected to be a source of odors. The adjacent land uses are such that the project residents would not be subjected to objectionable odors from any surrounding land use. Consequently, no significant impacts from such odors are anticipated.

5.4.3.4.1.6 Threshold: The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety;

Threshold: The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list;

Threshold: The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or

Threshold: The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million.

Analysis: Construction of the project would not result in an accidental release of hazardous materials on site because any lead-based paint and asbestos containing materials would be abated and disposed of in accordance with SCAQMD and other local and state regulations. Construction of the project would result in emissions of diesel particulate matter (DPM), which has been designated a toxic air contaminant (TAC) by CARB. Typically, cancer risk is assessed for long-term exposure durations (typically 70 years). Construction of the project would result in much shorter-term DPM emissions, however, and exposure would be for less than three years. According to the Office of Environmental Health Hazard Assessment

(OEHHA), high short-term exposures (i.e., less than a maximum theoretical project life of 70 years) are not necessarily equivalent to low longer-term exposures:[84]

> *[A]s the exposure duration decreases the uncertainties introduced by applying cancer potency factors derived from very long term studies increases. Short-term high exposures are not necessarily equivalent to longer-term lower exposures even when the total dose is the same. OEHHA therefore does not support the use of current cancer potency factor to evaluate cancer risk for exposures of less than 9 years.*

Construction of the project would result in maximum on-site DPM emissions of 12.75 pounds per day in 2011; 11.16 pounds per day in 2012 ; and 4.31 pounds per day in 2013. These emissions would occur at various locations throughout the entire project site. Because construction of the project would result in a maximum exposure duration of DPM for just under three years and that construction activities would take place at different locations throughout the project site, it is not expected that the total dose over three years to any single sensitive receptor would result in an exceedance of the SCAQMD maximum individual cancer risk of 10 in one million. Also, in accordance with OEHHA policy described above, any numerical evaluation of cancer risk from very short-term exposures (i.e., less than nine years) would introduce uncertainties into the assessment. Furthermore, the SCAQMD does not require a health risk assessment for short-term construction impacts. Therefore, because of the limited exposure duration and temporary nature of the DPM emissions, no significant impacts with respect to the criteria listed above would occur.

The proposed land uses of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project will not use hazardous materials or emit toxic air contaminants in appreciable quantities. Adjacent land uses would not subject project site residents, employees, or visitors to toxic air emissions. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.

5.4.3.4.1.7 Threshold: The project would generate emissions of greenhouse gases that could contribute to changes in global climate.

Analysis: As previously discussed, the primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. Accordingly, the construction and operation of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in direct emissions of these GHGs due to fuel combustion in motor vehicles, construction equipment, and building heating systems

84 Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, (2003) 8-4.

associated with the project. Building and motor vehicle air conditioning systems may use HFCs (and HCFCs and CFCs to the extent that they have not been completely phased out at later dates), which may result in emissions through leaks. The other primary GHGs (perfluorocarbons and sulfur hexafluoride) are associated with specific industrial sources and are not expected to be associated with the proposed project.

The direct GHG emissions associated with operation of the project and existing uses were estimated using URBEMIS2007 with the following adjustments to convert CO_2 emissions to GHG emissions on a carbon dioxide equivalent (CO_2E) basis:

- Motor vehicles: The annual CO_2 emissions associated with construction workers and project residents and users of the hotel and park multiplied by a factor based on the assumption that CO_2 represents 95 percent of the CO_2E emissions associated with passenger vehicles, which account for most of these project-related trips.[85]

- Area sources (natural gas combustion): The annual CO_2 emissions obtained from URBEMIS2007 for natural gas consumption for multifamily residences and the hotel were adjusted based on emission factors for CO_2, CH_4, and N_2O for natural gas combustion in the California Climate Action Registry (CCAR)'s *General Reporting Protocol*[86] and the global warming potential for each GHG.

- Construction diesel trucks and equipment: No adjustment was made to the annual CO_2 emissions because the GHGs in the exhaust from diesel engines are almost entirely CO_2 (less than 1 percent CH_4 and N_2O on a CO_2 equivalent basis).

The project would also result in indirect GHG emissions due to the electrical demands of the project. Emission factors for GHGs due to electrical demand from the project's land uses were obtained from the CCAR *General Reporting Protocol*.[87] The CCAR is a private non-profit organization formed by the State of California and serves as a voluntary GHG registry to protect and promote early actions to reduce GHG emissions by organizations. This emission factor takes into account the mix of energy sources used to generate electricity in the State of California and the relative carbon intensities of these sources, and includes natural gas, coal, nuclear, large hydroelectric, and other renewable sources of energy. The estimated annual electrical demand for the project was obtained from factors in the California Air

85 US Environmental Protection Agency, "Greenhouse Gas Emissions from a Typical Passenger Vehicle", Office of Transportation and Air Quality, EPA420-F-05-004 (Washington, D.C.: U.S. Environmental Protection Agency, February 2005), p. 4.

86 California Climate Action Registry, *General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.0*, (2008).

87 California Climate Action Registry, *General Reporting Protocol*, (2008) 91-93.

Pollution Control Officers Association's *CEQA and Climate Change*[88] whitepaper and the CCAR *General Reporting Protocol*.[89]

Indirect GHG emissions are also associated with the electrical demand resulting from the provision of water to the project site, electrical demand and process emissions due to wastewater treatment, and decomposition of solid waste generated by the project. The electrical demand associated with supplying water to the project site were calculated based on the estimated water use (see **Section 5.9, Water Service**), CEC estimates of electric use for water conveyance, treatment, and distribution,[90] and the electrical generation factor from the CCAR *General Reporting Protocol*.[91] The wastewater-related GHG emissions were calculated based on the estimated wastewater production (see **Section 5.8, Sewer Service**) and state and federal estimates of GHG associated with wastewater treatment[92] and the electrical generation factor from the CCAR *General Reporting Protocol*.[93] Lastly, the solid waste-related emissions were calculated based on the solid waste generation of the project (see **Section 5.10, Solid Waste Service**) and a US EPA emission factor.[94]

The estimated GHG emissions associated with construction of the project are shown in **Table 5.4-~~16~~8, Estimated Construction Greenhouse Gas Emissions – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project**. The values shown are the total of those values in **Table 5.4-2~~2~~4, Estimated Construction Greenhouse Gas Emissions – Neptune Marina Parcel 10R, Table 5.4-~~28~~30, Estimated Construction Greenhouse Gas Emissions – Neptune Marina Parcel FF, Table 5.4-3~~5~~7, Estimated Construction Greenhouse Gas Emissions – Woodfin Suite Hotel and Timeshare Resort** and **Table 5.4-~~39~~41, Estimated Construction Greenhouse Gas Emissions – Restored Wetland and Upland Buffer** for the relevant construction activities in a given year**.**

The estimated GHG emissions associated with the project are shown in **Table 5.4-1~~7~~9, Estimated Operational Greenhouse Gas Emissions – Neptune Marina Apartments and Anchorage/Woodfin Suite**

88 California Air Pollution Control Officers Association, *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 61.

89 California Climate Action Registry, *General Reporting Protocol*, (2008) 34.

90 California Energy Commission, *California's Water-Energy Relationship*, Final Staff Report (CEC-700-2005-011-SF), (2005) 26 and *Refining Estimates of Water-Related Energy Use in California, PIER Final Project Report* (CEC-500-2006-118), (2006) 22.

91 California Climate Action Registry, *General Reporting Protocol*, (2008) 34.

92 California Energy Commission, *Refining Estimates of Water-Related Energy Use in California, PIER Final Project Report* (CEC-500-2006-118), (2006) 22; US Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006* (EPA 430-R-08-005), (2008) 8-15.

93 California Climate Action Registry, *General Reporting Protocol*, (2008) 34.

94 US Environmental Protection Agency, Office of Solid Waste and Emergency Response, *Greenhouse Gas Emission Factors for Management of Selected Materials in Municipal Solid Waste* (EPA-530-R-98-013), (1998).

Hotel and Timeshare Resort Project. The values shown are the total of those values in **Table 5.4-2~~3~~5, Estimated Operational Greenhouse Gas Emissions – Neptune Marina Parcel 10R, Table 5.4-~~29~~31, Estimated Operational Greenhouse Gas Emissions – Neptune Marina Parcel FF, Table 5.4-3~~6~~8, Estimated Operational Greenhouse Gas Emissions – Woodfin Suite Hotel and Timeshare Resort** and **Table 5.4-~~40~~2, Estimated Operational Greenhouse Gas Emissions – Restored Wetland and Upland Buffer**.

Table 5.4-1~~8~~6
Estimated Construction Greenhouse Gas Emissions
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

Construction Year	Emissions in Metric Tons CO_2E Per Year
~~2009~~2011	1,886~~1,090~~
~~2010~~2012	3,722~~2,951~~
~~2011~~2013	2,120~~2,351~~
2012~~2014~~	~~1,624~~

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

Table 5.4-1~~9~~7
Estimated Operational Greenhouse Gas Emissions
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Direct GHG Emissions	
Operational (Mobile) Sources	6,940
Area Sources	1,555
Total Direct GHG Emissions	8,495
Indirect GHG Emissions	
Electrical Generation	2,282
Water Supply	55
Wastewater Treatment	149
Solid Waste	83
Total Indirect GHG Emissions	2,569
Project GHG Emissions	11,064
Emissions Due To Existing Land Uses	2,391
Net GHG Emissions	8,673

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

While the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in emissions of GHGs, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project of this size is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.[95] Accordingly, further discussion of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project's greenhouse gas emissions and their impact on global climate are addressed in **Section 5.4.4.2, Cumulative Impacts, Global Climate Change**.

5.4.3.4.1.8 Summary of Project Impacts Without Mitigation – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

Demolition, Excavation/Grading and Construction Impacts: Significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant.

Global Climate Change: Less than significant.

5.4.3.4.1.9 Mitigation Measures: Existing Regulations and Standards Applicable to the Project – Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

95 California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 35.

Mitigation for Demolition, Excavation/Grading and Construction Impacts: The SCAQMD has prepared a list of measures to reduce the impacts of construction-related emissions to the greatest extent possible. Those that could be feasibly implemented during the development of the project to mitigate NO_X, $PM_{2.5}$, and PM_{10} emissions are as follows:

5.4-1. Develop and implement a construction management plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Configure construction parking to minimize traffic interference.

b. Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person).

c. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable.

d. Reroute construction trucks away from congested streets.

e. Consolidate truck deliveries when possible.

f. Provide dedicated turn lanes for movement of construction trucks and equipment on and off site.

g. Maintain equipment and vehicle engines in good condition and in proper tune according to manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.

h. Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts.

i. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators.

j. Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices.

k. Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices.

5.4-2. Develop and implement a dust control plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).

b. Replace ground cover in disturbed areas as quickly as possible.

c. Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, dirt) according to manufacturers' specifications.

d. Water active grading sites at least twice daily (SCAQMD Rule 403).

e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

f. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded.

g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.

h. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available).

i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

j. Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.

k. Enforce traffic speed limits of 15 mph or less on all unpaved roads.

l. Pave construction roads when the specific roadway path would be utilized for 120 days or more.

5.4-3. In the event asbestos is identified within existing on-site structures, the project applicant/developer shall comply with SCAQMD Rule 1403 (Asbestos Emissions From Demolition/Renovation Activities). Compliance with Rule 1403 is considered to mitigate asbestos-related impacts to less than significant.

Construction mitigation measures recommended in the SCAQMD's *CEQA Air Quality Handbook* that were rejected for the proposed project are listed below along with a discussion of why each measure was rejected:

- Prohibit truck idling in excess of 2 minutes: The nature of diesel engines does not lend them to constant turning on and off during construction activities. However, CARB has adopted an Airborne Toxics Control Measure (ATCM) that applies to all diesel-fueled commercial vehicles over 10,000 pounds and prohibits idling for more than 5 minutes except under limited circumstances. Accordingly, this restriction is required by law and should not be considered mitigation.

- Implement a shuttle service to and from retail services and food establishments during lunch hours: Construction workers typically take a 0.5-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to the site. This measure would therefore be ineffective in reducing project construction-related emissions.

5.4.3.4.1.10 Summary of Project Impacts With Mitigation: Neptune Marina Apartments and Anchorage Project/Woodfin Suite Hotel and Timeshare Resort

Demolition, Excavation/Grading and Construction Impacts: Significant and unavoidable;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant and unavoidable;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant.

Global Climate Change: Less than significant.

5.4.3.4.2 Neptune Marina Parcel 10R

5.4.3.4.2.1 Threshold: The project will generate air pollutant quantities in excess of established SCAQMD emissions thresholds.

Analysis: Development of the Neptune Marina Parcel 10R would generate air emissions from a wide variety of stationary, area, and mobile sources. Fugitive dust (PM_{10} and $PM_{2.5}$) would be generated by on-site construction activities. Once the proposed uses are occupied, emissions would be generated by stationary and area sources such as water and space heaters, landscape maintenance equipment and consumer products. Stationary and area source emissions could also result from the operation of certain types of commercial business, such as restaurants, within the project site. Mobile source emissions would be generated by motor vehicle travel associated with construction activities and occupancy of the proposed development. An assessment of construction and operational emissions are presented below based on the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook*.

Demolition, Excavation/Grading and Construction Impacts: Development of the Neptune Marina Parcel 10R would require removal of existing uses, site excavation and grading and construction of the proposed improvements. Parcel 10R would include construction of a new 10-inch sewer line for approximately 500 linear feet within Marquesas Way and 160 linear feet within Via Marina; and construction of an additional 180 linear feet of new 10-inch line and approximately 710 linear of a new 8-inch sewer line within existing site boundaries of Parcel 10R. Parcel 10R would also include the installation of approximately 500 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances. These activities would occur over a ~~33~~310 ~~-~~month period and, during this time emissions would be generated by on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles and generators. Construction activity associated with the sewer line was assumed to occur during the grading phase of Parcel 10R. Fugitive dust would also be generated during all project development phases (i.e., demolition, excavation, grading and construction). In addition, for structures built before 1978, microscopic asbestos fibers may also pose an air quality concern.

Because of the duration of project development and the normal day-to-day variability in construction activities, it is difficult to precisely quantify the daily emissions associated with each phase of the proposed construction activities. **Table 5.4-~~18~~20, Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Neptune Marina Parcel 10R**, identifies daily emissions associated with typical equipment for different construction phases based on information provided by the project applicant and default construction values generated by URBEMIS2007 Version 9.2.4. Emissions associated with the sewer line ~~-~~and water line construction are included in the analysis. These emissions assume that some of the construction equipment and activities would occur

continuously over an 8-hour period. In reality, this would not occur, as most equipment would operate only a fraction of each workday. Therefore, **Table 5.4-2018** represents a worst-case scenario for the construction phase of the project.

Table 5.4-2018
Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions
Neptune Marina Parcel 10R

	Emissions in Pounds per Day					
Year	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
20092011	76.9544.71	12.88	117.31	0.075	27.7141.73	9.6311.96
20102012	63.1780.78	14.5395	68.97112.68	0.067	4.0547.72	3.5813.81
20112013	60.2266.40	13.9014.15	63.2875.27	0.06	3.634.37	3.203.87
Maximum Emissions in Any Year	76.9580.78	14.5314.95	117.31112.68	0.07	27.7147.72	9.6313.81
SCAQMD Thresholds	550	75	100	150	150	55
Exceeds Thresholds?	NO	NO	**YES**	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

As shown, the recommended significance threshold for NO_X would be exceeded during the grading phase due to the operation of heavy-duty vehicles, heavy-duty haul trucks, and worker trips. Therefore, construction impacts associated with the construction of Parcel 10R would be considered significant for NO_X emissions.

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: An analysis of the impacts of the Neptune Marina Parcel 10R construction emissions on ambient concentrations of PM_{10}, $PM_{2.5}$, NO_2 and CO was conducted. This analysis determined the ambient air quality impacts on the day with the highest estimated daily mass emission rates. The methodology and results are described in detail in **Appendix 5.4**. The results of the dispersion modeling analysis are compared to the localized significance thresholds in **Table 5.4-1921**, **Localized Significance Thresholds Analysis – Parcel 10R**.

Table 5.4-2119
Localized Significance Thresholds Analysis – Parcel 10R

Pollutant	Averaging Period	Modeling Results µg/m3	Modeling Results ppm	LST Criteria µg/m3	LST Criteria ppm	Exceeds Threshold?
Respirable Particulate Matter (PM_{10})	24 hours	23.3348.5	NA	10.4	NA	**YES**
Respirable Particulate Matter (PM_{10})	Annual	2.49	NA	4.2	NA	NO
Fine Particulate Matter ($PM_{2.5}$)	24 hours	11.9415.8	NA	10.4	NA	**YES**
Fine Particulate Matter ($PM_{2.5}$)	Annual	0.93	NA	4.2	NA	**NO**
Nitrogen Dioxide (NO_2)	1 hour	113121	0.06	188	0.10	NO
Nitrogen Dioxide (NO_2)	Annual	0.88	0.00	19	0.01	NO
Carbon Monoxide (CO)	1 hour	814782	0.7168	19,454	17	NO
Carbon Monoxide (CO)	8 hours	284273	0.245	7,896	6.9	NO

Source: *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *June 2008.*
[1] *LST Criteria for NO_2 and CO are the difference between CAAQS and the Peak Concentrations during the last three years (see* ***Table 5.4-2****).*

As shown in **Table 5.4-2119,** the construction of the Neptune Marina Parcel 10R would cause localized significant impacts for PM_{10} and $PM_{2.5}$.

Project construction would involve the demolition and removal of existing structures located on the Parcel 10R site. Demolition of the existing structures would be a potential hazard if the buildings contained asbestos fibers. The existing buildings were constructed in the 1960s. Typically, buildings built before 1978 are considered to have a higher probability of containing asbestos fibers; however, under SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities), all buildings must be properly inspected for the presence of asbestos. Demolition of all existing structures must comply with the precautionary requirements specified in Rule 1403. All structures must be stabilized and removed in accordance with applicable regulations including Rule 1403. This rule is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the US EPA NESHAP and provides additional requirements to cover non-NESHAP areas. The rule requires that the SCAQMD be notified before any demolition or renovation activity occurs. This notification includes a description of the structures and methods utilized to determine the presence or absence of asbestos. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity. As part of project implementation, the project applicant must comply with the requirements of Rule 1403. Project compliance with Rule 1403 would ensure that asbestos-containing materials would be removed and disposed of appropriately. With adherence to this applicable regulation, the potential for significant adverse health impacts would be reduced to less than significant level.

Operational Impacts; Daily Emissions: Operational emissions would be generated by area and mobile, and possibly by stationary, sources as a result of normal day-to-day activities on the project site after occupation. The emissions from such sources are primarily associated with fuel combustion, which is addressed in the area and mobile source emission calculations by URBEMIS2007 discussed below. Area sources emissions would be generated by the consumption of natural gas for space and water heating devices and food preparation and from the operation of gasoline-powered landscape maintenance equipment and consumer products (e.g., hair spray, deodorants, lighter fluid, air fresheners, automotive products and household cleaners). Mobile emissions would be generated by the motor vehicles traveling to and from the residential units, boat spaces and commercial uses. The Neptune Marina Parcel 10R area and mobile source emissions as estimated using URBEMIS2007 are shown in **Table 5.4-22~~0~~, Estimated Operational Emissions without Mitigation – Neptune Marina Parcel 10R**. Because the existing apartments would be demolished, the emissions associated with the existing land use and the net emissions are also shown in **Table 5.4-22~~0~~**.

Table 5.4-22~~0~~
Estimated Operational Emissions without Mitigation
Neptune Marina Parcel 10R

	Emissions in Pounds per Day					
Emissions Source	**CO**	**VOC**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summertime Emissions[1]						
Operational (Mobile) Sources	169.28	15.96	18.29	0.22	35.40	6.88
Area Sources	4.76	21.75	3.96	0.00	0.02	0.02
Summertime Emission Totals:	174.04	37.71	22.25	0.22	35.42	6.90
Emissions Due To Existing Land Uses:	136.78	21.55	15.30	0.10	16.42	3.21
Net Increase In Emissions	37.26	16.16	6.95	0.12	19.00	3.69
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO
Wintertime Emissions[2]						
Operational (Mobile) Sources	160.59	15.66	22.04	0.18	35.40	6.88
Area Sources	1.67	21.50	3.92	0.00	0.01	0.01
Wintertime Emission Totals:	162.26	37.16	25.96	0.18	35.41	6.89
Emissions Due To Existing Land Uses:	129.94	21.18	18.24	0.08	16.41	3.20
Net Emissions	32.32	15.98	7.72	0.10	19.00	3.69
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] *"Summertime Emissions" are representative of worst-case conditions that may occur during the O_3 season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).*

As shown, the Neptune Marina Parcel 10R at buildout and in full operation would not generate a net increase in emissions that would exceed SCAQMD recommended thresholds. Therefore, the operation of the proposed Neptune Marina Parcel 10R would not result in a significant air quality impact.

Operational Impacts; Wind: RWDI prepared a wind study for the proposed project to assess the project's development and/or building placement on wind patterns within the marina, loss of surface winds used by birds and sailboats and general air circulation (this report is included in **Appendix 5.4** in its entirety). The study concluded:

> *From the results of this wind study, it has been concluded that the proposed Neptune Marina will produce similar wind conditions over a majority of the areas of Marina del Rey. There will be localized areas of altered wind directions and speeds at the west end of Basins B and C. The change in wind conditions noted at the west end of Basins B and C is assumed not to be significant as boats would be under power at this location in the marina. The overall wind conditions predicted with the proposed and expected future developments are similar to those presently experienced in and around the marina and, therefore, the general air circulation patterns and the use of surface winds by birds will not be affected.*

Operational Impacts; Additional Indicators: As previously discussed, the SCAQMD lists criteria indicating when a project may create potential air quality impacts. These criteria are listed below along with an analysis of whether or not the project meets any of them. If a project meets any one of the criteria, project air quality impacts would be significant relative to that criterion.

5.4.3.4.2.2 Threshold: The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

Analysis: SCAQMD's *CEQA Air Quality Handbook* indicates that an air quality modeling analysis would need to be performed to identify the project's impact on ambient air quality.[96] In order for a project to be found consistent with the applicable AQMP, the analysis would have to demonstrate that the project's emissions would not increase the frequency or the severity of existing air quality violations, or contribute to a new violation.[97] The CO analysis for traffic emissions described below assesses the potential ambient air quality impacts with respect to this pollutant. URBEMIS2007 was used to calculate project emissions for comparison with thresholds addressing regional significance. The estimated operational emissions due to proposed project were found to be less than significant. Hence, the project is not expected to violate ambient air quality standards or contribute to an existing or projected air quality violation.

96 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-3.

97 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, p. 12-3.

5.4.3.4.2.3 Threshold: The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

Analysis: As discussed earlier in this analysis, the 2007 AQMP is designed to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to achieve the federal 8-hour ozone standard by 2021[98] and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP do not interfere with attainment and do not contribute to the exceedance of an existing air quality violation because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds. The following analysis discusses the project's consistency with the AQMP.

Projects that are consistent with the projections of population forecasts identified in the Growth Management Chapter of the RCPG are considered consistent with the AQMP growth projections. This is because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP.

As discussed in **Section 5.16, Population and Housing**, the Neptune Marina Parcel 10R is considered to be consistent with the future population and employment figures projected for the site's census tract. The project would not increase population over that which has been planned for the area, would be consistent with the AQMP forecasts for this area, would be considered consistent with the air quality-related regional plans and should not jeopardize attainment of state and federal ambient air quality standards in the basin.

Another measurement tool in determining AQMP consistency is to determine how a project accommodates the expected increase in population and employment. Generally, if a project is planned in a way that results in the minimization of VMT both within the project and in the community in which it is located and consequently the minimization of air pollutant emissions, that project is consistent with the AQMP.[99]

The nature of the project and its location within the Marina del Rey and surrounding urban areas with supporting commercial and office uses would minimize the need for or distance of some automobile trips, thereby, reducing automotive emissions from such trips. This type of development is consistent

---

98 The 2007 AQMP has determined that the basin will still exceed the federal 8-hour ozone standard in 2021 even with implementation of 2007 AQMP control measures.

99 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-5.

with the goals of the AQMP for reducing motor vehicle emissions. In addition, the project site is located in proximity to existing job centers that provide employment opportunities to many Marina del Rey residents. With these job centers, many local residents do not have to commute to distant employment centers. The project site is also linked to various employment, shopping and recreation areas throughout the Los Angeles Basin through the local transit system. Use of these facilities could reduce the need for some motor vehicle trips. As a result of reduced commutes and other vehicle trips, VMT and, consequently, air pollutant emissions could be further reduced.

5.4.3.4.2.4 Threshold: The project could generate vehicle trips that cause a CO hotspot or the project could be occupied by sensitive receptors that are exposed to a CO hotspot.

Analysis: As was done to assess cumulative CO concentrations, the simplified CALINE4 screening procedure was used to predict future CO concentrations 0 and 25 feet from the intersections in the study area for future traffic with the addition of Parcel 10R only. The results of air emissions modeling for the project study area are shown in **Table 5.4-23~~1~~, Carbon Monoxide Concentrations Future with Parcel 10R Traffic (2013)**. The values in this table reflect the ambient air quality impacts of emissions resulting from ambient traffic growth in the area along with traffic resulting from the proposed Parcel 10R development as predicted in the traffic impact analysis for the project.[100]

Table 5.4-23~~1~~
Carbon Monoxide Concentrations
Future with Parcel 10R Traffic (2013) (parts per million)

Intersection	LOS	0 Feet		25 Feet	
		1-Hour[1]	8-Hour[2]	1-Hour[1]	8-Hour[2]
Admiralty Way & Mindanao Way	C	7.4	4.3	6.5	3.7
Lincoln Blvd. & Fiji Way	C	8.4	5.0	7.3	4.2
Lincoln Blvd. & Marina Expressway (SR-90)	C	7.8	4.6	6.8	3.9
Lincoln Blvd. & Mindanao Way	D	7.7	4.5	6.8	3.9
Lincoln Blvd. & Washington Blvd.	F	9.0	5.4	7.7	4.5
Marina Expressway (SR-90 EB) & Mindanao Way	C	6.4	3.6	5.9	3.2
Palawan Way & Admiralty Way	B	7.1	4.1	6.3	3.5
Palawan Way & Washington Blvd.	C	6.8	3.9	6.1	3.4
Via Marina & Admiralty Way	C	5.5	3.0	5.4	2.9
Via Marina & Washington Blvd.	D	7.0	4.0	6.2	3.5

*Source: Impact Sciences, Inc. The CO concentration calculations are provided in **Appendix 5.4**.*
Note: Not all intersections would operate at a level of service (LOS) that could generate a CO hotspot (i.e., D or worse). However, for consistency purposes all ten intersections that were adversely affected during the "Cumulative with Project" scenario were analyzed for a potential CO hotspot.
[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*
[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*

100 Crain & Associates, *Traffic Analysis for a Proposed 526-Unit Residential Development, 288-Room Hotel/Timeshare Resort, and 1.46-Acre Public Park on Parcels 10R, FF and 9U in Marina del Rey* (Los Angeles, California: Crain & Associates, December 2007).

As shown, the state and federal 1- and 8-hour CO standards would not be exceeded at any of the modeled intersections at Parcel 10R buildout with ambient traffic growth. Therefore, CO hotspots are not predicted to occur near these intersections in the future with the contribution of related projects, and the proposed project traffic-related CO at these intersections would not be considered significant.

5.4.3.4.2.5 Threshold: The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

Analysis: The residential uses associated with the Neptune Marina Parcel 10R are not expected to be a source of odors. The adjacent land uses are such that the project residents would not be subjected to objectionable odors from any surrounding land use. Consequently, no significant impacts from such odors are anticipated.

5.4.3.4.2.6 Threshold: The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety;

Threshold: The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list;

Threshold: The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or

Threshold: The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million.

Analysis: Construction of the Neptune Marina Parcel 10R would not result in an accidental release of hazardous materials on site because any lead-based paint and asbestos containing materials would be abated and disposed of in accordance with SCAQMD and other local and state regulations. Construction of the project would result in emissions of DPM, which has been designated a TAC by CARB. Typically, cancer risk is assessed for long-term exposure durations (typically 70 years). Construction of the project would result in much shorter-term DPM emissions, however, and exposure would be for less than three years. According to OEHHA, high short-term exposures (i.e., less than a maximum theoretical project life of 70 years) are not necessarily equivalent to low longer-term exposures, as previously discussed. Construction of the Parcel 10R would result in maximum on-site DPM emissions of 4.87 pounds per day in 2011; 3.36 pounds per day in 2012; and 2.98 pounds per day in 2013. These emissions would occur at various locations through the Parcel. Because construction of the Parcel would result in a maximum

exposure duration of DPM for just under three years and because construction activities would take place at different locations throughout the site, it is not expected that the total dose to any single sensitive receptor would result in an exceedance of the SCAQMD maximum individual cancer risk of ten in one million. Also, in accordance with OEHHA policy described above, any numerical evaluation of cancer risk from short-term exposures (i.e., less than nine years) would introduce uncertainties into the assessment. Furthermore, the SCAQMD does not require a health risk assessment for short-term construction impacts. Therefore, because of the limited exposure duration and temporary nature of the DPM emissions, no significant impacts with respect to the criteria listed above will occur.

The proposed land use of the Neptune Marina Parcel 10R will not use hazardous materials or emit toxic air contaminants in appreciable quantities. Adjacent land uses would not subject project site residents, employees, or visitors to toxic air emissions. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.

5.4.3.4.2.7 Threshold: The project would generate emissions of greenhouse gases that could contribute to changes in global climate.

As previously discussed, the primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. Accordingly, the construction and operation of the Neptune Marina Parcel 10R would result in direct emissions of these GHGs due to fuel combustion in motor vehicles, construction equipment, and building heating systems associated with the project. Building and motor vehicle air conditioning systems may use HFCs (and HCFCs and CFCs to the extent that they have not been completely phased out at later dates), which may result in emissions through leaks. The other primary GHGs (perfluorocarbons and sulfur hexafluoride) are associated with specific industrial sources and are not expected to be associated with the proposed project. In addition, indirect GHG emissions would be associated with the electrical demand of the apartments, the electrical demand resulting from the provision of water to the project site, the electrical demand and process emissions due to wastewater treatment, and the decomposition of solid waste generated by the project.

Using the methods described in **Section 5.4.3.4.1.7**, the construction and operational GHG emissions associated with the project were estimated and are shown in **Table 5.4-224, Estimated Construction Greenhouse Gas Emissions – Neptune Marina Parcel 10R** and **Table 5.4-253, Estimated Operational Greenhouse Gas Emissions – Neptune Marina Parcel 10R**, respectively.

Table 5.4-2~~2~~42
Estimated Construction Greenhouse Gas Emissions
Neptune Marina Parcel 10R

Construction Year	Emissions in Metric Tons CO_2E Per Year
~~2009~~2011	1,036~~95~~
~~2010~~2012	1,641~~1,585~~
~~2011~~2013	1,504~~1,635~~

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

Table 5.4-2~~5~~3
Estimated Operational Greenhouse Gas Emissions
Neptune Marina Parcel 10R

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Direct GHG Emissions	
Operational (Mobile) Sources	3,568
Area Sources	832
Total Direct GHG Emissions	4,400
Indirect GHG Emissions	
Electrical Generation	1,118
Water Supply	24
Wastewater Treatment	67
Solid Waste	47
Total Indirect GHG Emissions	1,256
Project GHG Emissions:	5,656
Emissions Due To Existing Land Uses:	2,391
Net GHG Emissions:	3,265

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

While the Neptune Marina Parcel 10R would result in emissions of GHGs, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project of this size is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are

no non-cumulative GHG emission impacts from a climate change perspective.[101] Accordingly, further discussion of the Neptune Marina Parcel 10R greenhouse gas emissions and their impact on global climate are addressed in **Section 5.4.4.2, Cumulative Impacts, Global Climate Change**.

5.4.3.4.2.8 Summary of Project Impacts Without Mitigation – Neptune Marina Parcel 10R

Demolition, Excavation/Grading and Construction Impacts: Significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;~~.~~

Global Climate Change: Less than significant.

5.4.3.4.2.9 Summary of Mitigation; Existing Regulations and Standards Applicable to the Project – Neptune Marina Parcel 10R

Mitigation for Demolition, Excavation/Grading and Construction Impacts: The SCAQMD has prepared a list of measures to reduce the impacts of construction-related emissions to the greatest extent possible. Those that could be feasibly implemented during the development of the project to mitigate NO_X, $PM_{2.5}$, and PM_{10} emissions are as follows:

5.4-4. Develop and implement a construction management plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Configure construction parking to minimize traffic interference.

b. Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person).

c. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable.

[101] California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 35.

d. Reroute construction trucks away from congested streets.

e. Consolidate truck deliveries when possible.

f. Provide dedicated turn lanes for movement of construction trucks and equipment on and off site.

g. Maintain equipment and vehicle engines in good condition and in proper tune according to manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.

h. Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts.

i. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators.

j. Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices.

k. Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices.

5.4-5. Develop and implement a dust control plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).

b. Replace ground cover in disturbed areas as quickly as possible.

c. Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, dirt) according to manufacturers' specifications.

d. Water active grading sites at least twice daily (SCAQMD Rule 403).

e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

f. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded.

g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.

h. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available).

i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

j. Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.

k. Enforce traffic speed limits of 15 mph or less on all unpaved roads.

l. Pave construction roads when the specific roadway path would be utilized for 120 days or more.

5.4-6. In the event asbestos is identified within existing on-site structures, the project applicant/developer shall comply with SCAQMD Rule 1403 (Asbestos Emissions From Demolition/Renovation Activities). Compliance with Rule 1403 is considered to mitigate asbestos-related impacts to less than significant.

Construction mitigation measures recommended in the SCAQMD's *CEQA Air Quality Handbook* that were rejected for the proposed project are listed below along with a discussion of why each measure was rejected:

- Prohibit truck idling in excess of 2 minutes: The nature of diesel engines does not lend them to constant turning on and off during construction activities. However, CARB has adopted an ATCM that applies to all diesel-fueled commercial vehicles over 10,000 pounds and prohibits idling for more than 5 minutes except under limited circumstances. Accordingly, this restriction is required by law and should not be considered mitigation.

- Implement a shuttle service to and from retail services and food establishments during lunch hours: Construction workers typically take a 0.5-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to the site. This measure would therefore be ineffective in reducing project construction-related emissions.

5.4.3.4.2.10 Summary of Project Impacts With Mitigation – Neptune Marina Parcel 10R

Demolition, Excavation/Grading and Construction Impacts: Significant and unavoidable;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant and unavoidable;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;~~.~~

Global Climate Change: Less than significant.

5.4.3.4.3 Neptune Marina Parcel FF

5.4.3.4.3.1 Threshold: The project will generate air pollutant quantities in excess of established SCAQMD emissions thresholds.

Analysis: Development of the Neptune Marina Parcel FF would generate air emissions from a wide variety of stationary, area, and mobile sources. Fugitive dust (PM_{10} and $PM_{2.5}$) would be generated by on-site construction activities. Once the proposed uses are occupied, emissions would be generated by stationary and area sources such as water and space heaters, landscape maintenance equipment and consumer products. Stationary and area source emissions could also result from the operation of certain types of commercial business, such as restaurants, within the project site. Mobile source emissions would be generated by motor vehicle travel associated with construction activities and occupancy of the proposed development. An assessment of construction and operational emissions are presented below based on the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook*.

Demolition, Excavation/Grading and Construction Impacts: Development of the Neptune Marina Parcel FF would require removal of an existing surface parking lot, site excavation and grading and construction of the proposed improvements. Parcel FF would include the installation of approximately 170 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances. These activities would occur over a 2~~1~~5-month period and, during this time, emissions would be generated by on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles and generators. Fugitive dust would also be generated during all project development phases (i.e., demolition, excavation, grading and construction). Because of the duration of project development and the normal day-to-day variability in construction activities, it is difficult to precisely quantify the daily emissions associated with each phase of the proposed construction activities. **Table 5.4-2~~6~~4, Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Neptune Marina Parcel FF**, identifies daily emissions associated with typical equipment for different construction phases based on information provided by the project applicant and default construction values generated by URBEMIS2007 Version 9.2.4. These emissions assume that some of the construction equipment and activities would occur continuously over an 8-hour period. In reality, this would not occur, as most equipment would operate only a fraction of each workday. Therefore, **Table 5.4-2~~6~~4** represents a worst-case scenario for the construction phase of the Neptune Marina Parcel FF.

Table 5.4-2~~6~~4
Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions
Neptune Marina Parcel FF

Year	Emissions in Pounds per Day					
	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
						4.850.78
20102011	33.477.11	7.051.51	58.9211.75	0.020	12.241.51	
20112012	32.8434.26	6.5984	54.6152.85	0.02	11.9213.69	4.574.39
20122013	22.7823.82	6.1161	31.9834.74	0.02	1.5371	1.3753
Maximum Emissions in Any Year	33.4734.26	7.056.84	58.9252.85	0.02	12.2413.69	4.854.39
SCAQMD Thresholds	550	75	100	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

As shown, construction emissions associated with development of Parcel FF would not exceed the thresholds of significance during any construction year. Therefore, proposed construction on Parcel FF would not result in a significant air quality impact.

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: An analysis of the impacts of the Neptune Marina Parcel FF construction emissions on ambient concentrations of PM_{10}, $PM_{2.5}$, NO_2 and CO was conducted. This analysis determined the ambient air quality impacts from construction activities on the day with the highest estimated daily mass emission rates. The methodology and results are described in detail in **Appendix 5.4**. The results of the dispersion modeling analysis are compared to the localized significance thresholds in **Table 5.4-2~~7~~5, Localized Significance Thresholds Analysis – Neptune Marina Parcel FF**.

Table 5.4-2~~75~~
Localized Significance Thresholds Analysis
Neptune Marina Parcel FF

Pollutant	Averaging Period	Modeling Results μg/m³	Modeling Results ppm	LST Criteria[1] μg/m³	LST Criteria[1] ppm	Exceeds Threshold?
Respirable Particulate Matter (PM_{10})	24 hours	29.33~~31.2~~	NA	10.4	NA	**YES**
Respirable Particulate Matter (PM_{10})	Annual	1.54	NA	4.2	NA	NO
Fine Particulate Matter ($PM_{2.5}$)	24 hours	13.27~~11.0~~	NA	10.4	NA	**YES**
Fine Particulate Matter ($PM_{2.5}$)	Annual	1.06	NA	4.2	NA	NO
Nitrogen Dioxide (NO_2)	1 hour	90.90~~96.1~~	0.05	188	0.10	NO
Nitrogen Dioxide (NO_2)	Annual	1.30	0.00	19	0.01	NO
Carbon Monoxide (CO)	1 hour	766~~635~~	0.67~~55~~	19,454	17	NO
Carbon Monoxide (CO)	8 hours	277~~229~~	0.24~~0~~	7,896	6.9	NO

Source: *Impact Sciences, Inc.*
[1] *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *June 2008.*

As shown in **Table 5.4-2~~75~~,** the construction of the Neptune Marina Parcel FF would cause localized significant impacts for PM_{10} and $PM_{2.5}$.

Operational Impacts; Daily Emissions: Operational emissions would be generated by area and mobile, and possibly by stationary, sources as a result of normal day-to-day activities on the project site after occupation. The emissions from such sources are primarily associated with fuel combustion, which is addressed in the area and mobile source emission calculations by URBEMIS2007 discussed below. Area sources emissions would be generated by the consumption of natural gas for space and water heating devices and food preparation and from the operation of gasoline-powered landscape maintenance equipment and consumer products (e.g., hair spray, deodorants, lighter fluid, air fresheners, automotive products and household cleaners). Mobile emissions would be generated by the motor vehicles traveling to and from the residential units, boat spaces and commercial uses. The Neptune Marina Parcel FF area and mobile source emissions as estimated using URBEMIS2007 are shown in **Table 5.4-2~~8~~6, Estimated Operational Emissions without Mitigation – Neptune Marina Parcel FF**.

Table 5.4-2~~6~~
Estimated Operational Emissions without Mitigation
Neptune Marina Parcel FF

	Emissions in Pounds per Day					
Emissions Source	**CO**	**VOC**	**NOx**	**SOx**	**PM10**	**PM2.5**
Summertime Emissions[1]						
Operational (Mobile) Sources	42.02	3.84	4.49	0.05	8.71	1.69
Area Sources	2.08	6.89	1.26	0.00	0.01	0.01
Summertime Emission Totals:	44.10	10.73	5.75	0.05	8.72	1.70
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO
Wintertime Emissions[2]						
Operational (Mobile) Sources	39.80	3.82	5.42	0.04	8.71	1.69
Area Sources	0.53	6.77	1.24	0.00	0.00	0.00
Wintertime Emission Totals:	40.33	10.59	6.66	0.04	8.71	1.69
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] *"Summertime Emissions" are representative of worst-case conditions that may occur during the O_3 season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).*

As shown, the Neptune Marina Parcel FF at buildout and in full operation would not generate emissions that would exceed SCAQMD recommended thresholds. Therefore, the proposed Neptune Marina Parcel FF would not result in a significant air quality impact.

Operational Impacts; Wind: RWDI prepared a wind study for the proposed project to assess the project's development and/or building placement on wind patterns within the marina, loss of surface winds used by birds and sailboats and general air circulation (this report is included in **Appendix 5.4** in its entirety). The study concluded:

> *From the results of this wind study, it has been concluded that the proposed Neptune Marina will produce similar wind conditions over a majority of the areas of Marina del Rey. There will be localized areas of altered wind directions and speeds at the west end of Basins B and C. The change in wind conditions noted at the west end of Basins B and C is assumed not to be significant as boats would be under power at this location in the marina. The overall wind conditions predicted with the proposed and expected future developments are similar to those presently experienced in and around the marina and, therefore, the general air circulation patterns and the use of surface winds by birds will not be affected.*

Operational Impacts; Additional Indicators: As previously discussed, the SCAQMD lists criteria indicating when a project may create potential air quality impacts. These criteria are listed below along

with an analysis of whether or not the project meets any of them. If a project meets any one of the criteria, project air quality impacts would be significant relative to that criterion.

5.4.3.4.3.2 Threshold: The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

Analysis: SCAQMD's *CEQA Air Quality Handbook* indicates that an air quality modeling analysis would need to be performed to identify the project's impact on ambient air quality.[102] In order for a project to be found consistent with the applicable AQMP, the analysis would have to demonstrate that the project's emissions would not increase the frequency or the severity of existing air quality violations, or contribute to a new violation.[103] The CO analysis for traffic emissions described below assesses the potential ambient air quality impacts with respect to this pollutant. URBEMIS2007 was used to calculate project emissions for comparison with thresholds addressing regional significance. The estimated operational emissions due to proposed project were found to be less than significant. Hence, the project is not expected to violate ambient air quality standards or contribute to an existing or projected air quality violation.

5.4.3.4.3.3 Threshold: The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

Analysis: As discussed earlier in this analysis, the 2007 AQMP is designed to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to achieve the federal 8-hour ozone standard by 2021[104] and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP do not interfere with attainment and do not contribute to the exceedance of an existing air quality violation because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds. The following analysis discusses the project's consistency with the AQMP.

---

102 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-3.

103 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, p. 12-3.

104 The 2007 AQMP has determined that the basin will still exceed the federal 8-hour ozone standard in 2021 even with implementation of 2007 AQMP control measures.

Projects that are consistent with the projections of population forecasts identified in the Growth Management Chapter of the RCPG are considered consistent with the AQMP growth projections. This is because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP.

As discussed in **Section 5.16, Population and Housing**, the Neptune Marina Parcel FF is considered to be consistent with the future population and employment figures projected for the site's census tract. The project would not increase population over that which has been planned for the area, would be consistent with the AQMP forecasts for this area, would be considered consistent with the air quality-related regional plans and should not jeopardize attainment of state and federal ambient air quality standards in the basin.

Another measurement tool in determining AQMP consistency is to determine how a project accommodates the expected increase in population and employment. Generally, if a project is planned in a way that results in the minimization of VMT both within the project and in the community in which it is located and consequently the minimization of air pollutant emissions, that project is consistent with the AQMP.[105]

The nature of the project and its location within the Marina del Rey and surrounding urban areas with supporting commercial and office uses would minimize the need for or distance of some automobile trips, thereby, reducing automotive emissions from such trips. This type of development is consistent with the goals of the AQMP for reducing motor vehicle emissions. In addition, the project site is located in proximity to existing job centers that provide employment opportunities to many Marina del Rey residents. With these job centers, many local residents do not have to commute to distant employment centers. The project site is also linked to various employment, shopping and recreation areas throughout the Los Angeles Basin through the local transit system. Use of these facilities could reduce the need for some motor vehicle trips. As a result of reduced commutes and other vehicle trips, VMT and, consequently, air pollutant emissions could be further reduced.

5.4.3.4.3.4 Threshold: The project could generate vehicle trips that cause a CO hotspot or the project could be occupied by sensitive receptors that are exposed to a CO hotspot.

Analysis: As was done to assess cumulative CO concentrations, the simplified CALINE4 screening procedure was used to predict CO concentrations 0 and 25 feet from the intersections in the study area for future traffic with the addition of Parcel FF only. The results of air emissions modeling for the project study area are shown in **Table 5.4-2~~9~~7, Carbon Monoxide Concentrations Future with Parcel FF Traffic**

105 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-5.

(2013). The values in this table reflect the ambient air quality impacts of emissions resulting from ambient traffic growth in the area along with traffic resulting from the proposed Parcel FF development as predicted in the traffic impact analysis for the project.[106]

Table 5.4-2~~7~~
Carbon Monoxide Concentrations
Future with Parcel FF Traffic (2013)
(parts per million)

Intersection	LOS	0 Feet		25 Feet	
		1-Hour[1]	8-Hour[2]	1-Hour[1]	8-Hour[2]
Admiralty Way & Mindanao Way	C	7.3	4.3	6.5	3.7
Lincoln Blvd. & Fiji Way	C	8.4	5.0	7.3	4.2
Lincoln Blvd. & Marina Expressway (SR-90)	C	7.8	4.6	6.8	3.9
Lincoln Blvd. & Mindanao Way	D	7.7	4.5	6.8	3.9
Lincoln Blvd. & Washington Blvd.	F	9.0	5.4	7.7	4.5
Marina Expressway (SR-90 EB) & Mindanao Way	C	6.4	3.6	5.9	3.2
Palawan Way & Admiralty Way	B	7.1	4.1	6.3	3.5
Palawan Way & Washington Blvd.	C	6.8	3.9	6.1	3.4
Via Marina & Admiralty Way	C	5.5	3.0	5.4	2.9
Via Marina & Washington Blvd.	D	7.0	4.0	6.2	3.5

*Source: Impact Sciences, Inc. The CO concentration calculations are provided in **Appendix 5.4**.*
Note: Not all intersections would operate at a level of service (LOS) that could generate a CO hotspot (i.e., D or worse). However, for consistency purposes all ten intersections that were adversely affected during the "Cumulative with Project" scenario were analyzed for a potential CO hotspot.
[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*
[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*

As shown, the state and federal 1- and 8-hour CO standards would not be exceeded at any of the modeled intersections at Parcel FF buildout with ambient traffic growth. Therefore, CO hotspots are not predicted to occur near these intersections in the future with the contribution of related projects, and the proposed project traffic-related CO at these intersections would not be considered significant.

5.4.3.4.3.5 Threshold: The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

Analysis: The residential uses associated with the Neptune Marina Parcel FF are not expected to be a source of odors. The adjacent land uses are such that the project residents would not be subjected to objectionable odors from any surrounding land use. Consequently, no significant impacts from such odors are anticipated.

106 Crain & Associates, *Traffic Analysis for a Proposed 526-Unit Residential Development, 288-Room Hotel/Timeshare Resort, and 1.46-Acre Public Park on Parcels 10R, FF and 9U in Marina del Rey* (Los Angeles, California: Crain & Associates, May 2007).

5.4.3.4.3.6 Threshold: The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety;

Threshold: The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list;

Threshold: The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or

Threshold: The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in one million.

Analysis: Construction of the Neptune Marina Parcel FF would not result in an accidental release of hazardous materials on site because any lead-based paint and asbestos containing materials would be abated and disposed of in accordance with SCAQMD and other local and state regulations. Construction of the Parcel would result in emissions of DPM, which has been designated a TAC by CARB. Typically, cancer risk is assessed for long-term exposure durations (typically 70 years). Construction of the project would result in much shorter-term DPM emissions, however, and exposure would be for less than two years. According to OEHHA, high short-term exposures (i.e., less than a maximum theoretical project life of 70 years) are not necessarily equivalent to low longer-term exposures, as previously discussed. Construction of the Parcel would result in maximum on-site DPM emissions of 2.69 pounds per day in 2011; 2.48 pounds per day in 2012; and 1.33 pounds per day in 2013. These emissions would occur at various locations through the Parcel. Because construction of the project would result in a maximum exposure duration of DPM for approximately two years and because construction activities would take place at different locations throughout the site, it is not expected that the total dose to any single sensitive receptor would result in an exceedance of the SCAQMD maximum individual cancer risk of ten in one million. Also, in accordance with OEHHA policy described above, any numerical evaluation of cancer risk from short-term exposures (i.e., less than nine years) would introduce uncertainties into the assessment. Furthermore, the SCAQMD does not require a health risk assessment for short-term construction impacts. Therefore, because of the limited exposure duration and temporary nature of the DPM emissions, no significant impacts with respect to the criteria listed above would occur.

The proposed land use of the Neptune Marina Parcel FF will not use hazardous materials or emit toxic air contaminants in appreciable quantities. Adjacent land uses would not subject project site residents,

employees, or visitors to toxic air emissions. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.

5.4.3.4.3.7 Threshold: The project would generate emissions of greenhouse gases that could contribute to changes in global climate.

Analysis: As previously discussed, the primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. Accordingly, the construction and operation of the Neptune Marina Parcel FF would result in direct emissions of these GHGs due to fuel combustion in motor vehicles, construction equipment, and building heating systems associated with the project. Building and motor vehicle air conditioning systems may use HFCs (and HCFCs and CFCs to the extent that they have not been completely phased out at later dates), which may result in emissions through leaks. The other primary GHGs (perfluorocarbons and sulfur hexafluoride) are associated with specific industrial sources and are not expected to be associated with the proposed project. In addition, indirect GHG emissions would be associated with the electrical demand of the apartments, the electrical demand resulting from the provision of water to the project site, the electrical demand and process emissions due to wastewater treatment, and the decomposition of solid waste generated by the project.

Using the methods described in **Section 5.4.3.4.1.7**, the construction and operational GHG emissions associated with the project were estimated and are shown in **Table 5.4-3028, Estimated Construction Greenhouse Gas Emissions – Neptune Marina Parcel FF** and **Table 5.4-3129, Estimated Operational Greenhouse Gas Emissions – Neptune Marina Parcel FF**, respectively.

Table 5.4-3028
Estimated Construction Greenhouse Gas Emissions
Neptune Marina Parcel FF

Construction Year	Emissions in Metric Tons CO_2E Per Year
20102011	1437
20112012	754716
20122013	616523

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

Table 5.4-3~~129~~
Estimated Operational Greenhouse Gas Emissions
Neptune Marina Parcel FF

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Direct GHG Emissions	
Operational (Mobile) Sources	879
Area Sources	262
Total Direct GHG Emissions	1,141
Indirect GHG Emissions	
Electrical Generation	352
Water Supply	8
Wastewater Treatment	21
Solid Waste	15
Total Indirect GHG Emissions	396
Project GHG Emissions:	1,537

Source: Impact Sciences, Inc. Emissions calculations are provided in ***Appendix 5.4****.*

While the Neptune Marina Parcel FF would result in emissions of GHGs, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project of this size is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.[107] Accordingly, further discussion of the Neptune Marina Parcel FF project's greenhouse gas emissions and their impact on global climate are addressed in **Section 5.4.4.2, Cumulative Impacts, Global Climate Change**.

5.4.3.4.3.8 Summary of Project Impacts Without Mitigation – Neptune Marina Parcel FF

Demolition, Excavation/Grading and Construction Impacts: Less than significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant;

Operational Impacts; Daily Emissions: Less than significant;

107 California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 35.

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

Global Climate Change: Less than significant.

5.4.3.4.3.9 Summary of Mitigation; Existing Regulations and Standards Applicable to the Project – Neptune Marina Parcel FF

Mitigation for Demolition, Excavation/Grading and Construction Impacts: The SCAQMD has prepared a list of measures to reduce the impacts of construction-related emissions to the greatest extent possible. Those that could be feasibly implemented during the development of the project to mitigate $PM_{2.5}$ and PM_{10} emissions are as follows:

5.4-7. Develop and implement a construction management plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Configure construction parking to minimize traffic interference.

b. Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person).

c. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable.

d. Reroute construction trucks away from congested streets.

e. Consolidate truck deliveries when possible.

f. Provide dedicated turn lanes for movement of construction trucks and equipment on and off site.

g. Maintain equipment and vehicle engines in good condition and in proper tune according to manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.

h. Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts.

i. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators.

j. Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices.

k. Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices.

5.4-8. Develop and implement a dust control plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).

b. Replace ground cover in disturbed areas as quickly as possible.

c. Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, dirt) according to manufacturers' specifications.

d. Water active grading sites at least twice daily (SCAQMD Rule 403).

e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

f. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded.

g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.

h. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available).

i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

j. Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.

k. Enforce traffic speed limits of 15 mph or less on all unpaved roads.

l. Pave construction roads when the specific roadway path would be utilized for 120 days or more.

5.4.3.4.3.10 Summary of Project Impacts With Mitigation – Neptune Marina Parcel FF

Demolition, Excavation/Grading and Construction Impacts: Less than significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant and unavoidable;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

Global Climate Change: Less than significant.

5.4.3.4.4 Woodfin Suite Hotel and Timeshare Resort Project

5.4.3.4.4.1 Threshold: The project will generate air pollutant quantities in excess of established SCAQMD emissions thresholds.

Analysis: Development of the Woodfin Suite Hotel and Timeshare Resort would generate air emissions from a wide variety of stationary, area, and mobile sources. Fugitive dust (PM_{10} and $PM_{2.5}$) would be generated by on-site construction activities. Once the proposed uses are occupied, emissions would be generated by stationary and area sources such as water and space heaters, landscape maintenance equipment and consumer products. Stationary and area source emissions could also result from the operation of certain types of commercial business, such as restaurants, within the project site. Mobile source emissions would be generated by motor vehicle travel associated with construction activities and occupancy of the proposed development. An assessment of construction and operational emissions are presented below based on the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook*.

Demolition, Excavation/Grading and Construction Impacts: Development of the Woodfin Suite Hotel and Timeshare Resort would require site excavation and grading and construction of the proposed improvements. Parcel 9U North would include the installation of approximately 570 feet of 18-inch diameter water main in Via Marina, including interconnections to existing water system, and all necessary appurtenances (this is not considered part of the Parcel 9U North project but is included in the air quality analysis). These activities would occur over an estimated 2~~0~~4-month period. During this time, emissions would be generated by on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles and generators. Fugitive dust would also be generated during all project development phases (i.e., excavation, grading and construction). Because of the duration of project development and the normal day-to-day variability in construction activities, it is difficult to precisely quantify the daily emissions associated with each phase of the proposed construction activities. **Table 5.4-3~~0~~2, Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions – Woodfin Suite Hotel and Timeshare Resort**, identifies daily emissions associated with typical equipment for different construction phases based on information provided by the project applicant and default construction values generated by URBEMIS2007 Version 9.2.4. These emissions assume that some of the construction equipment and activities would occur continuously over an 8-hour period. In reality, this would not occur, as most equipment would operate only a fraction of each workday. Therefore, **Table 5.4-3~~0~~2** represents a worst-case scenario for the construction phase of the Woodfin Suite Hotel and Timeshare Resort.

Table 5.4-3~~2~~0
Estimated Unmitigated Demolition, Excavation/Grading and Construction Emissions
Woodfin Suite Hotel and Timeshare Resort

Year	Emissions in Pounds per Day					
	CO	**VOC**	**NOx**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
~~2009~~2011	65.48~~71.45~~	13.24~~20.01~~	100.45~~113.21~~	0.02	11.62~~13.81~~	5.33~~5.98~~
~~2010~~2012	51.85~~56.83~~	25.59~~19.40~~	79.04~~90.16~~	0.01	4.10~~76~~	3.73~~4.34~~
Maximum Emissions in Any Year	65.48~~71.45~~	25.59~~20.01~~	100.45~~113.21~~	0.02	11.62~~13.81~~	5.33~~5.98~~
SCAQMD Thresholds	550	75	100	150	150	55
Exceeds Thresholds?	NO	NO	**YES**~~NO*~~	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

As shown, construction emissions associated with development of the Woodfin Suite Hotel and Timeshare Resort would barely exceed the thresholds of significance during any construction year. Therefore, proposed construction on the Woodfin Suite Hotel and Timeshare Resort would result in a significant air quality impact. As shown, recommended thresholds for NO_X would potentially~~likely~~ be exceeded during the construction and asphalt paving phases due to the operation of heavy-duty vehicles. Therefore, proposed construction of the Woodfin Suite Hotel and Timeshare Resort would result in a significant air quality impact for NO_X emissions.

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: An analysis of the impacts of the Woodfin Suite Hotel and Timeshare Resort construction emissions on ambient concentrations of PM_{10}, $PM_{2.5}$, NO_2 and CO was conducted. This analysis determined the ambient air quality impacts on the day with the highest estimated daily mass emission rates. The methodology and results are described in detail in **Appendix 5.4**. The results of the dispersion modeling analysis are compared to the localized significance thresholds in **Table 5.4-3~~1~~3, Localized Significance Thresholds Analysis – Woodfin Suite Hotel and Timeshare Resort**.

Table 5.4-33~~1~~
Localized Significance Thresholds Analysis
Woodfin Suite Hotel and Timeshare Resort

Pollutant	Averaging Period	Modeling Results µg/m³	Modeling Results ppm	LST Criteria[1] µg/m³	LST Criteria[1] ppm	Exceeds Threshold?
Respirable Particulate Matter (PM_{10})	24 hours	24.55~~28.8~~	NA	10.4	NA	**YES**
Respirable Particulate Matter (PM_{10})	Annual	0.97	NA	4.2	NA	NO
Fine Particulate Matter ($PM_{2.5}$)	24 hours	14.35~~16.2~~	NA	10.4	NA	**YES**
Fine Particulate Matter ($PM_{2.5}$)	Annual	0.73	NA	4.2	NA	NO
Nitrogen Dioxide (NO_2)	1 hour	203~~229~~	0.1~~2~~1	188	0.10	**YES**
Nitrogen Dioxide (NO_2)	Annual	1.08	0.00	19	0.01	NO
Carbon Monoxide (CO)	1 hour	1,669~~802~~	1.46	19,454	17	NO
Carbon Monoxide (CO)	8 hours	437~~472~~	0.38~~41~~	7,896	6.9	NO

Source: *Impact Sciences, Inc.*
[1] *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *June 2008.*

As shown in **Table 5.4-31,** the construction of the Woodfin Suite Hotel and Timeshare Resort would cause localized significant impacts for PM_{10}, $PM_{2.5}$, and NO_2.

Operational Impacts; Daily Emissions: Operational emissions would be generated by area, mobile and possibly stationary, sources as a result of normal day-to-day activities on the project site after occupation. The emissions from such sources are primarily associated with fuel combustion, which are addressed in the area and mobile source emission calculations by URBEMIS2007 discussed below. Area source emissions would be generated by the consumption of natural gas for space and water heating devices and food preparation and from the operation of gasoline-powered landscape maintenance equipment and consumer products (e.g., hair spray, deodorants, lighter fluid, air fresheners, automotive products and household cleaners). Mobile emissions would be generated by the motor vehicles traveling to and from the hotel. The Woodfin Suite Hotel and Timeshare Resort area and mobile source emissions as estimated using URBEMIS2007 are shown in **Table 5.4-34~~2~~, Estimated Operational Emissions without Mitigation – Woodfin Suite Hotel and Timeshare Resort**.

Table 5.4-3~~4~~2
Estimated Operational Emissions without Mitigation
Woodfin Suite Hotel and Timeshare Resort

Emissions Source	Emissions in Pounds per Day					
	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Summertime Emissions[1]						
Operational (Mobile) Sources	111.71	10.02	12.48	0.15	24.11	4.68
Area Sources	3.49	1.13	2.32	0.00	0.01	0.01
Summertime Emission Totals:	115.20	11.15	14.80	0.15	24.12	4.69
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO
Wintertime Emissions[2]						
Operational (Mobile) Sources	106.54	10.21	15.04	0.12	24.11	4.68
Area Sources	1.94	1.01	2.30	0.00	0.00	0.00
Wintertime Emission Totals:	108.48	11.22	17.34	0.12	24.11	4.68
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] "Summertime Emissions" are representative of worst-case conditions that may occur during the O_3 season (May 1 to October 31).
[2] "Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).

As shown, the Woodfin Suite Hotel and Timeshare Resort at buildout and in full operation would not generate an increase in emissions that would exceed SCAQMD recommended thresholds. Therefore, operation of the proposed Woodfin Suite Hotel and Timeshare Resort would not result in a significant air quality impact.

Operational Impacts; Wind: RWDI prepared a wind study for the proposed project to assess the project's development and/or building placement on wind patterns within the marina, loss of surface winds used by birds and sailboats and general air circulation (this report is included in **Appendix 5.4** in its entirety). The study concluded:

> *From the results of this wind study, it has been concluded that the proposed Neptune Marina will produce similar wind conditions over a majority of the areas of Marina del Rey. There will be localized areas of altered wind directions and speeds at the west end of Basins B and C. The change in wind conditions noted at the west end of Basins B and C is assumed not to be significant as boats would be under power at this location in the marina. The overall wind conditions predicted with the proposed and expected future developments are similar to those presently experienced in and around the marina and, therefore, the general air circulation patterns and the use of surface winds by birds will not be affected.*

Operational Impacts; Additional Indicators: As previously discussed, the SCAQMD lists criteria indicating when a project may create potential air quality impacts. These criteria are listed below along

with an analysis of whether or not the project meets any of them. If a project meets any one of the criteria, project air quality impacts would be significant relative to that criterion.

5.4.3.4.4.2 Threshold: The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

Analysis: SCAQMD's *CEQA Air Quality Handbook* indicates that an air quality modeling analysis would need to be performed to identify the project's impact on ambient air quality.[108] In order for a project to be found consistent with the applicable AQMP, the analysis would have to demonstrate that the project's emissions would not increase the frequency or the severity of existing air quality violations, or contribute to a new violation.[109] The CO analysis for traffic emissions described below assesses the potential ambient air quality impacts with respect to this pollutant. URBEMIS2007 was used to calculate project emissions for comparison with thresholds addressing regional significance. The estimated operational emissions due to proposed project were found to be less than significant. Hence, the project is not expected to violate ambient air quality standards or contribute to an existing or projected air quality violation.

5.4.3.4.4.3 Threshold: The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

Analysis: As discussed earlier in this analysis, the 2007 AQMP is designed to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to achieve the federal 8-hour ozone standard by 2021[110] and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP do not interfere with attainment and do not contribute to the exceedance of an existing air quality violation because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds. The following analysis discusses the project's consistency with the AQMP.

---

108 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-3.

109 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, p. 12-3.

110 The 2007 AQMP has determined that the basin will still exceed the federal 8-hour ozone standard in 2021 even with implementation of 2007 AQMP control measures.

Projects that are consistent with the projections of population forecasts identified in the Growth Management Chapter of the RCPG are considered consistent with the AQMP growth projections. This is because the Growth Management Chapter forms the basis of the land use and transportation control portions of the AQMP.

As discussed in **Section 5.16, Population and Housing**, the Woodfin Suite Hotel and Timeshare Resort is considered to be consistent with the future population and employment figures projected for the site's census tract. The project would not increase population over that which has been planned for the area, would be consistent with the AQMP forecasts for this area, would be considered consistent with the air quality-related regional plans and should not jeopardize attainment of state and federal ambient air quality standards in the basin.

Another measurement tool in determining AQMP consistency is to determine how a project accommodates the expected increase in population and employment. Generally, if a project is planned in a way that results in the minimization of VMT both within the project and in the community in which it is located and consequently the minimization of air pollutant emissions, that project is consistent with the AQMP.[111]

The nature of the project and its location within the Marina del Rey and surrounding urban areas with supporting commercial and office uses would minimize the need for or distance of some automobile trips, thereby, reducing automotive emissions from such trips. This type of development is consistent with the goals of the AQMP for reducing motor vehicle emissions. In addition, the project site is located in proximity to existing job centers that provide employment opportunities to many Marina del Rey residents. With these job centers, many local residents do not have to commute to distant employment centers. The project site is also linked to various employment, shopping and recreation areas throughout the Los Angeles Basin through the local transit system. Use of these facilities could reduce the need for some motor vehicle trips. As a result of reduced commutes and other vehicle trips, VMT and, consequently, air pollutant emissions could be further reduced.

5.4.3.4.4.4 Threshold: The project could generate vehicle trips that cause a CO hotspot or project could be occupied by sensitive receptors that are exposed to a CO hotspot.

Analysis: As was done to assess cumulative CO concentrations, the simplified CALINE4 screening procedure was used to predict future CO concentrations at 0 and 25 feet from the intersections in the study area for future traffic with the addition of Woodfin Suite Hotel and Timeshare Resort only. The results of air emissions modeling for the project study area are shown in **Table 5.4-35~~3~~, Carbon**

111 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-5.

Monoxide Concentrations Future with Woodfin Suite Hotel and Timeshare Resort Traffic (2013). The values in this table reflect the ambient air quality impacts of emissions resulting from ambient traffic growth in the area along with traffic resulting from the proposed Woodfin Suite Hotel and Timeshare Resort development as predicted in the traffic impact analysis for the project.[112]

Table 5.4-3~~3~~5
Carbon Monoxide Concentrations
Future with Woodfin Suite Hotel and Timeshare Resort Traffic (2013)
(parts per million)

		0 Feet		25 Feet	
Intersection	**LOS**	**1-Hour[1]**	**8-Hour[2]**	**1-Hour[1]**	**8-Hour[2]**
Admiralty Way & Mindanao Way	C	7.4	4.3	6.5	3.7
Lincoln Blvd. & Fiji Way	C	8.4	5.0	7.3	4.2
Lincoln Blvd. & Marina Expressway (SR-90)	C	7.8	4.6	6.8	3.9
Lincoln Blvd. & Mindanao Way	D	7.7	4.5	6.8	3.9
Lincoln Blvd. & Washington Blvd.	F	9.0	5.4	7.7	4.5
Marina Expressway (SR-90 EB) & Mindanao Way	C	6.4	3.6	5.9	3.2
Palawan Way & Admiralty Way	B	7.1	4.1	6.3	3.5
Palawan Way & Washington Blvd.	C	6.8	3.9	6.1	3.4
Via Marina & Admiralty Way	C	5.5	3.0	5.4	2.9
Via Marina & Washington Blvd.	D	7.0	4.0	6.2	3.5

Source: Impact Sciences, Inc. The CO concentration calculations are provided in ***Appendix 5.4****.*
Note: Not all intersections would operate at a level of service (LOS) that could generate a CO hotspot (i.e., D or worse). However, for consistency purposes all ten intersections that were adversely affected during the "Cumulative with Project" scenario were analyzed for a potential CO hotspot.
[1] *State standard is 20 parts per million. Federal standard is 35 parts per million.*
[2] *State standard is 9.0 parts per million. Federal standard is 9 parts per million.*

As shown, the state and federal 1- and 8-hour CO standards would not be exceeded at any of the modeled intersections at Woodfin Suite Hotel and Timeshare Resort buildout with ambient traffic growth. Therefore, CO hotspots are not predicted to occur near these intersections in the future with the contribution of ambient growth and the proposed project's traffic. The proposed project would not expose sensitive receptors to CO hotspots and its impact with respect to this criterion would be considered less than significant.

112 Crain & Associates, *Traffic Analysis for a Proposed 526-Unit Residential Development, 288-Room Hotel/Timeshare Resort, and 1.46-Acre Public Park on Parcels 10R, FF and 9U in Marina del Rey* (Los Angeles, California: Crain & Associates, May 2007).

5.4.3.4.4.5 Threshold: The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

Analysis: The uses associated with the Woodfin Suite Hotel and Timeshare Resort are not expected to be a source of odors. The adjacent land uses are such that users of the hotel/timeshare resort would not be subjected to objectionable odors from any surrounding land use. Consequently, no significant impacts from such odors are anticipated.

5.4.3.4.4.6 Threshold: The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety;

Threshold: The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list;

Threshold: The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or

Threshold: The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in one million.

Analysis: Construction of the Woodfin Suite Hotel and Timeshare Resort would not result in an accidental release of hazardous materials on site because any lead and asbestos containing materials would be abated and disposed of in accordance with SCAQMD and other local and state regulations. Construction of the Parcel would result in emissions of DPM, which has been designated a TAC by CARB. Typically, cancer risk is assessed for long-term exposure durations (typically 70 years). Construction of the project would result in much shorter-term DPM emissions, however, and exposure would be for less than two years. According to OEHHA, high short-term exposures (i.e., less than a maximum theoretical project life of 70 years) are not necessarily equivalent to low longer-term exposures, as previously discussed. Construction of the Woodfin Suite Hotel and Timeshare Resort would result in maximum on-site DPM emissions of 5.64 pounds per day in 2011 and 3.95 pounds per day in 2012. These emissions would occur at various locations through the Parcel. Because construction of the Woodfin Suite Hotel and Timeshare Resort would result in a maximum exposure duration of DPM for less than two years and that construction activities would take place at different locations throughout the site, it is not expected that the total dose over two years to any single sensitive receptor would result in an exceedance of the SCAQMD maximum individual cancer risk of ten in one million. Also, in accordance with OEHHA policy described above, any numerical evaluation of cancer risk from short-term exposures (i.e., less than

nine years) would introduce uncertainties into the assessment. Furthermore, the SCAQMD does not require a health risk assessment for short-term construction impacts. Therefore, because of the limited exposure duration and temporary nature of the DPM emissions, no significant impacts with respect to the criteria listed above would occur.

The proposed land use of the Woodfin Suite Hotel and Timeshare Resort will not use hazardous materials or emit toxic air contaminants in appreciable quantities. Adjacent land uses would not subject project site visitors or employees to toxic air emissions. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.

5.4.3.4.4.7 Threshold: The project would generate emissions of greenhouse gases that could contribute to changes in global climate.

Analysis: As previously discussed, the primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. Accordingly, the construction and operation of the Woodfin Suite Hotel and Timeshare Resort would result in direct emissions of these GHGs due to fuel combustion in motor vehicles, construction equipment, and building heating systems associated with the project. Building and motor vehicle air conditioning systems may use HFCs (and HCFCs and CFCs to the extent that they have not been completely phased out at later dates), which may result in emissions through leaks. The other primary GHGs (perfluorocarbons and sulfur hexafluoride) are associated with specific industrial sources and are not expected to be associated with the proposed project. In addition, indirect GHG emissions would be associated with the electrical demand of the hotel, the electrical demand resulting from the provision of water to the project site, the electrical demand and process emissions due to wastewater treatment, and the decomposition of solid waste generated by the project.

Using the methods described in **Section 5.4.3.4.1.7**, the construction and operational GHG emissions associated with the project were estimated and are shown in **Table 5.4-364**, **Estimated Construction Greenhouse Gas Emissions – Woodfin Suite Hotel and Timeshare Resort Project** and **Table 5.4-357**, **Estimated Operational Greenhouse Gas Emissions – Woodfin Suite Hotel and Timeshare Resort Project**, respectively.

Table 5.4-3~~4~~
Estimated Construction Greenhouse Gas Emissions
Woodfin Suite Hotel and Timeshare Resort Project

Construction Year	Emissions in Metric Tons CO_2E Per Year
~~2009~~2011	651~~995~~
~~2010~~2012	1,168

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

Table 5.4-3~~5~~
Estimated Operational Greenhouse Gas Emissions
Woodfin Suite Hotel and Timeshare Resort Project

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Direct GHG Emissions	
Operational (Mobile) Sources	2,415
Area Sources	460
Total Direct GHG Emissions	2,875
Indirect GHG Emissions	
Electrical Generation	812
Water Supply	23
Wastewater Treatment	61
Solid Waste	21
Total Indirect GHG Emissions	917
GHG Emissions:	3,792

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

While the Woodfin Suite Hotel and Timeshare Resort Project would result in emissions of GHGs, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project of this size is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.[113] Accordingly, further discussion of the Woodfin Suite Hotel and Timeshare Resort

[113] California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 35.

Project's greenhouse gas emissions and their impact on global climate are addressed in **Section 5.4.4.2, Cumulative Impacts, Global Climate Change**.

5.4.3.4.4.8 Summary of Project Impacts Without Mitigation – Woodfin Suite Hotel and Timeshare Resort

Demolition, Excavation/Grading and Construction Impacts: ~~Less than s~~Significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

Global Climate Change: Less than significant.

5.4.3.4.4.9 Summary of Project Mitigation; Existing Regulations and Standards Applicable to the Project – Woodfin Suite Hotel and Timeshare Resort

Mitigation for Demolition, Excavation/Grading and Construction Impacts: The SCAQMD has prepared a list of measures to reduce the impacts of construction-related emissions to the greatest extent possible. Those that could be feasibly implemented during the development of the project to mitigate NO_X, $PM_{2.5}$, and PM_{10} emissions are as follows:

5.4-9. Develop and implement a construction management plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Configure construction parking to minimize traffic interference.

b. Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person).

c. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable.

d. Reroute construction trucks away from congested streets.

e. Consolidate truck deliveries when possible.

f. Provide dedicated turn lanes for movement of construction trucks and equipment on and off site.

g. Maintain equipment and vehicle engines in good condition and in proper tune according to manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.

h. Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts.

i. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators.

j. Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices.

k. Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices.

5.4-10. Develop and implement a dust control plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).

b. Replace ground cover in disturbed areas as quickly as possible.

c. Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, dirt) according to manufacturers' specifications.

d. Water active grading sites at least twice daily (SCAQMD Rule 403).

e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

f. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded.

g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.

h. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available).

i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

j. Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.

k. Enforce traffic speed limits of 15 mph or less on all unpaved roads.

l. Pave construction roads when the specific roadway path would be utilized for 120 days or more.

Construction mitigation measures recommended in the SCAQMD's *CEQA Air Quality Handbook* that were rejected for the proposed project are listed below along with a discussion of why each measure was rejected:

- Prohibit truck idling in excess of 2 minutes: The nature of diesel engines does not lend them to constant turning on and off during construction activities. However, CARB has adopted an ATCM that applies to all diesel-fueled commercial vehicles over 10,000 pounds and that prohibits idling for more than 5 minutes except under limited circumstances. Accordingly, this restriction is required by law and should not be considered mitigation.

- Implement a shuttle service to and from retail services and food establishments during lunch hours: Construction workers typically take a 0.5-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to the site. This measure would therefore be ineffective in reducing project construction-related emissions.

5.4.3.4.4.10 Summary of Project Impacts With Mitigation – Woodfin Suite Hotel and Timeshare Resort

Demolition, Excavation/Grading and Construction Impacts: ~~Less than S~~S~~s~~ignificant ~~and unavoidable~~;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant and unavoidable;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

Global Climate Change: Less than significant.

.

5.4.3.4.5 Restored Wetland and Upland Buffer

5.4.3.4.5.1 Threshold: The project will generate air pollutant quantities in excess of established SCAQMD emissions thresholds.

Analysis: Development of the restored wetland and upland buffer would generate air emissions from a variety of area and mobile sources. Fugitive dust (PM_{10} and $PM_{2.5}$) would be generated by on-site construction activities. Once the proposed park has been developed, emissions would be generated by area sources such as landscape maintenance equipment. Mobile source emissions would be generated by motor vehicle travel associated with construction and operation of the proposed development. An assessment of construction and operational emissions are presented below based on the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook*.

Demolition, Excavation/Grading and Construction Impacts: Development of the restored wetland and upland buffer would require on-site soil excavation that would be moved on site to create the upland buffer. Additional soil material would also be imported to help create the upland buffer. During excavation and grading activities, as well as construction activities, fugitive dust would be generated. During construction activities, emissions would be generated by on-site stationary sources, heavy-duty construction equipment, construction worker vehicles, and generators. Due to the normal day-to-day variability in construction activities, it is difficult to precisely quantify the daily emissions associated with each phase of the proposed construction activities. **Table 5.4-3~~8~~6, Estimated Unmitigated Demolition, Excavation/Grading, and Construction Emissions – Restored Wetland and Upland Buffer**, identifies daily emissions associated with typical equipment for the various construction phases based on information provided by the applicant and default construction values generated by URBEMIS2007 Version 9.2.4. These emissions assumed that some of the construction equipment and activities would occur continuously for an 8-hour period. In reality, this would not occur, as most equipment would operate only a fraction of each workday. Therefore, **Table 5.4-3~~8~~6**, represents a worst-case scenario for the construction phase of the Restored Wetland and Upland Buffer.

Table 5.4-3~~6~~
Estimated Unmitigated Demolition, Excavation/Grading, and Construction Emissions
Restored Wetland Park and Upland Buffer

Year	Emissions in Pounds per Day					
	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
~~2010~~2011~~2~~	9.88~~16.21~~	2.22~~3.36~~	18.66~~22.39~~	0.00~~1~~	1.08~~65~~	0.86~~1.50~~
2012	15.16	2.94	19.58	0.00	1.45	1.32
Maximum Emissions in Any Year	15.16~~16.21~~	2.94~~3.36~~	19.58~~22.39~~	0.0~~1~~0	1.45~~1.65~~	1.32~~1.50~~
SCAQMD Thresholds	550	75	100	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are provided in ***Appendix 5.4****.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: An analysis of the impacts of the restored wetland and upland buffer construction emissions on ambient concentrations of PM_{10}, $PM_{2.5}$, NO_2, and CO was conducted. This analysis determined the ambient air quality impacts on the day with the highest estimated daily mass emission rates. The methodology and results are described in detail in **Appendix 5.4**. The results of the dispersion modeling analysis are compared to the localized significance thresholds in **Table 5.4-3~~7~~**, **Localized Significance Thresholds Analysis – Restored Wetland and Upland Buffer**.

Table 5.4-3~~7~~
Localized Significance Thresholds Analysis
Restored Wetland and Upland Buffer

Pollutant	Averaging Period	Modeling Results		LST Criteria[1]		Exceeds Threshold?
		µg/m³	ppm	µg/m³	ppm	
Respirable Particulate Matter (PM_{10})	24 hours	6.79~~7.7~~	NA	10.4	NA	NO
Respirable Particulate Matter (PM_{10})	Annual	0.41	NA	4.2	NA	NO
Fine Particulate Matter ($PM_{2.5}$)	24 hours	6.27~~7.1~~	NA	10.4	NA	NO
Fine Particulate Matter ($PM_{2.5}$)	Annual	0.38	NA	4.2	NA	NO
Nitrogen Dioxide (NO_2)	1 hour	44.38~~50.5~~	0.03~~2~~	188	0.10	NO
Nitrogen Dioxide (NO_2)	Annual	0.42	0.00	19	0.01	NO
Carbon Monoxide (CO)	1 hour	443~~458~~	0.39~~40~~	19,454	17	NO
Carbon Monoxide (CO)	8 hours	159~~164~~	0.14	7,896	6.9	NO

Source: *Impact Sciences, Inc.*
[1] *South Coast Air Quality Management District,* Final Localized Significance Threshold Methodology, *June 2008.*

As shown in **Table 5.4-3~~7~~9**, construction of the restored wetland and upland buffer would not generate pollutant concentrations that exceed any of the LST criteria for the proposed project.

Operational Impacts; Daily Emissions: Operational emissions would be generated by area and mobile sources as a result of normal day-to-day activities on the project site following full buildout. The emissions from such sources are primarily associated with fuel combustion, which is addressed in the mobile source emission calculations by URBEMIS2007 discussed below. Area source emissions are typically generated by the consumption of natural gas for space and water heating devices and food preparation, the operation of gasoline-powered landscape maintenance equipment, and consumer products (e.g., hair spray, deodorants, lighter fluid, air fresheners, automotive products, and household cleaners). However, the proposed park would not include residential or commercial uses; therefore, the only area source emissions associated with its day-to-day activities would be the use of landscape maintenance equipment. Mobile source emissions would be generated by the motor vehicles traveling to and from the restored wetland and upland buffer. The restored wetland and upland buffer area and mobile source emissions as estimated using URBEMIS2007 are shown in **Table 5.4-3~~8~~40, Estimated Operational Emissions without Mitigation – Restored Wetland and Upland Buffer**.

Table 5.4-4~~0~~38
Estimated Operational Emissions without Mitigation
Restored Wetland and Upland Buffer

Emissions Source	Emissions in Pounds per Day					
	CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Summertime Emissions[1]						
Operational (Mobile) Sources	3.63	0.27	0.41	0.00	0.78	0.15
Area Sources	1.55	0.12	0.02	0.00	0.01	0.01
Summertime Emission Totals:	5.18	0.39	0.43	0.00	0.79	0.16
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO
Wintertime Emissions[2]						
Operational (Mobile) Sources	3.46	0.31	0.49	0.00	0.78	0.15
Area Sources	0.00	0.00	0.00	0.00	0.00	0.00
Wintertime Emission Totals:	3.46	0.31	0.49	0.00	0.78	0.15
Recommended Threshold:	550	55	55	150	150	55
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] *"Summertime Emissions" are representative of worst-case conditions that may occur during the O_3 season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).*

As shown, the restored wetland and upland buffer at buildout and in full operation would not generate emissions that would exceed SCAQMD's recommended thresholds of significance. Therefore, the

operation of the proposed restored wetland and upland buffer would not result in a significant air quality impact.

Operational Impacts; Wind: RWDI prepared a wind study for the proposed project to assess the project's development and/or building placement on wind patterns within the marina, loss of surface winds used by birds and sailboats and general air circulation (this report is included in **Appendix 5.4** in its entirety). The study concluded:

> *From the results of this wind study, it has been concluded that the proposed Neptune Marina will produce similar wind conditions over a majority of the areas of Marina del Rey. There will be localized areas of altered wind directions and speeds at the west end of Basins B and C. The change in wind conditions noted at the west end of Basins B and C is assumed not to be significant as boats would be under power at this location in the marina. The overall wind conditions predicted with the proposed and expected future developments are similar to those presently experienced in and around the marina and, therefore, the general air circulation patterns and the use of surface winds by birds will not be affected.*

Operational Impacts; Additional Indicators: As previously discussed, the SCAQMD lists criteria indicating when a project may create potential air quality impacts. These criteria are listed below along with an analysis of whether or not the project meets any of them. If a project meets any one of the criteria, project air quality impacts would be significant relative to that criterion.

5.4.3.4.5.2 Threshold: The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

Analysis: SCAQMD's *CEQA Air Quality Handbook* indicates that an air quality modeling analysis would need to be performed to identify the project's impact on ambient air quality.[114] In order for a project to be found consistent the applicable AQMP, the analysis would have to demonstrate that the project's emissions would not increase the frequency or the severity of existing air quality violations, or contribute to a new violation.[115] The CO analysis for traffic emissions described below assesses the potential ambient air quality impacts with respect to this pollutant. URBEMIS2007 was used to calculate project emissions for comparison with thresholds addressing regional significance. The estimated operational emissions due to proposed project were found to be less than significant. Hence, the project is not expected to violate ambient air quality standards or contribute to an existing or projected air quality violation.

---

114 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 12-3.

115 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, p. 12-3.

5.4.3.4.5.3 Threshold: The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

Analysis: The restored wetland and upland buffer would involve passive recreation and would not result in an on-site population. Therefore, the project would not result in a population increase in excess of SCAG projections contained in the 2007 AQMP and impacts would be less than significant.

5.4.3.4.5.4 Threshold: The project could generate vehicle trips that cause a CO hotspot or project could be occupied by sensitive receptors that are exposed to a CO hotspot.

Analysis: The vehicle trips associated with this project component have been included in the CO hotspots analysis for the Woodfin Suite Hotel and Timeshare Resort, which is located on the same parcel. As shown in **Table 5.4-3~~3~~5**, CO concentrations generated from ambient growth in the area and the proposed project's traffic would not violate any state or federal CO standards. Furthermore, the vehicle trips associated with the restored wetland and upland buffer are also included in the cumulative CO hotspots analysis for the complete project. As shown in **Table 5.4-17~~15~~**, the CO concentrations generated by cumulative related projects and the complete proposed project, including the restored wetland and upland buffer would not violate any state or federal CO standards. Therefore, this component of the project would not expose sensitive receptors to CO hotspots and the impact with respect to this criterion is considered less than significant.

5.4.3.4.5.5 Threshold: The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

Analysis: The passive recreational uses associated with the restored wetland and upland buffer are not expected to be a source of odors. The adjacent land uses are such that project visitors would not be subjected to objectionable odors from any surrounding land use. Consequently, no significant impacts from such odors are anticipated.

5.4.3.4.5.6 Threshold: The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety;

Threshold: The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list;

Threshold: The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or

Threshold: The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million.

Analysis: Construction of the restored wetland and upland buffer would not result in an accidental release of hazardous materials on site because any lead-based paint and asbestos containing materials would be abated and disposed of in accordance with SCAQMD and other local and state regulations. Construction of the restored wetland and upland buffer would result in emissions of DPM, which has been designated a TAC by CARB. Typically, cancer risk is assessed for long-term exposure durations (typically 70 years). Construction of the project would result in much shorter-term DPM emissions, however, and exposure would be for less than two years. According to OEHHA, high short-term exposures (i.e., less than a maximum theoretical project life of 70 years) are not necessarily equivalent to low longer-term exposures, as previously discussed. Construction of the restored wetland and upland buffer would result in maximum on-site DPM emissions of 0.88 pounds per day in 2011 and 1.41 pounds per day in 2012. These emissions would occur at various locations throughout the site. Because construction of the project would result in a maximum exposure duration of DPM for less than two years and that construction activities would take place at different locations throughout the site, it is not expected that the total dose to any single sensitive receptor would result in an exceedance of the SCAQMD maximum individual cancer risk of ten in one million. Also, in accordance with OEHHA policy described above, any numerical evaluation of cancer risk from short-term exposures (i.e., less than nine years) would introduce uncertainties into the assessment. Furthermore, the SCAQMD does not require a health risk assessment for short-term construction impacts. Therefore, because of the limited exposure duration and temporary nature of the DPM emissions, no significant impacts with respect to the criteria listed above would occur.

The proposed land use of the restored wetland and upland buffer project will not use hazardous materials or emit toxic air contaminants in appreciable quantities. Adjacent land uses would not subject

project visitors to toxic air emissions. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.

5.4.3.4.5.7 Threshold: The project would generate emissions of greenhouse gases that could contribute to changes in global climate.

Analysis: As previously discussed, the primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. Accordingly, the restored wetland and upland buffer would result in direct emissions of these GHGs due to fuel combustion in motor vehicles and construction equipment associated with the project. Unlike the other project components, no indirect GHG emissions would result because the restored wetland and upland buffer would not be served by water or sewer service and solid waste would be minimal.

Using the methods described in **Section 5.4.3.4.1.7**, the construction and operational GHG emissions associated with the project were estimated and are shown in **Table 5.4-4139, Estimated Construction Greenhouse Gas Emissions – Restored Wetland and Upland Buffer** and **Table 5.4-402, Estimated Operational Greenhouse Gas Emissions – Restored Wetland and Upland Buffer**, respectively.

Table 5.4-4139
Estimated Construction Greenhouse Gas Emissions
Restored Wetland and Upland Buffer

Construction Year	Emissions in Metric Tons CO_2E Per Year
2011	56
20102012	15892

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix 5.4**.*

Table 5.4-4~~2~~0
Estimated Operational Greenhouse Gas Emissions
Restored Wetland and Upland Buffer

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Direct GHG Emissions	
Operational (Mobile) Sources	79
Area Sources	1
Total Direct GHG Emissions	80
Project GHG Emissions:	80

Source: Impact Sciences, Inc. Emissions calculations are provided in ***Appendix 5.4****.*

While the restored wetland and upland buffer would result in emissions of GHGs, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project of this size is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.[116] Accordingly, further discussion of the restored wetland and upland buffer project's greenhouse gas emissions and their impact on global climate are addressed in **Section 5.4.4.2, Cumulative Impacts, Global Climate Change**.

5.4.3.4.5.8 Summary of Project Impacts Without Mitigation – Wetland Park Project

Demolition, Excavation/Grading and Construction Impacts: Less than significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Less than significant;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

Global Climate Change: Less than significant.

116 California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 35.

5.4.3.4.5.9 Summary of Project Mitigation; Existing Regulations and Standards Applicable to the Project – Wetland Park Project

Mitigation for Demolition, Excavation/Grading and Construction Impacts: The SCAQMD has prepared a list of measures to reduce the impacts of construction-related emissions to the greatest extent possible. Even thought the Wetland Park would not result in any significant air quality impacts, the following measures are recommended to reduce NO_X, $PM_{2.5}$, and PM_{10} emissions:

5.4-9. Develop and implement a construction management plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Configure construction parking to minimize traffic interference.

b. Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person).

c. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the degree practicable.

d. Reroute construction trucks away from congested streets.

e. Consolidate truck deliveries when possible.

f. Provide dedicated turn lanes for movement of construction trucks and equipment on and off site.

g. Maintain equipment and vehicle engines in good condition and in proper tune according to manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.

h. Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at 800/242-4022 for daily forecasts.

i. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators.

j. Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices.

k. Use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices.

5.4-10. Develop and implement a dust control plan, as approved by the County, which includes the following measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD:

a. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).

b. Replace ground cover in disturbed areas as quickly as possible.

c. Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, dirt) according to manufacturers' specifications.

d. Water active grading sites at least twice daily (SCAQMD Rule 403).

e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

f. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded.

g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code.

h. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available).

i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

j. Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.

k. Enforce traffic speed limits of 15 mph or less on all unpaved roads.

l. Pave construction roads when the specific roadway path would be utilized for 120 days or more.

Construction mitigation measures recommended in the SCAQMD's *CEQA Air Quality Handbook* that were rejected for the proposed project are listed below along with a discussion of why each measure was rejected:

- Prohibit truck idling in excess of 2 minutes: The nature of diesel engines does not lend them to constant turning on and off during construction activities. However, CARB has adopted an ATCM that applies to all diesel-fueled commercial vehicles over 10,000 pounds and that prohibits idling for more than 5 minutes except under limited circumstances. Accordingly, this restriction is required by law and should not be considered mitigation.

- Implement a shuttle service to and from retail services and food establishments during lunch hours: Construction workers typically take a 0.5-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to

the site. This measure would therefore be ineffective in reducing project construction-related emissions.

5.4.3.4.5.10 Summary of Project Impacts With Mitigation – Wetland Park Project

Demolition, Excavation/Grading and Construction Impacts: Significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Significant and unavoidable;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

Global Climate Change: Less than significant.

5.4.3.4.6 Public/~~Transient~~ Serving Boat Space Project

5.4.3.4.6.1 Threshold: The project will generate air pollutant quantities in excess of established SCAQMD emissions thresholds.

5.4.3.4.6.2 Threshold: The project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

5.4.3.4.6.3 Threshold: The project could generate vehicle trips that cause a CO hotspot or project could be occupied by sensitive receptors that are exposed to a CO hotspot.

Analysis: The public boat spaces project would require construction of approximately 542 linear feet of dock space and between 7 and 11 transient boat spaces and dinghy boat moorage space. The use of heavy construction equipment would be required. However, the use of such equipment would be minimal and any associated emissions would be negligible. The operation of this project component would involve limited recreation uses (boating), would only generate minimal trips, and would not result in appreciable air pollutant emissions. Therefore, the proposed public boat spaces would not generate air pollutant quantities in excess of established SCAQMD emissions thresholds, interfere with the attainment of federal or state ambient air quality standards and/or generate a CO hotspot. Impacts would be less than significant.

5.4.3.4.6.4 Threshold: The project could result in population increases within an area, which would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's buildout year.

Analysis: The public boat spaces project would involve limited recreational uses and would not result in an on-site population. Therefore, the project would not result in a population increase in excess of SCAG projections contained in the 2007 AQMP and impacts would be less than significant.

5.4.3.4.6.5 Threshold: The project will have the potential to create, or be subjected to, an objectionable odor that could impact sensitive receptors.

Analysis: The limited recreational uses associated with the public boat spaces project are not expected to be a source of odors. The adjacent land uses are such that project visitors would not be subjected to objectionable odors from any surrounding land use. The adjacent water uses are similar to the proposed Public/Transient Boat Space project such that project visitors would not be subjected to objectionable

odors from these surrounding uses. Consequently, no significant impacts from such odors are anticipated.

5.4.3.4.6.6 Threshold: The project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety;

Threshold: The project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a federal or state air toxic list;

Threshold: The project could be occupied by sensitive receptors within 0.25 mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or

Threshold: The project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of ten in one million.

Analysis: Construction of the public boat spaces would not result in an accidental release of hazardous materials on site because any lead-based paint and asbestos containing materials would be abated and disposed of in accordance with SCAQMD and other local and state regulations. Construction of the public boat spaces would result in minimal emissions of DPM, which has been designated a TAC by CARB. Typically, cancer risk is assessed for long-term exposure durations (typically 70 years). Construction of the public boast spaces would result in much shorter-term DPM emissions, however, and exposure would be for less than two years. According to OEHHA, high short-term exposures (i.e., less than a maximum theoretical project life of 70 years) are not necessarily equivalent to low longer-term exposures, as previously discussed. Construction of the public boat spaces would result in minimal DPM emissions much less than the emissions associated with other components of the project. Because construction of the public boat spaces would result in a maximum exposure duration of DPM for less than one year, it is not expected that the total dose to any single sensitive receptor would result in an exceedance of the SCAQMD maximum individual cancer risk of ten in one million. Also, in accordance with OEHHA policy described above, any numerical evaluation of cancer risk from short-term exposures (i.e., less than nine years) would introduce uncertainties into the assessment. Furthermore, the SCAQMD does not require a health risk assessment for short-term construction impacts. Therefore, because of the limited exposure duration and temporary nature of the DPM emissions, no significant impacts with respect to the criteria listed above would occur.

The proposed land use of the public boat spaces will not use hazardous materials or emit toxic air contaminants. Adjacent land uses would not subject project visitors to toxic air emissions. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.

5.4.3.4.6.7 Threshold: The project would generate emissions of greenhouse gases that could contribute to changes in global climate.

Analysis: As previously discussed, the primary source of GHGs in California is fossil fuel combustion. The primary GHG associated with fuel combustion is carbon dioxide, with lesser amounts of methane and nitrous oxide. As noted above, the public boat spaces would not result in appreciable emissions.

While the public boat spaces would result in emissions of GHGs, albeit in negligible amounts, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally the case that an individual project of this size is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.[117] Accordingly, further discussion of the public boat spaces' greenhouse gas emissions and their impact on global climate are addressed in **Section 5.4.4.2, Cumulative Impacts, Global Climate Change**.

5.4.3.4.6.8 Summary of Project Impacts Without Mitigation – Public Boat Spaces

Demolition, Excavation/Grading and Construction Impacts: Less than significant;

Demolition, Excavation/Grading and Construction Impacts; Localized Significance Thresholds: Less than significant;

Operational Impacts; Daily Emissions: Less than significant;

Operational Impacts; Wind: Less than significant;

Operational Impacts; Additional SCAQMD Indicators: Less than significant;

~~.~~ **Global Climate Change:** Less than significant.

[117] California Air Pollution Control Officers Association, *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, (2008) 35.

5.4.3.4.6.9 Summary of Project Mitigation; Existing Regulations and Standards Applicable to the Public Boat Space Project

Construction of the public boat slip project would not involve earthmoving activities, the use of heavy construction equipment would be minimal. Any associated emissions would be negligible, and the public boat slip project would not result in any significant air quality impacts. Therefore, no mitigation measures are required or recommended.

5.4.4 CUMULATIVE IMPACTS

5.4.4.1 Regional Analysis

The *CEQA Air Quality Handbook* identifies possible methods to determine the cumulative significance of land use projects.[118] All of the SCAQMD's methods are based on performance standards and emission reduction targets necessary to attain the federal and state air quality standards identified in the 2007 AQMP. The *CEQA Air Quality Handbook* identifies possible methods to determine the cumulative significance of land use projects.[119] However, one method is no longer recommended and supported by the SCAQMD, and another method is not applicable as the SCAQMD repealed the underlying regulation after the *CEQA Air Quality Handbook* was published. This EIR evaluates the following methods: (1) the SCAQMD method of whether the rate of growth in average daily trips exceeds the rate of growth in population and (2) whether or not the project is consistent with 2007 AQMP and, thus, would not jeopardize attainment of state and federal ambient air quality standards in the basin.

One SCAQMD approach is to assess whether the rate of growth in VMT and trips is held to the rate of population growth. As specified in the *CEQA Air Quality Handbook*, the ratio of project VMT or average daily trips (AMT) to anticipated VMT or ADT in the city or country is compared to the ratio of the project population to the anticipated population in the city or county.[120] If the growth of VMT or ADT is less than the population growth, then the project is not considered to have a significant cumulative air quality impact. The relevant values are shown in **Table 5.4-4~~3~~1, Comparison of Growth of ADT to Population Growth**. Because this approach compares a project's population to VMT, only the population and VMT associated with permanent residents of the Neptune Marina Apartments and Anchorage in Parcels 10R and FF are used in this comparison. As shown in **Table 5.4-4~~3~~1**, this criterion has been met, and the project would not be considered to have significant cumulative impacts.

---

118 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 9-12; Written communication with Steve Smith, South Coast Air Quality Management District, 20 November 2003.

119 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, pp. 9–12; Written communication with Steve Smith, Program Supervisor, South Coast Air Quality Management District, November 20, 2003.

120 South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. A9-126.

Table 5.4-4~~3~~1
Comparison of Growth of ADT to Population Growth

	Average Daily Trips	Population
Neptune Marina Apartments and Anchorage	2,083 [1]	789 [2]
Los Angeles County	44,342,400 [3]	10,955,466 [4]
Ratio of Project to Los Angeles County	0.000047	0.000072

Source: Impact Sciences, Inc.

[1] *Average daily trips at a rate of 3.96 trips per apartment unit.*

[2] *Number of residents associated with 526-unit apartment complex at Neptune Marina Parcel 10R and Neptune Marina Parcel FF.*

[3] *Estimated ADT in Los Angeles County in 2013 (project buildout year) as determined by EMFAC2007.*

[4] *Aggregated population in Los Angeles County in 2013. Source: Southern California Association of Governments. "City Projections." http://www.scag.ca.gov/forecast/downloads/2004GF.xls.*

Although the following method is not included in the *CEQA Air Quality Handbook* as a way to assess cumulative air quality impacts, it is determined the project is within growth forecasts contained in the Growth Management Chapter of SCAG's RCPG, which forms the basis for the land use and transportation control portions of the 2007 AQMP. Therefore, it would be consistent with the 2007 AQMP, indicating that it would not jeopardize attainment of state and federal ambient air quality standards in the basin.

Based on the results of the latter two approaches discussed above, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would not cause significant cumulative impacts on air quality during operation.

In addition to the cumulative significance methodologies contained in *CEQA Air Quality Handbook*, the SCAQMD staff has suggested that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable.[121] Individual projects that exceed the SCAQMD-recommended daily thresholds for project-specific impacts would be considered to cause a cumulatively considerable increase in emissions for those pollutants for which the basin is in nonattainment. As presented previously (see **Tables 5.4-1~~3~~1~~,~~ and 18~~20~~~~, and 30~~**), construction of the project would result in daily construction emissions of NOx that exceed the thresholds of significance recommended by the SCAQMD during peak construction activities. Because the basin is in nonattainment for ozone (NOx is a precursor to ozone), construction of the project would generate a cumulatively considerable contribution. This is considered a significant and unavoidable impact.

121 Personal communication with Steve Smith, Program Supervisor, South Coast Air Quality Management District, Diamond Bar, California, with David Deckman, Impact Sciences, April 19, 2006.

Mitigation Measures: Cumulative impacts during construction are considered significant. Project-specific mitigation measures **5.4-1** through **5.4-10** discussed earlier would also reduce cumulative construction impacts. However, the cumulative impacts would remain significant and unavoidable.

~~**The project-serving sewer line will not use hazardous materials or emit toxic air contaminants in appreciable quantities. Accordingly, no significant impacts with respect to the criteria listed above are expected to occur.**~~

5.4.4.2 Global Climate Change

In addition to the project-level impact on global climate, a project's contribution to state, national, and global GHG emission inventories and the resultant effect on global climate must also be evaluated on a cumulative basis. The project would generate GHG emissions, as discussed and reported previously, which would contribute to potential cumulative impacts of GHG emissions on global climate.

Under Section 15130 of the *State CEQA Guidelines*, an EIR must discuss cumulative impacts if a project would have a cumulatively considerable effect on a resource, where "cumulatively considerable" is defined as "…the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."[122] However, as Section 15064(h)(4) states, "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."[123] Therefore, the fact that the proposed project would result in emissions of GHGs, and that global GHGs emissions contribute to the greenhouse effect and the resultant impacts on global climate, does not mean that the proposed project would have a cumulatively considerable impact on global climate. Accordingly, the potential contribution of the project to this cumulative impact is evaluated under other criteria.

To date, no quantitative emission thresholds or similar criteria have been established to evaluate the cumulative impact of a single project on global climate. In the absence of quantitative emissions thresholds, consistency with adopted programs and policies is used by many jurisdictions to evaluate the significance of cumulative impacts. A project's consistency with the implementing programs and regulations to achieve the statewide GHG emission reduction goals established under Executive Order S-3-05 and AB 32 cannot yet be evaluated because they are still under development. Nonetheless, the

---

122 *California Environmental Quality Act Guidelines*, California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Section 15065(a)(3).

123 *California Environmental Quality Act Guidelines*, California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Section 15064(h)(4).

Climate Action Team, established by Executive Order S-3-05, has recommended strategies for implementation at the statewide level to meet the goals of the Executive Order. In the absence of an adopted plan or program, the Climate Action Team's strategies serve as current statewide approaches to reducing the state's GHG emissions. As no other plan or program for GHG emissions that would apply to the projects has been adopted, consistency with these strategies is assessed to determine if the projects' contribution to cumulative GHG emissions is considerable.

In its report to the Governor and the Legislature, the Climate Action Team recommended strategies that could be implemented by various state boards, departments, commissions, and other agencies to reduce GHG emissions.[124] In addition, CARB has approved a list of early action measures that can be implemented by January 1, 2010. This EIR contains several project design features that would result in lower fuel combustion emissions, reduced energy usage, water conservation, and other collateral benefits with respect to GHG emissions.[125] The Climate Action Team strategies and early action measures that are relevant to the proposed project, the implementing agencies, and the project's design features or mitigation measures that would be consistent with these strategies are listed in **Table 5.4-~~42~~4, Project Features and Mitigation Measures to Achieve Climate Action Team Strategies** and **Table 5.4-~~43~~5, Project Features and Mitigation Measures Consistent with Early Action Measures**, respectively. Based on the analysis in **Table 5.4-~~42~~4** and **Table 5.4-~~43~~5**, the proposed project would reduce their contribution to GHG emissions and global climate through consistency with these strategies and measures, as well as many of the future strategies to meet the goals of AB 32. In addition, the development of Parcel 10R would replace old apartments that were constructed well before the implementation of California's stringent energy standards under Title 24 with new buildings that would be constructed in accordance with Title 24. Accordingly, this component of the proposed projects would likely result in a reduction in energy use and the associated generation of GHG emissions.

---

124 California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature. March 2006.

125 Project design features that are intended to reduce criteria pollutant emissions associated with fuel combustion (e.g., motor vehicle emissions) or energy conservation would also serve to reduce GHG emissions.

Table 5.4-4~~2~~
Project Features and Mitigation Measures to Achieve Climate Action Team Strategies

CAT Strategy	Implementing Agency	Project Feature/Mitigation
Vehicle Climate Change Standards	Air Resources Board	The project would be consistent with this strategy to the extent that new passenger vehicle and light trucks are purchased by the project's users starting in the 2009 model year.[1]
HFC Reduction Strategies	Air Resources Board	Project air conditioning systems would comply with the latest standards for new systems. Use of consumer products using HFCs would comply with CARB regulations, when adopted.
Building Energy Efficiency Standards in Place	Energy Commission	The project will meet or exceed California energy standards or energy efficient lighting requirements.
Appliance Energy Efficiency Standards in Place	Energy Commission	
Water Use Efficiency	Department of Water Resources	The project will meet or exceed California water use and conservation standards.

[1] *The U.S. EPA has denied the waiver that would allow these standards to be implemented; however, the state has filed a lawsuit to overturn this decision. The implementation of these standards and the time schedule for the introduction of compliance passenger vehicles and light trucks are in question at this time.*

Table 5.4-4~~5~~3
Project Features and Mitigation Measures Consistent with Early Action Measures

Early Action Measure	Project Feature/[Mitigation Measure]
Low-Carbon Fuel Standard	The project would be consistent with this measure because motor vehicles driven by project residents and hotel users would use compliant fuels in the future.
"Do-it-yourself" Automotive Refrigerants	The project would be consistent with this measure because the project's vehicles would be serviced by repair shops that capture and recycle automotive refrigerants.
Consumer Product Propellants	The project would be consistent with this measure because the project residents would use compliant consumer products.
Proper Tire Inflation	The project would be consistent with this measure because motor vehicles driven by project residents and hotel users would maintain proper tire pressure to improve fuel economy and reduce GHG emissions.

On October 24, 2008, CARB staff released a draft and preliminary proposal for determining whether the emissions related to proposed new projects represent cumulative significant impacts under CEQA. While the proposal is focused on helping lead agencies determine under which conditions a project may be found exempt from the preparation of an EIR, the proposal also provides a guide for establishing significance thresholds for projects for which EIRs would be prepared regardless of the project's climate change impact. According to this proposal, the threshold for determining whether a project's emissions are significant is not zero emissions, but must be a stringent performance-based threshold to meet the requirements of AB 32. If the project meets certain specific yet to be developed performance standards for several categories of emissions, including construction emissions, building energy use, water use, solid waste, and transportation ***and*** the project emits no more than a certain to be determined amount of metric tons of carbon equivalents per year, the project's impact would not be significant. According to CARB, California Energy Commission Tier II building energy use standards are proposed to be used, which generally require a reduction in energy usage of 30 percent beyond current Title 24 building code requirements. CARB has also proposed a 7,000 metric ton carbon dioxide equivalent ($MTCO_2e$) threshold for industrial projects, but has not yet proposed thresholds for residential and commercial projects. The annual threshold does not explicitly include emissions associated with construction- and transportation-related activities.

In April 2008, the SCAQMD, in order to provide guidance to local lead agencies on determining the cumulative significance of GHG emissions identified in CEQA documents, convened a "GHG CEQA

Significance Threshold Working Group."[126] The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until CARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA. As such, the SCAQMD will periodically review and revise the threshold in consideration of any adopted statewide guidance or other information. The Working Group has released a draft of the proposed significance threshold, which uses a tiered approach to determine a project's significance. It is similar, but not identical, to CARB's proposed GHG significance threshold guidance document, such that projects meeting as yet to be determined performance standards and screening levels result in a less than significant impact. For industrial projects, the SCAQMD is suggesting a screening level of 10,000 $MTCO_2e$ per year for industrial projects and 3,000 $MTCO_2e$ per year for residential and commercial projects. The SCAQMD explicitly includes construction and transportation emissions in their numerical thresholds while CARB does not but requires compliance with as yet to be determined construction and transportation performance standards. The SCAQMD guidance is currently under development and will be presented to the SCAQMD Governing Board for adoption at a later date. If a project exceeds the SCAQMD screening level, the SCAQMD proposes three compliance options: (1) calculate the project's GHG emissions using a "business as usual" (BAU) methodology and incorporate design measures and/or GHG mitigation measures to achieve a 30 percent reduction from BAU emission levels; (2) early compliance with AB 32 through early implementation of CARB's Scoping Plan Measures; and (3) compliance with yet-to-be-established sector-based performance standards. If the project cannot achieve the performance standards of any of the three compliance options, the project's GHG emissions would be significant. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for industrial and permitting projects where the SCAQMD is lead agency.

In light of the GHG significance thresholds proposed by CARB and the SCAQMD, the cumulative GHG impacts of the project are compared to the proposed SCAQMD screening thresholds. In applying this threshold, the project's total *net* GHG emissions are based on the sum of the construction emissions annualized over the project lifetime (defined by the SCAQMD as the total construction emissions annualized over a 30 year period) and the annual operational direct and indirect emissions. These emissions are summarized below in **Table 5.4-~~46~~5, Estimated Project Net Total Greenhouse Gas Emissions**.

The following project design features that will reduce emissions of GHGs shall be implemented during construction and operation of the project. These measures will reduce the project's GHG emissions~~and it's impacts to global climate change~~; however, these reductions are not accounted for in **Table 5.4-~~46~~5**.

126 For more information see: http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html.

- ~~These project design features will be incorporated into the final building plans: a~~Alternative transportation considerations such as encouraging bicycle transit and fuel efficient vehicles;
- ~~r~~Restore wetland habitat within dedicated open space area;
- ~~r~~Reduce stormwater runoff through incorporation of best management practices;
- U~~u~~se of roofing materials with high solar reflectance index;
- ~~w~~Water efficient landscaping through use of drought-tolerant species and smart irrigation controllers;
- U~~u~~se of high efficient toilets;
- U~~u~~se of energy efficient equipment and appliances;
- U~~u~~se of non-ozone depleting refrigerants;
- -I~~i~~ncorporation of recycled and rapidly renewable building materials;
- M~~m~~onitoring of ventilation systems;
- ~~d~~Development of indoor air quality management plans;
- ~~u~~Use of low-emitting volatile organic compound materials (e.g., in sealants and paints); and

~~p~~Provision of individual control for lighting and comfort control systems.

-

Table 5.4-46
Estimated Project Net Total Greenhouse Gas Emissions

Emissions Source	Emissions in Metric Tons CO_2E Per Year
Construction Emissions	
Year 2011	1,886
Year 2012	3,722
Year 2013	2120
Annualized Construction Emissions:	258
Direct GHG Emissions	
Operational (Mobile) Sources	6,940
Area Sources	1,555
Total Direct GHG Emissions:	8,495
Indirect GHG Emissions	
Electrical Generation	2,282
Water Supply	55
Wastewater Treatment	149
Solid Waste	83
Total Indirect GHG Emissions:	2,569
Emissions Due To Existing Land Uses:	2,391
Net Total Annual GHG Emissions:	8,931

Source: Impact Sciences, Inc. Emissions calculations are provided in ***Appendix 5.4****.*

The GHG emissions associated with the project buildout likely represents a conservative assessment of the actual GHG emissions that would result from construction and operation. The construction emissions were based on the assumption that equipment would operate continuously throughout an 8-hour work-day. In reality, construction equipment tends to operate cyclically for only a portion of the work day. In addition, as noted in CARB's AB 32 *Climate Change Scoping Plan*, reductions in GHG emissions from construction equipment are expected to occur upon implementation of the low carbon fuel standard (Scoping Plan Measure 5) and vehicle hybridization and energy efficiency standards adopted for medium- and heavy-duty vehicles (Scoping Plan Measure 10). These additional reductions were not quantified in this analysis resulting in conservatively estimated construction GHG emissions.

As shown in **Table 5.4-46**, GHG emissions from motor vehicles represent over half of the total GHG emissions associated with the project. Neither the state nor the federal government regulates tailpipe GHG emissions. However, several proposed regulatory actions have taken place at the federal and state level that would reduce GHG emissions from motor vehicles, and these reductions were not accounted for in the model.

This assessment is conservative because it does not account for improvements in fuel economy standards for cars, light trucks, and sport utility vehicles. In 2007, the President signed the Energy Independence and Security Act, which set a goal of achieving a CAFE standard of 35 miles per gallon by 2020 for new cars, light trucks, and sport utility vehicles. As previously discussed, the President proposed more stringent vehicle emission standards of 35.5 miles per gallon by 2016, which is approximately a 30 percent improvement in fuel economy. As previously discussed, AB 1493 would set GHG emission standards for motor vehicles in California; however, the State has not received a waiver from the US EPA to implement the standards. Additionally, as mentioned above, California has adopted the Low Carbon Fuel Standard, which would reduce the carbon content of transportation fuels by at least 10 percent. Under CARB's *Climate Change Scoping Plan*, fuel-efficient tire standards are being pursued (Scoping Plan Measure 7). Additionally, to the extent technology continues to improve and CAFE standards become more stringent, this analysis provides a conservative estimate of motor vehicle emissions based on current technology and CAFE standards. None of these future reductions in vehicle emissions are accounted for in the current air quality models.

Similarly, the GHG emissions associated with electricity, natural gas, and water consumption represent conservative estimates since the effect of many of the project design features listed above are not included in the emission calculations. Furthermore, as building code standards require even more energy efficiency measures in the future and as mandates to decrease the carbon footprint of electricity in California are adopted, the assessment will be even more conservative. For these reasons, the GHG emissions associated with electricity, natural gas, and water consumption represent conservative estimates.

~~It should also be noted that the total *net* GHG emissions from the proposed projects are estimated to be approximately 8,673 metric tons per year (0.009 million metric tons). Compared to the estimated GHG for all sources in California (423 million metric tons, excluding out-of-state electrical generation), the project's contribution to the effects on global climate would be imperceptible. Based on these findings, the contribution of the projects to cumulative GHG emissions is not considered cumulatively considerable.~~

As listed in **Table 5.4-~~46~~5**, the net total annual GHG emissions would exceed the SCAQMD preliminary draft 3,000 $MTCO_2e$ screening threshold. While CARB has not yet proposed a numerical threshold for residential and commercial projects, CARB has proposed that projects meet the California Energy Commission Tier II building energy use standards, which generally requires a 30 percent reduction in energy consumption compared to current Title 24 building code standards. Therefore, based on the analysis presented in this section, this EIR conservatively concludes that the project would be considered to have cumulatively significant GHG impacts and would require the implementation of mitigation measures.

Mitigation for Global Climate Change Impacts: The following list of measures shall be implemented to reduce the impacts of project-related GHG emissions. Mitigation measures 5.4-1 through 5.4-10 would reduce construction-related GHG emissions. Additional measures that could be feasibly implemented during the development and operation of the project to mitigate GHG emissions are as follows:

5.4-11. The project shall achieve energy efficiency equivalent to the California Energy Commission Tier II building energy use standards.

5.4-12. The project applicant shall recycle and/or salvage for reuse a minimum of 65 percent of non-hazardous construction and demolition debris by weight.

5.4-13. The project applicant shall use drought-tolerant landscaping from an approved plant list provided by the lead agency, County of Los Angeles, or other agency.

5.4-14. The project applicant shall install a smart irrigation controller for any area of the lot that is either landscaped or designated for future landscaping. The project applicant shall ensure landscaped areas comply with all requirements within Title 22 Part 21 of Chapter 22.523.

5.4-15. The project applicant shall install high-efficiency toilets (maximum 1.28 gallons/flush) when tank-type toilets are installed.

5.4-16. The project applicant shall provide sufficient interior and exterior bicycle parking facilities at residential components of the project. The project applicant will also provide residents and hotel guests with information regarding local and regional public transportation services.

5.4.5 UNAVOIDABLE SIGNIFICANT IMPACTS

The recommended mitigation measures would reduce the magnitude of construction-related emissions to some extent; however, no feasible mitigation exists which would reduce these emissions or the associated impacts on ambient air quality (i.e., localized significance thresholds) to below the SCAQMD's recommended thresholds of significance. The construction-related emissions for the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project, the Neptune Marina Parcel 10R, the Neptune Marina Parcel FF, and the Woodfin Suite Hotel and Timeshare Resort (Parcel 9U) would be considered significant and unavoidable.

The recommended mitigation measures for GHG emissions would reduce the project's contribution to cumulative impacts to global climate change. While the SCAQMD has proposed a screening threshold for residential and commercial projects, it has not been adopted by their Governing Board and is still undergoing further development. Also, as previously noted, the project's annual net total GHG emissions

presented in **Table 5.4-~~465~~** likely overstate the actual GHG emissions when project design features, future anticipated regulatory actions, and mitigation measures are taken into account. Assuming that either the federal government or the State of California implement regulations that reduce tailpipe GHG emissions in accordance with the President's 2009 proposed standards or the Pavley standards, vehicle GHG emissions from new cars purchased in 2016 or later by project occupants would be reduced by approximately 30 percent on top of the reductions from CARB's Low Carbon Fuel Standard. In addition, the project includes a multitude of project design features and mitigation measures that would achieve 30 percent reduction in energy-related GHG emissions as well as reductions from other GHG emission sources relative to the emission level indicated in **Table 5.4-~~456~~**. The project would also provide, as mitigation, sufficient bicycle parking facilities at residential components of the project and would provide residents and hotel guests with information regarding local and regional public transportation services. Therefore, the project, after mitigation, would not result in cumulatively considerable impacts with respect to global climate change.

5.6 VISUAL QUALITY

SUMMARY

Fourteen viewing locations, or vantage points, of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site were identified based on the presence of a large permanent or mobile viewing audience. Views of existing conditions from each viewing location are defined. Computer simulations were prepared from each representative viewing location to illustrate future conditions and to define potential impact significance.

This analysis determined that the Neptune Marina project (Parcels 10R and FF) proposes development of apartment structures that would be fully compatible, in terms of height, scale, and visual qualities, with apartment structures either under construction (on Parcel 12) or soon to be constructed (on Parcel 15, 100, and 101) on adjacent parcels. The visual character of the proposed Neptune Marina project is expected to be representative of other future new development in the marina as future (Phase II) projects recycle and redevelop existing land uses. The ongoing and proposed replacement of Phase I marina development, consistent with the Marina's "Phase II" development pursuant to the provisions of the certified Local Coastal Program (LCP), is intentionally designed to result in a marked intensification of existing land uses, with denser, larger and taller residential, hotel and visitor-serving commercial developments.

Although consistent with height standards defined for Parcel 9U in the certified LCP, the 225-foot Woodfin Suite Hotel/Timeshare Resort buildings would be taller than existing buildings in the immediate project vicinity and could be considered out of character in comparison to adjacent uses, because of its height and mass, when viewed from two publicly accessible viewing locations ~~in close proximity~~adjacent to the project site (Via Marina adjacent to the resort project site and Via Marina south of Tahiti Way). The Woodfin Suite Hotel/Timeshare Resort buildings would not be considered out of character when viewed from more distant vantage points, as the buildings will occupy or cover only a small amount of the viewshed from this panoramic perspective. Consequently, there would not be any significant visual impact from distant viewing locations. In addition, the project would cast shadows on existing residential uses to the north and the west of the project site at certain times of the year. This is a potentially significant impact.

5.6.1 METHODOLOGY

5.6.1.1 Background

The County of Los Angeles and the California Coastal Commission (CCC) both held public hearings on the 1996 updated LCP, which included discussion of the environmental effects that the amended land use changes contained within the updated LCP would cause. The CCC considered the changes that would

result from development standards that would allow building heights up to 225 feet. ~~The~~ This maximum building height is ~~only~~ permitted for specified parcels (including the subject Parcels 10R and 9U) located along the ~~periphery of the~~ Marina's loop roads~~; and~~ to achieve the maximum 225-foot building height, provision must be made for ~~a~~ a greatly expanded view corridors~~, with which~~ that guaranteed views to the harbor. ~~Specifically,~~The certified LCP stipulates that all development on waterfront parcels is required to incorporate ~~an~~ unobstructed marina view corridors ~~that is, at a minimum, equal in~~equaling a width ~~to~~ of no less than 20 percent of the parcel's lineal water frontage. ~~A larger~~ Expanded view corridors (reaching a maximum of up to 40 percent of the parcel's lineal water frontage) are~~is~~ required for buildings taller than 45 feet. In certifying the updated LCP, the Commission found this~~This~~ requirement to be~~is~~ consistent with Coastal Act Policy 30251 that requires that coastal development must be sited to protect views of the coastal waters. In fact, the Commission's findings noted that because Marina del Rey had pre-Coastal Act development blocking water views it was appropriate to allow greater building heights as a tradeoff to increasing water views through view corridors. In discharging its responsibilities under CEQA, the Commission found that there are no feasible alternatives or feasible mitigation measures which would substantially lessen any significant adverse impacts that the updated LCP would have on the environment.

Pursuant to Section 15162 of the *State CEQA Guidelines*, no new impact finding is required for this project as the height is the same as was contemplated in the LCP when amended. In essence, the Coastal Commission and the County, in discharging their CEQA obligations during the amendment process, elected to allow greater height at certain sites in exchange for larger view corridors. Only four sites in Marina del Rey were allowed to have the tallest height allowance, and Parcel 9 was one of those sites. Therefore, 225-foot tall building at this location, co-located with the required view corridor, is fully consistent with the LCP and does not warrant serious re-examination of impacts solely related to height, whether in a community character or a distant viewing context. Nonetheless, this EIR conservatively considers issues of compatibility of the proposed project with adjoining land uses.

The Marina del Rey LCP provided ~~for~~ the urban design concept for the Marina del Rey Specific Plan by incorporating a modified "bowl concept" (the bowl concept being the design feature of the originally certified Marina LCP) that locates the tallest buildings on the outer and northern boundary of the Marina and the shortest buildings on the moles. This design was selected to enhance the Marina's image and to guarantee that adequate sunlight and wind circulation continues over the Marina water basin. In addition to the modified bowl concept, the urban design concept mandates that view corridors of the Marina water be maintained for public views of the harbor. The view corridors are intended to prevent blockage by structures of views to the marina along Via Marina.

Specifically, hotels within the certified~~amended Marina~~ LCP are, by definition, permitted with a height limit of 225 feet (Marina del Rey Land Use Plan, page 8-11). Additionally, height design flexibility is provided for seaward parcels along Via Marina, such as Parcel 9U, for a maximum height of 225 feet when a 40 percent view corridor is provided (Policy 8b of the Marina del Rey LUP, page 9-6). Parcel 9U is included in the Tahiti Development Zone and has been designated as "Hotel" in the Marina del Rey ~~land~~ Land ~~use~~ Use ~~plan~~ Plan (Marina del Rey LUP, Map 10 and page 8-15). Specified development potential in this development zone ~~is~~ calls for overnight accommodations~~288 hotel rooms~~ within the permitted hotel use on Parcel 9U, with a maximum of 288 rooms.

5.6.1.2 Analysis Methods

This section of the EIR evaluates potential project-related changes in the visual character of the project site and surrounding environment. Methods of analysis include the following: (1) identify the location of corridors in which the project can be observed, (2) identify the location of "viewsheds" within these corridors, (3) identify "prominent visual features" within those viewsheds, and (4) simulate post-development changes in the viewsheds through preparation of renderings of post-development conditions.

Viewsheds selected for this analysis are those that are visible to

- a relatively large mobile viewing audience (either automobiles or boat traffic),
- a permanent-resident population (i.e., from existing residential uses), and/or
- a location designated as scenic by either the Los Angeles General Plan or LUP.

"Prominent visual features" are defined as visual elements that are unusual or that stand out in relation to their surroundings.

If portions of the proposed development area cannot be observed from specific vantage points, or if views of the development area are so far away as to make them visually obscure, those views are not considered visually prominent and are not emphasized as part of this analysis. It is not the intent of this analysis to suggest that the project site is visible from only the viewing locations discussed in this section. Rather, an attempt was made to identify a reasonable range of viewsheds that are representative of the most prominent views available in the project area.

For each of the viewsheds used in this analysis, view orientations were generally selected that~~which~~ would display the maximum amount of the proposed development area possible within that range of view. Using project information, the size and mass of post-project elements visible within each viewshed

were then rendered to scale. The project architect was consulted during the preparation of these renderings to ensure their accuracy.

To provide a standard frame of reference for the reader, the visual character of each viewing location is described in terms of foreground, middle ground, and background views. Each view represents a portion of the total viewshed based on distance from the viewer. Foreground views represent the closest views available, and are more likely to be affected by a project; the closer one is to the project, the greater amount of the viewshed the project necessarily covers. ~~m~~Middle ground views represent the next distinguishable range of view. B~~, while b~~ackground views represent distant landscape elements and typically form backdrops for the mid and foreground scenes. Viewsheds from distant locations are less likely to be impacted, because a project necessarily covers a smaller percentage of the viewshed in this "panoramic" view. Delineation of the viewing ranges is largely subjective and is based on landscape transitions.

Upon completion of the simulations, developed post-project conditions for each viewshed were evaluated using adopted Los Angeles County threshold criteria for significant visual impacts. Exceedance of these criteria would result in a significant visual impact.

5.6.2 EXISTING CONDITIONS

5.6.2.1 Visual Character

Marina del Rey is part of the Los Angeles coastal plain and is generally characterized by relatively flat and low-lying topographic features. Elevations on the site and surrounding area range from 10 to 15 feet above mean sea level.

The visual character of the project site and region is dominated by urban development within Marina del Rey, County of Los Angeles, and the Cities of Los Angeles, Santa Monica and Culver City. Views of open space, although uncommon, include the distant Santa Monica Mountains and the more proximal Westchester Bluffs. Views of the Pacific Ocean and marine uses within the small-craft harbor from surrounding roadways are largely obscured by intervening structures and landscape vegetation. The LUP indicates that marine related elements (boat masts, sails, spaces, water) of the harbor represent the primary visual resource of Marina del Rey.[1]

1 County of Los Angeles Department of Regional Planning, LUP, 1996, 9-1.

5.6.2.2 Scenic Resources

In the vicinity of the project site, Via Marina is defined as a "scenic highway meriting first priority status for further study" in the Marina del Rey LUP. However, the Marina del Rey LUP does not identify resources considered scenic. Areas considered scenic are present along segments of Via Marina where views of the marina can be ~~had~~seen. ~~On~~ Currently, on and in the vicinity of the project site, this condition is present only where Via Marina passes adjacent to Parcel 9U. Therefore, for the purposes of this EIR, the portion of Via Marina adjacent to Parcel 9U is considered a Scenic Highway.

The County of Los Angeles Marina del Rey LUP defines Burton Chace Park and the ends of each mole road as "Significant Vantage Points." These areas are not involved in any of the project sites. Therefore, other than the marina, which has not been formally defined as a scenic feature in the LUP, no other scenic resources are present on the project site or in the vicinity.

It should be acknowledged that, although not visible from Via Marina, oblique glimpses of the marina are visible from Marquesas Way looking north across Parcel FF. The use of a portion of Parcel FF as a construction site ~~presently~~ had ~~obscures~~ obscured the view from Via Marina, but views ~~would~~ have been restored ~~when~~ with completion of the construction ~~is complete~~.

5.6.2.3 Project Site

Neptune Marina Parcel 10R is presently developed with two-story wood and stucco structures with areas of surface parking and mature landscaping. These structures were constructed in the early 1960s as part of Phase I Marina del Rey development. The apartment buildings are low-lying and rectangular in nature and are typical of other existing development on the west side of the small-craft harbor. Generally, the buildings extend in a linear fashion along the frontage of the waterfront, and in most cases completely obscure water views for viewers on peripheral roadways. Along the waterfront between the existing structures and the marina is a narrow concrete sidewalk. This existing sidewalk is accessible to the public and provides extensive views of the marina.

Neptune Marina Parcel FF site is presently developed as an approximately 2.05-acre surface parking lot. Surrounding the western and northern portion of the parking lot (west of the existing driveway) is a screened chain-link fence (the intention of the fence is to obscure views of the parking lot from adjacent roadways). A fence that permits filtered views is present east of the parking lot, and glimpses of the parking lot and marina are available from Marquesas Way. Panoramic views of the marina are available from a publicly accessible sidewalk adjacent to the parking lot.

Parcel 9U is presently an undeveloped lot. Vegetation on Parcel 9U consists generally of low annual grasses and summer flowering forbs. However, in the south-central portion of the site a small man-made depression, the remnant of an abandoned construction project, is present where water ponds seasonally. In this location, the vegetation now consists of a taller willow thicket of approximately 0.5 acre. This area is described in greater detail in the Biota section (**Section 5.5**). Parcel 9U is surrounded by an open chain-link fence. Due to the lack of development at this location, boat masts in the western portion of Marina del Rey Basin B are visible from Via Marina; and in the distance, small vistas of water within the marina are also visible from Via Marina. Existing residential uses are present to the north, south, and west. Panoramic views of the marina are available from a publicly accessible sidewalk adjacent to the parking lot.

5.6.2.4 Viewshed Descriptions

Six viewing locations, or vantage points, in close proximity to the project site plus eight vantage points that are more distant were selected to evaluate potential project impacts on views. The selected vantage points represent publicly accessible locations, including beaches, parks, trails, and roadways, from which the project site is visible or which are identified as "significant vantage points" in the Marina del Rey LUP. Views from each viewing location are described below, beginning with the six locations in close proximity to the project site. **Figure 5.6-1, Viewing Locations**, provides an index map depicting those six viewing locations.

5.6.2.4.1 Viewing Location One, Northerly View of Parcel 10R and 9U as Observed from Via Marina South of Tahiti Way

As illustrated on **Figure 5.6-2, Pre- and Post-Development View of Site (Parcel 10R and 9U) from Via Marina South of Tahiti Way**, substantial views of the site and surrounding area are available from this location. Foreground views are dominated by the vacant Parcel 9U, the chain-link fence that surrounds Parcel 9U, and the rear facades of the existing parking structures and buildings associated with Parcel 10R. Middle ground views include primarily the boat masts and features within Marina del Rey Basin B. The visibility of the boats most proximal to Parcel 9U is limited due to the height of the bulkhead in relation to the water and distance of the boats to the viewing location. As such, only the upper portions of the masts are visible and vistas of water within Basin B are largely obstructed from this viewing location. More distant in the middle ground, mature landscaping and structures recently completed or under construction on Parcel 15 can be seen to the northeast. Background views are primarily of the taller palm trees, other mature landscaping and structures further north and east in the southern and southeastern portions of Marina del Rey.

Prominent Visual Features: Boat masts visible in Basin B; rear facades of the parking structures and buildings associated with Parcel 10R; predominately non-native weedy vegetation with a small assemblage of native wetland plants on Parcel 9U and mature landscaping on ~~the project site~~Parcel 10R; and more distant views of the southern and southeastern portions of Marina del Rey.

5.6.2.4.2 Viewing Location Two, Northerly View of Parcel 10R and 9U as Observed from Via Marina

As illustrated on **Figure 5.6-3, Pre- and Post-Development View of Site (Parcel 10R and 9U) from Via Marina**, substantial views of the site and surrounding area are available from this location. Foreground views are of the northern half of the vacant Parcel 9U, the chain-link fence that surrounds Parcel 9U and the rear facades of the existing parking structures and buildings associated with Parcel 10R. Middle ground views include primarily the mature landscaping on Parcel 10R and small portions of the existing two-story structure are visible. Also visible in the middle ground, adjacent to Parcels 10R and 9U, are masts associated with the boats berthed in Marina del Rey Basin B. Visibility of the boats is limited due to the height of the bulkhead and distance from the boats to the viewing location. Background views are primarily of the taller palm trees off-site to the north.

Prominent Visual Features: Rear facades of the parking structures and buildings associated with Parcel 10R; predominately non-native weedy vegetation with a small assemblage of native wetland plants on Parcel 9U and mature landscaping on ~~the project site~~Parcel 10R; boat masts visible in Marina del Rey Basin B; and the more distant palm trees.

5.6.2.4.3 Viewing Location Three, Easterly View of the Site (Parcel 10R) as Observed from the Intersection of Marquesas Way and Via Marina

As illustrated on **Figure 5.6-4, Pre- and Post-Development View of the Site (Parcel 10R) as Observed from the Intersection of Marquesas Way and Via Marina**, substantial views of the northwestern portion of Parcel 10R and surrounding area are available. Foreground views of the project site are dominated by the mature trees and perimeter landscaping associated with the existing Neptune Marina Apartment project. Also visible in the foreground are cars that use an existing surface parking lot in this portion of the site. From this viewing location, visibility of the existing apartment structure is very limited due to the view blocking effects of the mature vegetation. Also visible in the foreground are light poles and traffic signals associated with the Via Marina/Marquesas Way intersection and mature trees in the center median of Marquesas Way. Middle ground and distant vistas are largely obscured by foreground vegetation. However, taller palm trees off-site to the east are visible.

Prominent Visual Features: Mature landscaping on the project site, an existing surface parking lot, and signal lights.

5.6.2.4.4 Viewing Location Four, Westerly View of the Site (Parcel 10R) as Observed Westerly from Marquesas Way

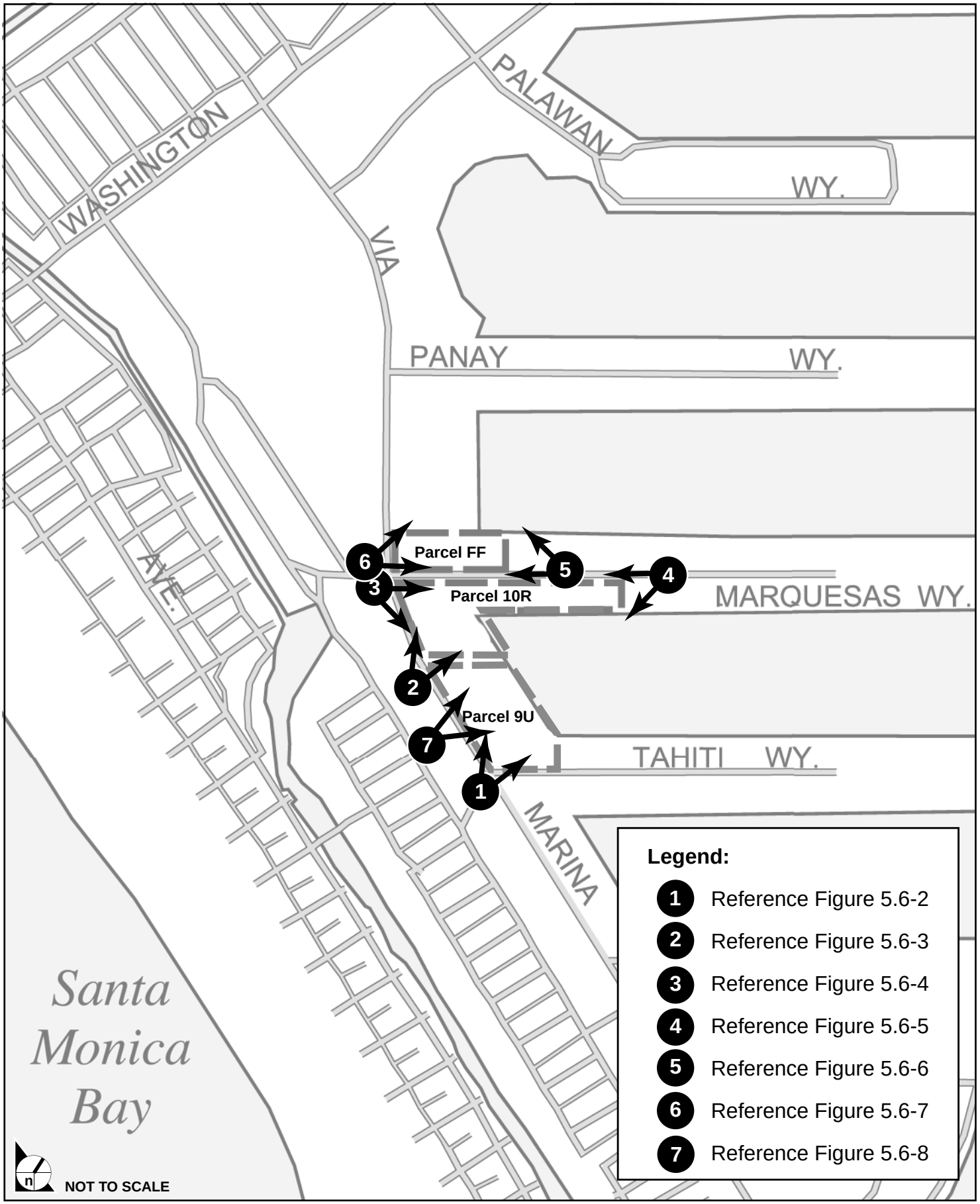
As illustrated on **Figure 5.6-5, Pre- and Post-Development View of the Site (Parcel 10R) as Observed Westerly from Marquesas Way**, limited views of the northwestern portion of Parcel 10R and surrounding area are available from this viewing location. Foreground views of the project site are dominated by new construction adjacent to and east of the project site on Parcel 12, mature trees and perimeter landscaping associated with the northern margin of the Parcel 10R. Also visible in the foreground are the mature trees in the median in Marquesas Way. From this viewing location, visibility of existing structures on Parcel 10R is generally precluded due to the view blocking effects of new structures under construction and the mature vegetation that is present along the northern perimeter of the project site. Midrange vistas are largely obscured by the foreground vegetation. Background views are also limited due to the presence of the foreground vegetation. However, taller eucalyptus and palm trees off site to the west are visible.

Prominent Visual Features: New building construction under way on Parcel 12 adjacent to and east of Parcel 10R and mature landscaping along the northern perimeter of the project site.

5.6.2.4.5 Viewing Location Five, Westerly View of the Site (Parcel FF) as Observed Westerly from Marquesas Way

As illustrated on **Figure 5.6-6, Pre- and Post-Development View of the Site (Parcel FF) as Observed Westerly from Marquesas Way**, limited views of the existing surface parking lot and surrounding area are available from this viewing location. Foreground views of the project site (Parcel FF) are dominated by mature trees and perimeter landscaping associated with the southern margin of the parking lot as well as the perimeter fencing. Also visible in the foreground are the mature trees and median island that Marquesas Way and signage associated with the parking lot entrance. Midrange vistas are largely obscured by the foreground vegetation and fencing; however, vistas of existing structures to the northwest are present as well as taller palm trees on the project site. Background views are limited due to the presence of the foreground vegetation. However, taller palm trees off site to the west can be observed as well as the 15-story Archstone apartment building off-site to the northwest.

Prominent Visual Features: Mature landscaping along the perimeter of the project site, the existing surface parking, and the 15-story Archstone apartment building.



SOURCE: Impact Sciences, Inc. – February 2008

FIGURE **5.6-1**

Viewing Locations

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – March 2007

FIGURE **5.6-2**

Pre- and Post-Development View of Site (Parcel 10R and 9U) – from Via Marina South of Tahiti Way

460-04•05/07

Pre-Development

Post-Development

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – March 2007

FIGURE **5.6-3**

Pre- and Post-Development View of the Site (Parcel 10R and 9U) – from Via Marina

Pre-Development

Post-Development

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – June 2005

FIGURE **5.6-4**

Pre- and Post-Development View of the Site (Parcel 10R) – as Observed from the Intersection of Marquesas Way and Via Marina

Pre-Development

Post-Development

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – May 2009

FIGURE **5.6-5**

Pre- and Post-Development View of the Site (Parcel 10R) – as Observed Westerly from Marquesas Way

Pre-Development

Post-Development

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – May 2009

FIGURE **5.6-6**

Pre- and Post-Development View of the Site (Parcel FF) – as Observed Westerly from Marquesas Way

5.6.2.4.6 Viewing Location Six, Easterly View of the Site (Parcel FF) as Observed from the Intersection of Marquesas Way and Via Marina

As illustrated on **Figure 5.6-7, Pre- and Post-Development View of the Site (Parcel FF) as Observed from the Intersection of Marquesas Way and Via Marina**, substantial views of the northwestern portion site and surrounding area are available. Foreground views of the project site (Parcel FF) are dominated by the mature trees and perimeter landscaping along the northern and western margin of the existing surface parking lot. Also visible in the foreground is the heavily screened chain-link perimeter fencing along the northern and western margins of the project site.

Light poles, traffic signals and signage associated with the Via Marina/Marquesas Way intersection are also visible as well as the median island and mature trees along the centerline of Marquesas Way. Midrange vistas are largely obscured by dense perimeter fencing along the northwestern margin of the project site and the foreground vegetation. However, north of Parcel FF, existing two-story apartment structures are visible. Background views are limited due to the presence of the foreground vegetation. However, taller eucalyptus and palm trees off site to the east can be observed.

Prominent Visual Features: Mature landscaping on the project site and screened chain-link perimeter fencing.

5.6.2.4.7 Viewing Location Seven, Easterly View of Parcel 9U as Observed from Via Marina

As illustrated on **Figure 5.6-8, Pre- and Post-Development View of Site (Parcel 9U) as Observed from Mid-Block on Via Marina**, open views of Parcel 9U and surrounding area are available from this location. Foreground views are of the vacant Parcel 9U, the chain-link fence that surrounds Parcel 9U with distant view of the structures on Parcel 12R. Visible in the middle ground, adjacent to Parcels 10R and 9U, are masts associated with the boats berthed in Marina del Rey Basin B. Visibility of the boats is limited due to the height of the bulkhead and distance from the boats to the viewing location. Background views are primarily of the taller palm trees off-site to the north and the Parcel 12R buildings.

Prominent Visual Features: Open views to the Marina; non-native vegetation on the project site; boat masts visible in Marina del Rey Basin B; and the more distant palm trees.

More Distant Viewing Locations:

As previously stated, views of the project site, particularly the site of the proposed hotel and timeshare resort, were also evaluated from eight, more distant off-site public viewing locations that are considered visually important in the Marina del Rey LUP. Those viewing locations are mapped in **Figure 5.6-9, Woodfin Suite Hotel and Timeshare Resort (Parcel 9U) – Viewing Locations**, and the pre- and post-project views are discussed below.

5.6.2.4.8 Viewing Location One, Southerly View of the Site as Observed from Mother's Beach

As illustrated on **Figure 5.6-10, Pre- and Post-Development View of the Site as Observed from Mother's Beach**, views south from this viewpoint are partially screened by the mature trees (eucalyptus, palms) and landscaping south of Mother's Beach along Panay Way and at the head of Basin C. Several one-story buildings along Panay Way are partially visible beyond the trees.

Prominent Visual Features: Mature trees and landscaping, one-story buildings along Panay Way south of Mother's Beach.

5.6.2.4.9 Viewing Location Two, Southeasterly View of the Site as Observed from Panay Way

As illustrated on **Figure 5.6-11, Pre- and Post-Development View of the Site as Observed from Panay Way**, there are no available views of the project site from this viewpoint. Views south and southeast are blocked by nearly contiguous apartment buildings on the southern side of Panay Way.

Prominent Visual Features: Existing apartment buildings along Panay Way.

5.6.2.4.10 Viewing Location Three, Westerly View of the Site as Observed from Tahiti Way

As illustrated on **Figure 5.6-12, Pre- and Post-Development View of the Site as Observed from Tahiti Way**, the project site is just visible at the eastern terminus of Tahiti Way at Via Marina. Apartment buildings lining the north side of Tahiti Way dominate the field of view and limit distant views from this viewpoint. Palms and other street trees lining the roadway also serve to screen views.

Prominent Visual Features: Existing apartment buildings, street trees along Tahiti Way.

5.6.2.4.11 Viewing Location Four, Northwesterly View of the Site as Observed from North Jetty Trail

As illustrated on **Figure 5.6-13, Pre- and Post-Development View of the Site as Observed from North Jetty Trail**, views of the project site, across the open water of the channel, are almost entirely obscured by two-story waterfront buildings near the terminus of Northwest Passage and five-story buildings just to the north on Old Harbor Lane. Mature trees also characterize this view.

Prominent Visual Features: Open water in channel, **e**xisting two-story apartment buildings on Northwest Passage, five-story apartment buildings on Old Harbor Lane, and mature trees.

Pre-Development

Post-Development

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – May 2009

FIGURE **5.6-7**

Pre- and Post-Development View of the Site (Parcel FF) – as Observed from the Intersection of Marquesas Way and Via Marina

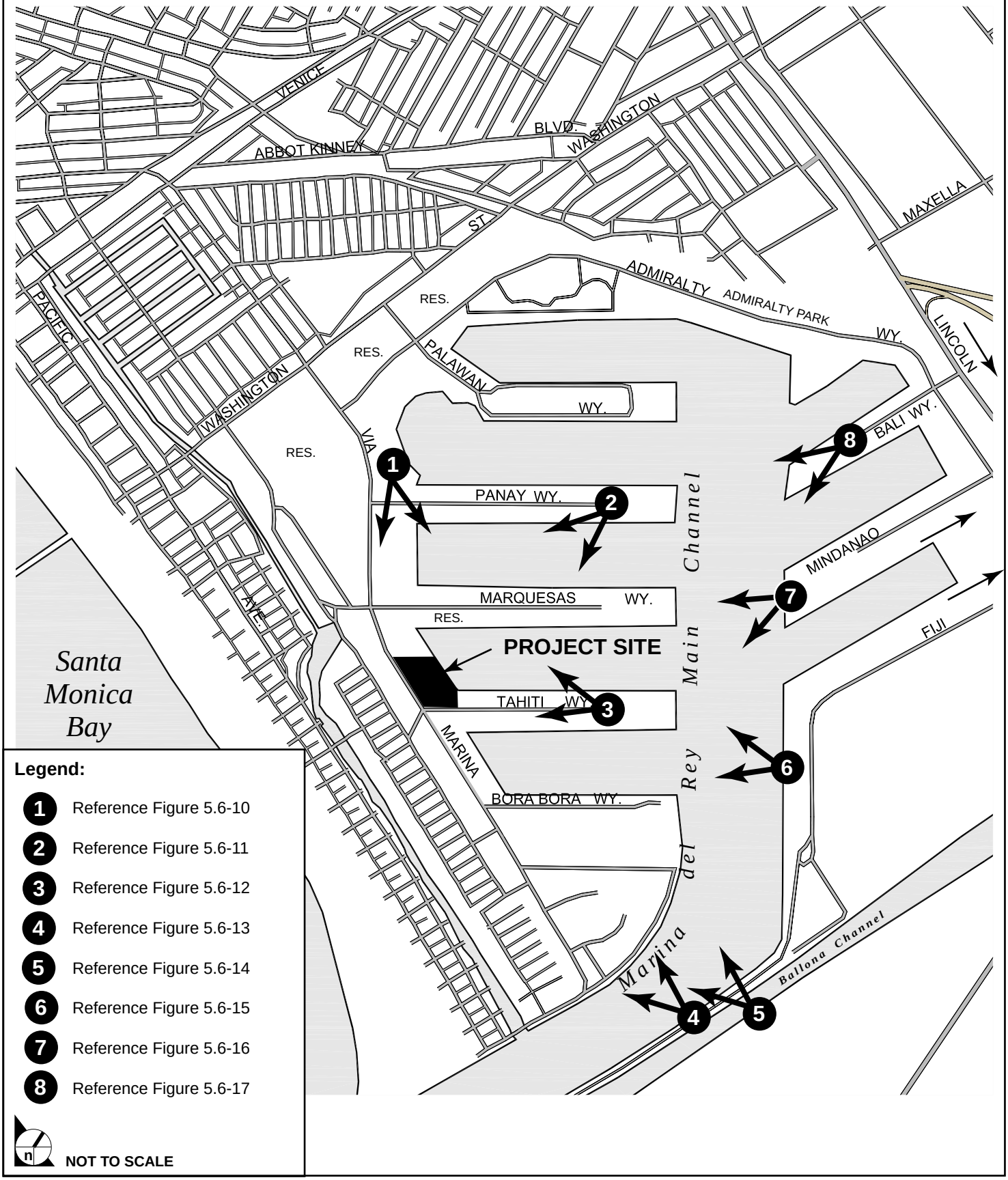
Pre-Development

Post-Development

SOURCE: Thomas P. Cox: Architects, Inc. – October 2005, Impact Sciences, Inc, – March 2008

FIGURE **5.6-8**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Mid-Block on Via Marina



SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-9**

Woodfin Suite Hotel and Timeshare Resort (Parcel 9U) – Viewing Locations

460-004•03/08

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-10**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Mother's Beach

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-11**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Panay Way

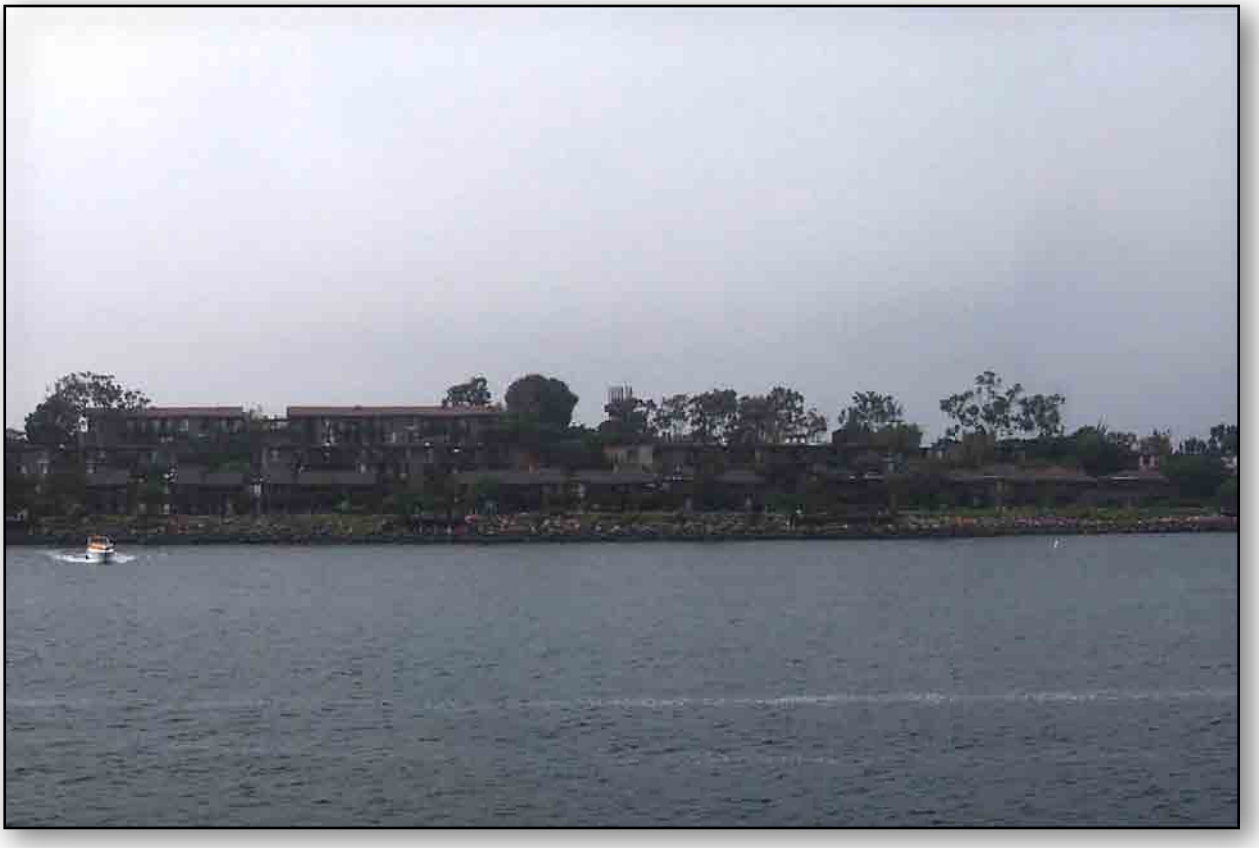
Pre-Development

Post-Development

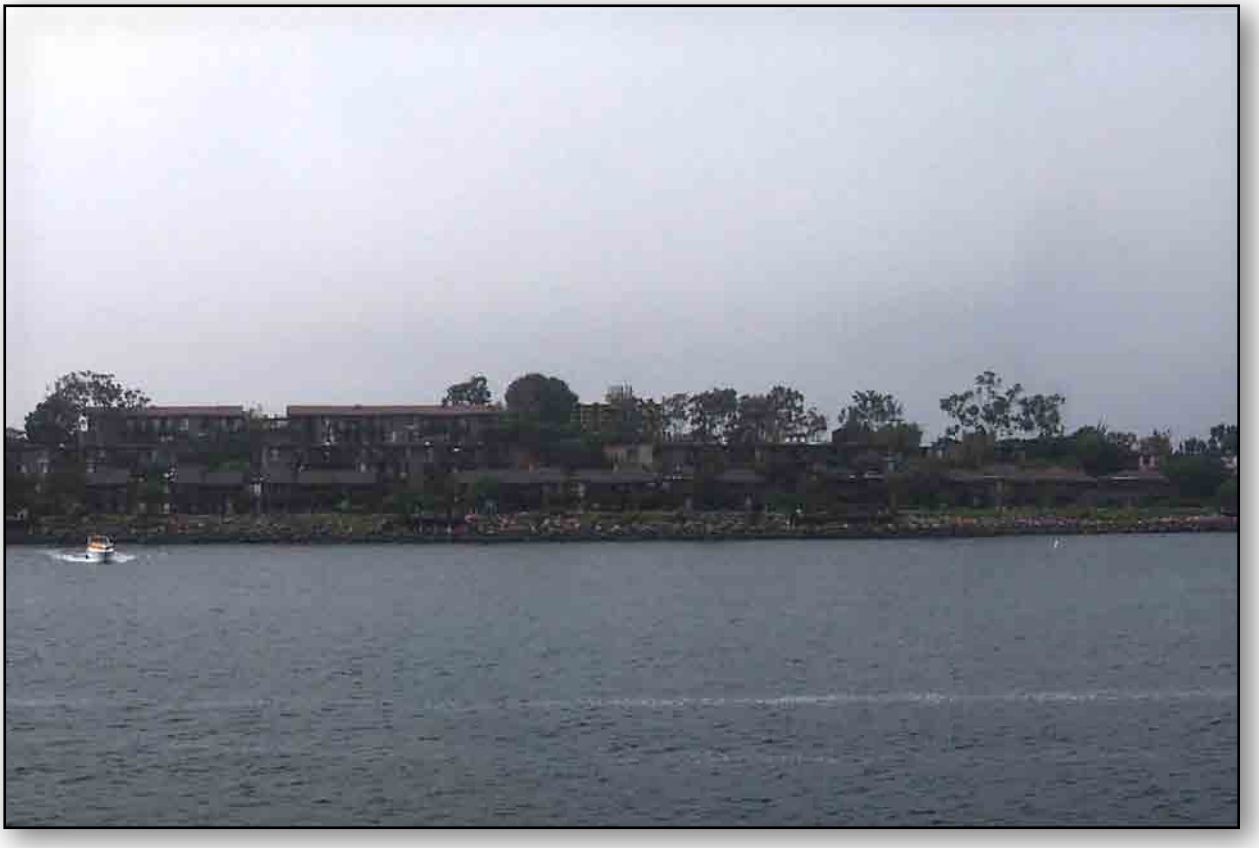
SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-12**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Tahiti Way



Pre-Development



Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-13**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from North Jetty Trail

5.6.2.4.12 Viewing Location Five, Northwesterly View of the Site as Observed from South Jetty Trail

As illustrated on **Figure 5.6-14, Pre- and Post-Development View of the Site as Observed from South Jetty Trail**, views from this trail are more panoramic in nature than those from the North Trail, with the project site more visible but occupying a smaller portion of the available field of view. Ballona Creek Channel and the North Jetty Trail are the most prominent visual features from this vantage, followed by the waterfront across the ship channel. As with views from North Jetty Trail, views toward the project site encompass two-story buildings near the terminus of Northwest Passage and five-story buildings just to the north on Old Harbor Lane, as well as taller apartment buildings to the west. Mature trees and other ornamental landscaping are visible along the waterfront. The 15-story Archstone apartment building apartment tower on Via Dolce, northwest of the project site, is visible in the distance.

Prominent Visual Features: Ballona Creek Channel, **e**xisting two-story apartment buildings on Northwest Passage, five-story apartment buildings on Old Harbor Lane, and mature trees.

5.6.2.4.13 Viewing Location Six, Northwesterly View of the Site as Observed from Fisherman's Village

As illustrated on **Figure 5.6-15, Pre- and Post-Development View of the Site as Observed from Fisherman's Village**, panoramic views of the marina's inner harbor and Basins A and B, as well as more distant apartment buildings lining Via Marina to the west, are available from this viewpoint. The project site is partially blocked from this viewpoint by the intervening four-story apartment building at the eastern terminus of Tahiti Way. A few mature eucalyptus trees are present along Tahiti Way, but little other vegetation is visible.

Prominent Visual Features: Inner harbor, Basins A and B, **e**xisting four-story apartment building on Tahiti Way.

5.6.2.4.14 Viewing Location Seven, Westerly View of the Site as Observed from Burton Chace Park

As illustrated on **Figure 5.6-16, Pre- and Post-Development View of the Site as Observed from Burton Chace Park**, panoramic views of the marina's inner harbor and Basins B and C, The park is almost due east of Parcels 10R and FF and the mole occupied by Parcel 10R, with Basins B and C to the south and north, respectively. Accordingly, there is a clear line of sight from Burton Chace Park west toward the project site, but views of the site are almost entirely obscured by the existing five-story apartment building at the end of Marquesas Way, near the tip of the mole. Palms and other trees lining Tahiti Way to the south and Via Marina to the west, and boats at anchor in the two basins, are the other prominent visual elements of views from this vantage.

Prominent Visual Features: Inner harbor, Basins B and C, five-story apartment building at the end of Marquesas Way on the mole between Basins B and C.

5.6.2.4.15 Viewing Location Eight, Southwesterly View of the Site as Observed from Bali Way

As illustrated on **Figure 5.6-17, Pre- and Post-Development View of the Site as Observed from Bali Way**, views toward the project site from Bali Way are ~~largely~~ blocked by the presence of the three-story Marina del Rey Hotel buildings and dense ornamental plantings lining Bali Way. However, there are locations at the Marina del Rey Hotel site where Parcel 9U is visible. Hotel rooms have panoramic views that include the project site to the south.

Prominent Visual Features: Marina del Rey Hotel (from Bali Way); Inner harbor, Basin D (from hotel).

5.6.2.5 Shadows, Light and Glare

The project site is presently developed as an existing apartment community (Parcel 10R), and an existing surface parking lot (Parcel FF). Parcel 9U is a vacant lot. Each of these existing developed land uses contains a variety of surface night lighting. Principal light sources include street lighting, lighting associated with the nearby residential and commercial uses, parking lot lighting, and vehicle headlights. None of these light sources is considered exceptionally bright or unique. All are considered typical in most urban settings.

The analysis of project-related shadow effects evaluates the potential for project development to cast shadows on adjacent land uses. Consequences of shadows on land uses may be positive, including cooling effects during warm weather, or negative, such as the loss of natural light necessary for solar energy purposes. Shading effects are dependent upon several factors, including the local topography, the height, and bulk of a project's structural elements, the shade-sensitivity of adjacent land uses, the season and consequent length of shadows, and the duration of shadows at a given location. Land uses considered sensitive to the effects of shadows include residential recreational, and institutional (e.g., schools, nursing homes); commercial, pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; plant nurseries; and existing solar collectors, or other land uses for which sunlight is important to function, physical comfort, or commerce.

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-14**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from South Jetty Trail

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-15**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Fisherman's Village

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-16**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Burton Chace Park

A project's potential for shading adjacent land uses is determined by identifying the height and bulk of proposed project components, such as buildings and trees, and calculating the shadows that would be cast by those components during various times throughout the year, including the most extreme conditions: wWinter sSolstice (December 21) when the sun is at its lowest point in the sky and shadows are the longest, and sSummer sSolstice (June 21) when the sun is at its highest point and shadows are the shortest. Shadow length and bearing (the direction in which they are cast) are dependent on the location (latitude and longitude) of the project site, which dictates the angle of the sun relative to the project site. In Los Angeles, the maximum shadow a building can cast is equivalent to three times its height, during the Winter Solstice.

5.6.3 ENVIRONMENTAL IMPACTS

5.6.3.1 Project Improvements

Implementation of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort project would result in the development of 526 residential dwelling units; a 19-story, 225-foot structure with 288 hotel/timeshare suites with an assortment of patron- and visitor-serving accessory uses; 174 private and between 7 and 11 public-serving boat spaces, and dinghy moorage area; a waterfront public pedestrian promenade; and a 1.46-acre public park inclusive of a 0.47-acre restored wetland and 0.99-acre upland buffer. A total of 1,511 parking spaces would be provided throughout the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort project in structured parking either below the apartment buildings or in a six-level parking garage situated adjacent to the hotel.

There are 136 existing apartments and 198 boat spaces presently on site. Therefore, completion of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in a net increase of 390 apartment units, 288 hotel and timeshare suites (with patron- and visitor-serving uses appurtenant thereto), a net decrease of up to 17 boat spaces, a 1.46-acre public park inclusive of a 0.47-acre restored wetland and 0.99-acre upland buffer.

5.6.3.2 Thresholds of Significance

The County of Los Angeles Department of Regional Planning has not adopted County specific significance thresholds. Thresholds used by the County are defined in their Initial Study Checklist. For the topic visual resources applicable significance thresholds are defined below.

(1) Is the project substantially visible from a scenic highway or will it obstruct views along a scenic highway (as shown of the Scenic Highway Element), or is it located within a scenic corridor or will it otherwise impact the viewshed?

(2) Is the project substantially visible from or will it obstruct views from a regional riding or hiking trail?

(3) Is the project located in an undeveloped or undisturbed area, which contains unique aesthetic features?

(4) Is the proposed use out-of-character in comparison to adjacent uses because of height, bulk, or other features?

(5) Is the project likely to create substantial sun shadow, light or glare problems?

Significance thresholds 2 and 3 address projects in rural undeveloped areas. The proposed project is situated in a high-density urban area and does not contain any unique aesthetic features. As such, significance thresholds 2 and 3 are not applicable to the proposed project and are not considered further in this impact analysis.

Significance threshold 4 relates to the visual contrast due to height, bulk, or other features between the project and adjacent uses. This contrast, in turn, will depend on the amount of viewshed impacted by a project. For example, if the proposed use is substantially greater in terms of height and bulk occupies or covers a substantial percentage of the viewshed, it will appear out of character compared with existing uses. The closer the viewing location is to the project, the contrast with adjacent development will be more apparent the impact on the viewshed will be greater. Conversely, the farther away a viewing location is, the more likely it is that the proposed use will blend into the existing panorama, will occupy less of the viewshed and will contrast less with adjacent uses. Consequently, adjacent viewing locations are more likely to have potential impacts from a project that appears out of character, whereas more distant viewing locations are less likely to have any such impacts.

Pre-Development

Post-Development

SOURCE: Impact Sciences, Inc. – May 2007

FIGURE **5.6-17**

Pre- and Post-Development View of the Site (Parcel 9U) – as Observed from Bali Way

5.6.3.3 Impact Analysis

5.6.3.3.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

5.6.3.3.1.1 Overview of Project Impacts

Development of the Neptune Marina Apartments and Anchorage project would require the removal of all existing structures, the existing surface parking lot and earth movement to allow construction of the partially subterranean parking lots, landscaped areas, develop drainage patterns and provide for necessary infrastructure. During this time, construction workers and equipment will be visible throughout the project site. Screened chain-link fencing would likely be installed that would surround the perimeter of the project site and would obscure direct vistas of the initial phases of construction and on-site staging areas. During construction, frames of the structures would be raised and finished, and hardscape and landscaping would be completed. As the structures are constructed and finished, the scale of the project and changes in the visual character of the project site would become evident.

Construction for the Neptune Marina Parcel 10R project component is anticipated to initiate in ~~December~~ May ~~2009~~2011, and would require a total of approximately ~~33~~ 30 months to complete, in ~~September~~ November ~~2012~~2013. Construction of the Neptune Marina Parcel FF project component is anticipated to initiate in ~~April~~ October 2011, and would require approximately ~~21~~ 24 months to complete, in ~~September~~ October ~~2012~~2013. Construction of the Woodfin Suite Hotel and Timeshare Resort component on Parcel 9U is anticipated to commence in May 2011 and would require approximately 30 months to complete, in November 2013. The wetland park, also on Parcel 9U, is expected to begin construction in October 2011, and would require about 12 months to complete, in October 2012.

Project improvements would contribute to the changing character of Marina del Rey. New (Phase II) development in the marina is intentionally more intensive than the existing Phase I marina development. As defined by the County, Phase II marina development allows for a greater development intensity that is generally achieved through an increase in available building height limits. The Marina del Rey LUP defines the maximum building height limit on Parcel 9U to be 225 feet, while the maximum building heights on Parcel 10R are ~~140~~ 225 feet (applicable to non-mole portion of the parcel fronting Via Marina) and 75 feet (applicable to the mole road portion of the parcel). Parcel FF has a current building height limit of 25 feet, per the parcel's Height Category 1 classification; however, the County is proposing an amendment to the certified LCP to change the Parcel FF Height Category from 1 to 3 (i.e., maximum of 75 feet with an expanded view corridor, to accommodate the proposed 55-foot-tall apartment building planned for the site.

As proposed, the four apartment structures proposed for Parcels 10R and FF as part of Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would not exceed 60 feet (exclusive of appurtenant, screened roof-top equipment, parapets and architectural features). Moreover, the applicant has programmed expanded view corridors on Parcel 10R to satisfy the requirements for additional building height above 45 feet. Therefore, proposed building heights on Parcel 10R would be compliant with the ~~140-foot and 75-foot maximum~~ building height and view corridor standards specified for the parcel in the certified LCP. The 55-foot-tall apartment building proposed for development on Parcel FF would be consistent with the Height Category 3 classification being proposed by the County and Legacy Partners for Parcel FF. Consistent with LCP requirements, the applicant has also programmed an expanded view corridor on Parcel FF to compensate for the additional building height over 45 feet.

Development proposed on Parcel 9U (the Woodfin Suite Hotel and Timeshare Resort) would introduce a 19-story, 225–foot building to the site. The hotel tower portion of the proposed project would be taller than other buildings on immediately adjacent neighboring parcels~~, but the design~~. However, the project, as designed, is fully ~~is~~ consistent with the building height allocation of 225 feet for Parcel 9U (see discussion in **Section 5.17, Land Use and Planning**) and is also consistent with the flexible building height ~~standard character of Phase II development concepts embraced by~~ provisions of the certified LCP. As described above, the certified LCP's flexible building height provisions allow for greater building heights (up to 225 feet in this instance) with provision of expanded view corridors (in this case, a view corridor in excess of 40 percent of the parcel's water frontage is being provided across the southerly portion of Parcel 9U). In approving the above-described flexible building height provisions as part of the County's 1996 major amendment to the MDR LCP, the Coastal Commission expressly found "that greater [building] heights do not detract from the quality of the Marina as a recreation area as long as larger view corridors are provided." (see page 59 of California Coastal Commission's February 8, 1996, Revised Findings relating to the Major Amendment of the Marina del Rey segment of the Los Angeles County LCP, attached hereto as **Appendix 5.6**). Additionally, the hotel tower portion of the proposed project would fit into the panorama of existing tall buildings when viewed from some of the distant viewing locations, and therefore would not create impacts from these locations.

~~replacement of Phase I Marina development with taller Phase II development is intentionally designed to provide open view corridors to the harbor but resulting in intensifying land uses in narrower and taller residential, hotel and visitor serving commercial developments, a decision reflected in the Coastal Commission's 1996 findings approving the LCP. The hotel and timeshare resort building height would be consistent with the 225-foot height standard defined in the certified LCP for Parcel 9U (see discussion in **Section 5.17, Land Use and Planning**).~~

5.6.3.3.1.2 Threshold: Is the project substantially visible from a scenic highway or will it obstruct views along a scenic highway (as shown of the Scenic Highway Element), or is it located within a scenic corridor or will it otherwise impact the viewshed?

Analysis: As defined above, Via Marina adjacent to Parcel 9U is defined in this EIR as a Scenic Highway. Via Marina adjacent to Parcels 10R or FF does not have vistas of the marina and as such cannot be defined as a Scenic Highway. Construction and operation of the proposed Woodfin Suite Hotel and Timeshare Resort project on the northern portion of Parcel 9U, depending on the location of the viewer, would partially obstruct ~~eliminate~~ available views of the marina when observed from Via Marina, ~~and would impact~~ a designated ~~fined~~ Scenic Highway. However, as discussed below, this impact would be mitigated by the inclusion of LCP-compliant view corridors into the project.

The Marina del Rey LUP considers Via Marina, Burton Chace Park, and the ends of each mole "significant vantage points" in Marina del Rey. ~~None~~ Parcels 10R, FF and 9U ~~of these~~front the "significant vantage point~~s~~" of Via Marina~~is~~, and each project design incorporates a view corridor to the Marina. ~~present on or near the project site. The~~ However, the proposed project site is not located within ~~or near~~ a defined scenic corridor.

To protect and enhance visibility of the marina and consistent with provisions of the LUP, the Neptune Marina Parcels 10R, FF, and 9U incorporate six view corridors. Of the six view corridors, three corridors permit vistas of Marina del Rey Basin B from Marquesas Way (southerly), one corridor allows filtered vistas of Marina del Rey Basin C from Marquesas Way (northerly). The fifth and sixth view corridors allow vistas of Marina del Rey Basin B from Via Marina (easterly).

With respect to the Neptune Marina Project component (Parcels 10R and FF), provisions of the LUP tabulate the area of required view corridor based on the length of the parcel's water frontage and the proposed building height. Based on the length of the parcel's water frontage and a proposed building height of 55 feet for Buildings 1, 2 (Parcel 10R), and 4 (Parcel FF) and 60 feet for Building 3 (Parcel 10R), the LUP requires 420 linear feet of view corridor. As proposed, Neptune Marina Parcels 10R and FF would provide 443 linear feet. As such, the project, as planned, is consistent with view corridor provisions of the LUP that call for public and private views of the marina from perimeter roadways.

With respect to the Woodfin Suite Hotel and Timeshare Resort Project (Parcel 9U), the project incorporates one substantial view corridor on Parcel 9U, south of the hotel. The primary view corridor allows vistas of Marina del Rey Basin B from Via Marina through the Parcel 9U public park/wetland. Per the LCP, based on the proposed 225-foot height of the hotel and timeshare resort structure (excluding appurtenant rooftop structures), a view corridor totaling 40 percent of the length of the site is required.

For the 386-foot-long site, a minimum 154-foot-wide view corridor is required. The project plans for 154 linear feet of view corridor through the Parcel 9U public park/wetland situated south of the hotel and timeshare resort structure. Because the project provides the required 154 feet of public view corridor, the hotel and timeshare resort is consistent with provisions of the LCP that call for public and private views of the Marina from perimeter roadways.

A summary of the lineal footage of each project component and the required width of the view corridor on each parcel is summarized in **Table 5.6-1**, below.

Table 5.6-1
Summary of Project Components and LCP View Corridor Requirements

Project Component	Waterfront Lineal Footage	LCP Required View Corridor	Proposed View Corridor
1 – Neptune Marina Parcel 10R 2 – Neptune Marina Parcel FF	10R = 1,455 feet FF = 200 feet	420 feet	443 feet
3 – Woodfin Suite Hotel/Timeshare Resort (Parcel 9U)	386 feet	154 feet	154 feet
4 – Restored Wetland/Upland Park Project (Parcel 9U)[a]	NA	NA	NA
5 – Public-Serving Anchorage	NA	NA	NA

[a] *Project Component 4, Restored Public Wetland and Upland Park Project, occupies the southern portion of Parcel 9U and is proposed to fulfill the LCP view corridor requirement for development of the northern portion of Parcel 9U with the Woodfin Suite Hotel/Timeshare Resort.*

To further ensure visual resource protection, the Marina del Rey LUP requires that the project site plan and architectural design be reviewed and approved by the Design Control Board (DCB) and to incorporate view corridors that do not presently exist on the project site. The DCB also has the authority to regulate signage, building architectural design, site planning, and facade design for all new development proposals. The DCB reviewed and conceptually approved Neptune Marina/Woodfin Suite Hotel and Vacation Suite Project on June 29, 2006, and, as part of that action, ensured compliance with the development standards and policies (inclusive of view corridors) outlined in the Land Use Plan with the development standards under its purview. Therefore, project impacts to visual corridors and views from scenic highways as defined in the Marina del Rey LUP are not considered significant.

Conclusion: Development on Parcel 10R replaces existing structures where no visibility of the marina is currently available. ~~No~~ Limited views of the marina are available directly from Via Marina in the vicinity of Parcel FF. Construction and operation of the Woodfin Suite Hotel and Timeshare Resort on Parcel 9U would result in an incremental loss of visibility of Marina del Rey Basin B when viewed from Via Marina

that is defined as a Scenic Highway. Consistent with requirements of the Marina del Rey LUP, and in conformance with the DCB, the project incorporates six view corridors that would mitigate the loss of available view (for Parcel 9U) or enhance visibility of the marina (for Parcel 10R and FF). Because this project is consistent with all development requirements defined in the Marina del Rey LUP, impacts associated with this visual resource criterion are not considered significant.

Mitigation: No mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.1.3 Threshold: Is the proposed use out-of-character in comparison to adjacent uses because of height, bulk, or other features?

Analysis: Viewing Location One, Northerly View of Parcel 10R and 9U as Observed from Via Marina South of Tahiti Way – As illustrated on **Figure 5.6-2, Pre- and Post-Development View of Site (Parcels 10R and 9U) from Via Marina South of Tahiti Way**, foreground views would be dominated by the Woodfin Suite Hotel and Timeshare Resort structure on the northern portion of Parcel 9U. The size and mass of this building would eliminate vistas of the northwestern portions of Marina del Rey Basin B and of structures and landscaping situated further to the northeast in the middle ground and far distance. Also, the southwestern corner of the westernmost structure proposed for Parcel 10R would be visible. Because of the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. When viewed from this location, it is expected that the Woodfin Suite Hotel and Timeshare Resort, due to its height and mass, would stand out in contrast to existing or proposed structures in the marina. In the project vicinity, ~~only~~ the 15-story Archstone apartment building on Via Dolce to the northwest, the 20-story Regatta condominiums, the 19-story Azzurra condominiums, and the 18-story Cove condominiums, all on Marina Pointe Drive to the northeast are ~~is~~ of similar scale. The view corridor south of this structure would provide direct viewsstas of boat masts that are present in Marina del Rey Basin B and the more distant residential development. Although consistent with height provisions that were approved by the California Coastal Commission (CCC) and the County of Los Angeles as defined in the Marina del Rey LUP, the height and mass of the proposed hotel structure would be a dominant visual element that would define this portion of the marina.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the rear facades of the parking structures and buildings associated with Parcel 10R. As part of site construction, existing structures and the existing landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure distant vistas of trees and structures in the background. Once complete, the most dominant visual feature would be the

architectural forms of the new Woodfin Suite Hotel and Timeshare Resort and apartment structure in the northern portion of Parcel 9U. Over time, proposed perimeter landscaping would ~~partially improve~~complement the visual character~~impact~~ of the new development.

Character of Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear greater in mass and building intensity than other existing or proposed structures located to the immediate west, north, and south. As noted, the Woodfin Suite Hotel and Timeshare Resort project would be consistent with the stated height guidelines as approved by the CCC and as defined in the LUP. However, the 225-foot hotel structure would be substantially taller than the height and of greater mass than other new (Phase II) construction east of the project site on Marina del Rey Parcel 12 as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. The tallest structure approved would be the 75~~ to 100~~-foot structures recently approved on Parcel 100 and 101 to the northwest. The hotel and timeshare resort structure would also be substantially taller than the older, lower-height residential structures located in the ~~local~~ immediate vicinity of the project site that do not exceed three stories. Therefore, the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with the established and forthcoming (via Phase II construction) development pattern on the western side of Marina del Rey.

Level of Impact: Site development would not alter any defined significant visual feature. However, the proposed project would eliminate vistas of the marina (Parcel 9U only) and would change the visual character of the property to a more intensive developed use. The Neptune Marina and Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on the project site. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225 foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. All elements of the project are compliant with past CCC approvals, the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[2] As defined above, the height of the Woodfin Suite Hotel and Timeshare Resort structure, although consistent with the provisions of the LCP in regard to building height (see discussion in **Section 5.17, Land Use and Planning**), could be considered out of character with structures that are existing or under construction within the marina, as well as with existing older low-rise residential structures in the ~~local~~immediate

2 See pp. 8-3 and 8-4 of the LUP.

vicinity of the project site. Therefore, aesthetic/visual impacts with respect to the Woodfin Suite Hotel and Timeshare Resort structure from this viewing location are considered significant.

Analysis: Viewing Location Two, Northerly View of Parcel 10R and 9U as Observed from Via Marina – As illustrated on **Figure 5.6-3, Pre- and Post-Development View of Site (Parcels 10R and 9U) from Via Marina,** similar to Viewing Location One, foreground views would be dominated by structures proposed on Parcel 10R and portions of the Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U. The Woodfin Suite Hotel and Timeshare Resort building would eliminate views~~vistas~~ of the northwestern portions of Marina del Rey Basin B. Due to the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. When viewed from this location, it is expected that the height of the Woodfin Suite Hotel and Timeshare Resort structure would cause the structure to stand out in contrast to existing and proposed structures on the westerly side of the marina. As stated above, several ~~the only~~ other structures of similar size ~~is~~ include the 15-story Archstone apartment building on Via Dolce to the northwest, the 20-story Regatta condominiums, the 19-story Azzurra condominiums, and the 18-story Cove condominiums, all on Marina Pointe Drive to the northeast, which were found to be consistent with the City of Los Angeles local coastal program. The view corridor south of the Woodfin Suite Hotel and Timeshare Resort would provide direct views~~vistas~~ of boat masts that are present in Marina del Rey Basin B and the more distant residential development. Although consistent with height provisions that were approved by the CCC and the County of Los Angeles as defined in the Marina del Rey LUP, the height of the building would be a dominant visual element that would help define this portion of the marina.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the portions of the rear facades of the parking structures and buildings associated with Parcel 10R. As part of site construction, these existing structures and existing landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure vistas of trees and structures in the background. Once complete, the most dominant visual feature would be the architectural forms of the new Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U and portions of the Neptune Marina project situated in the western portion of Parcel 10R, fronting on Via Marina. Over time, perimeter landscaping proposed as part of each project would ~~partially improve~~complement the visual character~~impact~~ of new development in this area.

Character of Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear taller than other existing or proposed structures located to the west and north. As noted, the Woodfin Suite Hotel and Timeshare Resort structure is consistent with the stated height guidelines as approved by the CCC and as defined in the LUP. However, the 225-foot hotel structure would be substantially taller than other new (Phase II) construction that is present east of the project site on Marina del Rey Parcel 12

as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. The tallest structures approved for the immediate vicinity would be the 75~~ to 100~~-foot structures recently approved on Parcels 100 and 101. The hotel and timeshare resort structure would also be substantially taller than the older, lower-height residential structures in the ~~local imeddiate~~immediate vicinity of the project site that do not exceed three stories. Therefore, due to the height disparity between the proposed hotel and timeshare structure and other planned and existing development in the vicinity of the project site, the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with its immediate surroundings.

Level of Impact: Site development would not alter any defined significant visual feature. However, the proposed project would eliminate vistas of the marina (Parcel 9U only) when viewed from Via Marina and would alter the visual character of the property to a more intensive developed use. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on the project sites. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225-foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. Although the proposed apartment buildings and hotel and timeshare resort are compliant with past CCC approvals, the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina,[3] the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with the contemporary structures present or under construction within ~~the~~M~~m~~arina del Rey as well as out of character with the older, lower-height residential structures in the local vicinity of the project site. Therefore, the Woodfin Suite Hotel and Timeshare Resort building, although consistent with the provisions of the LCP in regard to building height (see discussion in **Section 5.17, Land Use and Planning**), could appear out of character in comparison to adjacent uses in terms of height and mass when viewed from this viewing location. This is considered a potentially significant impact.

Analysis: Viewing Location Three, Easterly View of the Site (Parcel 10R) as Observed from the Intersection of Marquesas Way and Via Marina – As illustrated on **Figure 5.6-4, Pre- and Post-Development View of Site (Parcel 10R) as Observed from the Intersection of Marquesas Way and Via Marina**, from the intersection of Marquesas Way and Via Marina, two 55-foot-tall apartment buildings and one 60-foot-tall apartment building on Parcel 10R would be clearly visible in the foreground and

3 See pp. 8-3 and 8-4 of the LUP.

middle ground of the field of view, as well as portions of the parking structure and the upper portions of the Woodfin Suite Hotel and Timeshare Resort project proposed on the northern portion of Parcel 9U. The new apartment structures would replace the existing two-story structures that are currently present on Parcel 10R but are not visually prominent. With removal of the existing perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. The increased height and mass of the apartment structures would make on-site uses more visible and visually prominent than the existing structures and the height of the proposed structures would obscure vistas of trees in the background. The proposed project would increase on-site building intensity (particularly the Woodfin Suite Hotel and Timeshare Resort Project, which would be visible in the background at this viewing location) than existing apartment structures, or existing apartment structures located to the west and north. The Neptune Marina project would be consistent with the height and mass of new Phase II construction east of the project site on Marina del Rey Parcel 12, approved structures to be constructed to the north on Parcel 15, and recently approved structures on Marina del Rey Parcels 100 and 101. However, although consistent with past approvals of the CCC and height provisions defined in the Marina del Rey LUP, the 19-story, 225-foot Woodfin Suite Hotel and Timeshare Resort would be visually prominent in this part of the marina.

Prominent Visual Features: No significant visual resources as defined in the Marina del Rey LUP are visible from this viewing location. Currently, the most visible features from this viewpoint include mature landscaping on the project site and an existing surface parking lot on Parcel 10R. No prominent visual features are present in this portion of the project site, no portion of the marina is visible, and background vistas are minimal. As part of project construction, existing structures and vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure vi<u>ews</u> ~~stas~~ of palm trees in the background. Once complete, the most dominant visual feature would be the new apartment structures on Parcel 10R and the <u>architectural forms of the</u> Woodfin Suite Hotel and Timeshare Resort structure situated adjacent and to the south. Over time, perimeter landscaping proposed as part of this project would ~~partially improve~~<u>complement</u> the visual <u>character</u> ~~impact~~ of new development.

Character of Impacts: Site development on Parcel 10R would alter the visual character of the property to a more intensive developed use. While the Neptune Marina Parcel 10R project would result in an intensification of development on the project site, this new development is consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[4] Moreover, the height and mass of the most prominent Parcel 10R apartment buildings would be considered consistent with new apartments being constructed to the east on adjoining Parcel 12 as well as apartment buildings

4 Ibid.

planned to the north on Marina Parcels 15, 100, and 101. Project architecture has been approved in concept by the DCB and is considered to be in character with the contemporary structures present or under construction within the marina.

The proposed Woodfin Suite Hotel and Timeshare Resort structure (proposed on the northern portion of Parcel 9U) would be visible and would be taller than other existing or proposed structures located to the west and north. The Woodfin Suite Hotel and Timeshare Resort project is consistent with the stated height guidelines defined in the certified LCP. However, the structure would be taller than existing or proposed Phase II structures on Parcels 10R and FF, structures under construction east of the project site on Marina del Rey Parcel 12, and other projects proposed to the north on Marina del Rey Parcels 15, 100, and 101. The hotel and timeshare resort structure would also be significantly taller than the older, lower-height residential structures in the project vicinity. Therefore, the structure could be considered out of character with other Phase II marina development and existing, older development in the vicinity of the project site.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use and would eliminate distant views (none of which are defined in the Marina del Rey LUP as visually significant). The Woodfin Suite Hotel and Timeshare Resort structure would result in a significant intensification of development on the project site. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225–foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. Although the proposed hotel and timeshare resort is compliant with the LCP-prescribed building height standard for Parcel 9U, is consistent with the County's hotel land use designation and accompanying height provisions, and would intensify land uses within the marina,[5] the Woodfin Suite Hotel and Timeshare Resort structure can be considered out of character with the contemporary structures present or under construction within the marina as well as existing, older residential structures in the vicinity of the project site. Therefore, aesthetic impacts with respect to the Woodfin Suite Hotel and Timeshare Resort structure from this viewing location are considered significant.

Analysis: Viewing Location Four, Westerly View of the Site (Parcel 10R) as Observed from Marquesas Way – As illustrated on **Figure 5.6-5, Pre- and Post-Development View of the Site (Parcel 10R) as Observed Westerly from Marquesas Way**, the 55- and 60-foot-tall residential structures proposed on Parcel 10R would be visible in the foreground and middle ground. These new structures would replace existing two-story structures that are currently present on the project site. With removal of the existing

5 See pp. 8-3 and 8-4 of the LUP.

perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be distinguishable. The increased height and mass of the proposed structures would make on-site uses more visible and visually prominent than the existing structures. The proposed project would be appear greater in mass and on-site building intensity than existing apartment structures located to the northeast. However, the project would be consistent with the height and mass of new Phase II construction east of the project site on Marina del Rey Parcel 12, and would also be consistent with the height and mass of apartment buildings approved for development to the north on Via Marina on Marina Parcels 15, 100, and 101.

It is expected that in the future, construction on Marina del Rey Parcel 12 (reference **Figure 5.6-45**) would obscure views of portions of development planned on Parcel 10R when viewed from the east on Marquesas Way. Structure height on Parcel 12 (maximum of 65 feet, exclusive of appurtenant rooftop structures) would be marginally taller than development proposed on Parcel 10R (a maximum of 60 feet, exclusive of appurtenant rooftop structures). In the future from this location, visible portions of development proposed for Parcel 10R would be limited to the northern portion~~margin~~ of the site adjacent to Marquesas Way.

Prominent Visual Features: No significant visual resources or defined scenic highways as defined in the Marina del Rey LUP are present near this viewing location. Currently, the most noticeable features visible from this viewpoint include new building construction adjacent to and east of Parcel 10R on Parcel 12 and mature landscaping along the northern perimeter of the project site. No prominent visual features (inclusive of the marina) are present on this portion of the project site and distant vistas are minimal. As part of site construction, existing structures and landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure viewsstas of palm trees in the background. Once complete, the most dominant visual feature would be the new apartment structures. Over time, perimeter landscaping proposed as part of this project would partially improve the visual character ~~impact~~ of new development.

Character and Surroundings Impacts: From this location, the proposed project would appear similar in mass and building intensity when compared with new development under construction on Parcel 12, adjacent to and east of the project site. The project would be consistent with the height**,** mass, and visual character of new (Phase II) projects recently constructed, or proposed in the Marina per height and mass standards defined in the LUP. Therefore, the project is not out of character with development surrounding the project site or other Phase II marina development.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use. While the project would result in an intensification of development on the project site, this

new development is consistent with height standards defined in the County of Los Angeles LUP and the County's desire to recycle Phase I marina development and intensify land uses within the marina.[6] Moreover, project architecture has been approved in concept by the DCB and is considered to be in character with the contemporary structures present, under construction (Parcel 12 to the east) or planned (Parcels 15, 100, and 101 within the marina). As such, impacts of the project when viewed from this location are not considered significant.

Analysis: Viewing Location Five, Westerly View of the Site (Parcel FF) as Observed from Marquesas Way – As illustrated on **Figure 5.6-6, Pre- and Post-Development View of the Site (Parcel FF) as Observed Westerly from Marquesas Way**, the 55-foot-tall residential structure proposed on Parcel FF would clearly be visible in the foreground and middle ground. This new structure would replace an existing surface parking lot present on Parcel FF. With removal of the existing perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. The increased height and mass of the structures would make on-site uses appear more visually prominent than the existing surface lot. The proposed project would be perceived as a new land use of greater mass and on-site building intensity than either the existing surface parking lot or existing residential development that is situated to the west (west of Via Marina) and east. However, the project would be consistent with the height, mass and visual character of new (Phase II) apartments under construction on Marina del Rey Parcel 12 as well as apartments planned on the adjoining Parcel 15 to the north and on nearby Parcels 100 and 101 on Via Marina.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include mature landscaping on the perimeter of the existing parking lot, filtered vistas of the existing surface parking and, to some extent, the 15-story Archstone apartment building on Via Dolce to the northwest. Other than the Archstone building, no prominent visual features (inclusive of the marina) are present on this portion of the project site and distant vistas are minimal. As part of site construction, existing paved surfaces and landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure vistas of palm trees as well as any viewsvista of the 15-story Archstone building in the background. Once complete, the most dominant visual feature would be the new apartment structure. Over time, perimeter landscaping proposed as part of this project would partially improve the visual character impact of new development.

Character of Impacts: From this location, the proposed project would appear similar in mass, intensity and height to apartments under construction on Marina del Rey Parcel 12 as well as apartments approved and planned on the Parcel 15 to the north and on nearby Parcels 100 and 101 to the west on Via Marina. Although inconsistent with the current 25-foot height limitation for Parcel FF, the County and Legacy

6 Ibid.

Partners are proposing to amend the certified LCP to change the Parcel FF classification to Height Category 3, which would accommodate the proposed 55-foot-tall apartment building. The proposed apartment building for Parcel FF would be consistent with the height and mass of new (Phase II) projects recently constructed, approved, or proposed in the Marina per height and mass standards defined in the LUP. Therefore, the height, mass and visual characteristics of the proposed apartment building for Parcel FF are consistent with the height, mass and visual characteristics of other Phase II developments either being constructed or planned in the vicinity of the project site.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use. While the project would result in an intensification of development on the project site, this new development is consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[7] Moreover, project architecture has been conceptually approved by the DCB and is considered in character with nearby contemporary structures either under construction (i.e., Parcel 12 to the southeast on Marquesas Way) or planned in the vicinity of the project site (i.e., Parcels 15, 100 and 101 located adjacent to and nearby the project site to the north on Via Marina). As such, impacts are not considered significant from this location. ~~with respect to this visual resource assessment criterion~~.

Mitigation: No mitigation measures are proposed or are required.

Conclusion: Not significant.

Analysis: Viewing Location Six, Easterly View of the Site (Parcel FF) as Observed from the Intersection of Marquesas Way and Via Marina – As illustrated on **Figure 5.6-7, Pre- and Post-Development View of the Site (Parcel FF) as Observed from the Intersection of Marquesas Way and Via Marina**, the 55-foot-tall residential structure proposed on Parcel FF would clearly be visible in the foreground and middle ground. This new structure would replace the existing surface parking lot present on Parcel FF. With removal of the existing perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. The increased height and mass of the building would make on-site uses more visually prominent than the existing surface lot. The proposed project would be perceived as a new land use of greater mass and on-site building intensity than existing surface parking lot and existing high density residential development that is situated to the west (west of Via Marina) and east. However, the project would be consistent with the height, mass and visual character of new (Phase II) apartments currently being constructed to the southeast of the project site on Marina del Rey Parcel 12, as well as apartments planned adjacent and nearby by the site to the north on Parcels 15, 100, and 101.

7 Ibid.

Prominent Visual Features: No significant visual resources ~~or defined scenic highways as defined in the Marina del Rey LUP~~ are visible from this viewing location. Currently, the most noticeable features visible from this viewpoint include mature landscaping on the perimeter of the existing parking lot. Vistas of the existing surface parking and marina are obscured by the solid fencing along the western and northwestern portion of Parcel FF. Other than existing eucalyptus and palm trees, no prominent visual features (inclusive of the marina) are present on this portion of the project site and distant vistas are minimal. As part of site construction, existing paved surface and landscape vegetation would be removed and replaced. ~~As defined above, t~~The height of the proposed structures would obscure vi<u>ews</u>~~stas~~ of palm trees in the background. Once complete, the most dominant visual feature would be the new apartment structure. Over time, perimeter landscaping proposed as part of this project would ~~partially~~ improve the visual <u>character</u>~~impact~~ of new development.

Character of Impacts: From this location, the proposed project would appear similar in mass and development intensity to new development under construction on Parcel 12 and new apartment development planned adjacent to and nearby the site to the north on Marina Parcels 15, 100, and 101. Although inconsistent with the current 25-foot height limitation for Parcel FF, the County and Legacy Partners are proposing to amend the certified LCP to change the Parcel FF classification to Height Category 3, which would accommodate the proposed 55-foot-tall apartment building. The proposed apartment building for Parcel FF would be consistent with the height and mass of new (Phase II) projects recently constructed, approved, or proposed in the Marina per height and mass standards defined in the LUP. Therefore, the height, mass, and visual character of the proposed apartment building for Parcel FF are consistent with the height, mass and visual character of other Phase II developments either being constructed or planned in the vicinity of the project site. As such, the project is considered to be consistent with the visual character of other Phase II marina developments in the vicinity of the project site.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use. While the project would result in an intensification of development on the project site, this new development is consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[8] Moreover, project architecture has been approved by the DCB and is considered in character with the contemporary structures, under construction (Parcel 12 to the east and southeast on Marquesas Way) or proposed (Parcels 15, 100 and 101 to the north on Via Marina) within the marina. As such, impacts are not considered significant <u>from this location.</u> ~~with respect to this visual resource assessment criterion.~~

Analysis: Viewing Location Seven, Easterly View of Parcel 9U as Observed from Via Marina – As illustrated on **Figure 5.6-8, Pre- and Post-Development View of Site (Parcels 9U) as Observed from**

8 Ibid

Mid-Block Via Marina, similar to Viewing Location One, foreground views would be dominated by structures of the Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U. The Woodfin Suite Hotel and Timeshare Resort building would eliminate vistas of the western portions of Marina del Rey Basin B. Due to the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. When viewed from this location, the height of the Woodfin Suite Hotel and Timeshare Resort structure would cause the structure to stand out in contrast to existing and proposed structures on the westerly side of the marina. As stated above, ~~the only~~ other structures of similar size ~~is~~ are the 15-story Archstone apartment building on Via Dolce to the northwest, the 20-story Regatta condominiums, the 19-story Azzurra condominiums, and the 18-story Cove condominiums, all on Marina Pointe Drive to the northeast, which were found to be consistent with the City of Los Angeles local coastal program. The view corridor south of the Woodfin Suite Hotel and Timeshare Resort would provide direct vistas of boat masts that are present in Marina del Rey Basin B and the more distant residential development. Although consistent with height provisions that were approved by the CCC and the County of Los Angeles as defined in the Marina del Rey LUP, the height and mass of the building would be a dominant visual element that would define this portion of the marina.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the portions of the vacant nature of Parcel 9U. As defined above, the height of the proposed structures would obscure vistas of trees and structures in the background. Once complete, the most dominant visual feature would be the architectural forms of the new Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U fronting on Via Marina. Over time, project landscaping proposed as part of each project would ~~partially improve~~complement the visual character~~impact~~ of the new development ~~in this area~~.

Character of Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear taller than other existing or proposed structures located to the west and north. As noted, the Woodfin Suite Hotel and Timeshare Resort structure is consistent with the stated height guidelines as approved by the CCC and as defined in the LUP. However, the 225-foot hotel structure would be substantially taller than other new (Phase II) construction that is present east of the project site on Marina del Rey Parcel 12R as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. The tallest structures approved would be the 75~~ to 100~~-foot structures recently approved on Parcels 100 and 101. The hotel and timeshare resort structure would also be substantially taller than the older, lower-height residential structures in the local vicinity of the project site that do not exceed three stories. Therefore, due to the height disparity between the proposed hotel and timeshare structure

and other planned and existing development in the vicinity of the project site, the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with its surroundings.

Level of Impact: Site development would not alter any defined significant visual feature. However, the proposed project would eliminate vistas of the marina (Parcel 9U only) when viewed from Via Marina and would alter the visual character of the property to a more intensive developed use. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on the project sites. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225-foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. Although the proposed apartment buildings and hotel and timeshare resort are compliant with past CCC approvals, the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina,[9] the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with the contemporary structures present or under construction within the marina as well as out of character with the older, lower-height residential structures in the local vicinity of the project site. Therefore, the Woodfin Suite Hotel and Timeshare Resort building, although consistent with the provisions of the LCP in regard to building height (see discussion in **Section 5.17, Land Use and Planning**), could appear out of character in comparison to adjacent uses in terms of height and mass when viewed from this viewing location. This is considered a potentially significant impact.

Analysis

More Distant Viewing Locations:

Parcel 9U Viewing Location One, Southerly View of the Site as Observed from Mother's Beach – As illustrated on **Figure 5.6-10, Pre- and Post-Development View of the Site as Observed from Mother's Beach**, the 225-foot-tall Woodfin Suite Hotel and Timeshare Resort tower would be seen from Mother's Beach. Although the hotel tower would be visible from Mother's Beach, views from this location to west, north, and northeast include several other high rise buildings as well, including the 15-story Archstone building, the adjacent 10-story Marriott Hotel, the three 13-story Marina City Club buildings, the 14-story Ritz Carlton Hotel, the 18-, 19- and 20-story Cove, Azzurra, and Regatta condominium buildings. The

9 See pp. 8-3 and 8-4 of the LUP.

hotel tower therefore is not out of character when compared with the other similarly sized structures in view from this distant location. Additionally, due to the panoramic nature of the view from this location, the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources.

Parcel 9U Viewing Location Two, Southeasterly View of the Site as Observed from Panay Way – As illustrated on **Figure 5.6-11, Pre- and Post-Development View of the Site as Observed from Panay Way,** there are no available views of the project site from this viewpoint as the scene depicts only the apartment structure at this location. Views south and southeast are blocked by nearly contiguous apartment buildings on the southern side of Panay Way. Therefore, the Woodfin Suite hotel and Timeshare Resort would not be visible from this location.

Parcel 9U Viewing Location Three, Westerly View of the Site as Observed from Tahiti Way – As illustrated on **Figure 5.6-12, Pre- and Post-Development View of the Site as Observed from Tahiti Way,** views of the project site at Via Marina are mostly obstructed from the eastern terminus of Tahiti Way. Apartment buildings lining the north side of Tahiti Way dominate the field of view and limit distant views from this viewpoint. Palms and other street trees lining the roadway also serve to screen views. Only a portion of the Woodfin Suite Hotel and Timeshare Resort would be visible from this view location.

Parcel 9U Viewing Location Four, Northwesterly View of the Site as Observed from North Jetty Trail – As illustrated on **Figure 5.6-13, Pre- and Post-Development View of the Site as Observed from North Jetty Trail**, from this vantage point, views of the project site, across the open water of the channel, are essentially obscured by two-story waterfront buildings near the terminus of Northwest Passage and five-story buildings just to the north on Old Harbor Lane. Mature landscape trees in the foreground characterize this view. Only a very small portion of the Woodfin Suite Hotel and Timeshare Resort structure would be visible between the trees from this location and would not be a prominent feature.

Parcel 9U Viewing Location Five, Northwesterly View of the Site as Observed from South Jetty Trail – As illustrated on **Figure 5.6-14, Pre- and Post-Development View of the Site as Observed from South Jetty Trail,** the panoramic views from this location, allow some visibility of the project site but a small portion of the available field of view. Ballona Creek Channel and the North Jetty Trail are the most prominent visual features from this vantage, as is the waterfront across the ship channel. Mature trees and other ornamental landscaping are visible along the waterfront. The upper stories of the Woodfin Suite Hotel and Timeshare Resort tower structure would be visible through the landscape materials but would not be a prominent feature on the horizon.

Parcel 9U Viewing Location Six, Northwesterly View of the Site as Observed from Fisherman's Village – As illustrated on **Figure 5.6-15, Pre- and Post-Development View of the Site as Observed from**

Fisherman's Village, panoramic views of the marina's inner harbor and Basins A and B are characteristic of this viewpoint. Distant apartment buildings lining Via Marina to the west are visible across the water, and other high-rise buildings, the Marina City Club and the Ritz Carlton Hotel, are visible across the water to the north. The project site is partially blocked from this viewpoint by the intervening four-story apartment building at the eastern terminus of Tahiti Way. However, the upper portion of the Woodfin Suite Hotel and Timeshare Resort tower would be clearly visible on the horizon.

Parcel 9U Viewing Location Seven, Westerly View of the Site as Observed from Burton Chace Park – As illustrated on **Figure 5.6-16, Pre- and Post-Development View of the Site as Observed from Burton Chace Park**, similar to the Fisherman's Village viewpoint, panoramic views of the marina's inner harbor and Basins B and C are visible from the park, The park is almost due east of Parcels 10R and FF and the mole occupied by Parcel 12, with Basins B and C to the south and north, respectively. Views west from Burton Chace Park are almost entirely obscured by the existing five-story apartment building at the end of Marquesas Way, near the tip of the mole. Palms and other trees lining Tahiti Way to the south can be seen, as can the anchored boats in the two basins. The height of the Parcel 12 five-story buildings obscure a direct line of sight of the Woodfin Suite Hotel and Timeshare Resort structure with only the very top floors of the tower being visible.

Parcel 9U Viewing Location Eight, Southwesterly View of the Site as Observed from Bali Way – As illustrated on **Figure 5.6-17, Pre- and Post-Development View of the Site as Observed from Bali Way,** demonstrates that views toward the project site from Bali Way are largely blocked by the presence of the three-story Marina del Rey Hotel buildings and dense ornamental plantings lining Bali Way. Hotel rooms have panoramic views that include the project site to the south. The blocked view of the Woodfin Suite Hotel and Timeshare Resort greatly limit any visual impact from this vantage point.

Prominent Visual Features

More Distant Viewing Locations:

Parcel 9U Viewing Location One, Southerly View of the Site as Observed from Mother's Beach features mature trees and landscaping, along with single- and multi-story buildings along Panay Way south of Mother's Beach. As discussed above, although the hotel tower would be visible from Mother's Beach, views from this location to west, north, and northeast include several other high rise buildings as well, such as the 15-story Archstone building, the adjacent 10-story Marriott Hotel, the three 13-story Marina City Club buildings, the 14-story Ritz Carlton Hotel, the 18-, 19- and 20-story Cove, Azzurra, and Regatta condominium buildings. The hotel tower therefore is not out of character when compared with the other similarly sized structures in view from this distant location. Additionally, due to the panoramic nature of the view from this location (the tower will be separated from Mother's Beach by a distance of no

less than approximately 1,900 feet), the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources.

Parcel 9U Viewing Location Two, Southeasterly View of the Site as Observed from Panay Way is the existing apartment buildings along Panay Way. This will continue to be the prominent visual feature post-construction of Woodfin Suite Hotel and Timeshare Resort as that structure will not be visible.

Parcel 9U Viewing Location Three, Westerly View of the Site as Observed from Tahiti Way is the existing apartment buildings, street trees along Tahiti Way. This will continue to be the prominent visual feature post-construction of Woodfin Suite Hotel and Timeshare Resort as only a small portion of the structure will be visible.

Parcel 9U Viewing Location Four, Northwesterly View of the Site as Observed from North Jetty Trail has an open water channel in the foreground, with mature landscape trees prominent in the distant foreground. The existing two-story and five-story apartment buildings are only discernible structures. Only a very small portion of the proposed project structures would be visible between the trees from this location.

Parcel 9U Viewing Location Five, Northwesterly View of the Site as Observed from South Jetty Trail has the Ballona Creek Channel as the most conspicuous feature. The mature trees and existing two-story and five-story apartment buildings on Northwest Passage and Old Harbor Lane, respectively are also prominent. The top of the Woodfin Suite Hotel and Timeshare Resort tower would appear on the horizon above the landscape trees.

Parcel 9U Viewing Location Six, Northwesterly View of the Site as Observed from Fisherman's Village shows the inner harbor, Basins A and B, and the existing four-story apartment building on Tahiti Way. Because of the low stature of the existing buildings, the Woodfin Suite Hotel and Timeshare Resort structure, along with other high-rise buildings, such as the Marina City Club and the Ritz Carlton Hotel, will be visible on the horizon above the existing apartments. Due to the relatively distant location of the hotel tower from this viewing point (the tower will be separated from Fisherman's Village by a distance of no less than approximately 3,200 feet—over 0.5 mile—and the Marina's main channel, apartment complexes and anchorages are located in between the tower and Fisherman's Village), the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources.

Parcel 9U Viewing Location Seven, Westerly View of the Site as Observed from Burton Chace Park has views of the inner harbor, Basins B and C, and the five-story apartment building at the end of Marquesas Way on the mole between Basins B and C. Because of the height of the new apartment buildings on Parcel 12, just the very top floors of the Woodfin Suite Hotel and Timeshare Resort would be observable.

Parcel 9U Viewing Location Eight, Southwesterly View of the Site as Observed from Bali Way depicts the Marina del Rey Hotel (from Bali Way) and its associated landscaping with mature trees. Because of the density of landscape materials and buildings, the post-construction structures of the Woodfin Suite Hotel and Timeshare Resort would not be visible.

Character of Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear taller than other immediately adjacent existing or proposed structures when the views are not obstructed by structures, landscaping or distance. As noted, the Woodfin Suite Hotel and Timeshare Resort structure is consistent with the stated height guidelines as approved by CCC and the County of Los Angeles as defined in the Marina del Rey LUP. The height of the building would be a dominant visual element as seen from the immediately adjacent viewing locations, but would only be another structure in the panoramic view that comes from more distant viewing locations such as Mother's Beach and Fisherman's Village.

Level of Impact: Site development of the Woodfin Suite Hotel and Timeshare Resort would not alter any defined significant visual feature, especially of the scenic Marina. The proposed project (Parcel 9U) would not eliminate views of the marina from the distant viewing locations across the marina from the proposed Woodfin Suite Hotel and Timeshare Resort project site. While the height of the proposed structure would alter the visual character of the property, the design is consistent with the Marina del Rey LCP. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on the project sites, but are compliant with past CCC approvals, the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina (see discussion in **Section 5.17, Land Use and Planning**). The Woodfin Suite Hotel and Timeshare Resort building could appear out of character in comparison to immediately adjacent uses in terms of height and mass, as the structure will dominate a larger percentage of the available viewshed. In contrast, the hotel tower occupies only a very small portion of the viewshed available from more distant locations, such as Mother's Beach and Fisherman's Village, and the panoramic view from these locations includes other structures of similar size, height, and mass. Consequently, there are potentially significant view impacts on immediately adjacent locations, but no potential view impacts on more distant viewing locations.

Mitigation: To mitigate impacts associated with the height and mass of the proposed Woodfin Suite Hotel and Timeshare resort project from Viewing Locations One, Two, Three, and Seven, the following mitigation measures are proposed.

5.6-1: A deed restriction shall be placed on the southern portion of Parcel 9U requiring that the wetland park be retained as natural open space.

5.6-2: On the street level of the project landscaping to the satisfaction of the County of Los Angeles Design Control Board shall be implemented to reduce visual impacts of the project when viewed from adjacent public rights of waythis location. Further, if approved by the Design Control Board, areas of landscaping shall be included on terraces and balconies that could be incorporated into the design of the hotel structure and associated parking structure.

5.6-3: Articulation and variations in color or building materials shall could be incorporated into the lower levels of the hotel and parking structure to. These actions would reduce visual resource impacts on Via Marina.

Conclusion: Significant after mitigation.

5.6.3.3.1.4 Threshold: Is the project likely to create substantial sun shadow, light or glare problems?

Analysis: The shade and shadow created by an object blocking sunlight varies dependent upon the time of year and time of day. This variation is a result of the sun's azimuth (the position of the earth in its annual orbit relative to the sun, due to the tilted axis of the earth) and altitude (the position of the earth in its daily rotation relative to the sun). Because the sun is lowest in the southern sky during the winter, project development would cast the longest shadow during this season (the worst-case condition). During the summer months, the sun is directly overhead, and the shadow length is more limited. Thus, the following analysis considers is directed towards the winter conditionthe summer, autumn and winter periods, since although eight months out of the year the project would only cast minimal shade or shadow onto adjacent land area.Shade-sensitive uses such as residences and public parks are considered to be sensitive receptors with respect to shade and shadow.

The series of **Figures 5.6-18A–C, Shade and Shadow Effects; Neptune Marina Project – ~~Winter~~ Summer Solstice, 9:00 AM through 5~~3~~:00 PM**, **Figures 5.6-19A–C, Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 9:00 AM through 5:00 PM Figures 5.6-20A–C, Shade and Shadow Effects; Neptune Marina Project – October, 9:00 AM through 5:00 PM,** and **Figures 5.6-21A–C, Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM through 3:00 PM** depicts post-

development site conditions for the Neptune Marina project hourly during the time period of 9:00 AM through 5:00 PM (3:00 PM for winter) in the summer solstice (June 21), the autumnal equinox (September 21), October 21, and the winter solstice (December 21), respectively. These figures represent the times of the year when shades would be at their smallest (summer solstice) to when shadow effects would be greatest (winter solstice). The month of October is included because this the time of year that shadows would start casting shade on portions of the existing and proposed residential structures on the north side of Marquesas Way and to the north of Parcel FF. The spring equinox (March 21) is not depicted because the shadows would be similar to those for the autumnal equinox.

As shown on **Figures 5.6-21A–C**, ~~shadows cast~~ during the winter solstice the ~~from~~ structures proposed on Parcel 10R ~~at 9:00 AM~~ would cast shadows throughout the day ~~affect portions of Via Marina,~~ on portions of Marquesas Way, the lower portions of the south facing façades of the existing residential structures across Marquesas Way and the lower portion of part of the south facing façade of the proposed residential structures situated on Parcel FF. No other sensitive receptors would be shaded. ~~Existing residential structures situated north, west and east of the project are not affected by shadow effects during the AM period.~~ The proposed structures on Parcel 10R would also cast shadows on portions Via Marina in the morning only and ~~Shadows cast at 3:00 PM affect portions of Marquesas Way and~~ the western portion of Marina del Rey Basin B in the afternoon only. As shown of **Figures 5.6-20A–C** and **5.6-21A–C**, the proposed structures on Parcel 10R would only cast shadows on limited portions of the existing residential structures across Marquesas Way from October to February.

As shown on **Figures 5.6-18A–C** and **5.6-19A–C**, the proposed structures on Parcel 10R would not cast any shadows on off-site sensitive receptors during the summer solstice of autumnal equinox.

As shown, during the winter solstice ~~shadows cast from~~ the structures proposed on Parcel FF ~~at 9:00 AM would affect portions of Via Marina~~ would cast shadows throughout the day, on the garages of the existing residential structures situated north of Parcel FF (Parcel 15) and on the existing garages on Parcel 15 (or lower portion of part of the south facing façade of the new building if that Parcel is redeveloped), No other sensitive receptors would be shaded. The structures proposed on Parcel FF would also cast shadows on portions Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin C in the afternoon only. ~~Existing residential structures situated west and east of the project are not affected by shadow effects during the AM period. Shadows cast at 3:00 PM affect portions of the western portion of Marina del Rey Basin C.~~

As shown of **Figures 5.6-21A–C**, the proposed structures on Parcel FF would only cast shadows on limited portions of the existing and proposed residential structures on Parcel 15 from October to February.

As shown on **Figures 5.6-18A–C** and **5.6-19A–C**, the proposed structures on Parcel FF would not cast any shadows on off-site sensitive receptors during the summer solstice of autumnal equinox.

The series of **Figures 5.6-22A–C, Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 9:00 AM through 5:00 PM, Figures 5.6-23A–C, Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 9:00 AM through 5:00 PM Figures 5.6-24A–C, Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 9:00 AM through 5:00 PM,** and **Figures 5.6-25A–C, Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 9:00 AM through 3:00 PM** depicts post-development site conditions for the Neptune Marina project hourly during the time period of 9:00 AM through 5:00 PM (3:00 PM for winter) in the summer solstice (June 21), the autumnal equinox (September 21), October 21, and the winter solstice (December 21), respectively. These figures represent the times of the year when shades would be at their smallest (summer solstice) to when shadow effects would be greatest (winter solstice). The month of October is included because this the time of year that shadows would respectively start and stop casting shade on portions of the existing and proposed residential structures on the north side of Marquesas Way and to the north of Parcel FF. The spring equinox (March 21) is not depicted because the shadows would be similar to those for the autumnal equinox.

This series of simulations are prepared to indicate the potential for shading of the structures approved for development on Parcel 15, to the north of Parcel FF. As shown, during the Winter Solstice the structures proposed on Parcel FF would cast shadows throughout the day on the lower floors of the approved residential structures situated north of Parcel FF (Parcel 15) and on the lower portion of part of the south facing façade of the new building. No other sensitive receptors would be shaded. The structures proposed on Parcel FF would also cast shadows on portions Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin C in the afternoon only.

As shown of **Figures 5.6-25A–C**, the proposed structures on Parcel FF would only cast shadows on limited portions of the proposed residential structures on Parcel 15 from October to February.

As shown on **Figures 5.6-25A–C**, during the winter solstice the structures proposed on Parcel 10R would have no change of shading on Parcel 15 because the shadows would not extend that far north.

~~Proposed development would cast shadows on adjacent uses beginning in October and only during the winter months and for brief variable periods of time, as discussed below.~~

The series of **Figures 5.6-~~19~~26A–C, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – ~~Winter~~ Summer Solstice, 9:00 AM through 5:00 PM**, **Figures 5.6-27A–C, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 9:00 AM through 5:00 PM, and Figures 5.6-28A–C, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort –**

Winter Solstice, 9:00 AM through 3:00 PM, depicts post-development site conditions for the Woodfin Suite Hotel and Timeshare Resort project hourly from 9:00 AM through 5:00 PM (3:00 PM in winter) on the summer solstice (June 21), the autumnal equinox (September 21), and the winter solstice (December 21), respectively. These figures represent the times of the year when shades would be at their shortest (summer solstice) to when shadows are longest (Winter Solstice).

As shown in **Figures 5.6-28A–C**, ~~shadows cast~~ during the winter solstice the Woodfin Suite Hotel and Timeshare Resort would cast shadows throughout the day on ~~at 9:00 AM affect portions of Via Marina and~~the project's proposed residential uses to the north on Parcels 10R and FF. The Woodfin Suite Hotel and Timeshare Resort would also cast shadows on portions of Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin B in the afternoon only. No off-site sensitive receptors would be shaded during the Winter Solstice.

As shown **in Figures 5.6-26A–C and 5.6-27A–C**, during the summer solstice and autumnal equinox the Woodfin Suite Hotel and Timeshare Resort would cast shadows from between 9:00 AM until sometime after 10:00 AM on a portion of the ~~E~~existing residential uses west ~~and east~~ of the project. No other sensitive receptors would be shaded. The Woodfin Suite Hotel and Timeshare Resort would also cast shadows on portions of Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin B in the afternoon only. The northern portion of the proposed wetland park would receive some shading from the Woodfin Suite Hotel and Timeshare Resort structure in the later afternoon.

~~are not affected by shadow effects during the AM period. Shadows cast at 3:00 PM during winter affect portions of Marina del Rey Basin B and small portions of buildings proposed in the eastern portion of Parcel 10R.~~

~~Exposure of adjacent uses to shadows cast by the project would be limited in duration to~~gin in October ~~and last through winter months and would vary dependent upon the time of day. No~~ Some ~~single existing~~ uses ~~would be exposed to shadows cast by the project for more than 3 hours, and given the small number of uses affected and the nature of those land uses, this is considered a less than significant impact.~~

Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues.

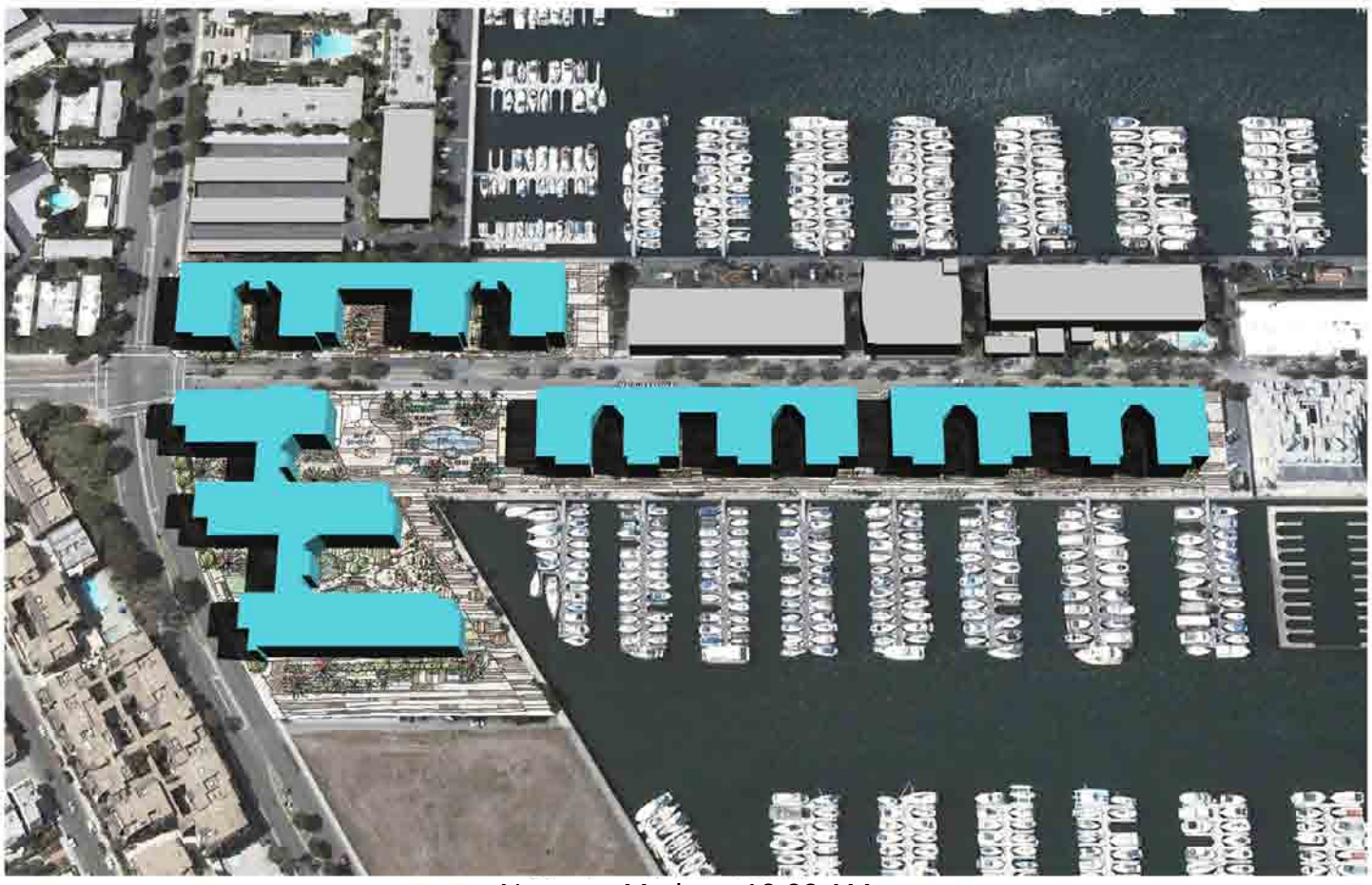
Level of Impact: County of Los Angeles Department of Regional Planning thresholds define a significance threshold that states, "Is the project likely to create substantial sun shadow, light or glare problems?" As shown on ~~defined in~~ **Figures 5.6-21A–C** and **5.6-25A–C, t**he project would cast shadows only on small portions of the south facing facades of the existing and proposed residential uses across Marquesas Way from Parcel 10R and adjacent to Parcel FF and only during the winter months. The Woodfin Suite Hotel and Timeshare Resort would cast shadows in the non-winter months on small portions of the existing residential uses to the west, but the duration of these shadows would be limited (i.e., less than 2 hours). Given the limited extent and duration of the shadows, the project's shade and shadow impacts would be less than significant. For the reasons set forth above, the project's glare impacts would also be less than significant.

~~shadows cast by the project would cast shadows during winter months on adjacent land uses for short considerable periods of time (more than three hours each day) and shade and shadow impacts are not considered significant.~~

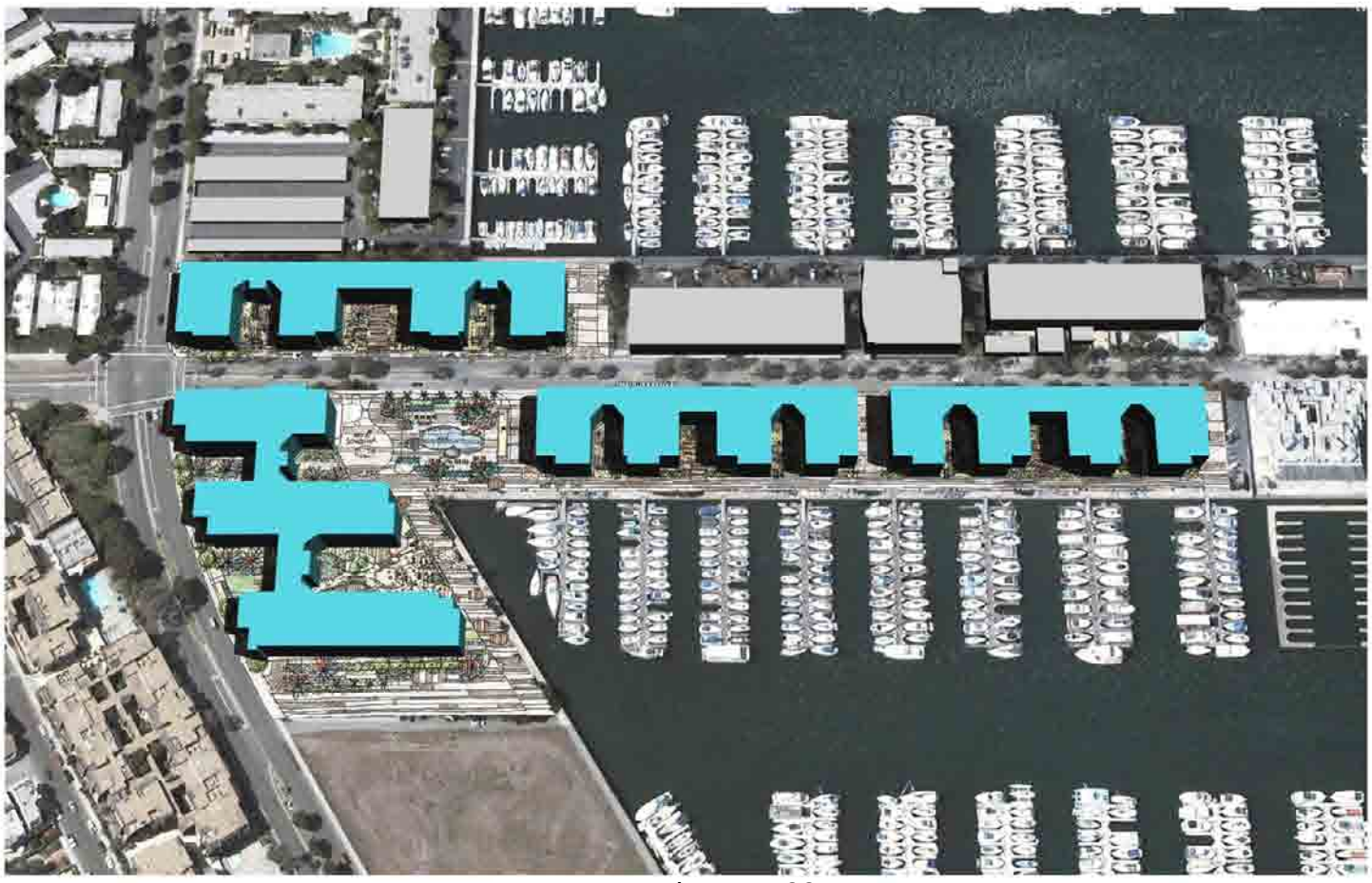
Mitigation: As impacts are not considered significant, no mitigation measures are proposed or are required.

Conclusion: **Not significant.**

Neptune Marina - 9:00 AM



Neptune Marina - 10:00 AM



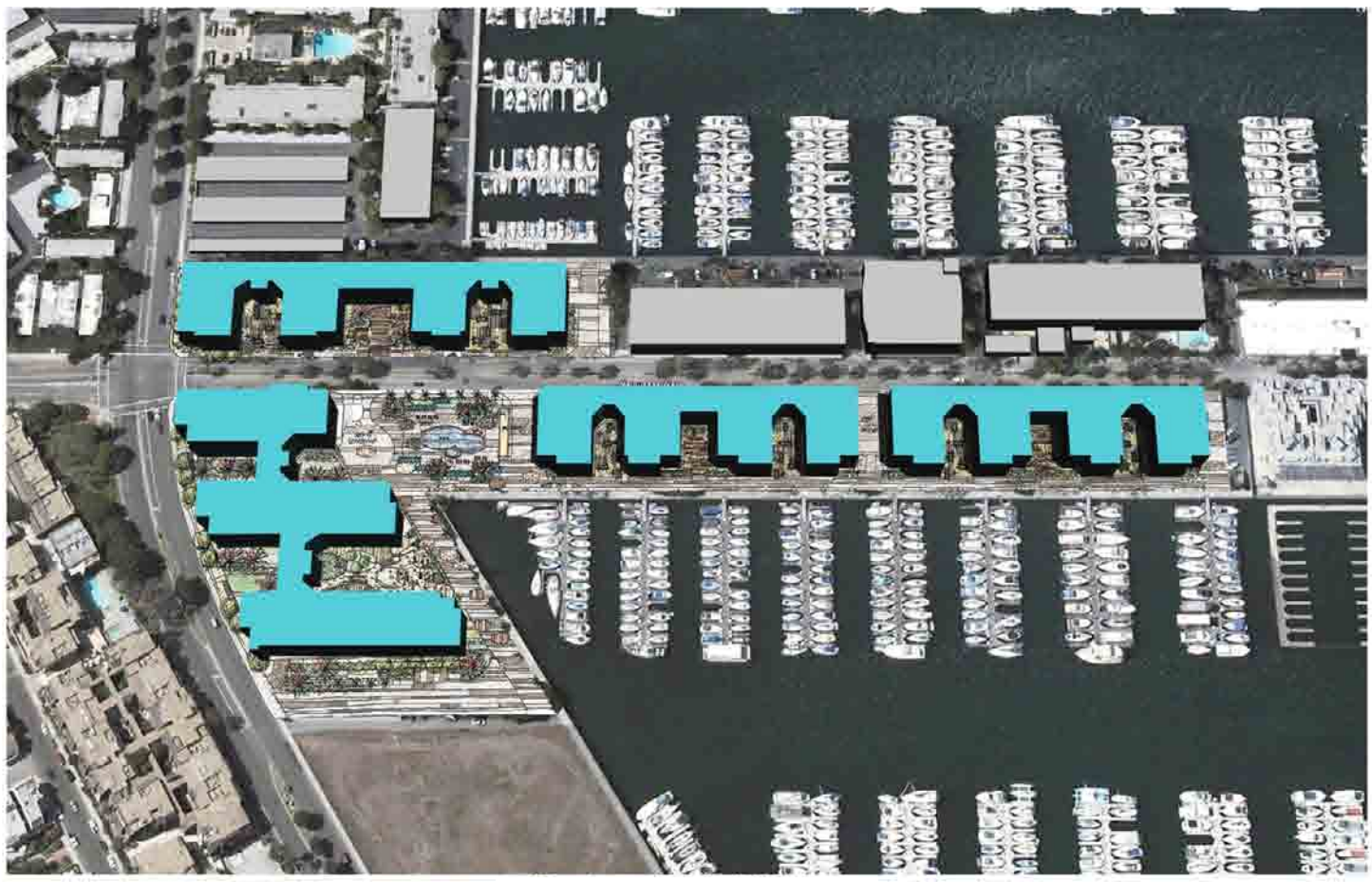
Neptune Marina - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

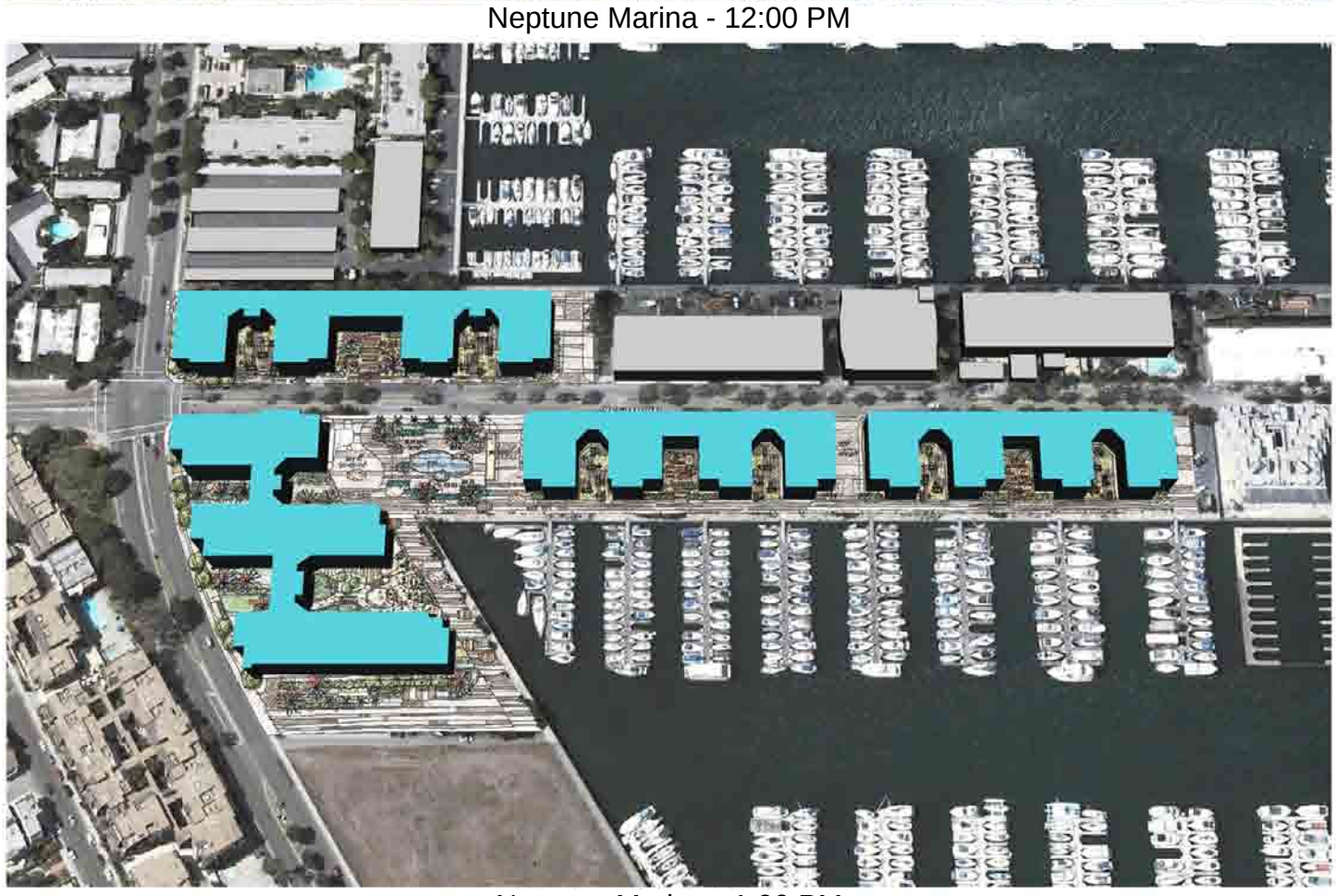
FIGURE **5.6-18A**

Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 9:00 AM through 11:00 AM

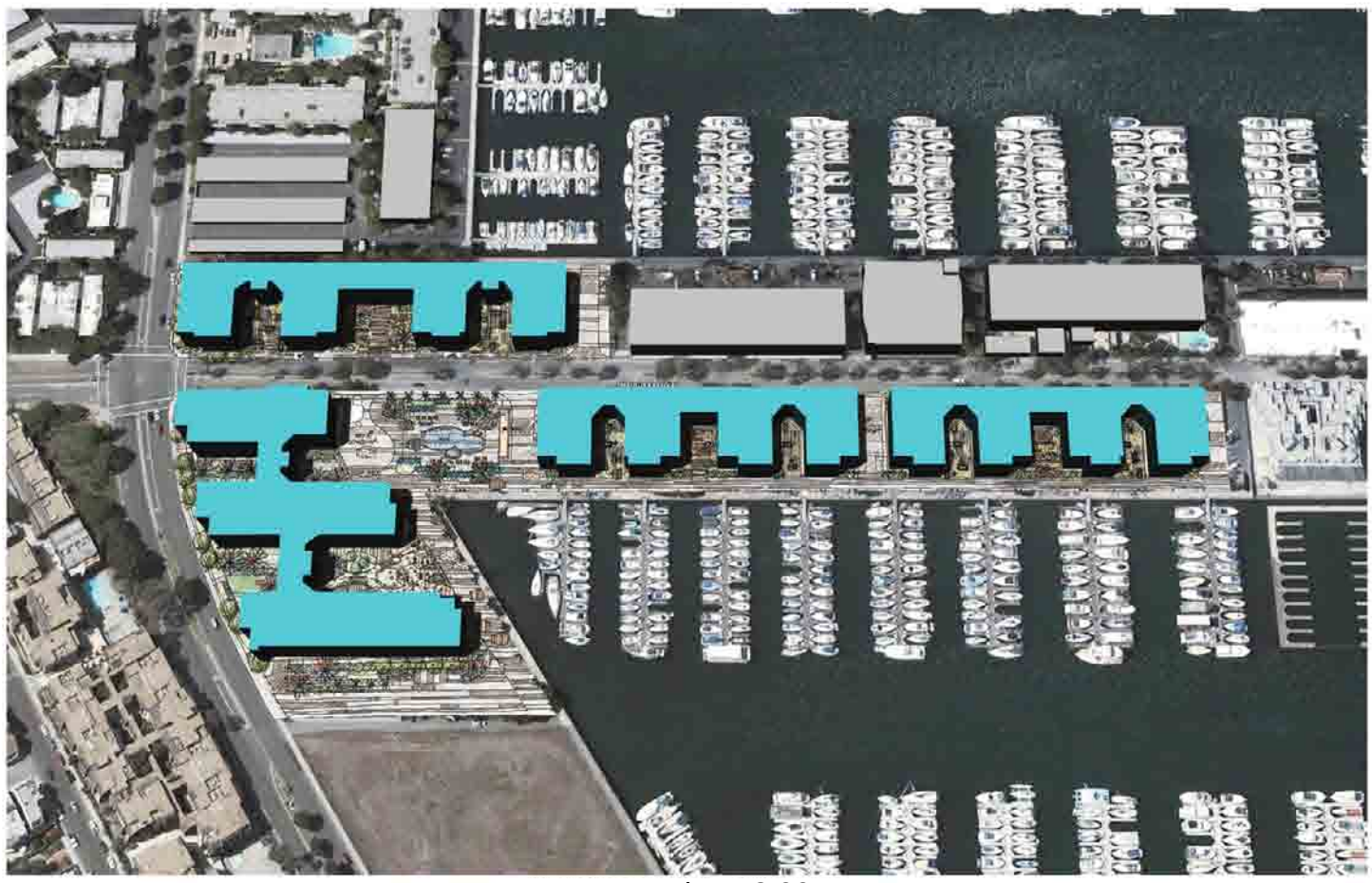
460-004•02/09



Neptune Marina - 12:00 PM



Neptune Marina - 1:00 PM



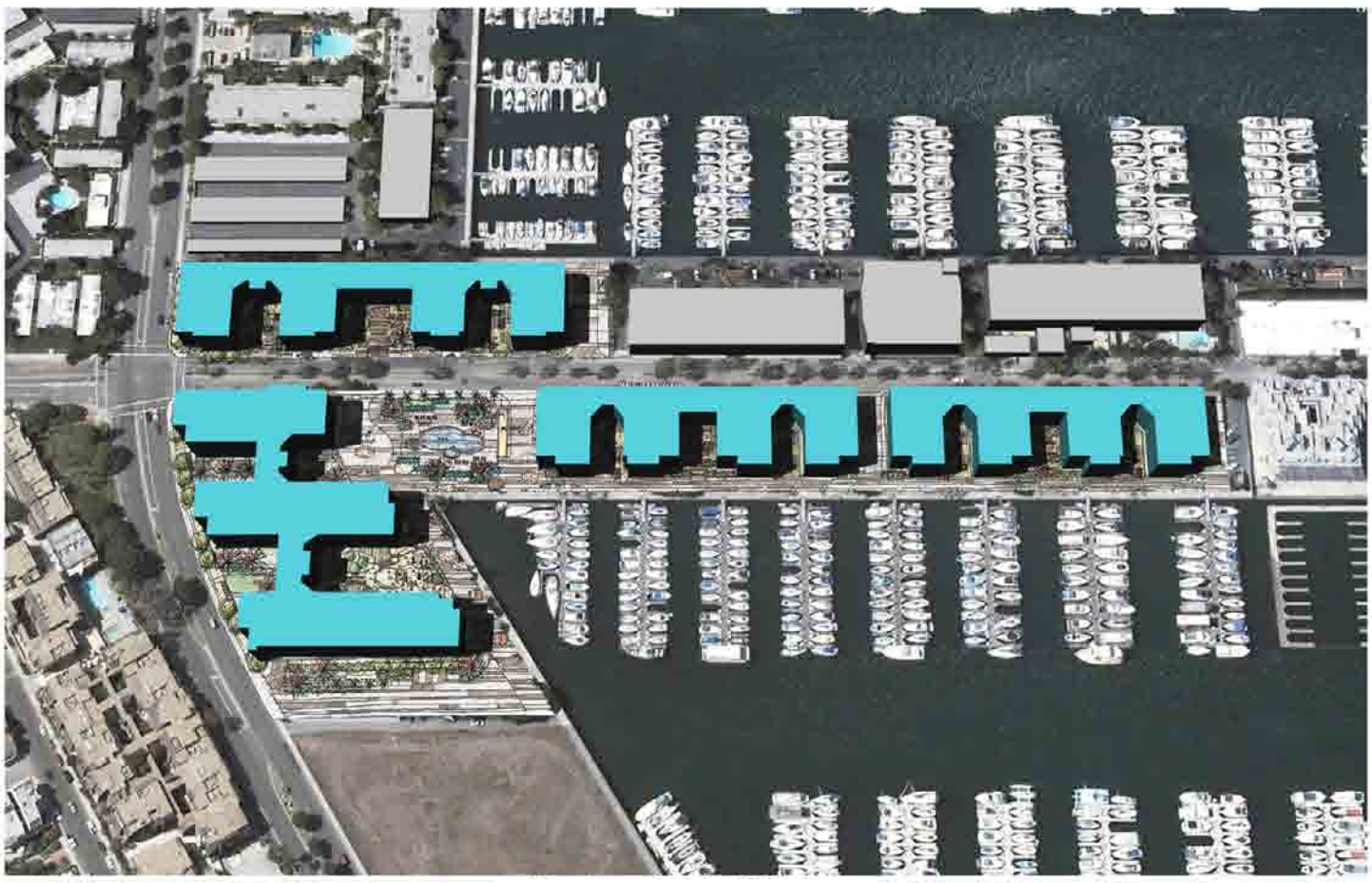
Neptune Marina - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

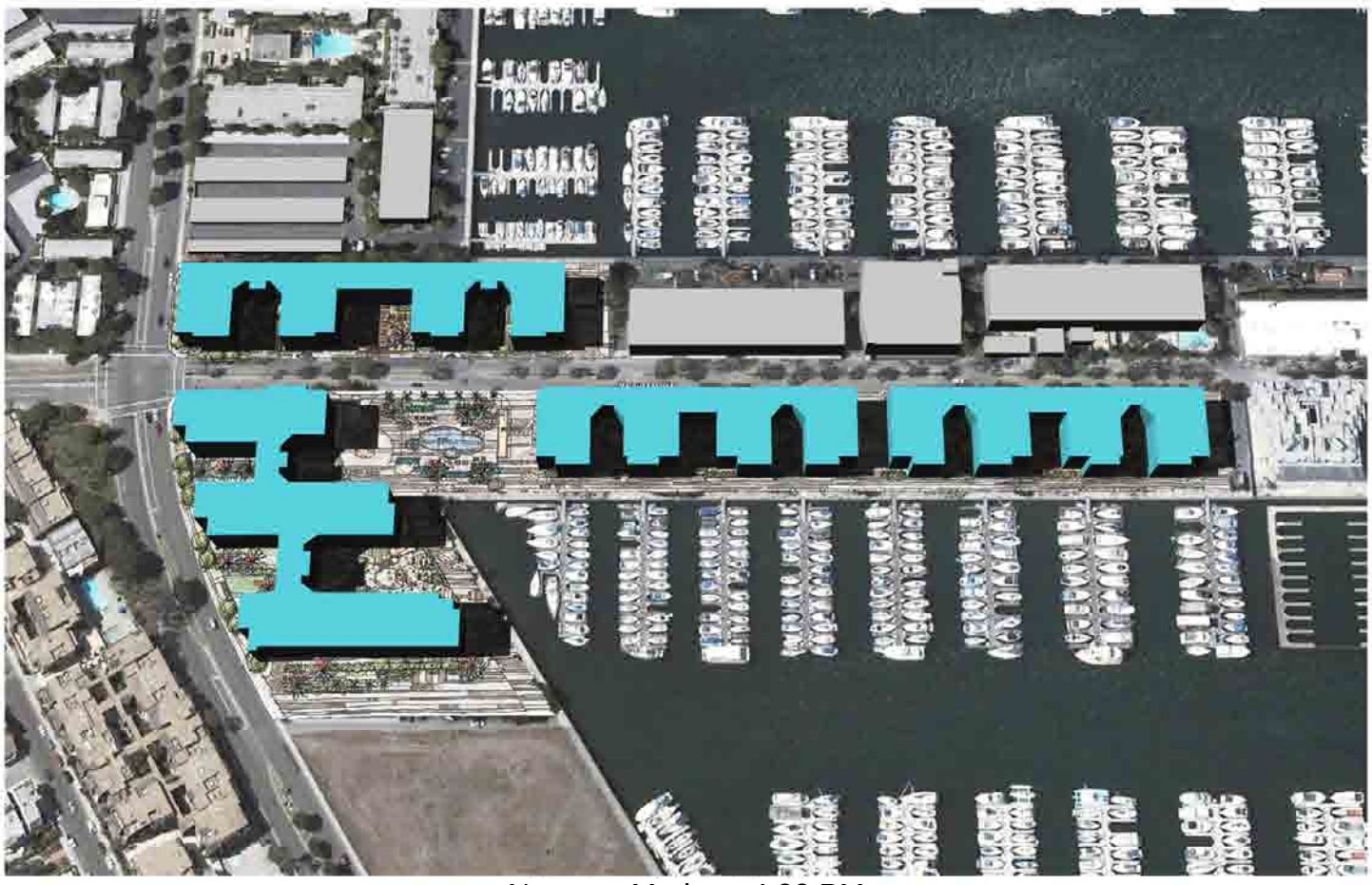
FIGURE **5.6-18B**

Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 12:00 PM through 2:00 PM

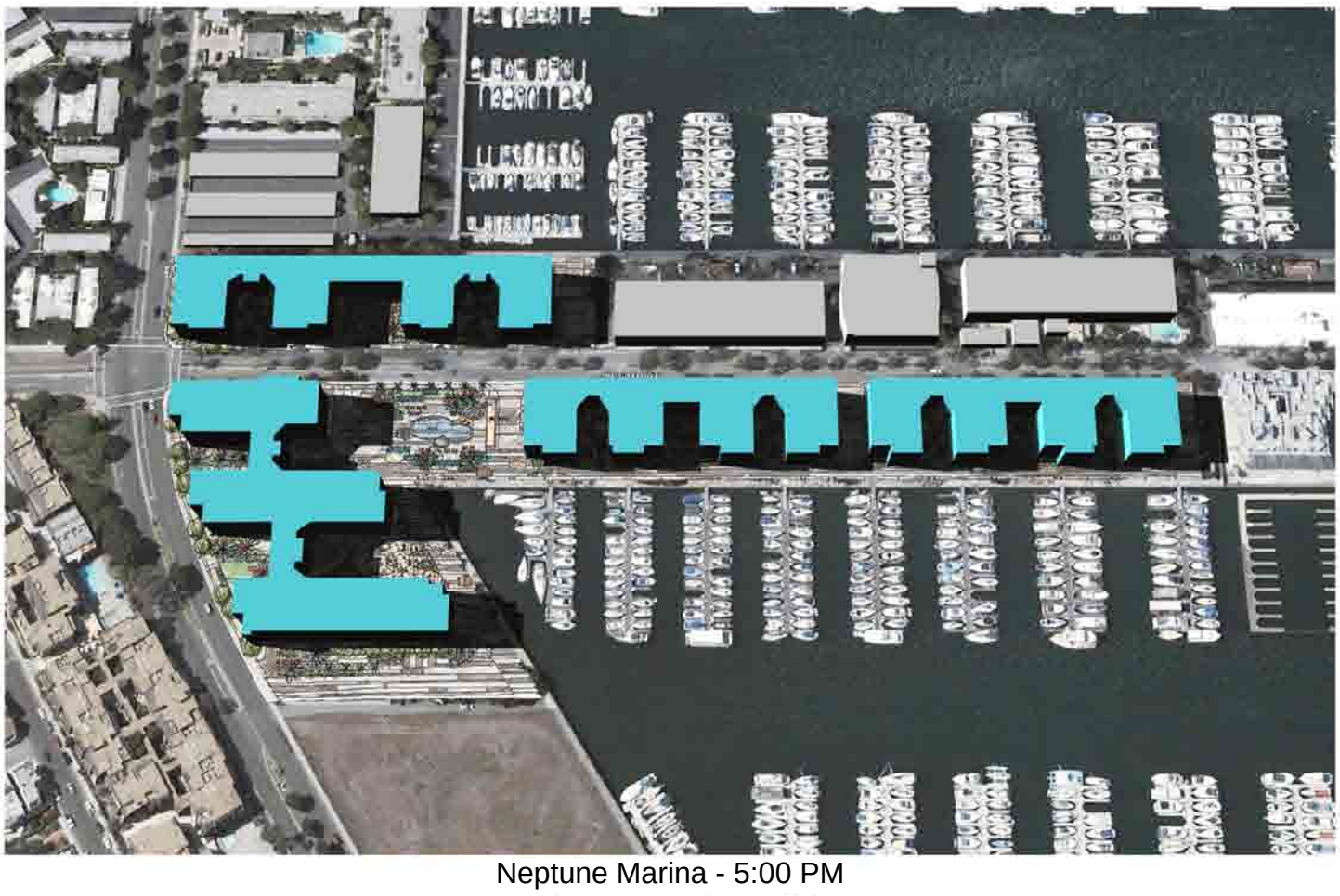
460-004•02/09



Neptune Marina - 3:00 PM



Neptune Marina - 4:00 PM



Neptune Marina - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-18C**

Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 3:00 PM through 5:00 PM

460-004•02/09

Neptune Marina - 9:00 AM

Neptune Marina - 10:00 AM

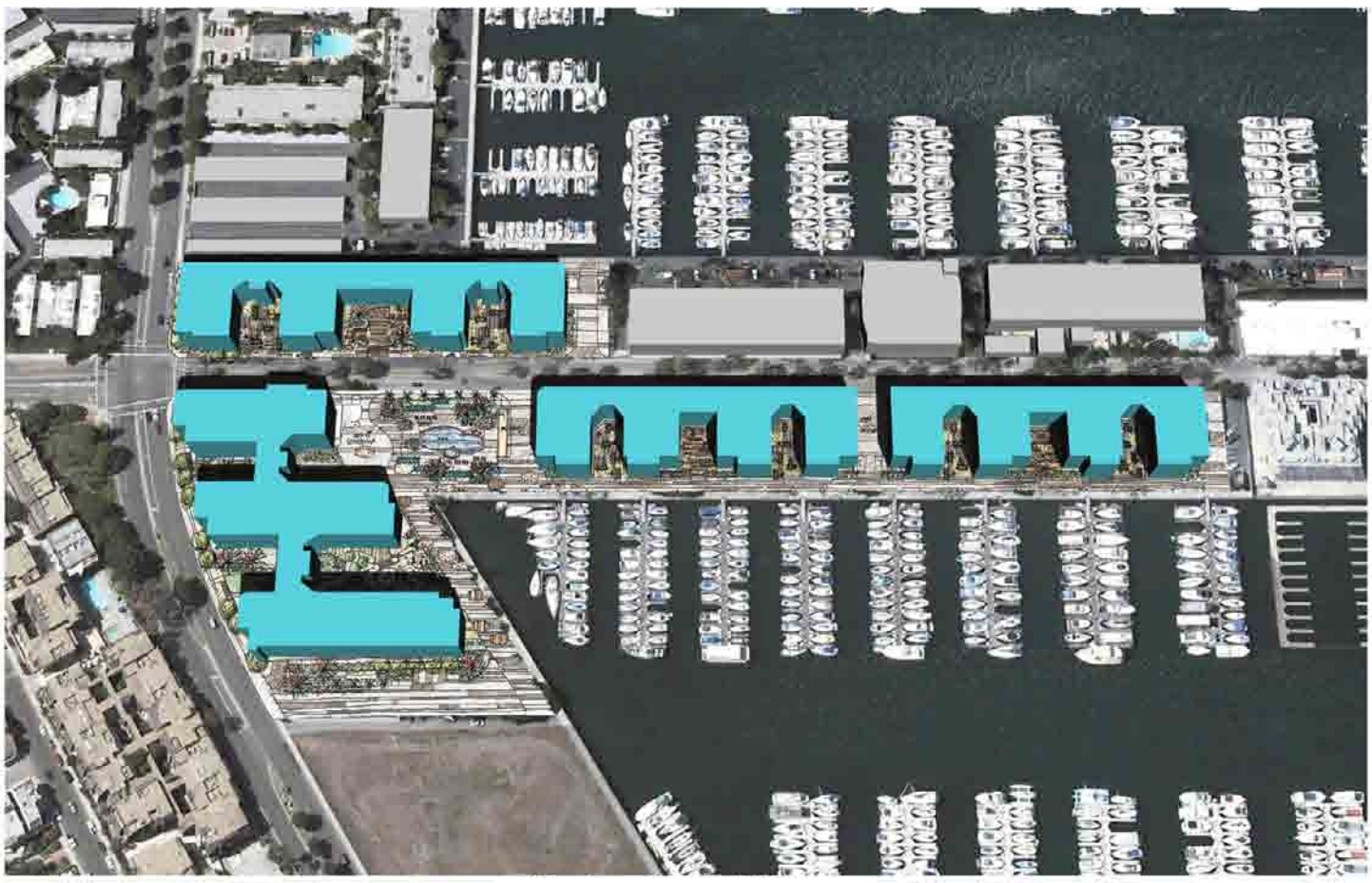
Neptune Marina - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

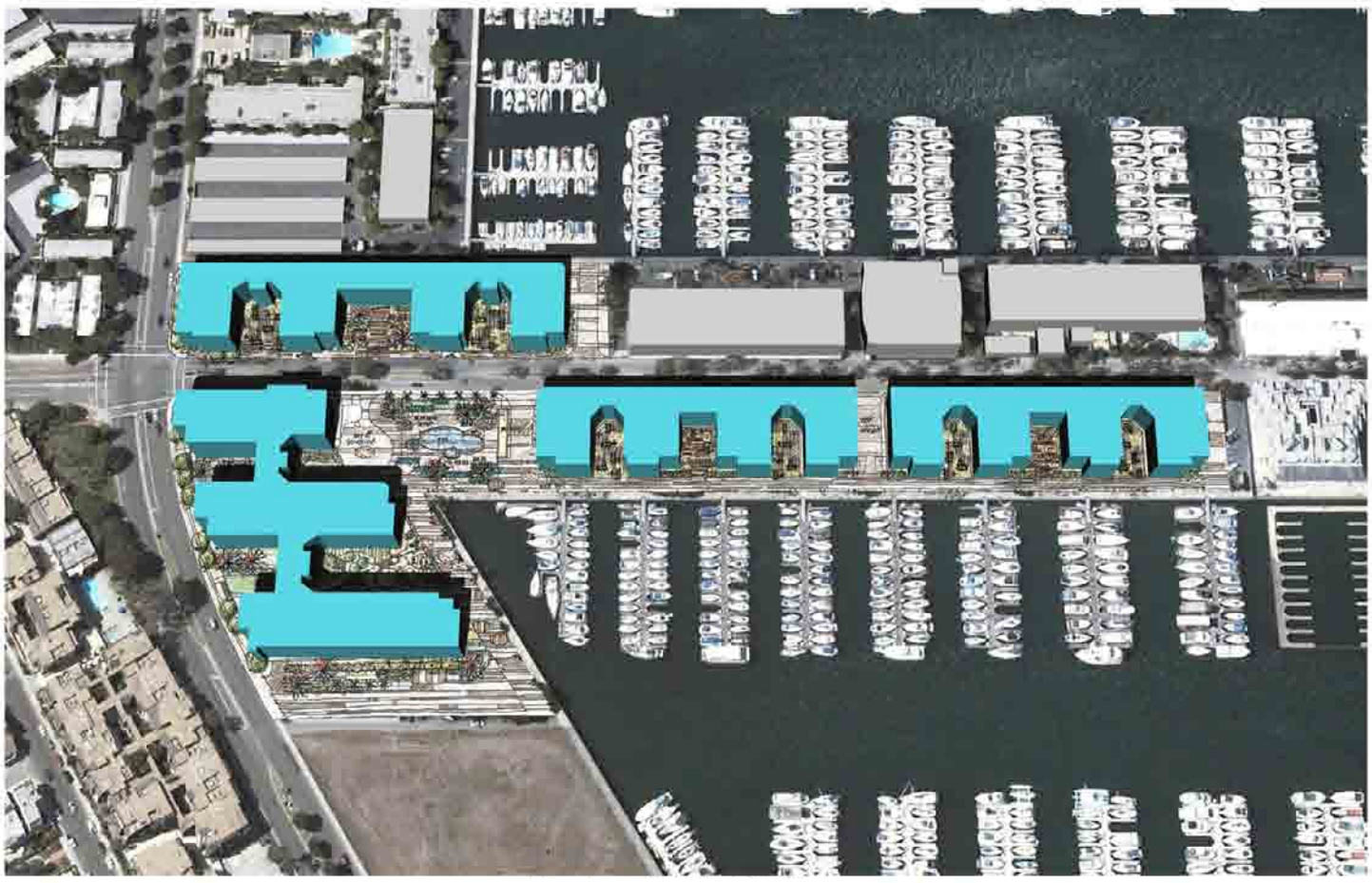
FIGURE **5.6-19A**

Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 9:00 AM through 11:00 AM

460-004•02/09



Neptune Marina - 12:00 PM



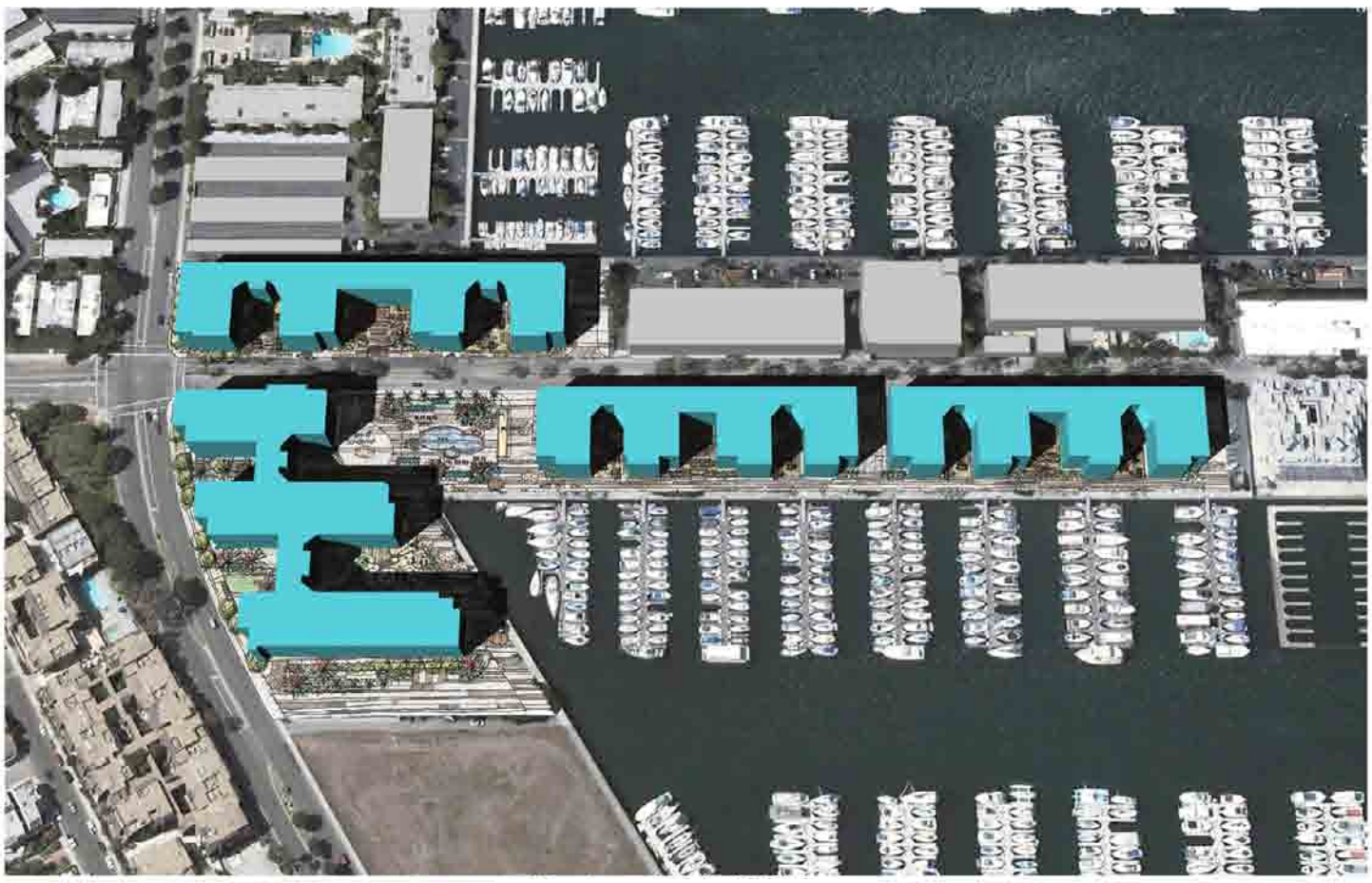
Neptune Marina - 1:00 PM

Neptune Marina - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-19B**

Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 12:00 PM through 2:00 PM



Neptune Marina - 3:00 PM

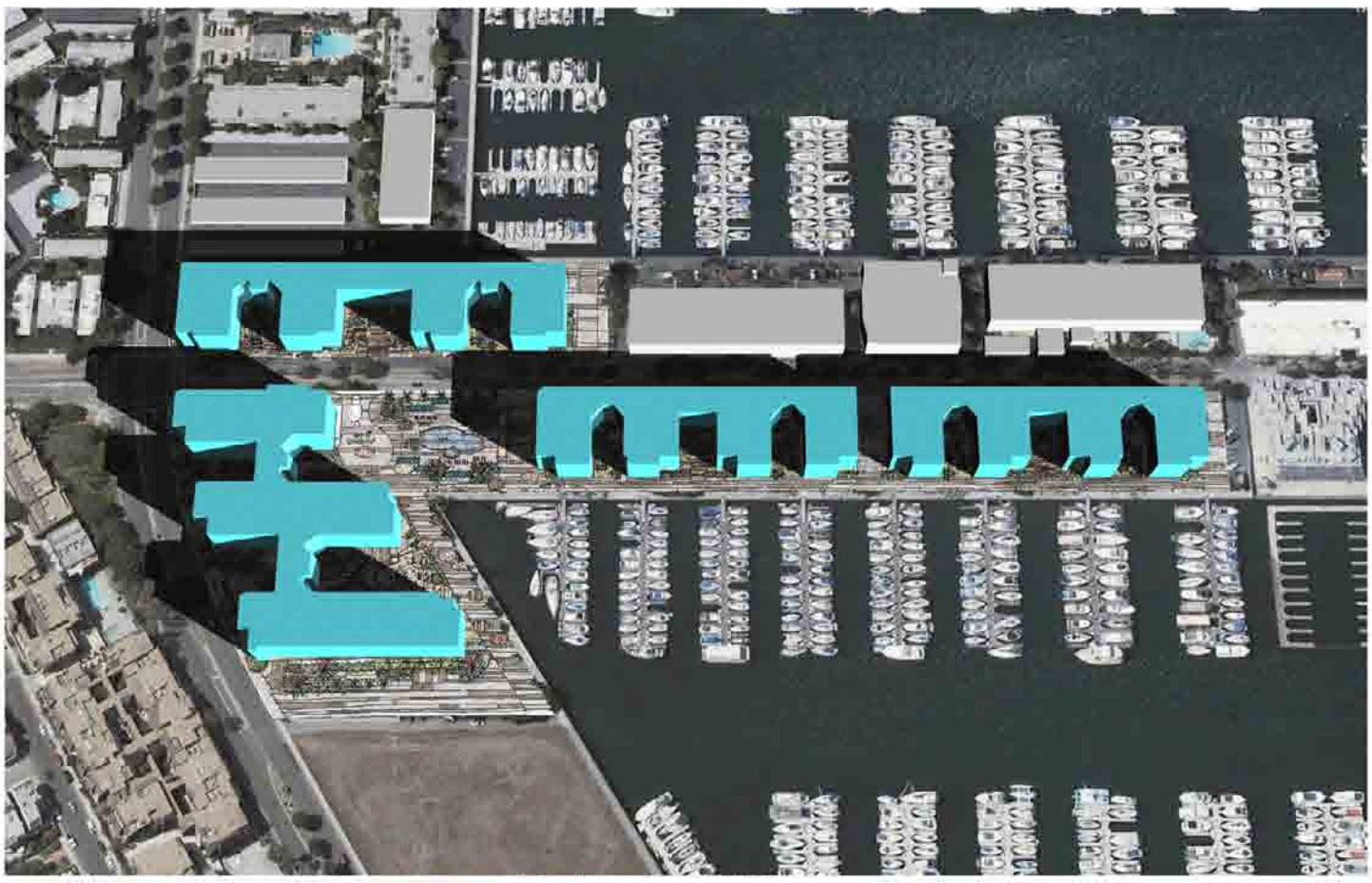
Neptune Marina - 4:00 PM

Neptune Marina - 5:00 PM

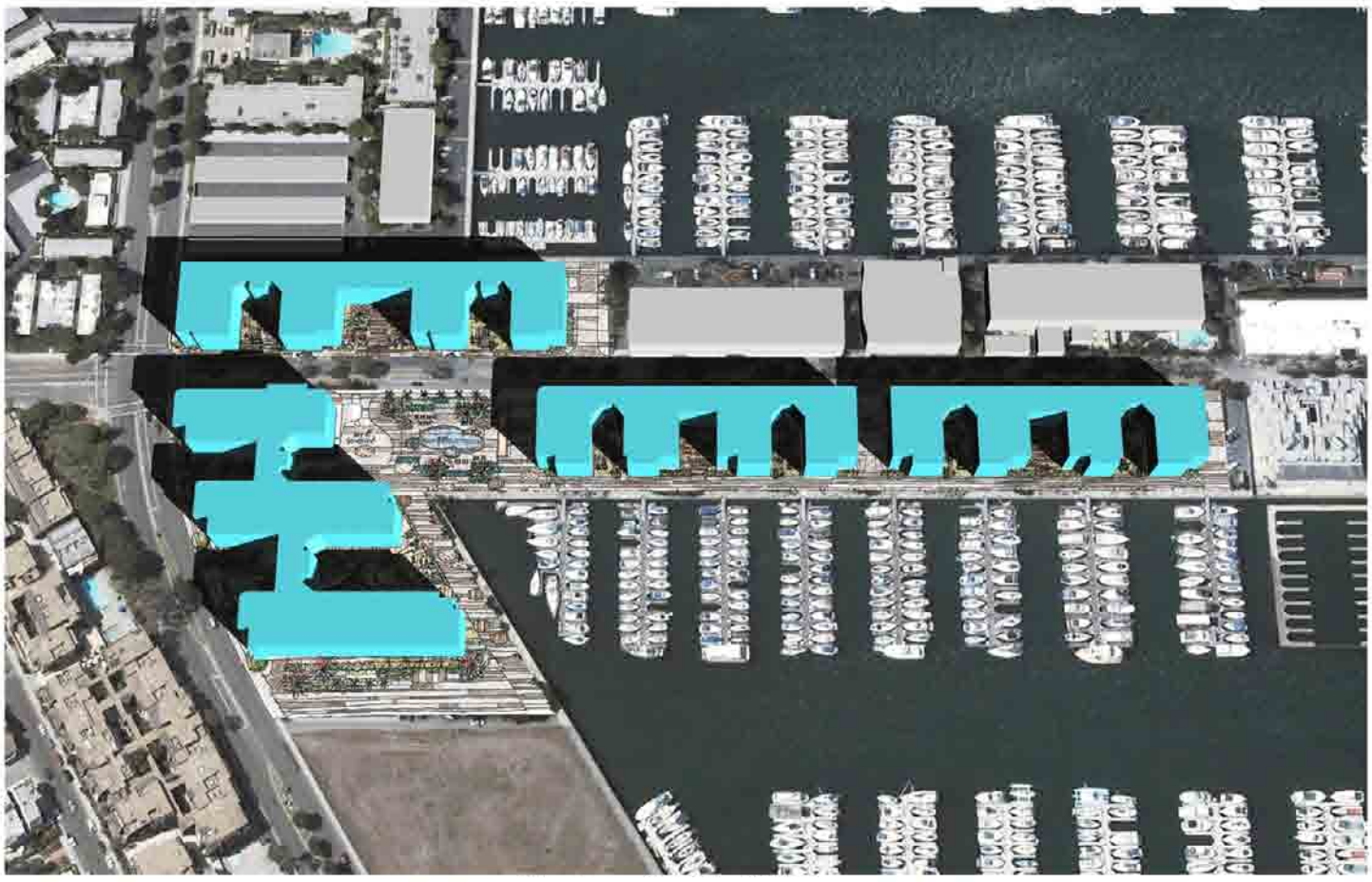
SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-19C**

Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 3:00 PM through 5:00 PM



Neptune Marina - 9:00 AM



Neptune Marina - 10:00 AM

Neptune Marina - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

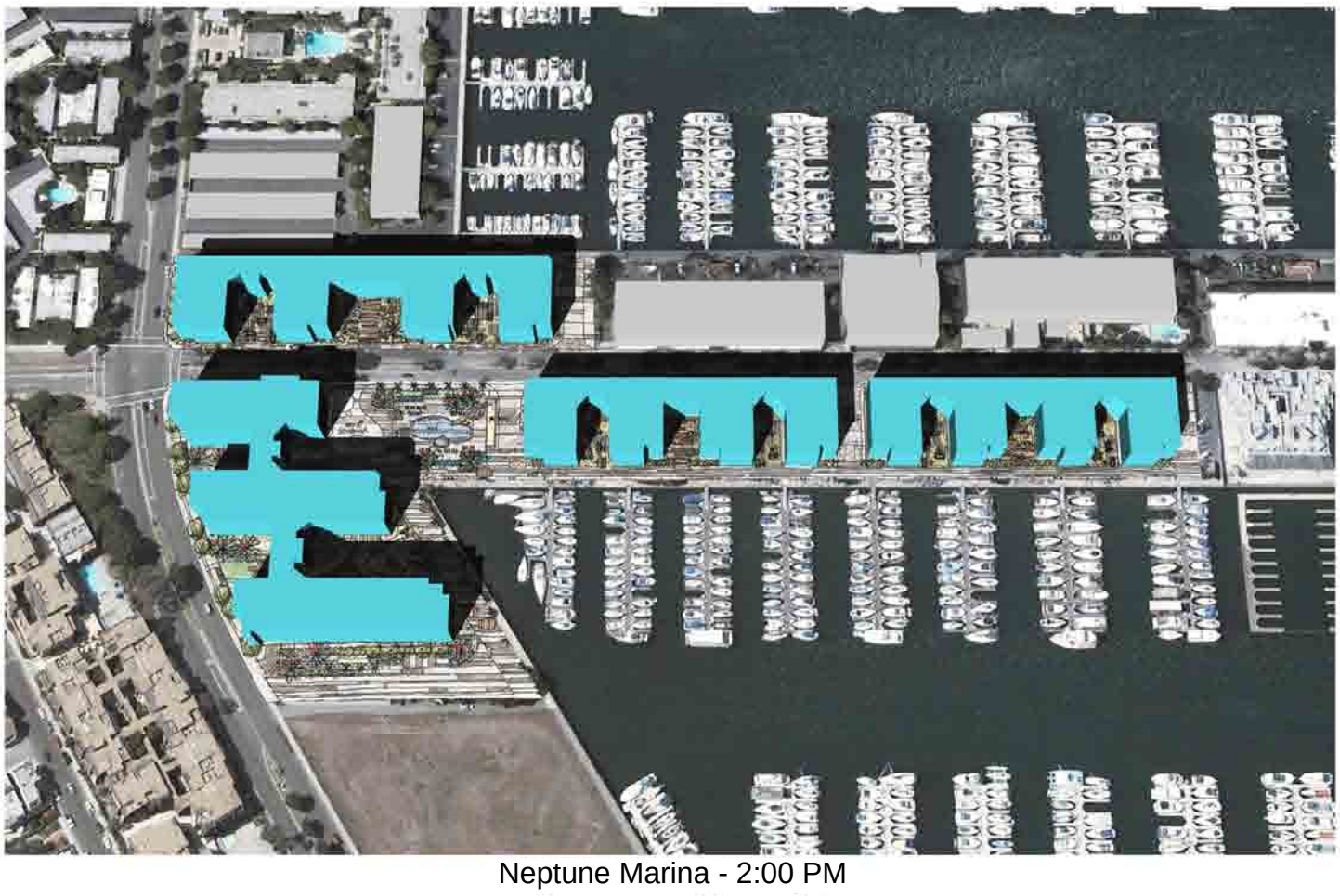
FIGURE **5.6-20A**

Shade and Shadow Effects; Neptune Marina Project – October, 9:00 AM through 11:00 AM

460-004•02/09

Neptune Marina - 12:00 PM

Neptune Marina - 1:00 PM



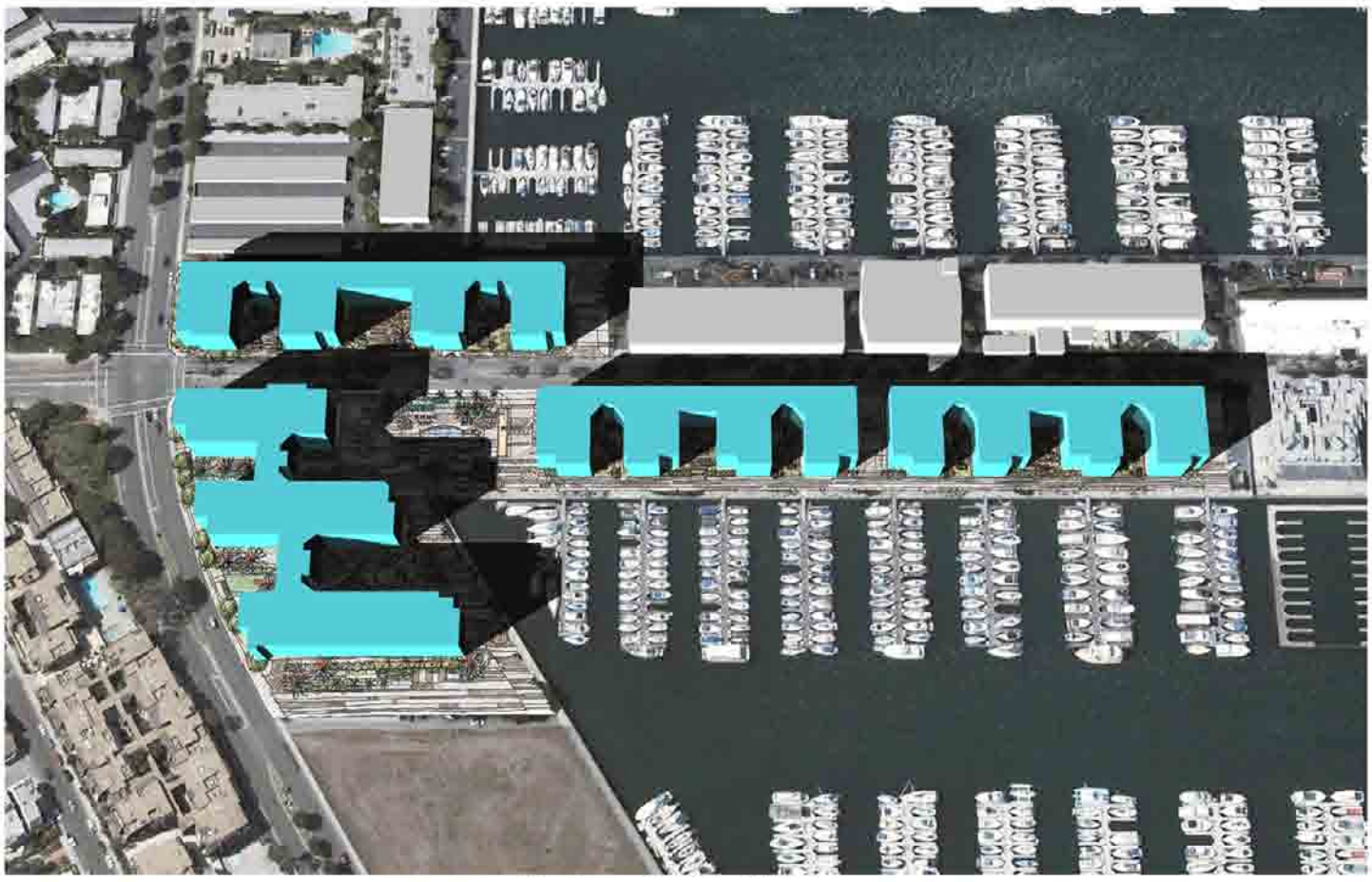
Neptune Marina - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

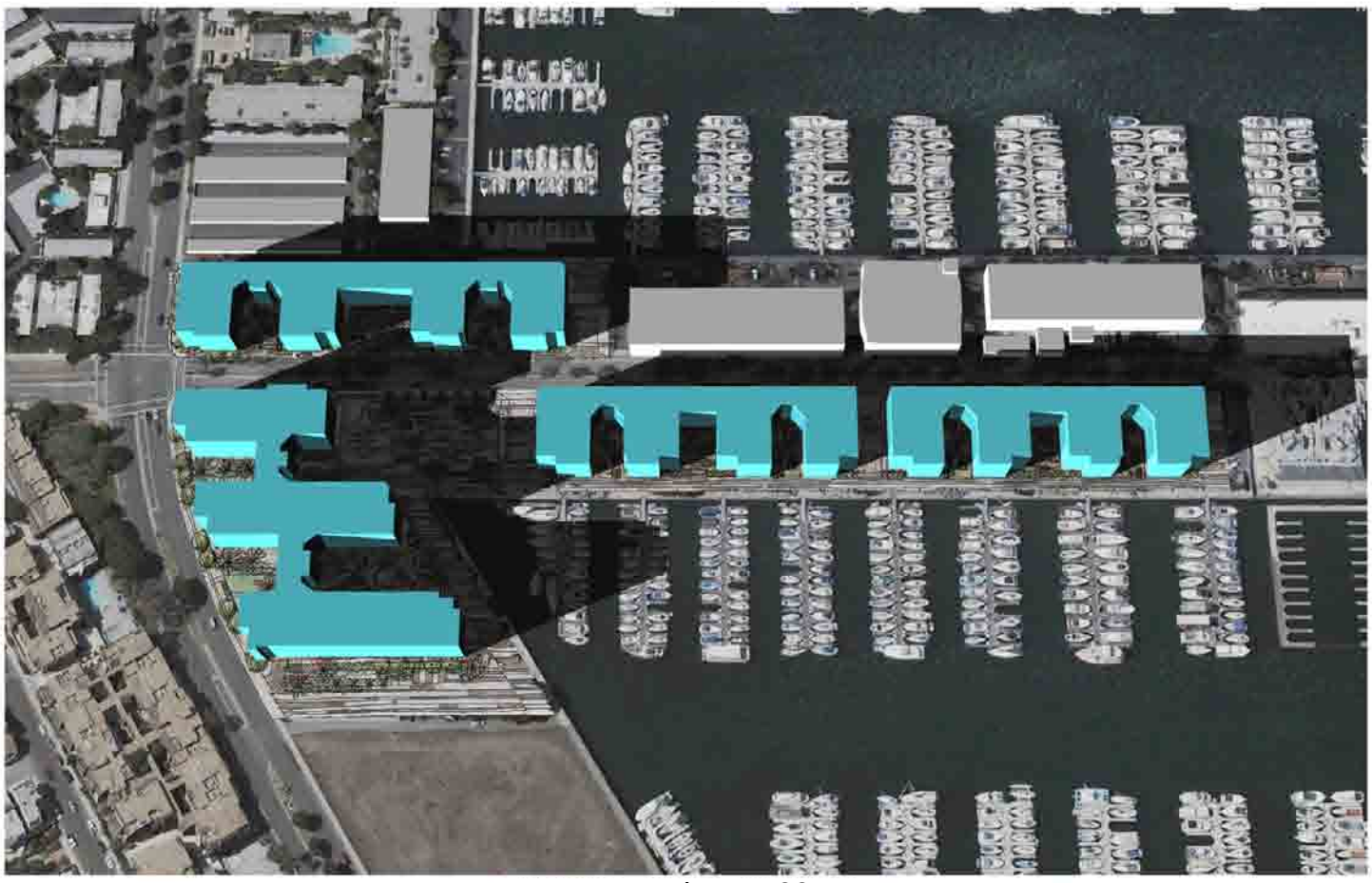
FIGURE **5.6-20B**

Shade and Shadow Effects; Neptune Marina Project – October Solstice, 12:00 PM through 2:00 PM

Neptune Marina - 3:00 PM



Neptune Marina - 4:00 PM



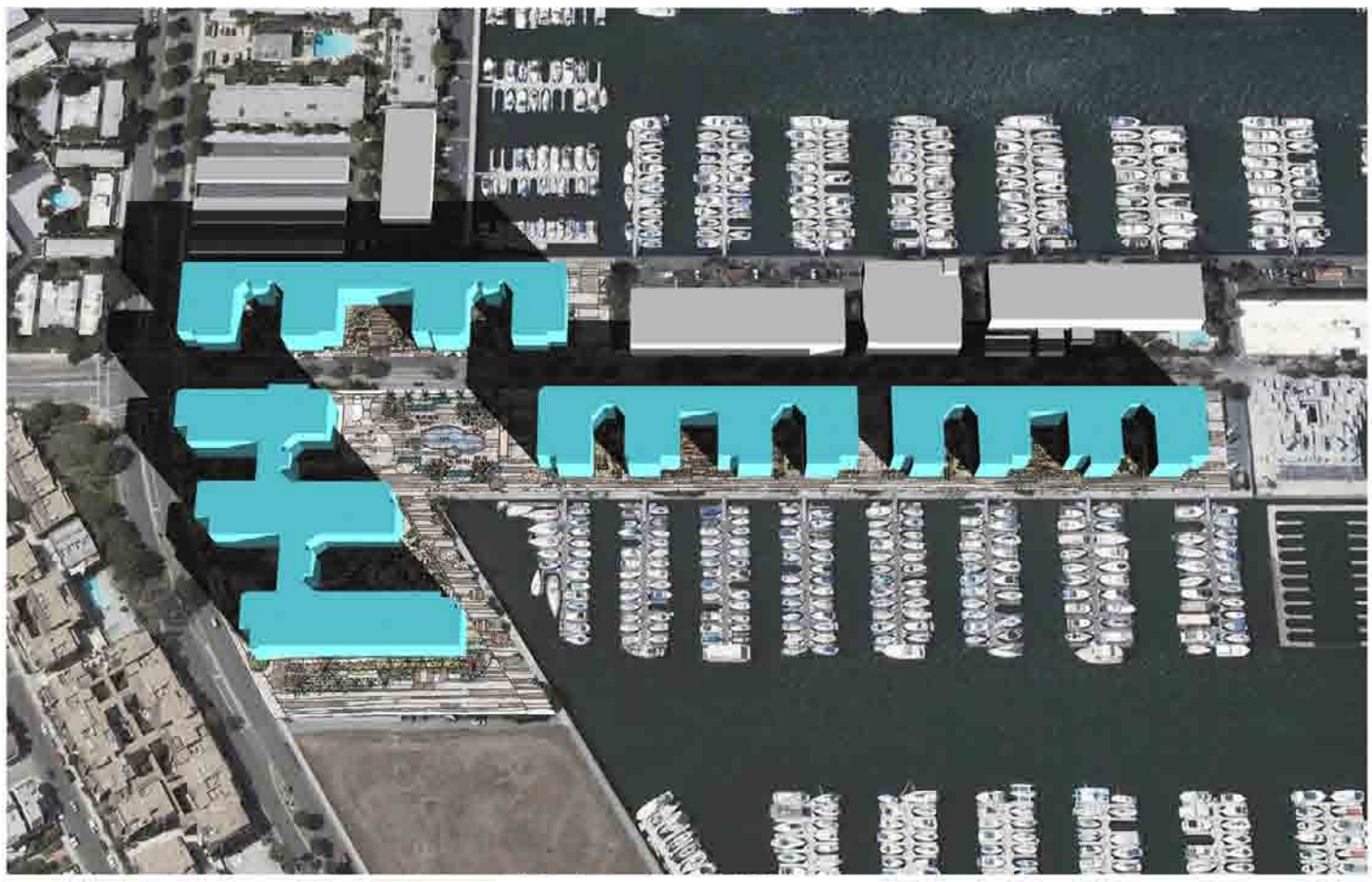
Neptune Marina - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-20C**

Shade and Shadow Effects; Neptune Marina Project – October, 3:00 PM through 5:00 PM

460-004•02/09



Neptune Marina - 9:00 AM

Neptune Marina - 10:00 AM

Neptune Marina - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-21A**

Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM through 11:00 AM

460-004•02/09

Neptune Marina - 12:00 PM

Neptune Marina - 1:00 PM

Neptune Marina - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-21B**

Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 12:00 PM through 2:00 PM

Neptune Marina - 3:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

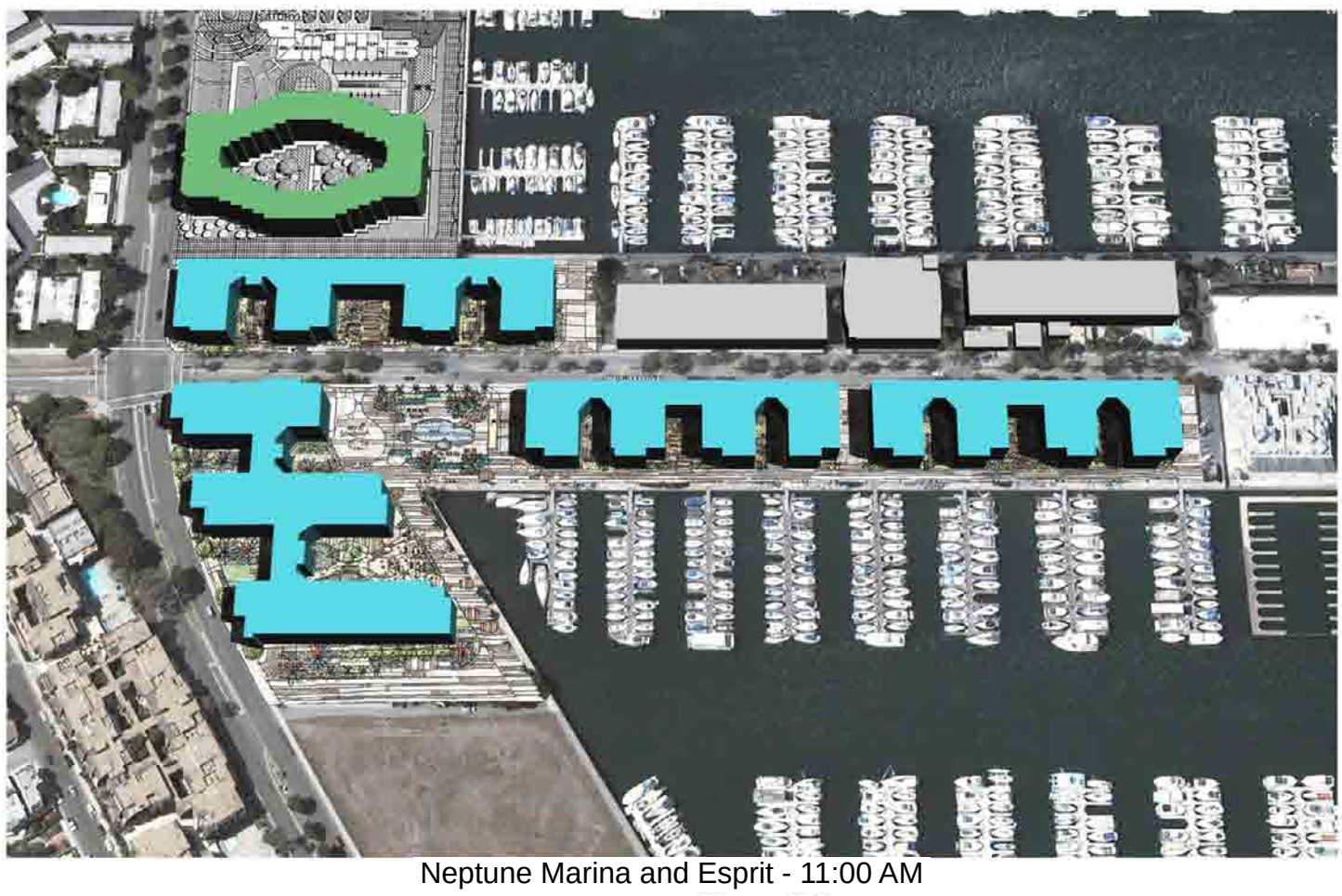
FIGURE **5.6-21C**

Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 3:00 PM

460-004•02/09

Neptune Marina and Esprit - 9:00 AM

Neptune Marina and Esprit - 10:00 AM



Neptune Marina and Esprit - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

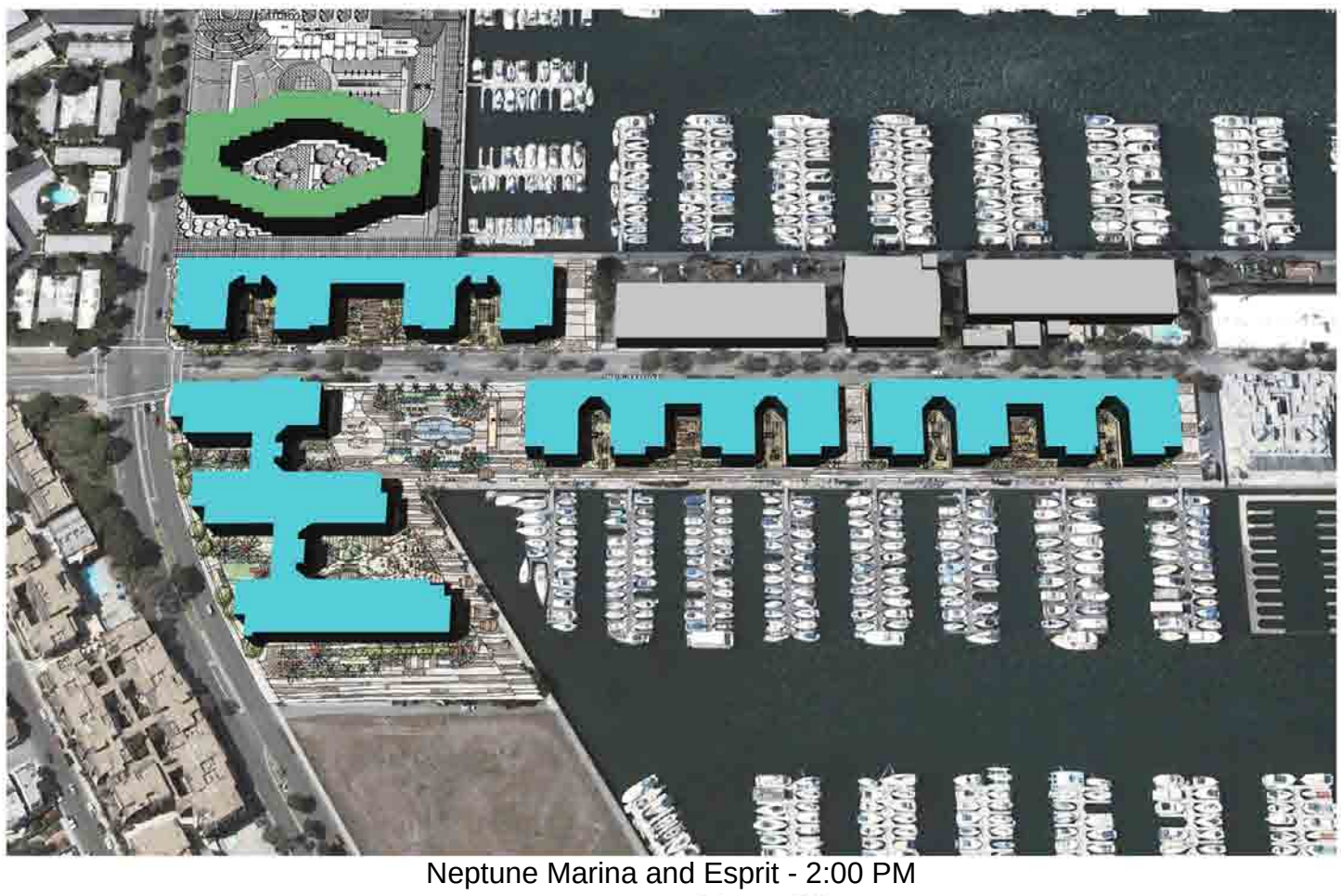
FIGURE **5.6-22A**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 9:00 AM through 11:00 AM

460-004•02/09

Neptune Marina and Esprit - 12:00 PM

Neptune Marina and Esprit - 1:00 PM



Neptune Marina and Esprit - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-22B**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 12:00 PM through 2:00 PM

460-004•02/09

Neptune Marina and Esprit - 3:00 PM

Neptune Marina and Esprit - 4:00 PM

Neptune Marina and Esprit - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-22C**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Summer Solstice, 3:00 PM through 5:00 PM

460-004•02/09

Neptune Marina and Esprit - 9:00 AM

Neptune Marina and Esprit - 10:00 AM

Neptune Marina and Esprit - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

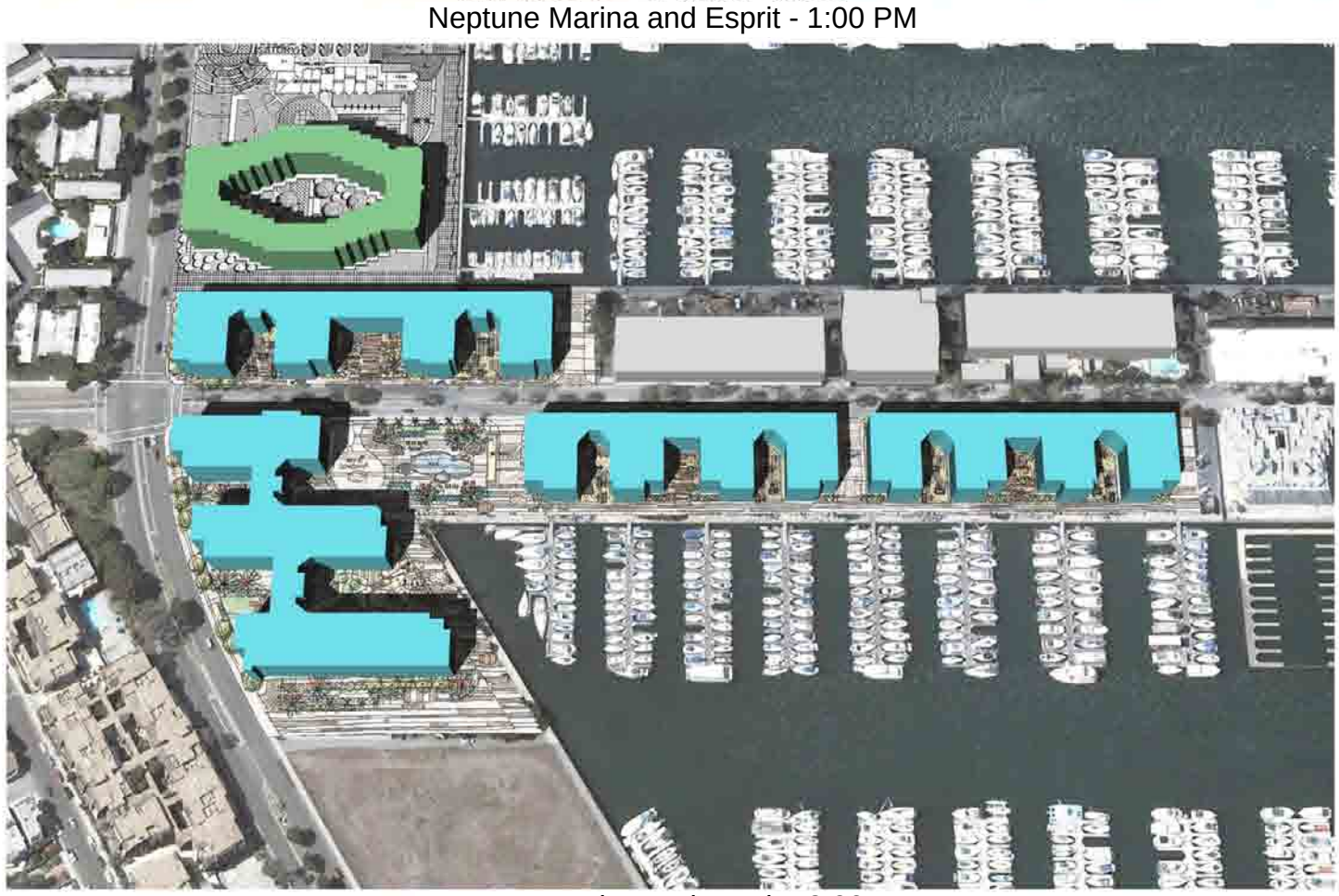
FIGURE **5.6-23A**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 9:00 AM through 11:00 AM

460-004•02/09

Neptune Marina and Esprit - 12:00 PM

Neptune Marina and Esprit - 1:00 PM



Neptune Marina and Esprit - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-23B**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 12:00 PM through 2:00 PM

460-004•02/09

Neptune Marina and Esprit - 3:00 PM

Neptune Marina and Esprit - 4:00 PM

Neptune Marina and Esprit - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-23C**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Autumnal Equinox, 3:00 PM through 5:00 PM

460-004•02/09

Neptune Marina and Esprit - 9:00 AM

Neptune Marina and Esprit - 10:00 AM

Neptune Marina and Esprit - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-24A**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 9:00 AM through 11:00 AM

Neptune Marina and Esprit - 12:00 PM

Neptune Marina and Esprit - 1:00 PM

Neptune Marina and Esprit - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

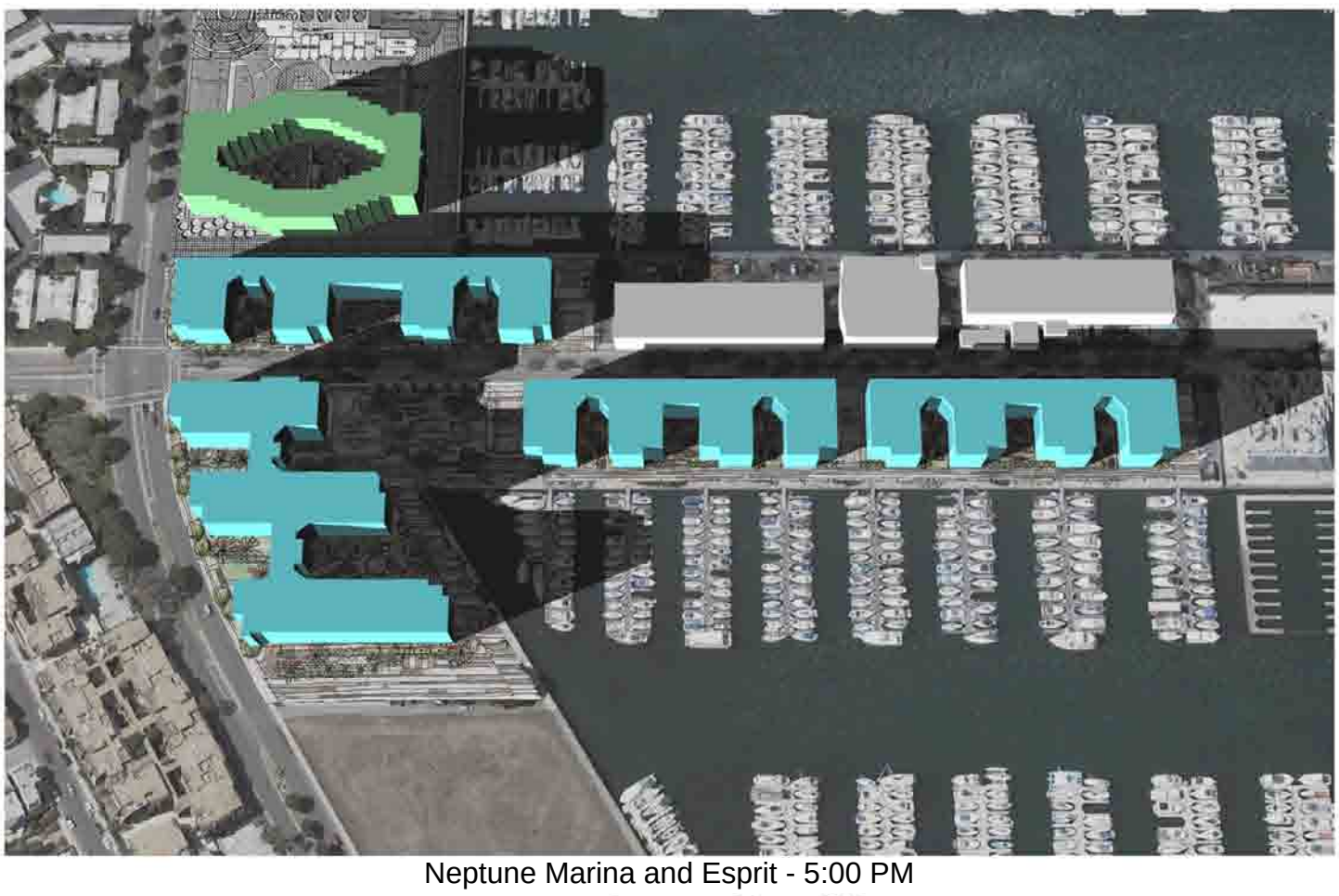
FIGURE **5.6-24B**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 12:00 PM through 2:00 PM

460-004•02/09

Neptune Marina and Esprit - 3:00 PM

Neptune Marina and Esprit - 4:00 PM



Neptune Marina and Esprit - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-24C**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – October, 3:00 PM through 5:00 PM

460-004•02/09

Neptune Marina and Esprit - 9:00 AM

Neptune Marina and Esprit - 10:00 AM

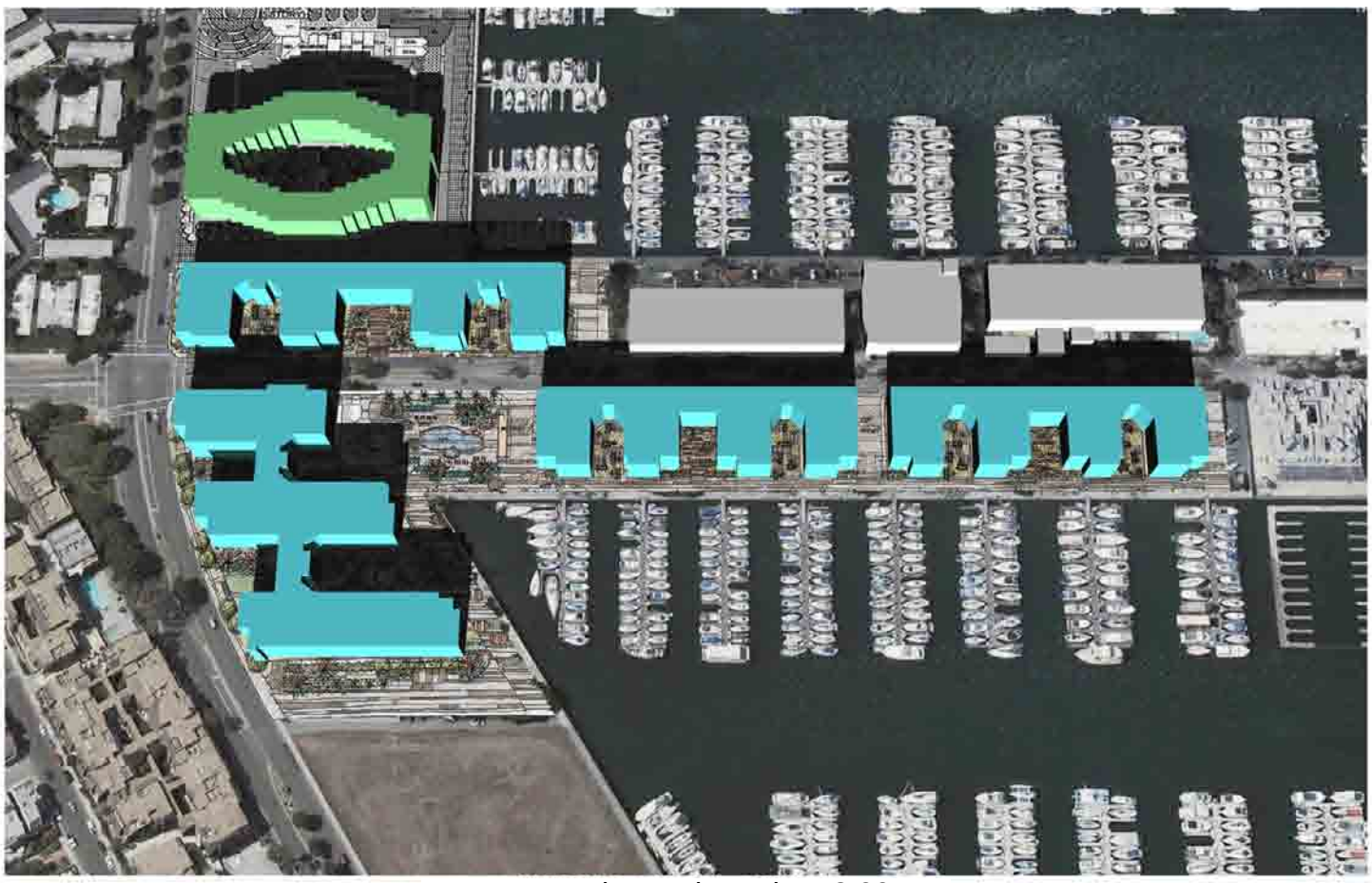
Neptune Marina and Esprit - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

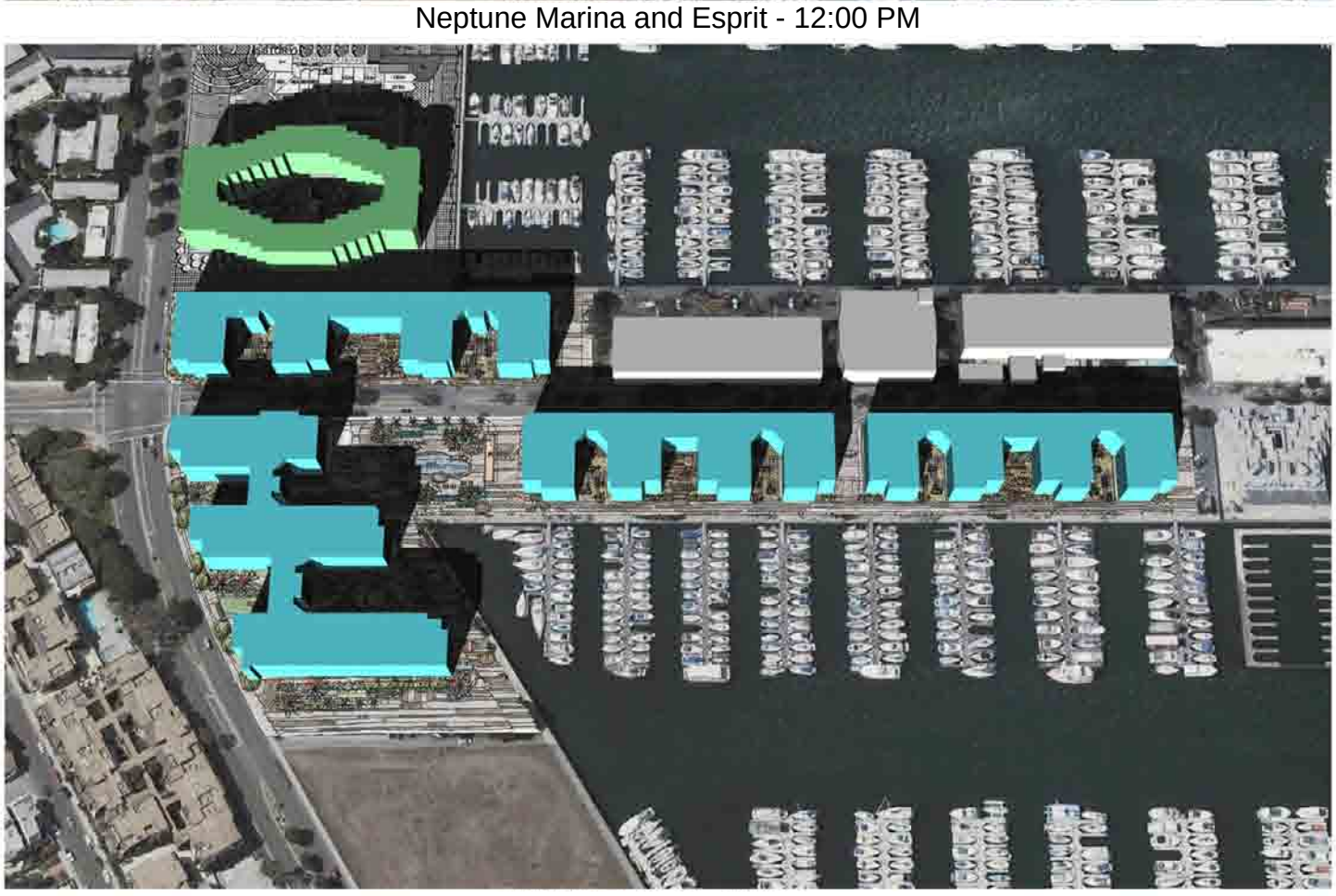
FIGURE **5.6-25A**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 9:00 AM through 11:00 AM

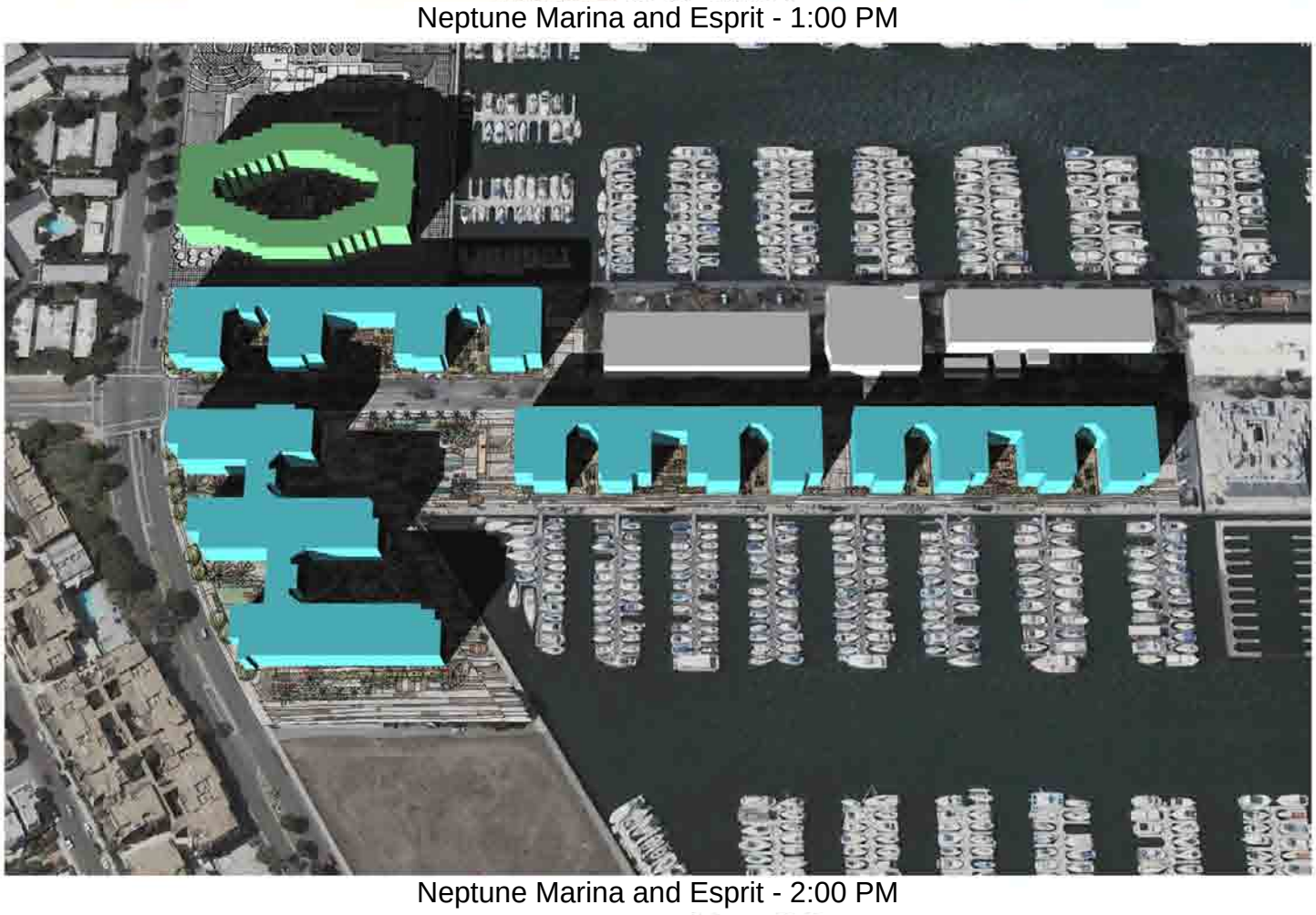
460-004•02/09



Neptune Marina and Esprit - 12:00 PM



Neptune Marina and Esprit - 1:00 PM



Neptune Marina and Esprit - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-25B**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 12:00 PM through 2:00 PM

460-004•02/09

Neptune Marina and Esprit - 3:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-25C**

Shade and Shadow Effects; Neptune Marina Project with Approved Parcel 15 Apartments – Winter Solstice, 3:00 PM

Woodfin Hotel - 9:00 AM

Woodfin Hotel - 10:00 AM

Woodfin Hotel - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-26A**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 9:00 AM through 11:00 AM

460-004•02/09

Woodfin Hotel - 12:00 PM

Woodfin Hotel - 1:00 PM

Woodfin Hotel - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-26B**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 12:00 PM through 2:00 PM

460-004•02/09

Woodfin Hotel - 3:00 PM

Woodfin Hotel - 4:00 PM

Woodfin Hotel - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-26C**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 3:00 PM through 5:00 PM

460-004•02/09

Woodfin Hotel - 9:00 AM

Woodfin Hotel - 10:00 AM

Woodfin Hotel - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-27A**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 9:00 AM through 11:00 AM

460-004•02/09

Woodfin Hotel - 12:00 PM

Woodfin Hotel - 1:00 PM

Woodfin Hotel - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-27B**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 12:00 PM through 2:00 PM

Woodfin Hotel - 3:00 PM

Woodfin Hotel - 4:00 PM

Woodfin Hotel - 5:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-27C**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 3:00 PM through 5:00 PM

Woodfin Hotel - 9:00 AM

Woodfin Hotel - 10:00 AM

Woodfin Hotel - 11:00 AM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-28A**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 9:00 AM through 11:00 AM

460-004•02/09

Woodfin Hotel - 12:00 PM

Woodfin Hotel - 1:00 PM

Woodfin Hotel - 2:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-28B**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 12:00 PM through 2:00 PM

Woodfin Hotel - 3:00 PM

SOURCE: Impact Sciences, Inc. - January 2009

FIGURE **5.6-28C**

Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 3:00 PM

460-004•02/09

5.6.3.3.2 Neptune Marina Parcel 10R Project

5.6.3.3.2.1 Overview of Project Impacts

Development of the Neptune Marina Parcel 10R would require the removal of all existing structures and earth movement to allow construction of the partially subterranean parking lots, landscaped areas, develop drainage patterns, and provide for necessary infrastructure. During this time, construction workers and equipment will be visible throughout the project site. Screened chain-link fencing would likely be installed that would surround the perimeter of the project site and would obscure direct vistas during the initial phases of construction. During construction, frames of the structures would be raised and finished, and hardscape and landscaping would be completed. As the structures are constructed and finished, the scale of the project and changes in the visual character of the project site would become evident. The duration of these construction activities would be approximately 30~~3~~ months. Although the visual character of the project site will be altered from its current condition, this impact is not considered significant due to its short-term nature and the urbanized visual character of the surroundings.

Project improvements would contribute to the changing character of Marina del Rey. New (Phase II) development in the marina is more intensive than the existing Phase I marina development. As defined by the County, Phase II marina development allows for a greater development intensity that is generally achieved through an increase in available building height limits. The Marina del Rey LUP defines the maximum building height limit on Parcel 10R to be ~~140~~ 225 feet (non-mole portion) and 75 feet (mole-road portion). The three structures proposed as part of Neptune Marina Parcel 10R Project would not exceed 60 feet (exclusive of appurtenant, screened rooftop equipment). Proposed building heights on Parcel 10R would be compliant with the height standards as defined in the Marina del Rey LUP.

5.6.3.3.2.2 Threshold: Is the project adjacent to a visual corridor and would the project substantially affect a visual corridor?

Analysis: Via Marina adjacent to Parcel 9U is defined in this EIR as a Scenic Highway. Via Marina adjacent to Parcels 10R does not have vistas of the marina and as such cannot be defined as a Scenic Highway. As such, Parcel 10R is not adjacent to a defined Scenic Highway.

The Marina del Rey LUP considers Via Marina, Burton Chace Park, and ends of each mole to be "significant vantage points" in Marina del Rey. Parcel~~s~~ 10R fronts the~~None of these~~ "significant vantage points" of Via Marina, and the project design incorporates a view corridor to the Marina.~~is present on or near Parcel 10R.~~

In the vicinity of the project site, Via Marina is defined as a "scenic highway meriting first priority status for further study" in the County of Los Angeles Marina del Rey LUP. As documented above, no information is available in the plan or in County records that define scenic resources along this route and no further study has been completed. Therefore, for the purpose of this analysis, the areas most frequented by visitors and those that contain views of the marina are considered view corridors. No vistas of the marina are available from Via Marina adjacent to Parcel 10R, and as such, Via Marina adjacent to Parcel 10R is not considered a Scenic Highway.

To protect and enhance visibility of the marina and consistent with provisions of the LUP, the Neptune Marina Parcel 10R project incorporates four view corridors. Of the four view corridors, three allow vistas of Marina del Rey Basin B from Marquesas Way (southerly) and one corridor allows vistas of Marina del Rey Basin B from Via Marina (easterly).

With respect to the Neptune Marina Parcel 10R, provisions of the LUP tabulate the area of required view corridor based on the length of the parcel's water frontage and the proposed building height. Based on the length of the parcel's water frontage and a proposed building height of 55 feet for Buildings 1 and 2 and 60 feet for Building 3, the LUP requires 360 linear feet of view corridor. As proposed, Neptune Marina Parcel 10R would provide 388.5 linear feet. As such, the project as planned is consistent with view corridor provisions of the LUP that call for public and private views of the marina from perimeter roadways.

To further ensure visual resource protection, the Marina del Rey LUP requires that the project site plan and architectural design be reviewed and approved by the DCB and to incorporate view corridors that do not presently exist on the project site. The DCB also has the authority to regulate signage, building architectural design, site planning, and facade design for all new development proposals. The DCB reviewed and conceptually approved Neptune Marina Project on June 29, 2006 and as part of that action, ensured compliance with the development standards and policies (inclusive of view corridors) outlined in the Land Use Plan with the development standards under its purview. Therefore, project impacts to visual corridors and views from scenic highways as defined in the Marina del Rey LUP are not considered significant.

Conclusion: Development on Parcel 10R would replace existing structures and no visibility of the marina is available from Via Marina adjacent to Parcel 10R. As such, development on Parcel 10R would not affect a defined Scenic Highway. Consistent with requirements of the Marina del Rey LUP, and in conformance with the DCB, the project incorporates four view corridors that would enhance visibility of the marina from Parcel 10R. Because this project is consistent with all development requirements defined in the Marina del Rey LUP, impacts associated with this visual resource criterion are not considered significant.

Mitigation: No mitigation is proposed or is required.

Conclusion: Not significant.

5.6.3.3.2.3 Threshold: Is the proposed use out-of-character in comparison to adjacent uses because of height, bulk, or other features?

Note to reader -- Of the 14 viewpoints evaluated, only Viewing Locations One through Four apply to Parcel 10R.

Analysis: Viewing Location One, Northerly View of Parcel 10R and 9U as Observed from Via Marina South of Tahiti Way – As illustrated on **Figure 5.6-2, Pre- and Post-Development View of Site (Parcels 10R and 9U) from Via Marina South of Tahiti Way**, foreground views would be dominated by the side and rear facades of the apartment structures planned on Parcel 10R (lower left in figure). The size and mass of these buildings would be consistent with new structures being constructed on Parcel 12 and approved on Parcels 100 and 101.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the rear facades of the parking structures and buildings associated with Parcel 10R. As part of site construction, existing structures and the existing landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure vistas of trees and structures in the background. Once complete, the most dominant visual feature would be the ne~~w apartment structures~~ighboring hotel proposed on Parcel ~~10R~~9U**.** Over time, perimeter landscaping proposed as part of the apartment project would ~~partially~~ improve the visual character ~~impact~~ of the new development.

Character and Surroundings Impacts: Apartment buildings proposed on Parcel 10R would be consistent with the stated height guidelines defined in the LUP. Further, the structures would be consistent with the height and mass of other new (Phase II) construction east of the project site on Marina del Rey Parcel 12 as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. Therefore, development on Parcel 10R would be considered in character with established and forthcoming (via Phase II construction) development pattern on the western side of Marina del Rey.

Level of Impact: Site development would not alter any defined significant visual feature or scenic highway or corridor. Development on Parcel 10R would result in an intensification of development on the project site. All elements of the project are compliant with the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and

intensify land uses within the marina.[10] The height of structures planned on Parcel 10R would be considered in character with the contemporary structures present or under construction within the marina as well as existing older lower-height residential structures in the local vicinity of the project site. Therefore, aesthetic/visual impacts with respect to development proposed on Parcel 10R are not considered significant.

Analysis: Viewing Location Two, Northerly View of Parcel 10R and 9U as Observed from Via Marina – As illustrated on **Figure 5.6-3, Pre- and Post-Development View of Site (Parcels 10R and 9U) from Via Marina**, similar to Viewing Location One, foreground views would be dominated by the new parking on 9U. ~~t~~The side and rear facades of the apartment structures planned on Parcel 10R view be partly visible in the background. These facades would be more visible if the new apartment structures are constructed before the proposed parking structure. The size and mass of these buildings would be consistent with new structures being constructed on Parcel 12 and approved on Parcels 100 and 101.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the rear facades of the parking structures and buildings associated with Parcel 10R. As part of site construction, existing structures and the existing landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure vistas of trees and structures in the background. Once complete, the most dominant visual feature would be the new apartment structures proposed on Parcel 10R. Over time, perimeter landscaping proposed as part of the apartment project would partially improve the visual impact of new development.

Character and Surroundings Impacts: Apartment buildings proposed on Parcel 10R would be consistent with the stated height guidelines defined in the LUP. Further, the structures would be consistent with the height and mass of other new (Phase II) construction east of the project site on Marina del Rey Parcel 12 as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. Therefore, development on Parcel 10R would be considered in character with the established and forthcoming (via Phase II construction) development pattern on the western side of Marina del Rey.

Level of Impact: Site development would not alter any defined significant visual feature. Development on Parcel 10R would result in an intensification of development on the project site. All elements of the project are compliant with the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[11] The height of structures planned on Parcel 10R would be considered in character with the contemporary

10 See pp. 8-3 and 8-4 of the LUP.

11 See pp. 8-3 and 8-4 of the LUP.

structures present or under construction within the marina as well as existing older lower-height residential structures in the local vicinity of the project site. Therefore, aesthetic/visual impacts with respect to development proposed on Parcel 10R are not considered significant.

Analysis: Viewing Location Three, Easterly View of the Site (Parcel 10R) as Observed from the Intersection of Marquesas Way and Via Marina – As illustrated on **Figure 5.6-4, Pre- and Post-Development View of Site (Parcel 10R) as Observed from the Intersection of Marquesas Way and Via Marina**, two 55-foot-tall apartment buildings and one 60-foot-tall apartment building on Parcel 10R would be clearly visible in the foreground and middle ground. The new apartment structures would replace the existing two-story structures that are currently present on Parcel 10R but are not visually prominent. With removal of the existing perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. The increased height and mass of the proposed apartment structures would make on-site uses more visually prominent than the existing structures and the height of the proposed structures would obscure vistas of trees in the background. The proposed project would appear greater in mass and development intensity than the existing apartment structures, or existing apartment structures located to the west and north. However, the new Parcel 10R development~~The Neptune Marina project~~ would be consistent with the height and mass of new Phase II construction east of the project site on Marina del Rey Parcel 12, structures planned to the north on Parcel 15, and recently approved structures on Marina del Rey Parcels 100 and 101.

Prominent Visual Features: No significant visual resources as defined in the Marina del Rey LUP are visible from this viewing location. Currently, the most noticeable features visible from this viewpoint include mature landscaping on the project site and an existing surface parking lot on Parcel 10R. No prominent visual features are present on this portion of the project site (no portion of the marina is visible) and distant vistas are minimal. As part of site construction, existing structures and landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure views of palm trees in the background. Once complete, the most dominant visual feature would be the new apartment structures on Parcel 10R. Over time, perimeter landscaping proposed as part of this project would ~~partially~~ improve the visual character ~~impact~~ of the new development.

Character of Impacts: Site development on Parcel 10R would alter the visual character of the property to a more intensive developed use. While the Neptune Marina Parcel 10R project would result in an intensification of development on the project site, this new development is consistent with the County's

desire to recycle Phase I marina development and intensify land uses within the marina.[12] Moreover, the height and mass of the most prominent Parcel 10R apartment buildings would be considered consistent with new apartments under construction to the east on adjoining Parcel 12 as well as apartment buildings planned to the north on Marina Parcels 15, 100 and 101. Project architecture has been approved in concept by the DCB and is considered to be in character with the contemporary structures present or under construction within the marina.

Level of Impact: Site development would not impact any defined significant visual feature or adversely impact any defined scenic highway or scenic corridor. The project would alter the visual character of the property to a more intensive developed use and would eliminate distant views (none of which are defined in the Marina del Rey LUP as visually significant). Apartment structures would be considered in character with the contemporary structures present or under construction within the marina as well as existing, older residential structures in the vicinity of the project site. Therefore, aesthetic impacts with respect to the apartment structures proposed on Parcel 10R are not considered significant.

Analysis: Viewing Location Four, Westerly View of the Site (Parcel 10R) as Observed from Marquesas Way – As illustrated on **Figure 5.6-5, Pre- and Post-Development View of the Site (Parcel 10R) as Observed Westerly from Marquesas Way**, the 55- and 60-foot-tall residential structures would be clearly visible in the foreground and middle ground of the field of view. These new structures would replace the existing two-story structures that are currently present on the project site. With removal of the existing perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be distinguishable. The increased height and mass of the structures would make on-site uses appear more visually prominent than the existing structures. The proposed project would appear greater in mass and development intensity than existing apartment structures located to the northeast. However, the project would be consistent with the height and mass of new (Phase II) construction east of the project site on Marina del Rey Parcel 12, and would also be consistent with the height and mass of apartment buildings approved for development nearby to the north on Via Marina on Marina Parcels 15, 100 and 101.

It is expected that in the future, construction on Marina del Rey Parcel 12 (reference **Figure 5.6-4**) would obscure views of portions of development planned on Parcel 10R when viewed from the east on Marquesas Way. Structure height on Parcel 12 (maximum of 65 feet, exclusive of appurtenant rooftop structures) would be 5 feet~~marginally~~ taller than development proposed on Parcel 10R (a maximum of 60 feet, exclusive of appurtenant rooftop structures). In the future from this location, visible portions of

12 Ibid.

development proposed for Parcel 10R would be limited to the northern margin of the site adjacent to Marquesas Way.

Prominent Visual Features: No significant visual resources or defined scenic highways as defined in the Marina del Rey LUP are visible from this viewing location. Currently, the most noticeable features visible from this viewpoint include new building construction adjacent to and east of Parcel 10R (on Parcel 12) and mature landscaping along the northern perimeter of the project site. No prominent visual features (inclusive of the marina) are visible from this portion of the project site and distant vistas are minimal. As part of site construction, existing structures and landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure views of palm trees in the background. Once complete, the most dominant visual feature would be the new apartment structures. Over time, perimeter landscaping proposed as part of this project would ~~partially~~ improve the visual character~~impact~~ of the new development. ~~construction~~.

Character and Surroundings Impacts: From this location, the proposed project would appear similar in mass and development intensity to new development under construction on Parcel 12 that is located adjacent to and east of the project site. The project would be consistent with the height and mass of new (Phase II) projects recently constructed, or proposed in the Marina per height and mass standards defined in the LUP. Therefore, the project is not out of character with development surrounding the project site or other Phase II marina development.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use. While the project would result in an intensification of development on the project site, this new development is consistent with height standards defined in the County of Los Angeles LUP and the County's desire to recycle Phase I marina development and intensify land uses within the marina.[13] Moreover, project architecture has been approved by the DCB and is considered to be in character with the contemporary structures present, under construction (Parcel 12 to the east) or planned (Parcels 15, 100, and 101) within the marina. As such, impacts of the project when viewed from this location are not considered significant.

Mitigation: As impacts are not considered significant, no mitigation is proposed or is required.

Conclusion: Not significant.

13 Ibid.

5.6.3.3.2.4 Threshold: Is the project likely to create substantial sun shadow, light or glare problems?

Analysis: The shade and shadow created by an object blocking sunlight varies dependent upon the time of year and time of day. This variation is a result of the sun's azimuth (the position of the earth in its annual orbit relative to the sun, due to the tilted axis of the earth) and altitude (the position of the earth in its daily rotation relative to the sun). Because the sun is lowest in the southern sky during the winter, project development would cast the longest shadow during this season (the worst-case condition). During the summer months, the sun is directly overhead, and the shadow length is more limited. ~~Thus, the following analysis considers the summer, autumn and winter periods, althoughis directed towards the winter condition, since eight months out of the year the project would only cast minimal shade or shadow onto adjacent land area.~~ Shade-sensitive uses such as residences and public parks are considered to be sensitive receptors with respect to shade and shadow.

The series of **Figures 5.6-18A–C, Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 9:00 AM through 5:00 PM**, **Figures 5.6-19A–C, Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 9:00 AM through 5:00 PM Figures 5.6-20A–C, Shade and Shadow Effects; Neptune Marina Project – October, 9:00 AM through 5:00 PM,** and **Figures 5.6-21A–C, Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM through 3:00 PM** depicts post-development site conditions for the Neptune Marina project hourly during the time period of 9:00 AM through 5:00 PM (3:00 PM for winter) in the summer solstice (June 21), the autumnal equinox (September 21), October 21, and the winter solstice (December 21), respectively. These figures represent the times of the year when shades would be at their smallest (summer solstice) to when shadow effects would be greatest (winter solstice). The month of October is included because this the time of year that shadows would respectively start and stop casting shade on portions of the existing and proposed residential structures on the north side of Marquesas Way and to the north of Parcel FF. The spring equinox (March 21) is not depicted because the shadows would be similar to those for the autumnal equinox.

As shown on **Figures 5.6-21A–C**, during the winter solstice the structures proposed on Parcel 10R would cast shadows throughout the day on portions of Marquesas Way, the lower portions of the south-facing façades of the existing residential structures across Marquesas Way and the lower portion of part of the south facing façade of the proposed residential structures situated on Parcel FF. No other sensitive receptors would be shaded. The proposed structures on Parcel 10R would also cast shadows on portions Via Marina in the morning only and the western portion of Marina del Rey Basin B in the afternoon only. As shown of **Figures 5.6-20A–C** and **5.6-21A–C**, the proposed structures on Parcel 10R would only cast shadows on limited portions of the existing residential structures across Marquesas Way from October to February.

As shown on **Figures 5.6-18A–C** and **5.6-19A–C**, the proposed structures on Parcel 10R would not cast any shadows on off-site sensitive receptors during the summer solstice of autumnal equinox.

Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues.

Level of Impact: County of Los Angeles Department of Regional Planning thresholds defines a significance threshold that states, "Is the project likely to create substantial sun shadow, light or glare problems?" As defined in **Figures 5.6-1821A–C, Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM and 3:00 PM,** ~~not considered significant.~~the proposed structures on Parcel 10R would cast shadows only on small portions of the south facing facades of the existing and proposed residential uses across Marquesas Way and only during the winter months. Given the limited extent and duration of the shadows, the project would not result in substantial sun shadow problems. Therefore, the development proposed on Parcel 10R would not result in significant shade and shadow impacts. For the reasons set forth above, development proposed on Parcel 10R would also not result in significant glare impacts.

Mitigation: As impacts are not considered significant, n~~N~~o mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.3 Neptune Marina Parcel FF Project

5.6.3.3.3.1 Overview of Project Impacts

During this time, construction workers and equipment will be visible throughout the project site. Screened chain-link fencing would likely be installed that would surround the perimeter of the project site and would obscure direct views of the construction area. During construction, the frame of the structure would be raised and finished, and hardscape and landscaping would be completed. The duration of these construction activities would be approximately (24 months). In addition, although the visual character of the project site will be altered from its current condition, this impact is not considered significant due to its short-term nature and the urbanized visual character of the surroundings.

5.6.3.3.3.2 Threshold: Is the project substantially visible from a scenic highway or will it obstruct views along a scenic highway (as shown of the Scenic Highway Element), or is it located within a scenic corridor or will it otherwise impact the viewshed?

Analysis: In the vicinity of the project site, Via Marina is defined as a "scenic highway meriting first priority status for further study" in the County of Los Angeles Marina del Rey LUP, and land uses lining the roadway are considered part of the associated scenic corridor. ~~Neither the LUP nor County records define the scenic resources along this route and~~Both the LUP nor County records define the scenic resources along this route and no further study has been completed. Therefore, for purposes of this analysis, roadway segments that are heavily traveled and provide views of the marina are considered view corridors. ~~No~~ Limited marina views are available from Via Marina directly adjacent to Parcels FF and 10R because of existing residential development on those parcels. The incorporation of view corridors into the proposed development will provide enhanced views of the marina. ~~; accordingly, the portions of Via Marina adjacent to Parcels 10R and FF are not considered scenic highway. Although Via Marina is designated a scenic highway, there is a lack of existing prominent views to the Marina along Parcels 10R and FF.~~

The Marina del Rey LUP considers Via Marina, Burton Chace Park, and the ends of each mole to be "significant vantage points" in Marina del Rey. None of these significant vantage points are located sufficiently close to Parcel FF for the proposed project to substantially affect associated views.

To protect and enhance visibility of the marina and consistent with provisions of the LUP, the Neptune Marina Parcel FF incorporates one view corridor. This view corridor allows ~~panoramic~~ views of Marina del Rey Basin C from Marquesas Way (northerly).

With respect to the Neptune Marina Parcel FF, provisions of the LUP tabulate the area of required view corridor based on the length of the parcel's water frontage and the proposed building height. Based on the length of the parcel's water frontage and a proposed building height of 55 feet, the LUP requires 53 linear feet of view corridor. As proposed, Neptune Marina Parcel FF would provide 60 linear feet of view corridor along Marquesas Way. As such, the project as planned is consistent with view corridor provisions of the LUP that call for public and private views of the marina from perimeter roadways.

To further ensure visual resource protection, the Marina del Rey LUP requires that the project site plan and architectural design be reviewed and approved by the DCB and to incorporate view corridors on the project site to the marina. The DCB also has the authority to regulate signage, building architectural design, site planning, and facade design for all new development proposals. The DCB reviewed and conceptually approved the Neptune Marina Project design on June 29, 2006, and as part of that action, ensured compliance with the development standards and policies (inclusive of view corridors) outlined in the Land Use Plan with the development standards under its purview. Therefore, project impacts to visual corridors and views from scenic highways as defined in the Marina del Rey LUP are not considered significant.

Conclusion: Development on Parcel FF would replace an existing surface parking lot and limited visibility of the marina from Via Marina directly adjacent to Parcel FF. Consistent with requirements of the Marina del Rey LUP, and in conformance with the DCB, the project incorporates one view corridor from Marquesas Way that would enhance visibility of the marina from Parcel FF. Because the Parcel FF project is consistent with all development requirements defined in the Marina del Rey LUP, impacts associated with this visual resource criterion are not considered significant.

Mitigation: No mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.3.3 Threshold: Is the proposed use out-of-character in comparison to adjacent uses because of height, bulk, or other features?

Note to reader – Of the fourteen view points evaluated, only Viewing Locations Five and Six apply to Parcel FF.

Analysis*:* Viewing Location Five, Westerly View of the Site (Parcel FF) as Observed from Marquesas Way – As illustrated on **Figure 5.6-6, Pre- and Post-Development View of the Site (Parcel FF) as Observed Westerly from Marquesas Way**, the 55-foot-tall residential structure proposed on Parcel FF would clearly be visible in the foreground and middle ground. This new structure would replace an existing surface parking lot present on Parcel FF. With removal of the existing perimeter landscaping as

well as the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. The increased height and mass of the structures would make on-site uses more visually prominent than the existing structures. The proposed project would be perceived as a new land use of greater mass and on-site building intensity than either the existing surface parking lot or existing residential development that is situated to the west (west of Via Marina) and east. However, the project would be consistent with the height and mass of new Phase II apartments under construction on Marina del Rey Parcel 12 as well as apartments planned on the adjoining Parcel 15 to the north and nearby Parcels 100 and 101 on Via Marina.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include mature landscaping on the perimeter of the existing parking lot, partially screened views of the existing surface parking and the 15-story Archstone apartment building on Via Dolce to the northwest. Other than the Archstone building, no prominent visual features (inclusive of the marina) are visible from this portion of the project site and other distant vistas are minimal. As part of site construction, existing paved surfaces and landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure views of palm trees as well as any vista of the 15-story Archstone building in the background. Once complete, the most dominant visual feature would be the new apartment structure. Over time, perimeter landscaping proposed as part of this project would ~~partially~~ improve the visual character of ~~impact of~~ the new development.

Character of Impacts: From this location, the proposed project would appear similar in mass, development intensity and height to apartments under construction on Marina del Rey Parcel 12 as well as apartments approved and planned on the Parcel 15 to the north and on nearby Parcels 100 and 101 to the west on Via Marina. Although inconsistent with the current 25-foot height limitation for Parcel FF, the County and Legacy Partners are proposing to amend the certified LCP to change the Parcel FF classification to Height Category 3, which would accommodate the proposed 55-foot-tall apartment building. The proposed apartment building for Parcel FF would be consistent with the height and mass of new (Phase II) projects recently constructed, approved, or proposed in the Marina per height and mass standards defined in the LUP. Therefore, the height, mass and visual characteristics of the proposed apartment building for Parcel FF are consistent with the height, mass and visual characteristics of other Phase II developments either under construction or planned in the vicinity of the project site.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use. While the project would result in an intensification of development on the project site, this new development is consistent with the County's desire to recycle Phase I marina development and

intensify land uses within the marina.[14] Moreover, project architecture has been conceptually approved by the DCB and is considered in character with nearby contemporary structures either under construction (i.e., Parcel 12 to the southeast on Marquesas Way) or under construction in the vicinity of the project site (i.e., Parcels 15, 100 and 101 located adjacent to and nearby the project site to the north on Via Marina). As such, impacts are not considered significant with respect to this visual resource assessment criterion.

Analysis: Viewing Location Six, Easterly View of the Site (Parcel FF) as Observed from the Intersection of Marquesas Way and Via Marina – As illustrated on **Figure 5.6-7, Pre- and Post-Development View of the Site (Parcel FF) as Observed from the Intersection of Marquesas Way and Via Marina**, the 55-foot-tall residential structure proposed on Parcel FF would clearly be visible in the foreground and middle ground. This new structure would replace the existing surface parking lot present on Parcel FF. With removal of the existing perimeter landscaping as well as the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. The increased height and mass of the building would make on-site uses more visually prominent than the existing structures. The proposed project would be perceived as a new land use of greater mass and on-site building intensity than the existing surface parking lot and existing high density residential development that is situated to the west (west of Via Marina) and east. However, the project would be consistent with both the height and mass of new (Phase II) apartments currently being constructed to the southeast of the project site on Marina del Rey Parcel 12, as well as apartments planned adjacent to and nearby the site to the north on Parcels 15, 100 and 101.

Prominent Visual Features: No significant visual resources or defined scenic highways as defined in the Marina del Rey LUP are visible from this viewing location. Currently, the most noticeable features visible from this viewpoint include mature landscaping on the perimeter of the existing parking lot. Panoramic views encompassing existing surface parking and marina are obscured by the solid fencing along the western and northwestern portion of Parcel FF. Other than existing eucalyptus and palm trees, no prominent visual features (inclusive of the marina) are visible from this portion of the project site and distant vistas are minimal. As part of site construction, existing paved surface and landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure views of palm trees in the background. Once complete, the most dominant visual feature would be the new apartment structure. Over time, perimeter landscaping proposed as part of this project would ~~partially~~ improve the visual character ~~impact~~ of the new development.

14 Ibid.

Character of Impacts: From this location, the proposed project would appear similar in mass and development intensity to new development under construction on Parcel 12 and new apartment development soon to take place adjacent to and nearby the site to the north on Marina Parcels 15, 100, and 101. Although inconsistent with the current 25-foot height limitation for Parcel FF, the County and Legacy Partners are proposing to amend the certified LCP to change the Parcel FF classification to Height Category 3, which would accommodate the proposed 55-foot-tall apartment building. The proposed apartment building for Parcel FF would be consistent with the height and mass of new (Phase II) projects recently constructed, approved, or proposed in the Marina per height and mass standards defined in the LUP. Therefore, the height, mass and visual characteristics of the proposed apartment building for Parcel FF are consistent with the height, mass and visual characteristics of other Phase II developments either being constructed or planned in the vicinity of the project site. As such, the project is considered to be consistent with the visual character of other Phase II marina developments in the vicinity of the project site.

Level of Impact: Site development would alter the visual character of the property to a more intensive developed use. While the project would result in an intensification of development on the project site, this new development is consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[15] Moreover, project architecture has been conceptually approved by the DCB and is considered in character with the contemporary structures, under construction (Parcel 12 to the east and southeast on Marquesas Way) or proposed (Parcels 15, 100, and 101 to the north on Via Marina) within the marina. As such, impacts are not considered significant with respect to this visual resource assessment criterion.

Mitigation: As impacts are not considered significant, no mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.3.4 Threshold: Is the project likely to create substantial sun shadow, light or glare problems?

Analysis: The shade and shadow created by an object blocking sunlight varies dependent upon the time of year and time of day. This variation is a result of the sun's azimuth (the position of the earth in its annual orbit relative to the sun, due to the tilted axis of the earth) and altitude (the position of the earth in its daily rotation relative to the sun). Because the sun is lowest in the southern sky during the winter,

15 Ibid.

project development would cast the longest shadow during this season (the worst-case condition). During the summer months, the sun is directly overhead, and the shadow length is more limited. Shade-sensitive uses such as residences and public parks are considered to be sensitive receptors with respect to shade and shadow.

~~Thus, the following analysis considers the summer, autumn and winter periods, although is directed towards the winter condition, since eight months out of the year shadows cast by the proposed project would be confined to the project site or would cast shadows on small portions of off site land uses for short durations (i.e., less than 1 hour).~~

~~**Figure 5.6-18, Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM and 3:00 PM**, depicts post development site conditions for the Neptune Marina project during 9:00 AM- 3:00 PM in the winter solstice (December 21) when shadow effects would be greatest. As shown, shadows cast by structures proposed on Parcel FF at 9:00 AM would affect portions of Via Marina, existing residential structures north of Parcel FF and small portions of the western portion of Marina del Rey Basin C. Existing residential structures situated west and east of the project are not affected by shadows in the morning. Shadows cast at 3:00 PM affect portions of the western portion of Marina del Rey Basin C.~~

The series of **Figures 5.6-18A–C, Shade and Shadow Effects; Neptune Marina Project – Summer Solstice, 9:00 AM through 5:00 PM**, **Figures 5.6-19A–C, Shade and Shadow Effects; Neptune Marina Project – Autumnal Equinox, 9:00 AM through 5:00 PM Figures 5.6-20A–C, Shade and Shadow Effects; Neptune Marina Project – October, 9:00 AM through 5:00 PM,** and **Figures 5.6-21A–C, Shade and Shadow Effects; Neptune Marina Project – Winter Solstice, 9:00 AM through 3:00 PM** depicts post-development site conditions for the Neptune Marina project hourly during the time period of 9:00 AM through 5:00 PM (3:00 PM for winter) in the summer solstice (June 21), the autumnal equinox (September 21), October 21, and the winter solstice (December 21), respectively. These figures represent the times of the year when shades would be at their smallest (summer solstice) to when shadow effects would be greatest (winter solstice). The month of October is included because this the time of year that shadows would respectively start and stop casting shade on portions of the existing and proposed residential structures on the north side of Marquesas Way and to the north of Parcel FF. The spring equinox (March 21) is not depicted because the shadows would be similar to those for the autumnal equinox.

As shown, during the Winter Solstice the structures proposed on Parcel FF would cast shadows throughout the day, on the garages of the existing residential structures situated north of Parcel FF (Parcel 15) and on the existing garages on Parcel 15 (or lower portion of part of the south-facing façade of the new building if that Parcel is redeveloped). No other sensitive receptors would be shaded.– The structures proposed on Parcel FF would also cast shadows on portions Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin C in the afternoon only.

As shown of **Figures 5.6-21A–C**, the proposed structures on Parcel FF would only cast shadows on limited portions of the existing and proposed residential structures on Parcel 15 from October to February.

As shown on **Figures 5.6-18A–C** and **5.6-19A–C**, the proposed structures on Parcel FF would not cast any shadows on off-site sensitive receptors during the summer solstice of autumnal equinox.

~~Exposure of adjacent uses to shadows cast by the project would be~~ beginning in October and~~limited in duration~~ during the~~to winter months and would vary dependent upon the time of day. Some existing~~No single uses would be exposed to shadows cast by the project for more than 3~~ three hours, and ~~given the small number of uses affected and the nature of those land uses, this is considered a less than significant impact.~~

Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues.

Level of Impact: County of Los Angeles Department of Regional Planning thresholds define a significance threshold that states, "Is the project likely to create substantial sun shadow, light or glare problems?" As shown on **Figures 5.6-21A–C** and **5.6-25A–C,** the proposed structures on Parcel FF would cast shadows only on the garages of the existing residential structures situated north of Parcel FF (Parcel 15) and, if that Parcel is redeveloped, on the lower portion of part of the south-facing façade of the proposed new development and only during the winter months. Given the limited extent and duration of the shadows, the proposed structures on Parcel FF would not result in substantial sun shadow problems. Therefore, the Parcel FF development's shade and shadow impacts would be less than significant. For the reasons set forth above, the project's glare impacts would also be less than significant.

~~As defined in **Figures 5.6-18**~~**21A-B,** ~~shadows cast by the project (Neptune Marina Parcel FF) during winter months would not substantially shade adjacent existing structures [define these structures here] in excess of these defined standards, and shade and shadow impacts are not considered significant.~~

Mitigation: As impacts are not considered significant, no mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.4 Woodfin Suite Hotel and Timeshare Resort Project

5.6.3.3.4.1 Overview of Project Impacts

Development of the Woodfin Suite Hotel and Timeshare Resort on Parcel 9U requires grading to allow construction of the partially subterranean parking lots, landscaped areas, develop drainage patterns and provide for necessary infrastructure. During this time, construction workers and equipment will be visible throughout the project site. Screened chain-link fencing would likely be installed that would surround the perimeter of the project site and would obscure direct views of the construction area. During construction, the frame of the structure would be raised and finished, and hardscape and landscaping would be completed. Construction of the Woodfin Suite Hotel and Timeshare Resort project component is anticipated to initiate as early as ~~January 2009~~May 2011, and would require approximately ~~24~~ 30 months to complete, ~~January~~ November ~~2011~~ 2013 at the earliest. Although the visual character of the project site will be altered from its current condition, this impact is not considered significant due to its short-term nature and the urbanized visual character of the surroundings.

5.6.3.3.4.2 Threshold: Is the project substantially visible from a scenic highway or will it obstruct views along a scenic highway (as shown of the Scenic Highway Element), or is it located within a scenic corridor or will it otherwise impact the viewshed?

Analysis: As defined below, Via Marina adjacent to Parcel 9U has vistas of the marina and as such is defined in this EIR as a Scenic Highway. The Marina del Rey LUP considers Via Marina, Burton Chace Park, and ends of each mole to be "significant vantage points" in Marina del Rey. Only the "significant vantage point" of Via Marina is visible along Parcel 9U.

In the vicinity of the project site, Via Marina is defined as a "scenic highway meriting first priority status for further study" in the County of Los Angeles Marina del Rey LUP. As documented above, no information is available in the plan or in County records that define scenic resources along this route and no further study has been completed. For the purpose of this analysis, areas most frequented by visitors and those that contain views of the marina can be considered scenic. Given that Parcel 9U is currently vacant, views of the marina are available from Via Marina across Parcel 9U. Therefore, Via Marina adjacent to Parcel 9U is considered a Scenic Highway. ~~Portions of the~~ A~~a~~vailable views ~~istas~~ of the marina from Via Marina would be reduced ~~eliminated~~ through site development in the northern Portion of Parcel 9U; however, the incorporation of view corridors into the project would ensure that substantial views of the marina would be preserved.

To protect visibility of the marina and consistent with provisions of the LUP, the Woodfin Suite Hotel and Timeshare Resort project proposed on Parcel 9U incorporates one substantial 154-foot-wide view

corridor over the southerly portion of the parcel. This view corridor allows vistas of Marina del Rey Basin B from Via Marina (easterly).

With respect to the Woodfin Suite Hotel and Timeshare Resort Project (Parcel 9U), ~~and based on~~to attain the proposed 225-foot height (as allowed by the CCC and County of Los Angeles in the LUP) ~~of~~ for the hotel and timeshare resort structure (excluding appurtenant rooftop structures), a view corridor totaling 40 percent of the length of the site along Via Marina ~~is~~ would be required. For the 386-foot-long site, a minimum 154-foot-wide view corridor is required. The project plans for 154 linear feet of view corridor through the Parcel 9U public park/wetland situated south of the hotel and timeshare resort structure. Because the project provides the required 154 feet of public view corridor, the hotel and timeshare resort is consistent with provisions of the LCP that call for public and private views of the Marina from perimeter roadways.

To further ensure visual resource protection, the Marina del Rey LUP requires that the project site plan and architectural design be reviewed and approved by the DCB and to incorporate view corridors that do not presently exist on the project site. The DCB also has the authority to regulate signage, building architectural design, site planning, and facade design for all new development proposals. The DCB reviewed and conceptually approved Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project on June 29, 2006, and, as part of that action, ensured compliance with the development standards and policies (inclusive of view corridors) outlined in the Land Use Plan with the development standards under its purview. Therefore, project impacts to visual corridors and views from scenic highways as defined in the Marina del Rey LUP are not considered significant.

Conclusion: Construction and operation of a hotel structure on Parcel 9U would result in an incremental loss of visibility of Marina del Rey Basin B when viewed from Via Marina that is considered in this EIR to be a Scenic Highway. Consistent with requirements of the Marina del Rey LUP, and in conformance with the DCB, the project incorporates a view corridor that would mitigate the loss of available view. Because this project is consistent with all development requirements defined in the Marina del Rey LUP, impacts associated with this visual resource criterion are not considered significant.

Mitigation: No mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.4.3 Threshold: Is the proposed use out-of-character in comparison to adjacent uses because of height, bulk, or other features?

Note to reader – Of the 14 viewing locations evaluated, only Viewing Locations One, Two and Seven as mapped in ***Figure 5.6-1*** *(i.e., vantages in close proximity to the project site) and Viewing Locations One, Three, Four, Five, Six, and Seven as mapped in* ***Figure 5.6-9*** *(i.e., "significant vantage points" per the LUP or vantages more distant from the project site) apply to Parcel 9U.*

Analysis: Viewing Location One, Northerly View of Parcel 10R and 9U as Observed from Via Marina South of Tahiti Way – As illustrated on **Figure 5.6-2, Pre- and Post-Development View of Site (Parcels 10R and 9U) from Via Marina South of Tahiti Way**, Foreground views would be dominated by the Woodfin Suite Hotel and Timeshare Resort structure on the northern portion of Parcel 9U. The size and mass of this building would eliminate some views of the northwestern portions of Marina del Rey Basin B as well as structures and landscaping situated further to the northeast in the middle ground and background. Due to the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. When viewed from this location, it is expected that the Woodfin Suite Hotel and Timeshare Resort, due to its height and mass, would ~~stand out in contrast to~~be larger than existing or proposed structures in the ~~marina~~ immediate vicinity. ~~In~~ However, in the ~~project vicinity~~surrounding area, ~~only~~ the 15-story Archstone apartment building on Via Dolce to the northwest, the 20-story Regatta condominiums, the 19-story Azzurra condominiums, and the 18-story Cove condominiums, all on Marina Pointe Drive to the northeast ~~is~~ are of similar scale. The view corridor south of this structure would provide direct vistas of boat masts that are present in Marina del Rey Basin B and the more distant residential development. ~~Although~~ The proposed project is consistent with height provisions that were approved the CCC and the County of Los Angeles as defined in the Marina del Rey LUP, and the height and mass of the proposed hotel structure would ~~be~~ serve as a ~~dominant~~ visual element that would help define this portion of the marina.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the rear facades of the parking structures and buildings associated with Parcel 10R. As part of site construction, existing structures and the existing landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure distant vistas of trees and structures in the background. Once complete, the most dominant visual feature would be the architectural forms of the new Woodfin Suite Hotel and Timeshare Resort and apartment structure in the northern portion of Parcel 9U. Over time, proposed perimeter landscaping would ~~partially improve~~complement the visual character~~impact~~ of the new development.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear greater in mass and building intensity than other existing or proposed structures located to the west and north. As noted, the Woodfin Suite Hotel and Timeshare Resort project would be consistent with the stated height guidelines as approved by the CCC and as defined in the LUP. However, the 225-foot hotel structure would be substantially taller than the height and of greater mass than other new (Phase II) construction east of the project site on Marina del Rey Parcel 12 as well as other projects planned to the north on nearby Marina del Rey Parcels 15, 100, and 101. The tallest structure approved would be the 75~~ to 100~~-foot structures recently approved on Parcel 100 and 101 to the northwest. The hotel and timeshare resort structure would also be substantially taller than the older, lower-height residential structures in the project vicinity that do not exceed three stories. Therefore, the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with the established and forthcoming (via Phase II construction) development pattern on the western side of Marina del Rey.

Level of Impact: Site development would not alter any defined significant visual feature, but would provide a permanent view corridor and open space for future generations of marina residents and visitors. However, the proposed project would eliminate some views ~~istas~~ of the marina and would adversely affect a portion of Via Marina that can be defined as a scenic highway. However, this impact would be reduced to less than significant through the inclusion of view corridors into the new Parcel 9U development. ~~Further, t~~The Neptune Marina and Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on the project site. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225-foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. All elements of the project are compliant with past CCC approvals, the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[16] As defined above, the height and mass of the Woodfin Suite Hotel and Timeshare Resort structure, although consistent with the provisions of the LCP in regard to building height (see discussion in **Section 5.17, Land Use and Planning**), could be considered to be out of character in comparison to the contemporary structures present or under construction within the marina as well as existing older lower-height residential structures in the local vicinity of the project site, when viewed from this viewing location. This is considered a potentially significant impact.

16 See pp. 8-3 and 8-4 of the LUP.

Analysis: Viewing Location Two, Northerly View of Parcel 10R and 9U as Observed from Via Marina – As illustrated on **Figure 5.6-3, Pre- and Post-Development View of Site (Parcels 10R and 9U) from Via Marina**, similar to Viewing Location One, foreground views would be dominated by the Woodfin Suite Hotel and Timeshare Resort structure and associated parking structure on the northern portion of Parcel 9U. The Woodfin Suite Hotel and Timeshare Resort building would obstruct existing ~~eliminate~~ views~~istas~~ of the northwestern portions of Marina del Rey Basin B. Due to the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. When viewed from this location, it is expected that the height of the Woodfin Suite Hotel and Timeshare Resort structure would cause the structure ~~stand out in contrast to~~to be more prominent than existing and proposed structures on the westerly side of the marina. As stated above, ~~the only~~ other structures of similar size ~~is~~ are the 15-story Archstone apartment building on Via Dolce to the northwest, the 20-story Regatta condominiums, the 19-story Azzurra condominiums, and the 18-story Cove condominiums, all on Marina Pointe Drive to the northeast, which were found to be consistent with the City of Los Angeles local coastal program.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the portions of the rear facades of the parking structures and buildings associated with Parcel 10R. As part of site construction, these existing structures and existing landscape vegetation would be removed and replaced. As defined above, the height of the proposed structures would obscure views ~~stas~~ of trees and structures in the background. Once complete, the most dominant visual feature would be the new Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U fronting on Via Marina. Over time, perimeter landscaping proposed as part of the project would ~~partially~~ improve the visual character ~~impact~~ of the new development.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would be noticeably taller than other existing or proposed structures located to the west and north. As noted, the Woodfin Suite Hotel and Timeshare Resort structure is consistent with the stated height guidelines as approved by the CCC and as defined in the LUP and has been approved by the DCB. However, the 225-foot hotel structure would be substantially taller than other new (Phase II) construction that is present east of the project site on Marina del Rey Parcel 12 as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. The tallest structures approved would be the 75~~ to 100~~-foot buildings recently approved on Parcels 100 and 101. The hotel and timeshare resort structure would also be substantially taller than the older, lower-height residential structures in the local vicinity of the project site that do not exceed three stories. Therefore, due to the height disparity between the proposed hotel and timeshare structure and other planned and existing

development in the vicinity of the project site, the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with its surroundings.

Level of Impact: Site development would not alter any defined significant visual feature. However, the proposed project would eliminate vistas of the marina (Parcel 9U only) when viewed from Via Marina that is considered a Scenic Highway and the project would alter the visual character of the property to a more intensive developed use. The proposed hotel and timeshare resort project is compliant with height standards approved by the CCC, the LCP-prescribed building height standards and is consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina.[17] However, because the Woodfin Suite Hotel and Timeshare Resort structure, although consistent with the provisions of the LCP in regard to building height (see discussion in **Section 5.17, Land Use and Planning**), could be considered out of character with the contemporary structures recently approved, present or under construction, impacts are considered significant and unavoidable.

Analysis: Viewing Location Seven, Easterly View of Parcel 9U as Observed from Via Marina – As illustrated on **Figure 5.6-8~~7~~, Pre- and Post-Development View of Site (Parcels 9U) as Observed from Mid-Block Via Marina,** similar to Viewing Location One, foreground views would be dominated by structures of the Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U. The Woodfin Suite Hotel and Timeshare Resort building would obstruct ~~eliminate~~ existing views ~~stas~~ of the western portions of Marina del Rey Basin B. Due to the proximity of this viewing location to the site, building shape, color, and architectural style would be readily distinguishable. When viewed from this location, the height of the Woodfin Suite Hotel and Timeshare Resort structure would cause the structure to ~~stand out in contrast to~~be viewed more readily than existing and proposed structures on the westerly side of the marina. As stated above, ~~the only~~ others structure of similar size ~~is~~ are the 15-story Archstone apartment building on Via Dolce to the northwest, the 20-story Regatta condominiums, the 19-story Azzurra condominiums, and the 18-story Cove condominiums, all on Marina Pointe Drive to the northeast, which were found to be consistent with the City of Los Angeles local coastal program. The view corridor south of the Woodfin Suite Hotel and Timeshare Resort would provide direct vistas of boat masts that are present in Marina del Rey Basin B and the more distant residential development. Although consistent with height provisions that were approved by the CCC and the County of Los Angeles as defined in the Marina del Rey LUP, the height of the building would be a dominant visual element that would define this portion of the marina.

[17] See pp. 8-3 and 8-4 of the LUP.

Prominent Visual Features: Currently, the most noticeable features visible from this viewpoint include the portions of the vacant nature of Parcel 9U. As defined above, the height of the proposed structures would obscure views ~~sta~~s of trees, boat masts and structures in the background. Once complete, the most dominant visual feature would be the architectural forms of the new Woodfin Suite Hotel and Timeshare Resort structure in the northern portion of Parcel 9U fronting on Via Marina. Over time, project landscaping proposed as part of each project would ~~partially improve~~complement the visual character~~impact~~ of the new development ~~in this area~~.

Character of Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear taller than other existing or proposed structures located immediately to the west and north. As noted, the Woodfin Suite Hotel and Timeshare Resort structure is consistent with the stated height guidelines as approved by the CCC and as defined in the LUP. However, the 225-foot hotel structure would be substantially taller than other new (Phase II) construction that is present east of the project site on Marina del Rey Parcel 12R as well as other projects approved for development to the north on nearby Marina del Rey Parcels 15, 100, and 101. The tallest structures approved would be the 75~~ to 100~~-foot structures recently approved on Parcels 100 and 101. The hotel and timeshare resort structure would also be substantially taller than the older, lower-height residential structures in the local vicinity of the project site that do not exceed three stories. Therefore, due to the height disparity between the proposed hotel and timeshare structure and other planned and existing development in the vicinity of the project site, the Woodfin Suite Hotel and Timeshare Resort structure ~~could~~ would be ~~considered out of character with its surroundings~~among the most prominent buildings in the marina.

Level of Impact: Site development would not alter any ~~defined~~ significant visual feature. However, the proposed Parcel 9U development ~~project~~ would obstruct ~~eliminate~~some of the existing views ~~vistas~~ of the marina ~~(Parcel 9U only)~~ when viewed from Via Marina and would alter the visual character of the property to a more intensive developed use. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on their respective project sites. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225-foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. Although the proposed ~~apartment buildings and~~ hotel and timeshare resort is~~are~~ compliant with past CCC approvals and the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina

development and intensify land uses within the marina,[18] the Woodfin Suite Hotel and Timeshare Resort structure could be considered out of character with the contemporary structures present or under construction within the marina as well as out of character with the older, lower-height residential structures in the ~~local~~ immediate vicinity of the project site. Therefore, the Woodfin Suite Hotel and Timeshare Resort building, although consistent with the provisions of the LCP in regard to building height (see discussion in **Section 5.17, Land Use and Planning**), could appear out of character in comparison to adjacent uses in terms of height and mass when viewed from this viewing location. This is considered a potentially significant impact.

Analysis: Parcel 9U Viewing Location One, Southerly View of the Site as Observed from Mother's Beach – As illustrated in **Figure 5.6-10, Pre- and Post-Development View of the Site as Observed from Mother's Beach**, the Woodfin Suite Hotel and Timeshare Resort structure would be seen from Mother's Beach. Although the hotel tower would be visible from Mother's Beach, views from this location to the west, north, and northeast include several other high rise buildings as well, including the 15-story Archstone building, the adjacent Marriott Hotel, the three 13-story Marina City Club buildings, the 18-, 19-, and 20-story Cove, Azzurra, and Regatta condominium buildings. The hotel tower therefore is not out of character when compared with the other similarly sized structures in view from this distant location. Additionally, due to the panoramic nature of the view from this location (the tower will be located no closer than approximately 1,900 feet from Mother's Beach), the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources. ~~clearly visible above the tops of existing intervening trees and one- and two-story buildings. The structure would be noticeably taller than surrounding buildings and landscape features. However, because of its distance from the Mother's Beach vantage point, it would occupy a small portion of the available field of view and would not block views of valued visual resources. In addition, there are several other tall high-rise buildings that are clearly visible from the same vantage point – the 15-story Archstone building, the adjacent Marriott Hotel, the three 13-story Marina City Club buildings, the 18-, 19-, and 20-story Cove, Azzurra, and Regatta condominium buildings.~~

Prominent Visual Features: The Woodfin Suite Hotel and Timeshare Resort structure would become one of several tall structures visible from ~~the dominant visual features from~~ this viewing location, along ~~together~~ with existing mature trees and landscaping. The existing one-story buildings along Panay Way would become secondary in views from this vantage.

---

18 See pp. 8-3 and 8-4 of the LUP.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would be similar to other tall structures in area as seen from ~~noticeably taller than other existing or proposed structures in the immediate area, although other tall buildings are visible in the distance in some views from~~ Mother's Beach (not shown in **Figure 5.6-9**). Due to the panoramic nature of the view from this location, the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources. ~~However, the project site's distance from Mother's Beach reduces (compresses) the apparent height, and thus the visual impact, of the structure.~~

Level of Impact: Because of the project site's distance from Mother's Beach, and the resulting small percentage of viewshed impacted by the hotel tower, impacts from this vantage point would be less than significant.

Analysis: Parcel 9U Viewing Location Two, Southeasterly View of the Site as Observed from Panay Way – As illustrated on **Figure 5.6-11, Pre- and Post-Development View of the Site as Observed from Panay Way**, there are no available views of the project site from this viewpoint **as** the scene depicts only the apartment structure at this location. Views south and southeast are blocked by nearly contiguous apartment buildings on the southern side of Panay Way. In this way, the Woodfin Suite hotel and Timeshare Resort would not obscure any views.

Prominent Visual Features: The existing apartment buildings along Panay Way are the dominant feature. This will continue to be the prominent visual feature post-construction of Woodfin Suite Hotel and Timeshare Resort as that structure will not be visible.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would be noticeably taller than other existing or proposed structures in the immediate area, although the building would not be visible from Panay Way (**Figure 5.6-11**).

Level of Impact: Because of the project site's inconspicuousness from Panay Way, impacts would be less than significant.

Analysis: Parcel 9U Viewing Location Three, Southeasterly View of the Site (Parcel 9U) as Observed from Tahiti Way – As illustrated on **Figure 5.6-12, Pre- and Post-Development View of the Site (9U) as Observed From Tahiti Way**, the Woodfin Suite Hotel and Timeshare Resort structure would be visible in the distance beyond the apartment buildings and trees lining Tahiti Way. Although the Tahiti Way apartment buildings are only four stories tall, their proximity to vantage points along Tahiti Way means they partially obscure views of the more distant resort structure. As a result, the resort does not appear out of character or scale with other development in the area when viewed from this vantage.

Prominent Visual Features: The existing apartment buildings and trees along Tahiti Way would remain the dominant visual features in the viewshed from Tahiti Way vantages, since distance to the project site diminishes the visual impact of the proposed resort building. The resort would be visually subordinate to the intervening apartment buildings and trees when viewed from Tahiti Way.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure is considerably taller than the apartment buildings along Tahiti Way (225 feet versus approximately 35 to 40 feet), but its apparent height is diminished because of distance to the project site. Moreover, the proposed resort would appear shorter than the palms and other trees lining Tahiti Way, again because of distance.

Level of Impact: Because of the presence of four-story apartment buildings and trees along Tahiti Way and the distance to the project site, impacts would be less than significant.

Analysis: Parcel 9U Viewing Location Four, Northwesterly View of the Site as Observed from North Jetty Trail – As illustrated on **Figure 5.6-13, Pre- and Post-Development View of the Site (9U) as Observed from North Jetty Trail**, the proposed Woodfin Suite Hotel and Timeshare Resort structure is barely visible above the tops of the two- and five-story apartment buildings and trees lining Northwest Passage. Because of apparent compression of height with distance, the structure appears to be approximately the same height as the five-story apartment buildings and trees, and does not stand out visually.

Prominent Visual Features: The two- and five-story apartment buildings and trees lining Northwest Passage remain the dominant visual features in the viewshed available from North Jetty Trail, and the proposed resort structure would be a minor visual feature in the field of view.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure is considerably taller than the apartment buildings along Northwest Passage (225 feet versus approximately 50 feet), but its apparent height is diminished because of distance. The resort structure would appear shorter than the tallest trees on Northwest Passage.

Level of Impact: Because of the presence of apartment buildings and trees along Northwest Passage and the distance to the project site, impacts would be less than significant.

Analysis: Parcel 9U Viewing Location Five, Northwesterly View of the Site as Observed from South Jetty Trail – As illustrated on **Figure 5.6-14, Pre- and Post-Development View of the Site (9U) as Observed from South Jetty Trail**, the proposed Woodfin Suite Hotel and Timeshare Resort structure is only partially visible above the tops of the two- and five-story apartment buildings and trees lining

Northwest Passage (similar to views from North Jetty Trail). Because of apparent compression of height with distance, the structure appears to be approximately the same height as the five-story apartment buildings and trees, and does not stand out visually.

Prominent Visual Features: The two- and five-story apartment buildings and trees lining Northwest Passage remain the dominant visual features in the viewshed available from South Jetty Trail, and the proposed resort structure would be a minor visual feature in the field of view.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure is considerably taller than the apartment buildings along Northwest Passage (225 feet versus approximately 50 feet), but its apparent height is diminished because of distance.

Level of Impact: Because of the presence of apartment buildings and trees along Northwest Passage and the distance to the project site, impacts would be less than significant.

Analysis: Parcel 9U Viewing Location Six, Northwesterly View of the Site as Observed from Fisherman's Village – As illustrated on **Figure 5.6-15, Pre- and Post-Development View of the Site (Parcel 9U) as Observed from Fisherman's Village**, the proposed Woodfin Suite Hotel and Timeshare Resort structure, along with other high-rise buildings such as the Marina City Club and the Ritz Carlton Hotel, would be ~~clearly~~ visible above the existing apartment buildings at the end of Tahiti Way on the mole between Basins A and B. Due to the distant location of the hotel tower form this viewing point (the hotel tower will be located no closer than approximately 3,200 feet—over 0.5 mile—from Fisherman's Village), the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources.

~~No other tall buildings are visible near the project site, but the distance from Fisherman's Village to the project site reduces the apparent height of the resort structure, and thus its visual impact from this viewing location. In addition, other high-rise buildings, the Marina City Club and the Ritz Carlton Hotel are visible across the water to the north.~~

Prominent Visual Features: The inner harbor and associated boat activity and Basins A and B remain the dominant visual features in views from this vantage. The proposed resort building is clearly visible, but occupies a relatively small portion of the panoramic field of view.

Character and Surroundings Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure is considerably taller than the apartment buildings along Tahiti Way, although it is similar in size to other high-rise buildings such as the Marina City Club and the Ritz Carlton Hotel ~~although its apparent height is diminished because of distance. Moreover, a number of apartment buildings and~~

~~commercial establishments, including mid rises, are visible in the field of view from this vantage, and~~ The hotel tower portion of the proposed project occupies a relatively small portion of the available viewshed, and will fit into the panorama of existing buildings. Therefore, the proposed resort structure is not out of character with surrounding development.

Level of Impact: The intervening presence of the inner harbor, associated boat activity, and Basins A and B, as well as the apartment buildings along Tahiti Way, reduce the visual impact of the building from this viewing location to less than potentially significant.

Analysis: Parcel 9U Viewing Location Seven, Westerly View of the Site as Observed from Burton Chace Park – As illustrated on **Figure 5.6-16, Pre- and Post-Development View of the Site (9U) as Observed from Burton Chace Park**, the proposed Woodfin Suite Hotel and Timeshare Resort structure would be barely visible above the existing five-story apartment building at the end of Marquesas Way on the mole between Basins A and B. No other tall buildings are visible near the project site, but the distance from the park to the project site reduces the apparent height of the resort structure, and thus its visual impact from this viewing location.

Prominent Visual Features: The inner harbor, Basins B and C, and the five-story apartment building at the end of Marquesas Way on the mole between Basins B and C remain the prominent visual features as viewed from this vantage.

Character and Surroundings Impacts: The height of the proposed Woodfin Suite Hotel and Timeshare Resort structure is diminished because of distance from Burton Chace Park. Moreover, because of the intervening five-story apartment building at the end of Marquesas Way, the proposed resort structure is not out of character with surrounding development.

Level of Impact: Because of the presence of the apartment buildings along Marquesas Way and the distance to the project site, impacts would be less than significant.

Analysis: Parcel 9U Viewing Location Eight, Southwesterly View of the Site as Observed from Bali Way – As illustrated on **Figure 5.6-17, Pre- and Post-Development View of the Site as Observed from Bali Way**, demonstrates that views toward the project site from Bali Way are largely blocked by the presence of the three-story Marina del Rey Hotel buildings and dense ornamental plantings lining Bali Way. However, there are locations at the Marina del Rey Hotel site where Parcel 9U is visible. Hotel rooms have panoramic views that include the project site to the south. The blocked view of the Woodfin Suite Hotel and Timeshare Resort preclude any visual impact from this vantage point.

Prominent Visual Features: The Marina del Rey Hotel (from Bali Way) and its associated landscaping with mature trees are the prominent features. Because of the density of landscape materials and buildings, the post-construction structures of the Woodfin Suite Hotel and Timeshare Resort would not be visible.

Character and Surroundings Impacts: The height of the proposed Woodfin Suite Hotel and Timeshare Resort structure is not evident from the Marina del Rey Hotel on Bali Way. Moreover, because of the lush landscaping materials, the proposed resort structure would be hidden from view.

Level of Impact: Because of the project site cannot be clearly seen from this location, impacts would be less than significant.

More Distant Viewing Locations:

Parcel 9U Viewing Location One, Southerly View of the Site as Observed from Mother's Beach – As illustrated on **Figure 5.6-10, Pre- and Post-Development View of the Site as Observed from Mother's Beach**, the 225-foot tall Woodfin Suite Hotel and Timeshare Resort tower would be seen ~~prominent~~ from Mother's Beach. Although the hotel tower would be visible from Mother's Beach, ~~When viewed from this location, the height of the Woodfin Suite Hotel and Timeshare Resort tower structure would cause it to stand out on the horizon in contrast to existing and proposed structures in the area. However, when viewed in context of other perspectives,~~ views from this location to the west, north, and northeast include several other high rise buildings, including the 15-story Archstone building, the adjacent 10-story Marriott Hotel, the three 13-story Marina City Club buildings, the 14-story Ritz Carlton Hotel, the 18-, 19- and 20-story Cove, Azzurra, and Regatta condominium buildings. The hotel tower therefore is not out of character when compared with the other similarly sized structures in view from this distant location. Additionally, due to the panoramic nature of the view from this location, the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources. ~~Although consistent with height provisions that were approved by the CCC and the County of Los Angeles as defined in the Marina del Rey LUP, the height of the building would be a dominant visual element that would define this portion of the marina. Because of its distance from the Mother's Beach vantage point, it would occupy a small portion of the available field of view and would not block views of valued resources.~~

Parcel 9U Viewing Location Two, Southeasterly View of the Site as Observed from Panay Way – As illustrated on **Figure 5.6-11, Pre- and Post-Development View of the Site as Observed from Panay Way,** there are no available views of the project site from this viewpoint as the scene depicts only the apartment structure at this location. Views south and southeast are blocked by nearly contiguous apartment

buildings on the southern side of Panay Way. Therefore, the Woodfin Suite hotel and Timeshare Resort would not be visible from this location.

Parcel 9U Viewing Location Three, Westerly View of the Site as Observed from Tahiti Way – As illustrated on **Figure 5.6-12, Pre- and Post-Development View of the Site as Observed from Tahiti Way,** views of the project site at Via Marina are mostly obstructed from the eastern terminus of Tahiti Way. Apartment buildings lining the north side of Tahiti Way dominate the field of view and limit distant views from this viewpoint. Palms and other street trees lining the roadway also serve to screen views. Only a portion of the Woodfin Suite Hotel and Timeshare Resort would be visible from this view location.

Parcel 9U Viewing Location Four, Northwesterly View of the Site as Observed from North Jetty Trail – As illustrated on **Figure 5.6-13, Pre- and Post-Development View of the Site as Observed from North Jetty Trail**, from this vantage point, views of the project site, across the open water of the channel, are essentially obscured by two-story waterfront buildings near the terminus of Northwest Passage and five-story buildings just to the north on Old Harbor Lane. Mature landscape trees in the foreground characterize this view. Only a very small portion of the Woodfin Suite Hotel and Timeshare Resort structure would be visible between the trees from this location and would not be a prominent feature.

Parcel 9U Viewing Location Five, Northwesterly View of the Site as Observed from South Jetty Trail – As illustrated on **Figure 5.6-14, Pre- and Post-Development View of the Site as Observed from South Jetty Trail,** the panoramic views from this location, allow some visibility of the project site but a small portion of the available field of view. Ballona Creek Channel and the North Jetty Trail are the most prominent visual features from this vantage, as is the waterfront across the ship channel. Mature trees and other ornamental landscaping are visible along the waterfront. The upper stories of the Woodfin Suite Hotel and Timeshare Resort tower structure would be visible through the landscape materials but would not be a prominent feature on the horizon.

Parcel 9U Viewing Location Six, Northwesterly View of the Site as Observed from Fisherman's Village – As illustrated on **Figure 5.6-15, Pre- and Post-Development View of the Site as Observed from Fisherman's Village**, panoramic views of the marina's inner harbor and Basins A and B are characteristic of this viewpoint. Distant apartment buildings lining Via Marina to the west are visible across the water, and other high-rise buildings, the Marina City Club and the Ritz Carlton Hotel, are visible across the water to the north. The project site is partially blocked from this viewpoint by the intervening four-story apartment building at the eastern terminus of Tahiti Way. However, the upper portion of the Woodfin Suite Hotel and Timeshare Resort tower would be clearly visible on the horizon.

Parcel 9U Viewing Location Seven, Westerly View of the Site as Observed from Burton Chace Park – As illustrated on **Figure 5.6-16, Pre- and Post-Development View of the Site as Observed from Burton**

Chace Park, similar to the Fisherman's Village viewpoint, panoramic views of the marina's inner harbor and Basins B and C are visible from the park, The park is almost due east of Parcels 10R and FF and the mole occupied by Parcel 12, with Basins B and C to the south and north, respectively. Views west from Burton Chace Park are almost entirely obscured by the existing five-story apartment building at the end of Marquesas Way, near the tip of the mole. Palms and other trees lining Tahiti Way to the south can be seen, as can the anchored boats in the two basins. The height of the Parcel 12 five-story buildings obscure a direct line of sight of the Woodfin Suite Hotel and Timeshare Resort structure with only the very top floors of the tower being visible.

Parcel 9U Viewing Location Eight, Southwesterly View of the Site as Observed from Bali Way – As illustrated on **Figure 5.6-17, Pre- and Post-Development View of the Site as Observed from Bali Way,** demonstrates that views toward the project site from Bali Way are largely blocked by the presence of the three-story Marina del Rey Hotel buildings and dense ornamental plantings lining Bali Way. Hotel rooms have panoramic views that include the project site to the south. The blocked view of the Woodfin Suite Hotel and Timeshare Resort greatly limit any visual impact from this vantage point.

Prominent Visual Features

More Distant Viewing Locations:

Parcel 9U Viewing Location One, Southerly View of the Site as Observed from Mother's Beach features mature trees and landscaping, along with single story buildings along Panay Way south of Mother's Beach. As discussed above, although the hotel tower would be visible from Mother's Beach, views from this location to the west, north, and northeast include several other high rise buildings as well, such as the 15-story Archstone building, the adjacent 10-story Marriott Hotel, the three 13-story Marina City Club buildings, the 14-story Ritz Carlton Hotel, the 18-, 19- and 20-story Cove, Azzurra, and Regatta condominium buildings. The hotel tower therefore is not out of character when compared with the other similarly sized structures in view from this distant location. Additionally, due to the panoramic nature of the view from this location, the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources.

Parcel 9U Viewing Location Two, Southeasterly View of the Site as Observed from Panay Way is the existing apartment buildings along Panay Way. This will continue to be the prominent visual feature post-construction of Woodfin Suite Hotel and Timeshare Resort as that structure will not be visible.

Parcel 9U Viewing Location Three, Westerly View of the Site as Observed from Tahiti Way is the existing apartment buildings, street trees along Tahiti Way. This will continue to be the prominent visual feature post-construction of Woodfin Suite Hotel and Timeshare Resort as only a small portion of the structure will be visible.

Parcel 9U Viewing Location Four, Northwesterly View of the Site as Observed from North Jetty Trail has an open water channel in the foreground, with mature landscape trees prominent in the distant foreground. The existing two-story and five-story apartment buildings are only discernible structures. Only a very small portion of the proposed project structures would be visible between the trees from this location.

Parcel 9U Viewing Location Five, Northwesterly View of the Site as Observed from South Jetty Trail has the Ballona Creek Channel as the most conspicuous feature. The mature trees and existing two-story and five-story apartment buildings on Northwest Passage and Old Harbor Lane, respectively are also prominent. The top of the Woodfin Suite Hotel and Timeshare Resort tower would appear on the horizon above the landscape trees.

Parcel 9U Viewing Location Six, Northwesterly View of the Site as Observed from Fisherman's Village shows the inner harbor, Basins A and B, and the existing four-story apartment building on Tahiti Way. Because of the low stature of the existing buildings, the Woodfin Suite Hotel and Timeshare Resort structure, along with other high-rise buildings such as the Marina City Club and the Ritz Carlton Hotel, will be highly visible on the horizon above the existing apartments. Due to the distant location of the hotel tower form this viewing point, the hotel tower will occupy only a small percentage of the available viewshed and will not block views of valued resources.

Parcel 9U Viewing Location Seven, Westerly View of the Site as Observed from Burton Chace Park has views of the inner harbor, Basins B and C, and the five-story apartment building at the end of Marquesas Way on the mole between Basins B and C. Because of the height of the new apartment buildings on Parcel 12, just the very top floors of the Woodfin Suite Hotel and Timeshare Resort would be observable.

Parcel 9U Viewing Location Eight, Southwesterly View of the Site as Observed from Bali Way depicts the Marina del Rey Hotel (from Bali Way) and its associated landscaping with mature trees. Because of the density of landscape materials and buildings, the post-construction structures of the Woodfin Suite Hotel and Timeshare Resort would not be visible. However, there are locations at the Marina del Rey Hotel site where Parcel 9U is visible.

Character of Impacts: The proposed Woodfin Suite Hotel and Timeshare Resort structure would appear taller than other immediately adjacent existing or proposed structures when the views are not obstructed by structures, landscaping or distance. As noted, the Woodfin Suite Hotel and Timeshare Resort structure is consistent with the stated height guidelines as approved by CCC and the County of Los Angeles as defined in the Marina del Rey LUP. The height of the building would be a dominant visual element as seen from the immediately adjacent viewing locations, but would only be another structure in the

panoramic view that comes from more distant viewing locations such as Mother's Beach and Fisherman's Village.

Level of Impact: Site development of the Woodfin Suite Hotel and Timeshare Resort would not alter any defined significant visual feature, especially of the scenic Marina. The proposed project (Parcel 9U) would not eliminate views of the marina from the distant viewing locations across the marina from the proposed Woodfin Suite Hotel and Timeshare Resort project site. While the height of the proposed structure would alter the visual character of the property, the design is consistent with the Marina del Rey LCP. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort structures would result in a significant intensification of development on the project sites. The land use changes accommodated in the 1996 updated Marina del Rey LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225--foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered. Although, the proposed apartment buildings and hotel and timeshare resort are compliant with past CCC approvals, the LCP-prescribed building height standards and are consistent with the County's desire to recycle Phase I marina development and intensify land uses within the marina (see discussion in **Section 5.17, Land Use and Planning**). The Woodfin Suite Hotel and Timeshare Resort building could appear out of character in comparison to immediately adjacent uses in terms of height and mass, as the structure will dominate a larger percentage of the available viewshed. In contrast, the hotel tower occupies only a very small portion of the viewshed available from more distant locations, such as Mother's Beach and Fisherman's Village, and the panoramic view from these locations includes other structures of similar size, height, and mass. Consequently, there are potentially significant view impacts on immediately adjacent locations, but no potential view impacts on more distant viewing locations.

Mitigation: To mitigate impacts associated with the height and mass of the proposed Woodfin Suite Hotel and Timeshare resort project from Viewing Locations One, Two, and Seven, the following mitigation measures are proposed.

5.6-1: A deed restriction shall be placed on the southern portion of Parcel 9U requiring that the wetland park be retained as natural open space.

5.6-2: On the street level of the project landscaping to the satisfaction of the County of Los Angeles Design Control Board shall be implemented to reduce visual impacts of the project when viewed from adjacent public rights of way~~this location~~. Further, if approved by the Design Control Board, areas of landscaping shall be included on

terraces and balconies ~~that could be~~ incorporated into the design of the hotel structure and associated parking structure.

5.6-3: Articulation and variations in color or building materials to the satisfaction of the County of Los Angeles Design Control Board~~could~~ shall be incorporated into the lower levels of the hotel and parking structure to~~. These actions would~~ reduce visual resource impacts on Via Marina

Conclusion: Significant after mitigation.

5.6.3.3.4.4 Threshold: Is the project likely to create substantial sun shadow, light or glare problems?

Analysis: The shade and shadow created by an object blocking sunlight varies dependent upon the time of year and time of day. This variation is a result of the sun's azimuth (the position of the earth in its annual orbit relative to the sun, due to the tilted axis of the earth) and altitude (the position of the earth in its daily rotation relative to the sun). Because the sun is lowest in the southern sky during the winter, project development would cast the longest shadow during this season (the worst-case condition). During the summer months, the sun is directly overhead, and the shadow length is more limited. Shade-sensitive uses such as residences and public parks are considered to be sensitive receptors with respect to shade and shadow.

The series of Figures 5.6-26A–C, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Summer Solstice, 9:00 AM through 5:00 PM, **Figures 5.6-27A–C, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Autumnal Equinox, 9:00 AM through 5:00 PM**, **and Figures 5.6-28A–C, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 9:00 AM through 3:00 PM**, depicts post-development site conditions for the Woodfin Suite Hotel and Timeshare Resort project hourly from 9:00 AM through 5:00 PM (3:00 PM in winter) on the summer solstice (June 21), the autumnal equinox (September 21), and the winter solstice (December 21), respectively. These figures represent the times of the year when shades would be at their shortest (summer solstice) to when shadows are longest (Winter Solstice).

As shown in **Figures 5.6-28A–C**, during the winter solstice the Woodfin Suite Hotel and Timeshare Resort would cast shadows throughout the day on the project's proposed residential uses to the north on Parcels 10R and FF The Woodfin Suite Hotel and Timeshare Resort would cast shadows on portions of Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin B in the afternoon only. No off-site sensitive receptors would be shaded during the Winter Solstice.

As shown **in Figures 5.6-26A–C and 5.6-27A–C**, during the summer solstice and autumnal equinox the Woodfin Suite Hotel and Timeshare Resort would cast shadows from between 9:00 AM until sometime after 10:00 AM on a portion of the existing residential uses west of the project. No other sensitive receptors would be shaded. The Woodfin Suite Hotel and Timeshare Resort would also cast shadows on portions of Via Marina in the morning only and small portions of the western portion of Marina del Rey Basin B in the afternoon only. The northern portion of the proposed wetland park would receive some shading from the Woodfin Suite Hotel and Timeshare Resort structure in the later afternoon.

~~is directed towards the winter condition, since eight months out of the year the project would only cast minimal shade or shadow onto adjacent land area.~~

~~**Figure 5.6-19, Shade and Shadow Effects; Woodfin Suite Hotel and Timeshare Resort – Winter Solstice, 9:00 AM and 3:00 PM,** depicts post-development site conditions for the Woodfin Suite Hotel and Timeshare Resort project during 9:00 AM and 3:00 PM in the winter solstice (December 21)~~

Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues.

Level of Impact: County of Los Angeles Department of Regional Planning thresholds defines a significance threshold that states, "Is the project likely to create substantial sun shadow, light or glare problems?" ~~As defined in **Figure 5.6-19**~~As shown on **Figures 5.6-26A-C** and **5.6-27A-C,** the Woodfin Suite Hotel and Timeshare Resort would cast shadows in the non-winter months on small portions of the existing residential uses to the west across Via Marina, but the duration of these shadows would be limited (i.e., less than 2 hours). Given the limited extent and duration of the shadows, the project would not result in substantial sun shadow problems. Therefore, the project's shade and shadow impacts would be less than significant. For the reasons set forth above, the project's glare impacts would also be less than significant.

Mitigation: As impacts are not considered significant, no mitigation measures are proposed or are required.

Conclusion: Not significant.

5.6.3.3.5 1.46-acre Public Park Project

As a component of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project, a public park of approximately 1.46 acres will be developed within the southerly portion of Parcel 9U. The park will consist of a 0.47-acre restored wetland surrounded by a 0.99-acre upland buffer. Given that no structures are proposed, impacts on views from surrounding roadways are limited and view corridors are not appropriately considered for this project component. The impact of development of a wetland park on a portion of Parcel 9U is not considered further in this impact analysis.

5.6.3.3.6 Public–Serving Boat Space Project

Within the westerly portion of Marina del Rey Boat Basin B, a public-serving anchorage will be developed, containing approximately 542 lineal feet of dock space with berthing spaces for between 7 and 11 vessels (depending on the relative sizes of vessels using the public anchorage at any one time). An area for dinghy moorage will be provided at the northerly end of the public anchorage. The anchorage would be situated adjacent to the Parcel 9U bulkhead within Marina del Rey Basin B. Given that no structures are proposed, other than the docks that are largely constructed at water level, impacts on views from surrounding roadways or other public viewing areas are limited and view corridors are not appropriately considered for this project element. Due to the lack of any impact potential from the construction or operation of the public-serving boat spaces, the impact of development of between seven to 11 public-serving boat spaces is not considered further in this impact analysis.

5.6.4 CUMULATIVE IMPACTS

Cumulative projects are listed in **Section 4.0** of this draft EIR. With the exception of development recently approved or in construction on Parcels 100 and 101 that are considered in this analysis, most cumulative projects are outside of the viewshed affected by this project. Development proposed and subsequently approved on Parcels 100 and 101 was consistent with or substantially lower than height standards defined in the Marina del Rey LUP and were generally consistent with existing or approved structures near the project site(s).

It is possible that one of the related projects, the Venice Dual Force Main Project (Force Main Project), could be under construction at the same time as the proposed project. Depending on the ultimate alignment and construction technique chosen, the Force Main Project could involve the digging of trenches and/or pits as well as the staging of construction equipment at the intersection of Via Marina and Marquesas Way and along Via Marina in the vicinity of the project. The Marina del Rey LUP designates Via Marina as first priority for study as a scenic highway. The Force Main Project may also involve the removal of mature street trees along Via Marina. Utilizing the criteria of the lead agency of that

jurisdiction, the City of Los Angeles, the EIR for the Force Main Project concluded that that project would result in a temporary visual character impact due to substantial construction, including lane closures in the public rights-of-way and a long term impact due to the removal of mature street trees.

It is possible that project construction could occur at that same time as construction of the Force Main Project. However, unlike the Force Main Project, the Neptune Marina and Woodfin Suite Hotel and Timeshare Resort Project would not involve extensive construction in Via Marina, a scenic highway designated under the Marina del Rey LUP. The proposed project may require the removal of up to four mature street trees within the median on Via Marina, a designated scenic highway**.** However, Via Marina is designated as a scenic highway because it affords views of the Marina and not because it has mature trees in the median. Moreover, mature trees that will be removed will be replaced with new trees upon completion of infrastructure improvements along the Via Marina median. Therefore, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would not result in any significant visual quality impacts during construction, and cumulative impacts would be less than significant.

As noted above and in the Introduction (**Section 2.3.2**), the land use changes accommodated in the 1996 updated Marina LCP, including the provision of an expanded view corridor on Parcel 9U to accommodate a maximum 225-foot building height, complied with CEQA and Coastal Act section 302521, which requires that coastal development be sited to protect the scenic and visual qualities of the coastal zone and community character. Therefore, this issue already has been considered.

Nonetheless, out of an abundance of caution, this EIR analyzes the potential for the Woodfin Suite Hotel and Timeshare Resort Project to create significant visual impacts. When viewed panoramically, the Project will not create any visual impacts because the hotel and timeshare structure blends into a skyline that includes other buildings of substantially similar height. When viewed from a nearby location, however, the Woodfin Suite Hotel and Timeshare Resort Project would result in a significant visual impact because its height could be considered out of character with the existing and proposed development. If the Force Main Project results in the removal of mature street trees adjacent to Parcel 9U, such removal could add incremental to the Woodfin Suite Hotel and Timeshare Resort Project's visual effects. Therefore, Woodfin Suite Hotel and Timeshare Resort Project's, together with the Force Main Project, is conservatively considered to result in a significant cumulative impact.

The 1996 LCP, as certified, presents a design approach for several relatively tall buildings for the Marina del Rey area which serve to identify and frame the skyline in order to facilitate for more open space and view corridors to the Marina at the street level. Parcels 9U, 100/101, 112/113, and 145 are all entitled to propose projects with heights up to 225 feet. To the extent that any of these other parcels have proposed

in the future structures up to 225-feet in height, the urban design aspects of such proposal would have been considered and allowed by the current LCP.

Interfaces between tall buildings and lower two-, three-, and four-story buildings abound in the highly urbanized Los Angeles area as limited land resources are available to satisfy the demand for such uses. The proposed 225 feet height of the Woodfin Suite Hotel and Timeshare Resort has a corresponding *positive* cumulative impact on view corridors and open space by concentrating the development footprint. In doing so, the project represents a more efficient form of development for its intensity. For all of these reasons, cumulative impacts with respect to these projects were not considered significant.

The proposed project was determined to result in less than significant shadow effects on off-land uses as well as less than significant light and glare effects. Moreover, as previously stated, most of the cumulative projects are not in proximity to the project sites. With respect to shadow effects, cumulative project that are in proximity to the project site would not be expected to affect the same land uses affected by the proposed project. For these reasons, shadow, light and glare effects would be less than cumulatively considerable and therefore less than significant.

Cumulative Mitigation Measures: Impacts to visual qualities are largely created on the sites of the individual related projects. As Phase II Marina del Rey development becomes more prominent, the existing visual character of the marina will be altered. In the future, larger structures will become more commonplace within Marina del Rey, which will increase the development intensity. Over time, the project's height and mass will become more consistent with the character of the area as new uses build out. To minimize impacts on the visual resources environment as future projects are proposed, all proposed development within the marina is subject to review and approval by the DCB, which is responsible for the enforcement of development standards within Marina del Rey.

Conclusion: Not significant.

5.6.5 UNAVOIDABLE SIGNIFICANT IMPACTS

5.6.5.1 Neptune Marina Parcel 10R Project

Site development would alter the visual character of the site by incrementally increasing building height and mass. The project would also be visible along Via Marina, a roadway that is designated as first priority for study scenic highway by the Marina del Rey LUP. However, because (1) the project improves views of the marina (as no views to the Marina currently are provided through the existing Neptune Marina Apartments at Parcel 10R, but view corridors to the water will be provided over the site in the proposed project); (2) the proposed project is consistent with the building height classifications for

Parcel 10R; (3) the project is consistent with all required view corridors; (4) the project would not directly or indirectly affect water views of the marina or any other natural visual feature; (5) the project has been reviewed and conceptually approved by the Design Control Board; and (6) the project is consistent with the scale and character of development envisioned as part of Marina del Rey Phase II development proximal to Via Marina, the Neptune Marina Parcel 10R project would not have significant impacts on visual resources. Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues. Given the information provided above, impacts associated with the Neptune Marina Parcel 10R project are not considered significant. Shadow impacts are also considered less than significant.

5.6.5.2 Neptune Marina Parcel FF Project

With respect to Neptune Marina Parcel FF, the project does not affect views of the marina from Via Marina; the project is consistent with all required view corridors; the project would not directly or indirectly affect water views of the marina or any other natural visual feature; the project has been reviewed and conceptually approved by the Design Control Board; and the project is consistent with the scale and character of development envisioned as part of Marina del Rey Phase II development proximal to Via Marina. As noted, the current LCP-prescribed height limitation for Parcel FF is 25 feet. However, as described above, the County and Legacy Partners are requesting a joint LCP amendment to change the Parcel FF height classification from its current Height Category 1 classification to Height Category 3. Upon the California Coastal Commission's certification of this proposed LCP amendment, the proposed 55-foot-tall apartment building will be consistent with the LCP height category for Parcel FF, as amended. Further, structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues. Shadow impacts are also considered less than significant.

Given the information provided above, impacts associated with the Neptune Marina Parcel FF project are not considered significant.

5.6.5.3 Woodfin Suite Hotel and Timeshare Resort Parcel 9U Project

With respect to development on Parcel 9U, the project is fully consistent with the 225-foot building height limit approved by the CCC and prescribed for Parcel 9U in the certified LCP (development on Parcel 9U would not exceed 225 feet from the finished pad elevation, exclusive of appurtenant, screened roof-top equipment, parapets and architectural features); see discussion in **Section 5.17, Land Use and Planning**. The project is consistent with all required view corridors; and the project has been reviewed and conceptually approved by the Design Control Board. Structures proposed on the project site utilize a variety of exterior surface treatments. To reduce potential glare or reflectivity impacts, these surfaces are intended to be non-reflective or oriented in a way that would result in limited off-site glare or reflectivity impacts. To verify limiting glare or reflectivity issues, this project has been reviewed and approved by the County of Los Angeles Design Control Board that is intended to review project design issues. Shadow impacts are also considered less than significant.

However, ~~the project would directly affect vistas of the marina from Via Marina a defined Scenic Highway that is considered visually important. Further~~the project's proposed height is considered to be out of character with existing as well as recently approved projects ~~near~~in the immediate vicinity of Parcel 9U, and from a limited perspective at two more distant locations, Mother's Beach and Fisherman's Village, although there are also several other high-rise buildings visible on the horizon from those locations. Therefore, visual impacts associated with the Woodfin Suite Hotel and Timeshare Resort project proposed on Parcel 9U are considered significant.

5.7 TRAFFIC/ACCESS

SUMMARY

Following completion and occupancy, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project (project) could generate a total of approximately 3,104 net new daily trips, including 253 net new trips during the AM peak hour and 228 net new trips during the PM peak hour. A total of 1,019 parking spaces will be provided for the 526 residential units (including guest parking), with an additional 131 spaces for boat slip parking. A maximum of approximately 360 parking spaces including 339 valet-only spaces and 21 "self-park" spaces will be provided separately for the proposed hotel.

Prior to mitigation, project traffic could produce significant direct traffic impacts at four nearby intersections: Admiralty Way and Via Marina; Washington Boulevard and Via Marina/Ocean Avenue; Lincoln Boulevard and Mindanao Way, and Admiralty Way and Mindanao Way. Mitigation measures are recommended in this section to reduce this potential impact to a less than significant level.

Prior to mitigation, cumulative traffic would significantly impact twelve intersections: Admiralty Way and Via Marina; Washington Boulevard and Via Marina/Ocean Avenue; Admiralty Way and Palawan Way; Washington Boulevard and Palawan Way; Washington Boulevard and Lincoln Boulevard; Lincoln Boulevard and Marina Expressway; Lincoln Boulevard and Bali Way; Lincoln Boulevard and Mindanao Way; Lincoln Boulevard and Fiji Way; Admiralty Way and Bali Way; Admiralty Way and Mindanao Way; and Marina Expressway EB and Mindanao Way. Mitigation measures are recommended in this section to reduce this potential cumulative impact to a less than significant level. However, if these or other equally effective measures are not installed, significant cumulative traffic impacts would remain.

The project would be required to pay the traffic mitigation fees to the County of Los Angeles pursuant to the Marina del Rey Specific Plan Transportation Improvement Program (TIP). This fee is intended to address regionally significant impacts and/or impacts resulting from cumulative development in and around the Marina, by providing "fair share" contributions to planned roadway improvements identified in the Marina del Rey Land Use Plan (LUP). The fee is based on the amount of project PM peak-hour trips generated in the Marina, as well as the trips that leave the Marina (regional trips).

The County's traffic mitigation fee structure is currently $5,690 per PM peak-hour trip. Based on the expected project trip generation for the project of 228 net PM peak-hour trips, the proposed project would be required to pay $1,297,320 in trip mitigation fees ($716,940 attributable to the planned residential and anchorage developments on Parcels 10R and FF and $580,380 attributable to the planned hotel/timeshare resort development on Parcel 9U). After payment of mitigation fees, impacts for the project would be less than significant; however, temporary significant impacts would remain if implementation of the prescribed mitigation measures are delayed or not implemented.

5.7.1 INTRODUCTION

This section presents an overview of existing traffic and access characteristics in the Marina del Rey area. It also discusses potential impacts associated with development of the Neptune Marina Apartments and Anchorage/Woodfin Suites Hotel and Timeshare Resort Project (project). Existing conditions are described followed by an impact analysis for the project. The impact analysis presents a discussion of the project as a whole, and then analyzes impacts of the individual parcel developments (Parcels 10R, FF, and 9U). This section also includes a discussion of the cumulative impacts of the project in conjunction with other related projects. Where impacts are identified, mitigation measures are recommended to reduce such impacts to acceptable levels.

5.7.2 METHODOLOGY

This section summarizes the findings of a traffic report prepared by Crain & Associates for the Neptune Marina Apartments and Anchorage/Woodfin Suites Hotel and Timeshare Resort Project in December 2007. A complete copy of this traffic report is included in **Appendix 5.7** of this EIR.

Traffic volume data were obtained from recent counts conducted in years 2006 and 2007 by The Traffic Solution (an independent traffic data collection company) and Crain & Associates (the firm that prepared the traffic study), except for the counts at the intersection of Washington Boulevard and Palawan Way that were conducted in October 2005. (Traffic counts were also collected in 2007 at the intersection of Washington Boulevard and Palawan Way; however, the 2007 counts were found to be lower than the 2005 counts. To be conservative, the higher 2005 counts were used for this intersection.) Additionally, San Diego Freeway and Marina Freeway/Expressway count data were obtained from the California Department of Transportation (Caltrans). Where necessary, counts were supplemented by traffic data collected by the Los Angeles County Department of Public Works (LACDPW) or the Los Angeles City Department of Transportation (LADOT). Other data pertaining to intersection geometrics, parking restrictions and signal operations were obtained through recent field surveys in the project study area.

5.7.2.1 Traffic Study Intersections

An analysis of current traffic conditions was conducted on the streets and highways serving the project area. Detailed traffic analyses for the project were performed at the following 17 intersections.

1. Via Marina/Tahiti Way
2. Via Marina/Marquesas Way
3. Via Marina/Panay Way
4. Admiralty Way/Via Marina
5. Washington Boulevard/Ocean Avenue/Via Marina

6. Admiralty Way/Palawan Way
7. Washington Boulevard/Palawan Way
8. Lincoln Boulevard/Washington Boulevard
9. Lincoln Boulevard/Marina Expressway (SR-90)
10. Lincoln Boulevard/Bali Way
11. Lincoln Boulevard/Mindanao Way
12. Lincoln Boulevard/Fiji Way
13. Admiralty Way/Bali Way
14. Admiralty Way/Mindanao Way
15. Admiralty Way/Fiji Way
16. Marina Expressway (SR-90) westbound/Mindanao Way
17. Marina Expressway (SR-90) eastbound/Mindanao Way

These project area intersections (see **Figure 5.7-1, Study Intersection Locations**) are expected to be most directly affected by project traffic generation. Intersections in the project area are within the jurisdiction of both the County and City of Los Angeles. All analyzed intersections are traffic signal controlled and exhibit typical two- or three-signal phases, with the exception of the intersection of Washington Boulevard and Palawan Way, which is a "tee" intersection, and is STOP sign controlled along Palawan Way.

The methodology used to study traffic operations at each project study area intersection was based on procedures outlined in Circular Number 212 of the Transportation Research Board.[1] The traffic analysis has~~shall be~~ been reviewed and approved by the Los Angeles County Department of Public Works~~prior to any formal public hearings on the project~~.

5.7.2.2 Traffic Generation Methodology

Vehicle trip generation rates for various types of developments within Marina del Rey are specified in Appendix G (TIP) of the Marina del Rey Local Implementation Program (LIP), which is in effect for the project site. This document provides the PM peak-hour trip rates for the proposed project's residential (apartment) uses. The TIP does not specify daily or AM peak-hour trip generation rates for the proposed uses. However, the traffic study upon which the TIP PM peak-hour rates were derived does identify AM peak-hour rates.[2] As these rates are consistent with the trip generation methodology utilized for the PM

1 Transportation Research Board, *Interim Materials on Highway Capacity*, Circular Number 212, Washington, D.C., 1980.

2 DKS Associates in Association with Gruen Associates, Table 2-11, *Marina del Rey Traffic Study Final Report*, January 17, 1991.

peak hour, the AM rates from the traffic study were also used. Daily trip rates were calculated based on the 6th Edition of the *Trip Generation Manual*, published by the Institute of Transportation Engineers (ITE),[3] which is the current industry standard for trip generation data. Daily trip generation factors for the proposed project uses were calculated based on the ratio of peak-hour-to-daily rates for the ITE data, applied to the peak-hour TIP rates.

Trip rates used in the traffic analysis for the proposed projects are listed in **Table 5.7-1, Project Trip Generation Rates**.

Table 5.7-1
Project Trip Generation Rates

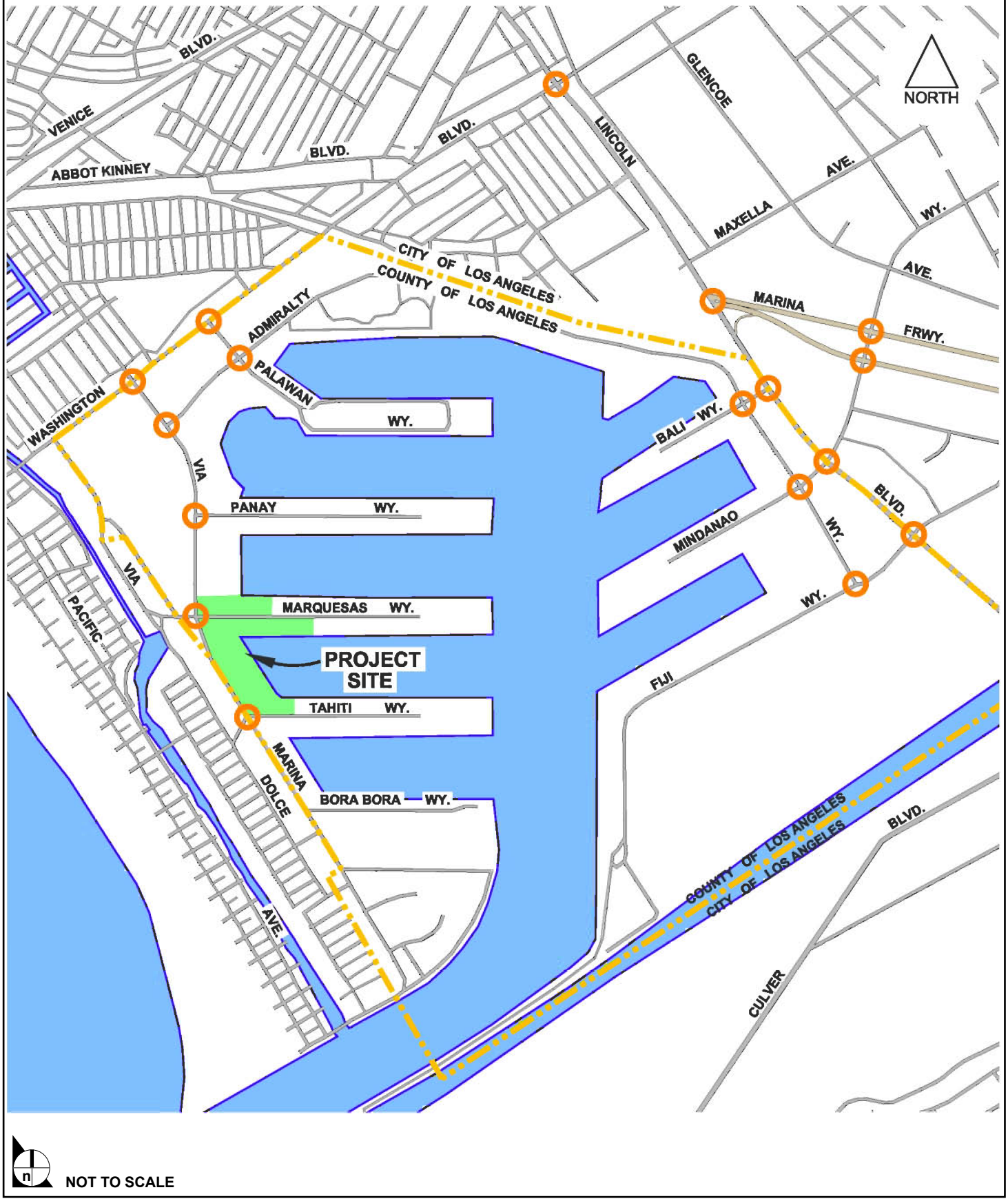
Apartments (per dwelling unit)			
Daily:	T = 3.960(U)		
AM Peak Hour	T = 0.349(U)	I/B = 18%	O/B = 82%
PM Peak Hour	T = 0.326(U)	I/B = 68%	O/B = 32%
Hotel (per room)			
Daily:	T = 5.339 (R)		
AM Peak Hour	T = 0.406 (R)	I/B = 54%	O/B = 46%
PM Peak Hour	T = 0.353 (R)	I/B = 45%	O/B = 55%
Boat Slips (per berth)			
Daily:	T = 2.883 (S)		
AM Peak Hour	T = 0.126 (S)	I/B = 34%	O/B = 66%
PM Peak Hour	T = 0.137 (S)	I/B = 36%	O/B = 64%

T = Trip Ends; U = Dwelling Unit; R = Hotel Rooms; S = Boat Slips; I/B = Inbound Trip Percent; O/B = Outbound Trip Percent.

5.7.2.3 Critical Movement Analysis Methodology

Impacts for the 17 study intersections were assessed using Critical Movement Analysis (CMA) as required by the County of Los Angeles Traffic Impact Analysis Report Guidelines. In the discussion of CMA for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the Level of Service provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" (LOS) describes the quality of traffic flow. The following is a description of the operating characteristics for each LOS category.

3 Institute of Transportation Engineers, *Trip Generation*, 6th Edition, Washington, D.C., 1997.



NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-1**

Study Intersection Locations

As shown in **Table 5.7-2, Level of Service Operating Characteristics**, LOS A to C operate quite well. LOS D typically is the level for which a metropolitan area street system is designed. Level E represents volumes at or near the capacity of the highway, which might result in stoppages of momentary duration and fairly unstable flow. LOS F occurs when an intersection is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

Table 5.7-2
Level of Service Operating Characteristics

Level of Service	Range of Description of Operating Characteristics
A	Uncongested operations; all vehicles clear in a single cycle.
B	Same as above.
C	Light congestion; occasional backups on critical approaches.
D	Congestion on critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.
F	Forced flow with stoppages of long duration.

Critical movement volumes determine the LOS of an intersection. The values indicated in **Table 5.7-3, Critical Movement Volume Ranges for Determining Levels of Service**, were used in this impact analysis to determine the applicable LOS.

Table 5.7-3
Critical Movement Volume Ranges[1] for Determining Levels of Service

Level of Service	Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	---------- Not Applicable ----------		

[1] *For planning applications only (i.e., not appropriate for operations and design applications).*

"Capacity" represents the maximum total hourly vehicle volume movement in the critical lanes, which have a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. The CMA indices used in this study were calculated by dividing the sum of critical movement volumes (**Table 5.7-3**, above) by the appropriate capacity value for the type of signal control present or proposed at the study area intersections. The LOS corresponding to a range of CMA values is shown in **Table 5.7-4, Level of Service as a Function of CMA Values**.

Table 5.7-4
Level of Service as a Function of CMA Values

Level of Service	CMA Values
A	≤0.60
B	>0.60 ≤0.70
C	>0.70 ≤0.80
D	>0.80 ≤0.90
E	>0.90 ≤1.00
F	>1.00

5.7.3 PROJECT SETTING

Below is a summary of existing roadways in the vicinity of the proposed project area. For a more detailed description on these roadways, see the traffic report prepared by Crain & Associates and provided in **Appendix 5.7**.

5.7.3.1 Freeways

The San Diego Freeway (Interstate 405). This freeway traverses north-south through the Greater Los Angeles metropolitan area and currently carries in excess of 298,000 vehicles per day (VPD). This freeway provides convenient project access, via the regional freeway system, to all other areas of the Los Angeles region.

- The Marina Freeway/Expressway (State Route 90). This portion of the Marina Freeway carries more than 75,000 VPD and is a short regional facility serving a roughly east-west alignment between Slauson Avenue (east of Sepulveda Boulevard) and Lincoln Boulevard.

With the exception of High Occupancy Vehicle (HOV) lane additions, no significant highway improvements in the project area were identified by either the County or City of Los Angeles as ongoing or likely to be completed within the year 2013 project development timeline. Therefore, for purposes of

this analysis of future traffic conditions, as discussed in the following section, no improvements to the existing freeway/expressway system in the study area were assumed. This assumption results in a "worst-case" analysis and more readily identifies locations where improvements should be made in order to provide sufficient roadway capacity to accommodate project traffic.

5.7.3.2 Streets and Highways

All of the study intersections are traffic signal controlled, with the exception of Washington Boulevard and Palawan Way, which is a tee intersection, STOP sign controlled along Palawan Way.

- Washington Boulevard. An east-west Major Highway located to the north of the project site.
- Admiralty Way. A four-lane collector facility, serving as a frontage road around the north and east portions of the Marina, between Via Marina on the west and Fiji Way on the southeast.
- Via Marina. A north-south facility that serves the western portion of Marina del Rey. This roadway also forms the western boundary of the project site and serves as the main access roadway for the project.
- Lincoln Boulevard. In the project area, this roadway is striped to provide a six-lane roadway with left-turn channelization (designated or permissive left-turn lanes) at most intersections.
- Tahiti Way. A short two-lane local street that provides access to the Marina del Rey "Basin A" and "Basin B" areas.
- Marquesas Way. This two-lane facility is located opposite Via Dolce at Via Marina and provides access to the "Basin B" and "Basin C" areas.
- Panay Way. Designated a local street, provides one lane in each direction and access to the Marina del Rey "Basin C" and "Basin D" areas.
- Palawan Way. Designated a local street, provides two lanes per direction on the segment between Admiralty Way and Washington Boulevard, separated by a raised median island.
- Bali Way. A short local street providing access from Lincoln Boulevard and Admiralty Way to the Marina del Rey "Basin F" and "Basin G" areas. Bali Way provides a single lane in each direction.
- Mindanao Way. A Secondary Highway providing two lanes in each direction, although some sections are widened to permit additional traffic lanes and/or turn-lane channelization, particularly at the SR-90 and Lincoln Boulevard intersections.
- Fiji Way. Designated a local street, provides one lane per direction plus on-street parking from east of Lincoln Boulevard to the eastern terminus at La Villa Marina.

5.7.3.3 Public Transit

The Los Angeles County Metropolitan Transportation Authority (Metro) has established an extensive grid system of bus routes throughout the Los Angeles region. Marina del Rey and adjacent communities, as well as the cities of Culver City and Santa Monica, are particularly well served by public transit. The most important bus routes serving the project area are described below.

- Metro Line 108. This bus line provides service between Marina del Rey on the west and the Pico Rivera community on the east. In the study area, Line 108 operates on a loop route through the Marina. Between the Marina and Pico Rivera, this line travels primarily along Mindanao Way/Short Avenue, Centinela Avenue, Jefferson Boulevard, and Slauson Avenue. The route travels to Fox Hills Mall and through the office development area between Centinela Avenue and Slauson Avenue, east of Sepulveda Boulevard, providing a link between the proposed project and potential shopping and employment locations. Buses operate on this line on weekdays with headways of approximately 30 to 45 minutes. Weekend and holiday service is also provided on a limited schedule. Headways on the weekend and holidays are approximately 60 minutes throughout the day.

- LADOT Express Line 437. This line, a service of the LADOT, operates between Marina del Rey on the west and Downtown Los Angeles on the east. In the project vicinity, Line 437 has several bus stops along Via Marina including a stop at Marquesas Way. In the vicinity of Marina del Rey, this line travels along Pacific Avenue, Via Marina, and Admiralty Way. Buses on this route continue on Mindanao Way and Alla Road to Culver Boulevard through Culver City. This line operates in the eastbound to Downtown Los Angeles during the morning peak period and in the westbound from Downtown Los Angeles to Culver City, Marina del Rey, and Venice during the afternoon peak periods. Headways for this bus route near the project site are generally about 15 to 30 minutes.

- Culver City Bus Line 1. This bus line runs between the Venice community on the west and the West Los Angeles Transit Center at Fairfax Avenue on the east. Line 1 travels south from Windward Avenue along Pacific Avenue to Washington Boulevard, turning east and continuing along Washington Boulevard through Mar Vista and Culver City to the West Los Angeles Transit Center. In the project vicinity, this line provides a stop along Washington Boulevard at Via Marina. Line 1 buses operate on weekdays, with limited weekend and holiday service. Weekday headways at the Washington Boulevard/Via Marina stop are approximately every 15 to 30 minutes throughout the day.

In addition to these key transit routes that are within walking distance of the project site, other bus routes that also serve the Marina del Rey community (e.g., along or near Lincoln Boulevard) include Culver City Lines 2 and 7, and the Santa Monica Big Blue Bus Line 3 and Rapid 3. Many more bus routes are available via transfers to other routes or transit providers. When these transfer opportunities are considered, all areas within the Los Angeles region are accessible via public transit. Thus, it is possible that some of the trips generated by the proposed project could utilize public transit.

5.7.4 EXISTING CONDITIONS

5.7.4.1 Existing Traffic Volumes

Existing (2007) traffic volumes during the AM and PM peak periods for the study intersections are shown on **Figure 5.7-2, Existing (2007) Traffic Volumes – AM Peak Hour**, and **Figure 5.7-3, Existing (2007) Traffic Volumes – PM Peak Hour**, respectively.

5.7.4.2 Project Trip Distribution and Traffic Assignment

Primary factors affecting trip distribution are the relative distribution of employment, educational and retail centers that would be used by the residents and guests of the project. Another key factor in trip distribution is the availability of roadway access to and from the site. Data from the Los Angeles Regional Transportation Study (LARTS) forecasts, as well as information presented in the current Los Angeles County Congestion Management Plan (CMP), were analyzed in order to estimate regional traffic distribution. Lastly, actual vehicle turning movements in and around the project vicinity were observed and general geographic trip distribution characteristics were developed.

The percentage split of trips which are applicable to the Neptune Marina Apartments and Anchorage/Woodfin Suites Hotel and Timeshare Resort Project, by direction, is shown in **Table 5.7-5**.

Table 5.7-5
Directional Trip Distribution

Direction	Percentage of Trips
North	25%
East	35%
South	35%
West	5%
Total	**100%**

5.7.4.3 Critical Movement Analysis

CMA values and the corresponding LOS for existing (2005) traffic conditions for AM and PM peak-hour conditions for the 17 study intersections are shown below in **Table 5.7-6, Critical Movement Analysis (2007) Summary**. The values in **Table 5.7-6** show that most intersections in the project study area are operating at acceptable levels of service. However, several key locations, particularly the intersection of Lincoln Boulevard and Washington Boulevard and at the intersection of Lincoln Boulevard and Mindanao Way, exhibit conditions at or near capacity, creating several "bottlenecks" to smooth traffic flow along this important transportation corridor.

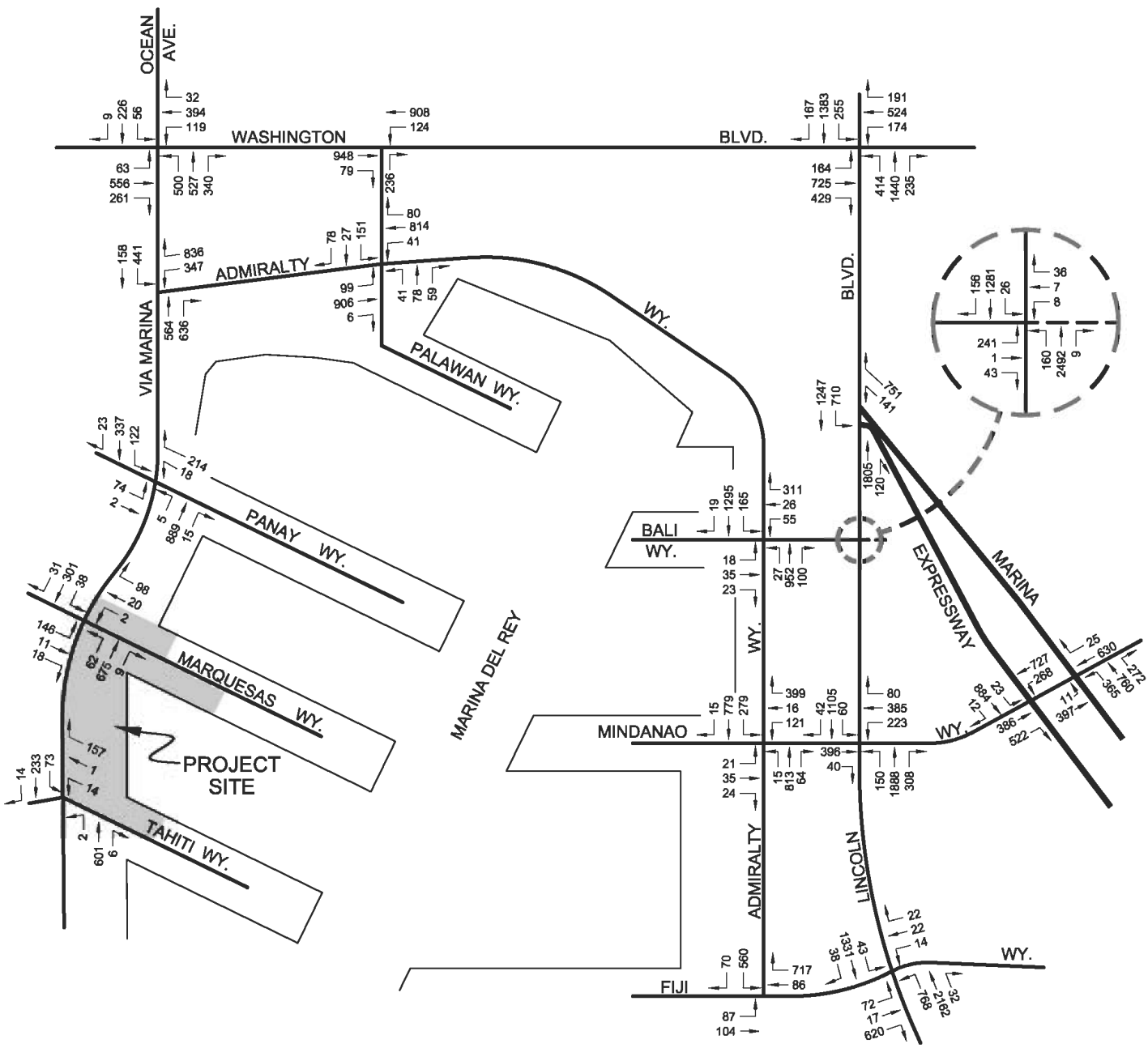
5.7.4.4 Traffic Capacity of Marina del Rey

As described in the Environmental Setting chapter of this EIR, all new development within Marina del Rey is regulated by the Marina del Rey Land Use Plan (LUP), which is a component of the certified ~~Los Angeles County~~ Marina del Rey Local Coastal Program.[4] This document specifies the amount of allowable new development within Marina del Rey, based on the amount of additional traffic generated and mitigation measures to be installed incrementally with the new development. Marina del Rey development, as defined by the LUP, is divided into two phases: Phase I and Phase II. Phase I defines the existing condition and is the amount of development considered to be "existing" at the present time. Phase II defines the future conditions and defines development intensities above and beyond the amount of existing Marina del Rey development.

Table 5.7-6
Critical Movement Analysis (2007) Summary

		AM Peak Hour		PM Peak Hour	
No.	**Intersection**	**CMA**	**LOS**	**CMA**	**LOS**
1.	Via Marina/Tahiti Way	0.264	A	0.171	A
2.	Via Marina/Marquesas Way	0.260	A	0.180	A
3.	Via Marina/Panay Way	0.346	A	0.253	A
4.	Admiralty Way/Via Marina	0.696	B	0.746	C
5.	Washington Blvd./Ocean Ave./Via Marina	0.710	C	0.762	C
6.	Admiralty Way/Palawan Way	0.429	A	0.480	A
7.	Washington Blvd./Palawan Way	0.640	B	0.716	C
8.	Lincoln Blvd./Washington Blvd.	0.775	C	1.337	F
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.679	B	0.721	C
10.	Lincoln Blvd./Bali Way	0.305	A	0.498	A
11.	Lincoln Blvd./Mindanao Way	0.635	B	0.669	B
12.	Lincoln Blvd./Fiji Way	0.554	A	0.575	A
13.	Admiralty Way/Bali Way	0.365	A	0.424	A
14.	Admiralty Way/Mindanao Way	0.531	A	0.724	C
15.	Admiralty Way/Fiji Way	0.245	A	0.345	A
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.405	A	0.531	A
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.615	B	0.738	C

4 *Marina del Rey Land Use Plan*, County of Los Angeles Development of Regional Planning, Certified February 8, 1996.



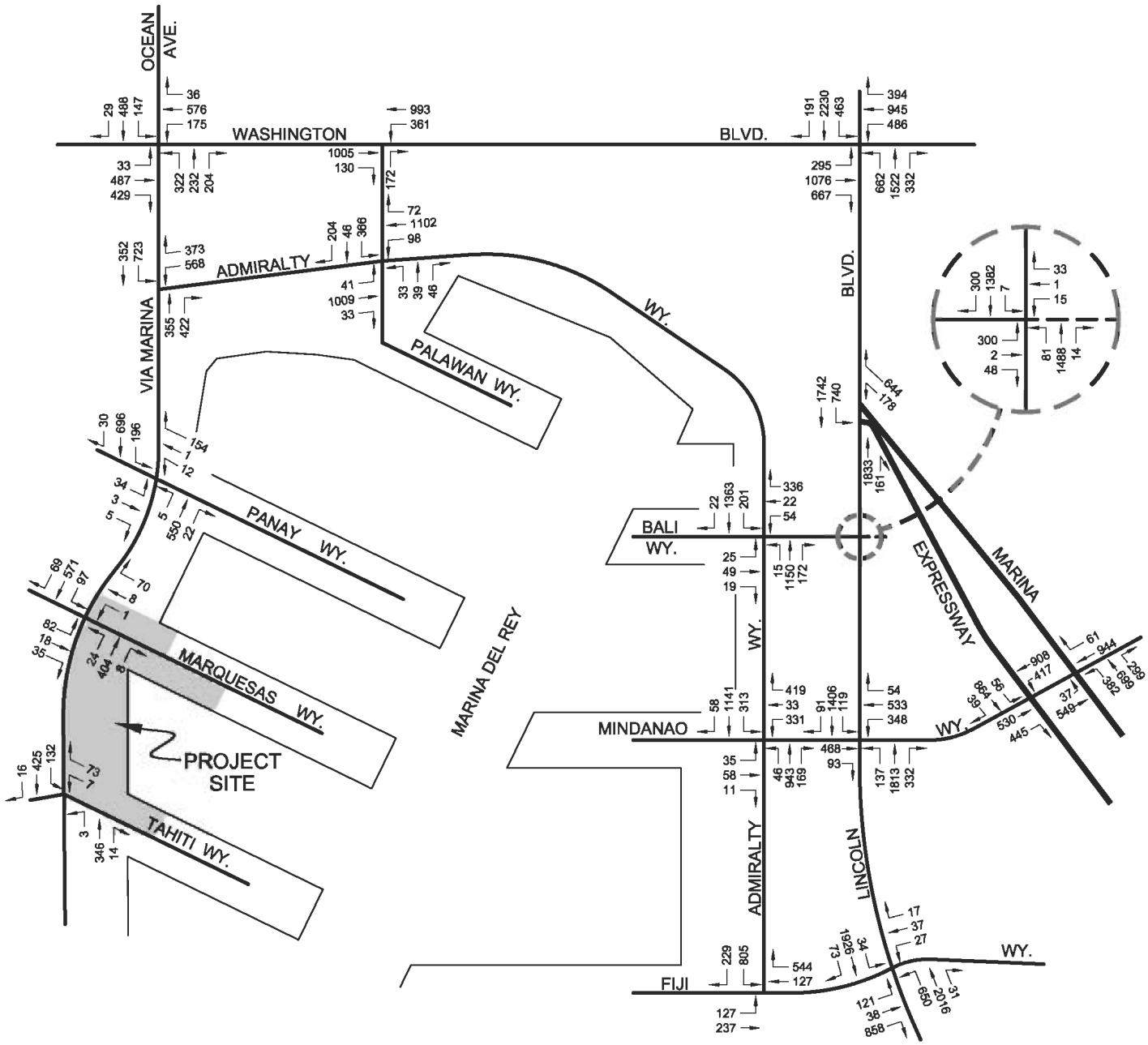
NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-2**

Existing (2007) Traffic Volumes - AM Peak Hour

480-004•08/08



NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-3**

Existing (2007) Traffic Volumes - PM Peak Hour

The Phase II Buildout development is allocated to 14 "development zones" within the Marina, with the development potential within each development zone based upon each zone's capacity to accommodate traffic. This determination is, in turn, based upon a traffic study conducted to assess development potential within the Marina, and to identify traffic and circulation improvements (mitigation measures) necessary to accommodate the increased traffic levels. As described previously in this report, the proposed development occurs within two of the Marina's development zones, Zone 2 (Parcel 9U – "Tahiti Development Zone") and Zone 3 (Parcels 10R and FF – "Marquesas Development Zone"). The total allowable Phase II (or future) development in the Marina del Rey is summarized in **Table 5.7-7, Total Allowable Phase II Marina del Rey Development**, while the amount of development potential within DZ 2 and DZ 3 is specified in **Table 5.7-8, Phase II Development Potential Allocated to Development Zone 2 and Zone 3**.

The determination of compliance with the LUP's development levels, and consequently, the Circulation Element of the ~~plan~~Plan, is based upon a comparison of the number of trips generated by the allowable development for DZ 2 and DZ 3 (shown in **Table 5.7-8**) to the number of trips generated by the proposed project as well as any other development approved or proposed within those zones.

Table 5.7-7
Total Allowable Phase II Marina del Rey Development

Land Use	Units
Residential	2,420
Congregate Care	75 rooms
Hotel	1,070 rooms
Specialty Retail	208,500 sq. ft.
Restaurant	1,875 seats
Boat Slip	348 slips
Office: Regular	32,000 sq. ft.
Department of Beaches and Harbors	26,000 sq. ft.
Conference Room (within Hotel)	40,000 sq. ft.
Marine Science	3,000 sq. ft.
Library	3,000 sq. ft.

Since the adoption of the Marina LUP in 1996, approval for or actual construction of various projects throughout the marina has occurred, using up some of the originally allowable Phase II development potential. No additional development has been approved within DZ 2. However, one development (i.e., ~~Marina Two~~the "Esprit I Apartments" on Parcel 12, which is the parcel adjoining Parcel 10R on Marquesas Way) has been approved within DZ 3; that residential project, ~~now under construction~~which

is recently occupied on the adjoining Parcel 12 on Marquesas Way, utilized all but three (3) of the DZ 3's 320-unit residential allocation.

Table 5.7-8
Phase II Development Potential Originally Allocated to Development Zone 2 and Zone 3

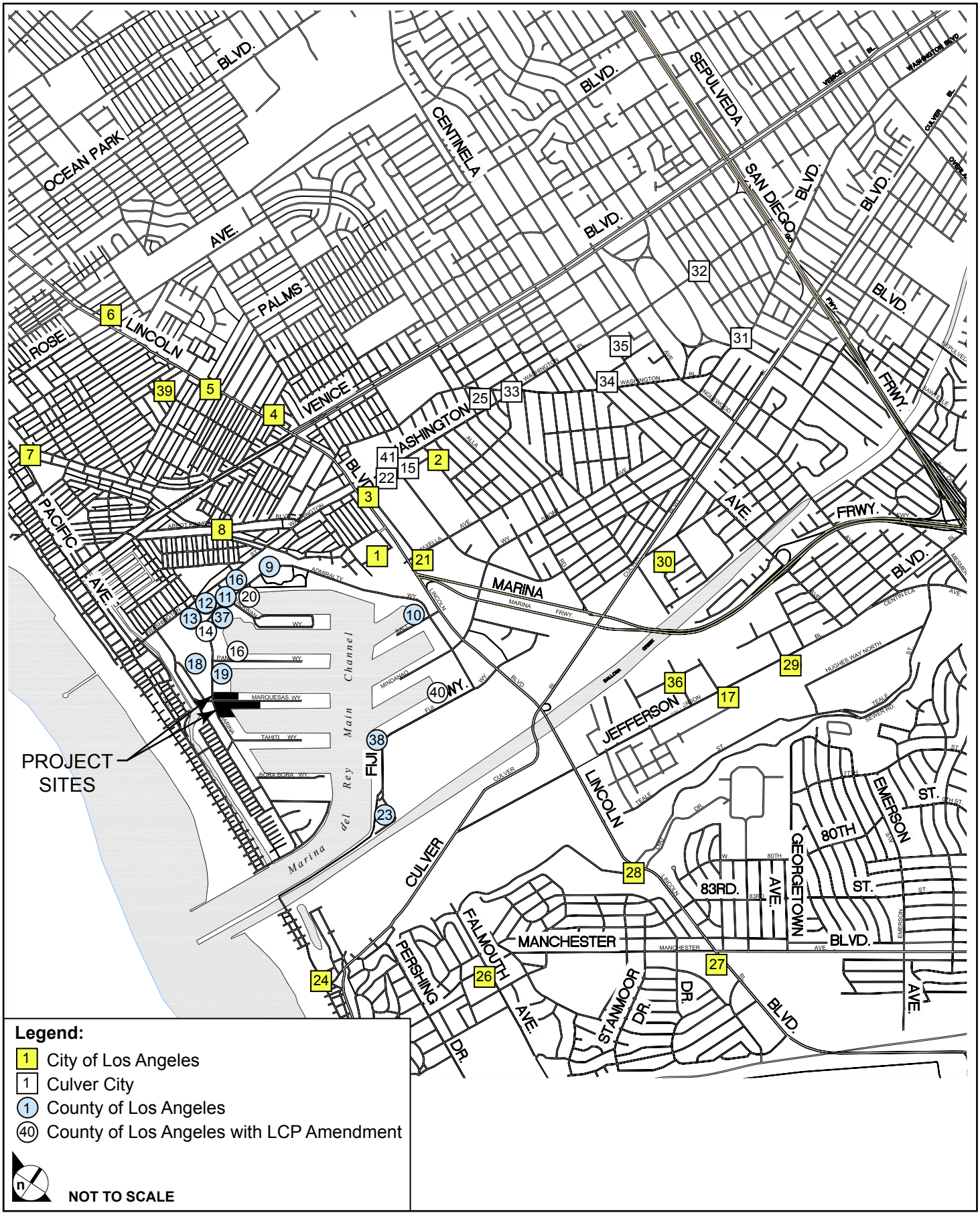
Tahiti Development Zone 2
275 Dwelling Units
288 Hotel Rooms
76 Boat Slips
Marquesas Development Zone 3
320 Dwelling Units
15,000 sq. ft. Visitor-serving Commercial
76 Boat Slips

Notes: Non-Priority coastal development may be converted to Hotel, Visitor-Serving Commercial, or Marina Commercial uses consistent with the conversion provisions of subsection C5 of Section 22.46.1090.

5.7.4.5 Related Projects in the Marina del Rey Area

Listings of potential related projects located in the study area were obtained from the Los Angeles Regional Planning Department, ~~the~~ LADOT, and from the Cities of Santa Monica and Culver City. From a review of these lists, it was determined that traffic from 41 projects near the study site could produce additional traffic at the study intersections for the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project. These related projects are shown in **Figure 5.7-4, Related Projects Location Map**, and are described below in **Table 5.7-9, Related Projects Descriptions and Trip Generation**. Estimates of the daily and peak-hour traffic expected to be generated by these related projects are summarized in the table as well. The trip-making estimates for the related projects are based on Coastal Transportation Corridor Specific Plan (CTCSP) PM trip rates, supplemented by data obtained from the 6th Edition ITE *Trip Generation Manual*[5] rates and equations, or from previously prepared traffic studies or other environmental documentation. Related project traffic was assigned to the area roadway system using a procedure identical to the methodology described previously for determining the proposed project's traffic assignments.

5 Institute of Transportation Engineers, *Trip Generation Manual*, 6th Edition, Washington, D.C., 1997.



SOURCE: Crain & Associates – March 2007

FIGURE **5.7-4**

Related Projects Location Map

5.7.5 ENVIRONMENTAL IMPACTS

5.7.5.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project Improvements

Implementation of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in the development of 526 residential dwelling units, 174 private and seven to 11 public-serving boat spaces, and a restored public wetland and upland park area. There are 136 existing apartments and 198 boat spaces presently on site. Therefore, completion of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in a net increase of 390 apartment units, a net decrease of up to 17 boat spaces, a 1.46-acre public park that includes a 0.47-acre restored wetland and 0.99-acre upland buffer.

Table 5.7-9
Related Projects Descriptions and Trip Generation

Map No.	Description	Daily	AM Peak Hour		PM Peak Hour	
			I/B	O/B	I/B	O/B
1.	298 du Apartment	860	(70)	103	47	(79)
	(24,000 sf Light Manufacturing)					
	(21,600 sf Office)					
	(40,000 sf Auto Service/Repair)					
2.	140 du Condominium	820	11	51	66	33
3.	98 du Condominium	574	7	36	46	23
	6,020 sf Retail	267	4	3	13	17
	Net Total	**841**	**11**	**39**	**59**	**40**
4.	6 vfp Service Station w/Convenience Store	977	30	30	11	11
5.	188,600 sf Retail	10,257	140	89	501	543
	280 du Apartment	1,882	29	114	127	69
	Net Total	**12,139**	**169**	**203**	**636**	**613**
6.	8,800 sf Shopping Center (addition)	378	5	4	61	67
7.	57 rm Hotel	757	19	11	33	24
	1,200 sf Retail					
	4,300 sf Restaurant					
8.	15,180 sf Office	167	21	3	7	36
9.	600 du Condominium	3,516	45	219	133	63

Map No.	Description	Daily	AM Peak Hour		PM Peak Hour	
			I/B	O/B	I/B	O/B
10.	158 du Condominium	386	0	47	53	18
	3,178 sf Specialty Retail					
	(48,000 sf Car Rental Facility)					
11.	179 du Apartment	650	11	51	34	24
	(64 du Apartment)	(233)	(4)	(18)	(12)	(9)
	Net Total	**417**	**7**	**33**	**22**	**15**
12.	6,236 sf Retail	18	1	0	1	1
	(5,750 sf Retail)					
13.	72 du Apartment	1,360	23	42	77	58
	368 st Restaurant					
	16,352 sf Retail					
	7,888 sf Office					
	(9,180 sf Office)					
	(165 sf Restaurant)					
14.	147 rm Hotel	1,201	50	32	23	29
15.	41 du Condominium	240	3	15	14	7
16.	114 du Congregate Care Retirement Facility	387	5	5	10	21
	5,000 sf Retail	(109)	4	(2)	(10)	(1)
	6,000 sf Marine Commercial Office	**278**	**9**	**3**	**10**	**20**
	(6,000 sf Health Club)					
17.	3,206,950 sf Office	38,733	2,455	1,540	1,777	3,217
	3,246 du Condominium					
	35,000 sf Retail					
	120,000 sf Community Serving Uses					
18.	544 du Apartment	2,154	34	156	120	57
	(202 du Apartment)	(1,354)	(13)	(57)	(45)	(21)
	Net Total	**800**	**21**	**99**	**75**	**36**
19.	940 du Apartment	1,785	31	140	106	46
	82 du Senior Apartment					
	4,000 sf Retail					
	6,000 sf Commercial					
	439 sl Boat					
20.	351 du Apartment	2,359	36	143	78	36
	2 4,300 sf Retail	1,077	17	12	46	62
	266 seat Restaurant (10,000 sf)	761	4	4	45	22
	(21,038 sf Restaurant)	(3,052)	(17)	(15)	(179)	(88)
	Net Total	**1,145**	**40**	**144**	**(10)**	**32**

Map No.	Description	Daily	AM Peak Hour		PM Peak Hour	
			I/B	O/B	I/B	O/B
21.	244 du Condominium 9,000 sf Shopping Center (21,038 sf Shopping Center)	903	11	84	73	10
22.	81 du Condominium 37,041 sf Retail 22 rm Motel 7,525 sf Retail 8,500 sf Industrial	1,401	11	32	83	75
23.	478 du Apartment 500 sf Retail 34 sl Boat (224 du Apartment)	1,106	17	32	83	75
24.	35 du Townhome 2,000 sf Retail 2,000 sf Restaurant	548	16	24	34	22
25.	12 du Live/Work 12 du Apartment **Net Total**	81 81 **162**	1 1 **2**	5 5 **10**	5 5 **10**	2 2 **4**
26.	204 du Apartment	1,371	21	83	93	50
27.	547 du Apartment 17,000 sf Shopping Center 4,000 sf Retail 5,000 sf High-Turnover Restaurant 3,000 sf Quality Restaurant (500 rm Hotel) (10,420 sf Retail) (10,590 sf Office) (4,800 sf High-Turnover Restaurant)	905	(128)	136	124	(10)
28.	120 du Single-family Residential	1,220	25	70	82	46
29.	175,000 sf Office 2,600 du Apartment 150,000 sf Retail 40,000 sf Community Serving Uses	24,220	577	1,049	1,275	1,027

Map No.	Description	Daily	AM Peak Hour		PM Peak Hour	
			I/B	O/B	I/B	O/B
30.	134,557 sf Warehouse	667	50	11	54	161
	1,357 sf Office	15	2	0	1	3
	(58,323 sf University of CA Laundry Building)	(223)	(33)	(10)	(17)	(30)
	Net Total	**459**	**19**	**1**	**38**	**134**
31.	2 du Apartment	13	0	1	1	0
	950 sf Office	37	4	1	14	66
	2,359 sf Retail	105	2	1	3	3
	Net Total	**155**	**6**	**3**	**18**	**69**
32.	20 du Senior Day Care Facility	43	1	0	2	1
	(9,970 sf Furniture manufacturing)	(38)	(5)	(2)	(3)	(4)
	Net Total	**5**	**(4)**	**(2)**	**(1)**	**(3)**
33.	4 du Condominium	23	0	2	2	1
34.	Phase A	535	8	6	15	18
	12,070 sf Commercial	352	4	22	21	10
	60 du Condominium					
	Phase B	172	3	2	5	6
	3,890 sf Commercial	105	1	7	6	3
	18 du Condominium	**1,164**	**16**	**37**	**47**	**37**
	Net Total					
35.	70 du Assisted Living Facility	151	2	2	7	5
36.	420 st Private School (K-8)	NA	208	170	120	136
37.	111 rm Hotel	907	38	24	18	21
	(42 rm Hotel)	(343)	(15)	(9)	(7)	(8)
	Net Total	**564**	**23**	**15**	**11**	**13**
38.	132 rm Hotel	2,375	41	57	114	95
	1,230 sea Restaurant					
	24,250 sf Retail					
	5,200 sf Office					
	26 slip Boat					
	(12,984 sf Retail/Commercial)					
	(16,149 sf Restaurant)					
	(17 slip Boat)					
39.	420 st High School	718	119	53	28	31
40.	345 Vessel Dry Stack Storage Facility	995	15	28	17	30
	30 Vessel Mast Up Storage Space	86	1	3	1	3
	1,500 sf Sheriff Boatwright Facility	–	–	–	–	–
	Net Total	**1,081**	**16**	**31**	**18**	**33**

Map No.	Description	Daily	AM Peak Hour		PM Peak Hour	
			I/B	O/B	I/B	O/B
41.	5,000 sf Retail	222	4	2	6	8
	19 du Condominium	111	1	7	7	3
	Net Total	**333**	**5**	**9**	**13**	**11**

I/B = inbound trips; O/B = outbound trips sf = square foot; du = dwelling unit; rm = room; ac = acre; sl = slips; p = pump.
Note: Descriptions in parentheses represent land uses to be removed; net losses in trips are shown in parentheses.

5.7.5.2 Thresholds of Significance

State California Environmental Quality Act (CEQA) Guidelines, Appendix G, identifies criteria for determining whether a project's impacts are considered to have a significant effect on the environment. One of these criteria states that a project's traffic and circulation impacts are significant when the project will

- cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system.
- exceed, either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads and highways.

The LACDPW defines a significant traffic impact based on a "stepped scale" as defined in the Traffic Impact Analysis Report Guidelines. The impact definition recognizes that intersections at high volume-to-capacity ratios are more sensitive to additional traffic than those operating with available surplus capacity. A significant traffic impact is identified as

- an increase in the CMA value of 0.010 or more, when the final "With Project" LOS is E or F (CMA > 0.900);
- a CMA increase of 0.020 or more at LOS D (CMA > 0.800 to 0.900); and
- a CMA increase of 0.040 or more at LOS C (CMA > 0.700 to 0.800).

Additionally, the Los Angeles County EIR Guidelines consider a project to have an adverse impact on traffic when

- traffic generated by a project considered alone or cumulatively with other projects, if added to existing traffic volumes, exceeds the design capacity of an intersection or roadway, contributes to an unacceptable LOS, or exacerbates an existing congested condition; and/or
- project-generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities); and/or

- proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways); and/or
- non-residential uses generate commuter or truck traffic through a residential area; and/or
- project-generated traffic significantly increases on a residential street and alters its residential character.

With regard to Criteria Items 4 and 5 under the County EIR Guidelines, these criteria are not applicable to the project because the project does not contain non-residential uses which would generate commuter or significant truck traffic through a residential area, and because project-generated traffic would not significantly increase on residential streets or alter the character of residential streets. Criteria Item 3 of the County EIR guidelines is also not applicable because the project's driveways and access points are designed consistent with the applicable design standards of the County. Therefore, this project is evaluated relative to Criteria Item 1 and 2 using the standard of significance defined in the Traffic Impact Analysis Report Guidelines.

This analysis of the proposed project also looks at the potential impacts on the regional transportation system and uses the guidelines set forth in the CMP. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. According to the CMP, a traffic analysis is required at all arterial monitoring intersections where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours. In addition, a traffic analysis is also required at all mainline freeway monitoring locations where the project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours. An analysis of parking demand and proposed supply is also presented.

5.7.5.3 Impact Analysis

5.7.5.3.1 Thresholds of Significance

The applicable thresholds of significance are listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts, if applicable.

5.7.5.3.2 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort

5.7.5.3.2.1 Threshold: Would the project cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system?

Threshold: Would the project exceed an LOS standard established by the county congestion management agency for designated roads and highways?

Threshold: Would the project cause an increase in the CMA value of 0.010 or more, when the final "With Project" LOS is E or F (CMA > 0.900); or cause an increase in the CMA of 0.020 or more at LOS D (CMA > 0.800 to 0.900); or cause an increase in the CMA of 0.040 or more at LOS C (CMA > 0.700 to 0.800)?

Threshold: Would the traffic generated by the project if added to existing traffic volumes, exceed the design capacity of an intersection or roadway, contribute to an unacceptable LOS, or exacerbate an existing congested condition?

Analysis: **Demolition, Excavation/Grading and Construction Impacts:** Consistent with the County's established methodologies, the majority of this analysis focuses on the long-term project traffic impacts of the project. These impacts will occur once the project has been completed and occupied. There also potentially will be some short-term traffic impacts occurring while the project is being constructed. The County will require the project to obtain building permits and other construction period permits (e.g., haul route approvals by Department of Public Works) for this construction activity. The impacts of the construction will be minimized by conditions placed upon these permits. For instance, the projects' approved haul routes will include conditions that restrict the routing and layover areas for trucks involved in the site excavation as condition of permit approval that will be required. Additionally, Worksite Traffic Control Plans will be developed and approved for activities in the public rights-of-way to assure that construction activity does not unduly interfere with traffic on the adjacent public roadways. Notwithstanding the above standard requirements, an analysis was conducted to assure that the short-

term traffic impacts during the construction period would not be significant and would not exceed the long-term impacts following project completion and occupancy.

Construction on four individual sites was considered—Parcel FF, Parcel 10R, Parcel 9U (hotel) and Parcel 9U (Wetland Park). The construction on these four sites will each be independent, but adjacent to each other and with overlapping time periods. Furthermore, the extent to which the project involves concurrent construction on all four sites is addressed by this EIR. Therefore, the construction impacts were considered in a single analysis. The first step in the analysis was to determine the level of activity anticipated on each site during each of the three standard phases of construction—Demolition/Excavation, Exterior Construction, and Interior Construction. The two major traffic impacts of construction activity are truck activities to and from the site (removal and delivery of construction materials) and automobile trips by construction workers (commute or otherwise). The number of trips from these two sources were estimated for each construction phase for each project component through a detailed process.

In order to estimate truck trips during the Demolition/Excavation phase, the anticipated amount of material to be removed from each site was first determined. This material includes both demolition debris from existing structures on the site and soil excavated from the site. The anticipated duration for this Demolition/Excavation phase was also determined in terms of workdays and resulting total months. The amount of daily removal of material was estimated by dividing the total amount of material to be removed from each site by the number of workdays. The number of truck trips were estimated by dividing the daily amount of material to be removed by the load size per truck. A separate analysis was conducted to determine the number of truck trips per day/hour during the Exterior and Interior Construction phases based on the amount of construction activity that would occur. A final step of using standard Passenger Car Equivalency (PCE) factors was used to convert truck trips into an equivalent number of passenger car trips for each phase period. *Transportation Research Circular No. 212* (Transportation Research Board) defines PCE for a vehicle as the number of through moving passenger cars it is equivalent to, based on the vehicle's headway and delay creating effects.

To estimate automobile trips that would occur at each site, the first step was to estimate the number of workers who will be employed at each site. The standard Institute of Transportation Engineers (ITE) rates for trips at an industrial site per worker was then applied to these estimates. It should be noted, however, that these rates include not only workers, but visitors and other automobile trips as well as truck trips. As construction sites normally do not attract many visitors and most truck trips are accounted for separately, the application of these rates is conservative and may overstate actual trips.

Once the number of each type of trip anticipated to be generated on a daily and peak hour basis to and from each site was determined, the total trips in PCE were added together. The trip generation for each site will vary by construction phase. Moreover, construction on the four sites, while overlapping, will

have different durations and start times for each phase. The construction phase durations are discussed in **Section 3.1.3.1.7, Construction Program: Neptune Marina Project,** and in **Table 3.0-4, Neptune Marina-Woodfin Suite Hotel and Timeshare Resort Project Construction Assumptions**. The resulting PCE trip generation for each time period for all four sites is shown in **Table 5.7-10, Peak Project Construction Trip Generation**. As this table shows, during much of the construction period, the short-term trip generation for the four combined sites will be much lower than that analyzed for the long-term traffic impacts of the completed project. Even during the overall peak level of activity during the spring through fall of 2012, the total generation will remain below the analyzed level for the completed project on a daily basis as well as during both peak hours.

During the construction of the project-serving sewer infrastructure within Marquesas Way (for the Parcel 10R project component), travel on Marquesas Way will for a limited time be periodically restricted to a single travel lane. However, the County will review and approve a construction management plan to control traffic flow during construction and export of the cut materials so that no significant delays or detours would occur. ~~In addition to the project infrastructure improvements, there exists the possibility for the Venice Dual Force Sewer Main upgrade to be under construction while the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort is actively under demolition or construction. These simultaneous construction activities could cause access disruption along both Via Marina and Marquesas Way. The Venice Dual Force Marina project could be constructed in Via Marina, the consequence of which would be the reduction to a single travel lane in each direction, which may result in delays during the peak commuting periods.~~

The installation of the project water lines on Via Marina extending into Parcels FF, 10R and possibly 9U will also need to occur for approximately 6–8 weeks during the project construction period. This installation will require that one lane be closed during off-peak hours along this roadway. However, all lanes would remain open during peak time periods (7:00–9:00 AM and 4:00–6:00 PM) and at least one travel lane in each direction would remain open at all times. The project would be required to obtain and implement a Worksite Traffic Control (WTC) Plan, as mentioned earlier, for all work within the right-of-way.~~While inconvenient, this is not considered a significant impact because it would be a short duration and haul trucks will use the roadways during off peak times.~~

Operational Impacts: The thresholds listed above relate to long-term traffic generated by the project and ~~if~~ whether that traffic would cause an increase in level of service at surrounding intersections or roadway segments. To establish the LOS for each intersection analyzed, project trip generation was calculated. According to the trip generation rates provided in **Table 5.7-1**, the project is expected to generate approximately 3,104 net new trips per day. Of this total, an estimated 253 trips would occur during the morning peak hour, and 228 new trips would occur during the evening peak hour. These new trips would be added to the project area roadway network once the existing development is removed and the

proposed project is completed and fully occupied. Estimated trip generation figures for the project are provided in **Table 5.7-~~10~~11, Project Trip Generation**.

The general geographic trip distribution percentages from **Table 5.7-5** were then assigned to specific travel routes in the study area and are assumed to be the same during both the AM and PM peak hours. Using the directional distribution percentages shown in **Figures 5.7-5, 5.7-6, and 5.7-7 Trip Distribution Percentages (Parcels 10R, FF, and 9U, respectively)**, the number of trips along each roadway were calculated. These "roadway" trips were then assigned to specific routes serving the project. The results of this traffic assignment provide the necessary level of detail to conduct the future traffic analysis. Traffic assignments for the AM and PM peak-hour project traffic on the nearby street system are shown in **Figure 5.7-8, Traffic Volumes – Net Project Traffic – AM Peak Hour,** and **Figure 5.7-9, Traffic Volumes – Net Project Traffic – PM Peak Hour**.

Table 5.7-10
Peak Project Construction Trip Generation

Land Uses	Daily	AM Peak Hour	PM Peak Hour
PARCEL 10R			
Construction Trips (PCE)	809	111	107
Existing Trips (Removed)	**(1,069)**	(70)	(69)
Net New Trips (Parcel 10R)	***-260***	***41***	***38***
PARCEL FF	432	59	57
PARCEL 9U (Hotel/Timeshare and Wetland Park)	437	62	59
Total Net Trips (Parcels 10R, FF, and 9U)*	***609***	***162***	***154***

Note: Net construction trips during the daily, AM peak hour and PM peak hour periods would be less than the net trip generation of the completed project (3,104 daily, 253 AM peak hour and 228 PM peak hour trips). In addition, some of the construction workers' commute trips would likely occur outside of the AM peak hour. Similarly, construction would likely end prior to the PM peak hour. Thus, the construction trips during the AM and PM peak hours are considered worst case.

** Takes into account trip credit for existing site uses to be removed.*

Table 5.7-~~10~~11
Project Trip Generation

Land Uses	Daily	AM Peak Hour		PM Peak Hour	
		In	Out	In	Out
PARCEL 10R					
Proposed Land Uses					
400 Apartments Units	1,584	25	115	88	42
174 Boat Slips	502	7	15	9	15
Subtotal New Trips	**2,086**	**32**	**130**	**97**	**57**

		AM Peak Hour		PM Peak Hour	
Existing Land Uses (Removed)					
136 Apartments Units	539	8	39	30	14
184 Boat Slips	530	8	15	9	16
Subtotal Existing Trips	**1,069**	**16**	**54**	**39**	**30**
Net New Trips (Parcel 10R)	***1,017***	***16***	***76***	***58***	***27***
PARCEL FF					
Proposed Land Uses					
126 Apartments Units	499	8	36	28	13
Existing Land Uses (Removed)					
None	0	0	0	0	0
Net New Trips (Parcel FF)	***499***	***8***	***36***	***28***	***13***
PARCEL 9U					
Proposed Land Uses					
288 Room Hotel	1,538	63	54	46	56
1.1 Acre Public Park	50	0	0	0	0
Subtotal New Trips	**1,588**	**63**	**54**	**46**	**56**
Existing Land Uses (Removed)					
None	0	0	0	0	0
Net New Trips (Parcel 9U)	***1,588***	***63***	***54***	***46***	***56***
Total Net Trips (Parcels 10R, FF, and 9U	***3,104***	***87***	***166***	***132***	***96***

Future "With Project" Traffic Conditions

The analysis of future (i.e., existing + ambient growth + project) traffic conditions in the project area was performed using the same CMA procedures described previously in this report. For future project conditions, the roadway system was considered to have no improvements beyond existing conditions. Traffic volumes for the analysis were developed as follows:

- Future-year traffic volumes for the project vicinity were determined by applying a 0.6 percent per year ambient growth factor to the 2007 traffic counts, to estimate area traffic growth.

Traffic volumes generated by the project were combined with these benchmark "Without Project" volumes to form the "With Project" traffic conditions and to determine traffic impacts directly attributable to the proposed development. The 2013 baseline Without Project AM and PM peak-hour traffic volumes for the project are shown in **Figure 5.7-10, Future (2013) Traffic Volumes without Project (Ambient Growth) – AM Peak Hour**, and **Figure 5.7-11, Future (2013) Traffic Volumes without Project (Ambient Growth) – PM Peak Hour**, respectively. Future year 2013 With Project traffic volumes are shown in **Figure 5.7-12, Future (2013) Traffic Volumes with Project – AM Peak Hour**, and **Figure 5.7-13**,

Future (2013) Traffic Volumes with Project – PM Peak Hour, for the AM and PM peak hours, respectively.

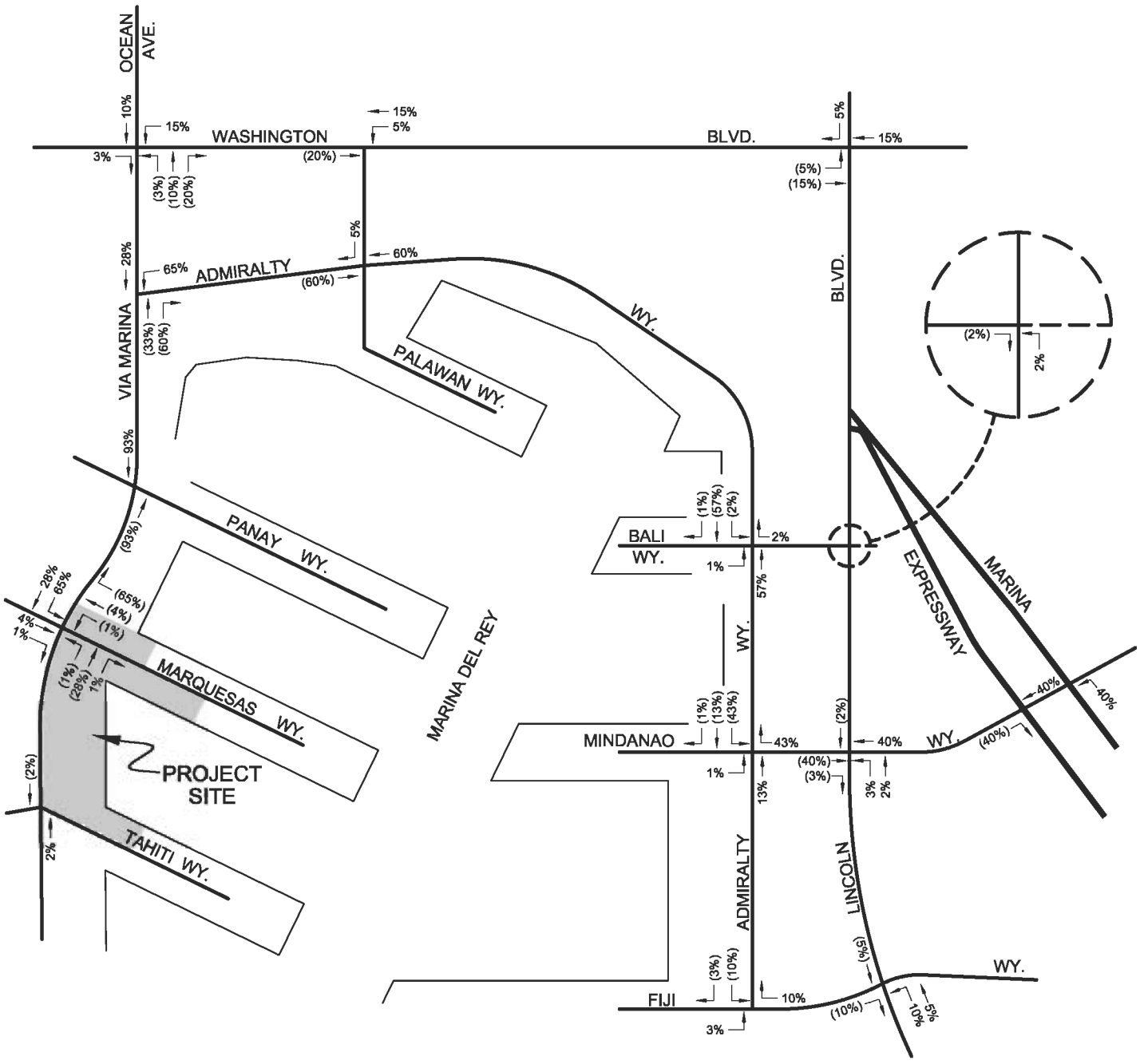
Study Area Intersection Impacts

The results of the CMA for future traffic conditions at the 17 study area intersections are summarized in **Table 5.7-~~11~~12, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – AM Peak Hour**, and T**able 5.7-~~12~~13, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – PM Peak Hour**. The table shows that both the Without Project and With Project intersection traffic conditions would range between LOS A and LOS F at the most congested study intersections during both the AM and PM peak hours. The incremental project traffic would significantly impact the LOS forecasts during the PM peak hours at three of the study intersections, Admiralty Way and Via Marina, Washington Boulevard at Ocean Avenue and Via Marina, and Admiralty Way and Mindanao Way. During the AM peak hour, only the Admiralty Way/Mindanao intersection would be significantly affected.

Table 5.7-~~11~~12
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – AM Peak Hour

		Without Project		With Project		
No.	**Intersection**	**CMA**	**LOS**	**CMA**	**LOS**	**Impact**
1.	Via Marina/Tahiti Way	0.276	A	0.276	A	+0.000
2.	Via Marina/Marquesas Way	0.271	A	0.333	A	+0.062
3.	Via Marina/Panay Way	0.360	A	0.388	A	+0.028
4.	Admiralty Way/Via Marina	0.730	C	0.749	C	+0.019
5.	Washington Blvd./Ocean Ave./Via Marina	0.744	C	0.774	C	+0.030
6.	Admiralty Way/Palawan Way	0.444	A	0.461	A	+0.017
7.	Washington Blvd./Palawan Way	0.668	B	0.682	B	+0.014
8.	Lincoln Blvd./Washington Blvd.	0.807	D	0.820	D	+0.013
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.707	C	0.707	C	+0.000
10.	Lincoln Blvd./Bali Way	0.677	B	0.677	B	+0.000
11.	Lincoln Blvd./Mindanao Way	0.754	C	0.782	C	+0.028
12.	Lincoln Blvd./Fiji Way	0.613	B	0.619	B	+0.006
13.	Admiralty Way/Bali Way	0.480	A	0.510	A	+0.030
14.	Admiralty Way/Mindanao Way	0.654	B	0.712	C	+0.058*
15.	Admiralty Way/Fiji Way	0.266	A	0.272	A	+0.006
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.423	A	0.428	A	+0.005
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.641	B	0.657	B	+0.016

* *Denotes significant impact, prior to mitigation.*

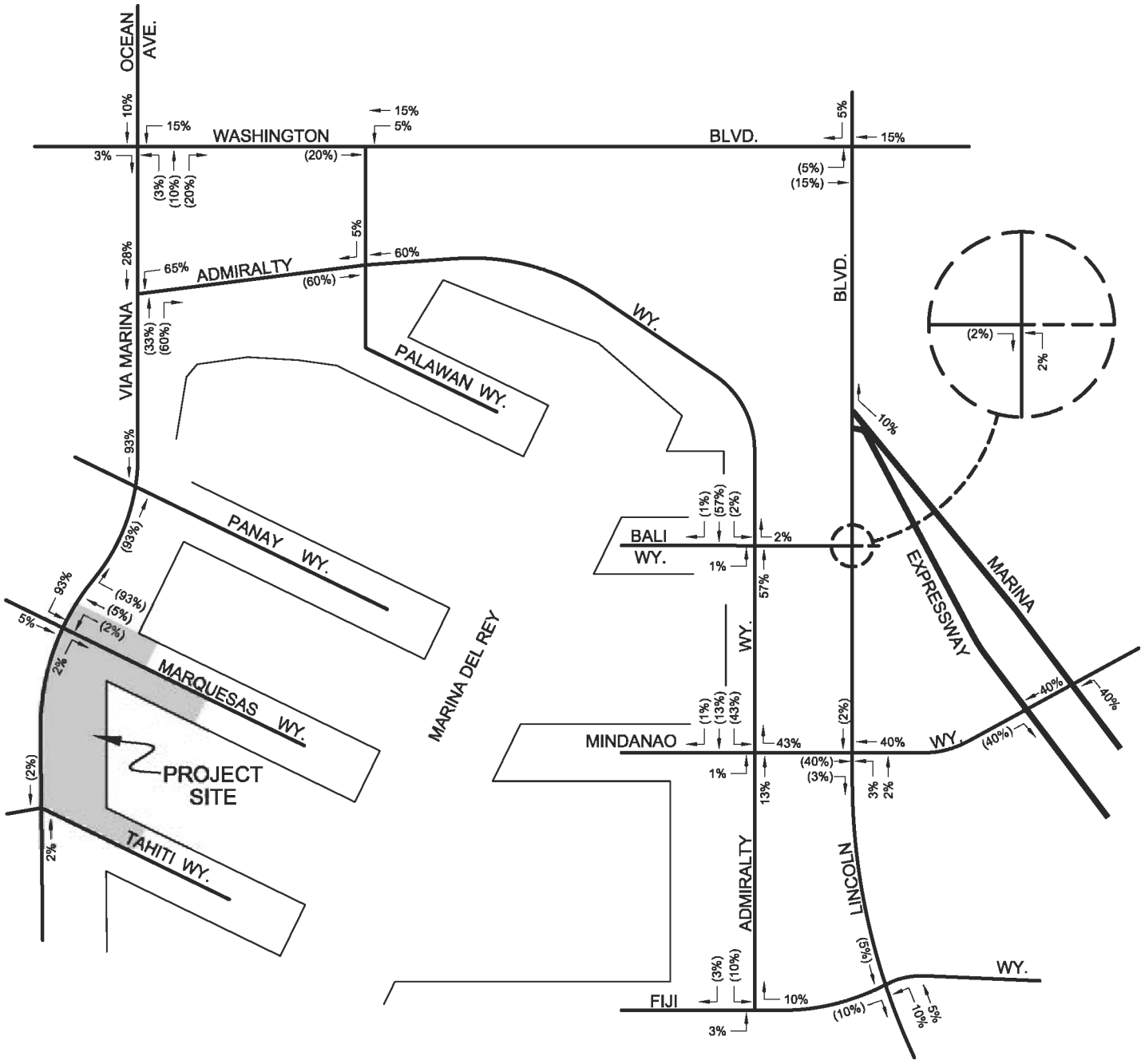


SOURCE: Crain & Associates - May 2007

FIGURE **5.7-5**

Trip Distribution Percentages (Parcel 10R)

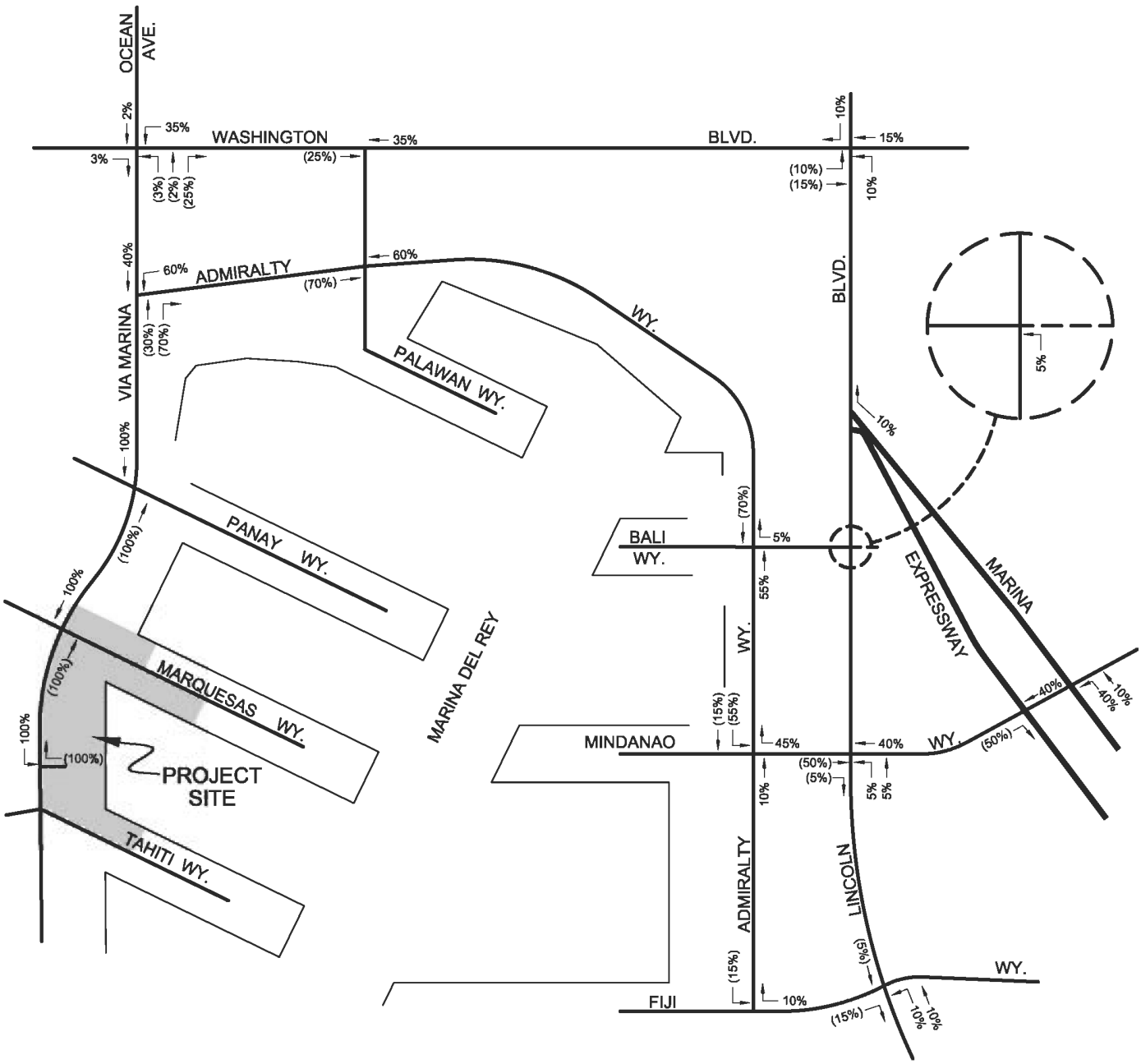
480-004•08/08



SOURCE: Crain & Associates - May 2007

FIGURE **5.7-6**

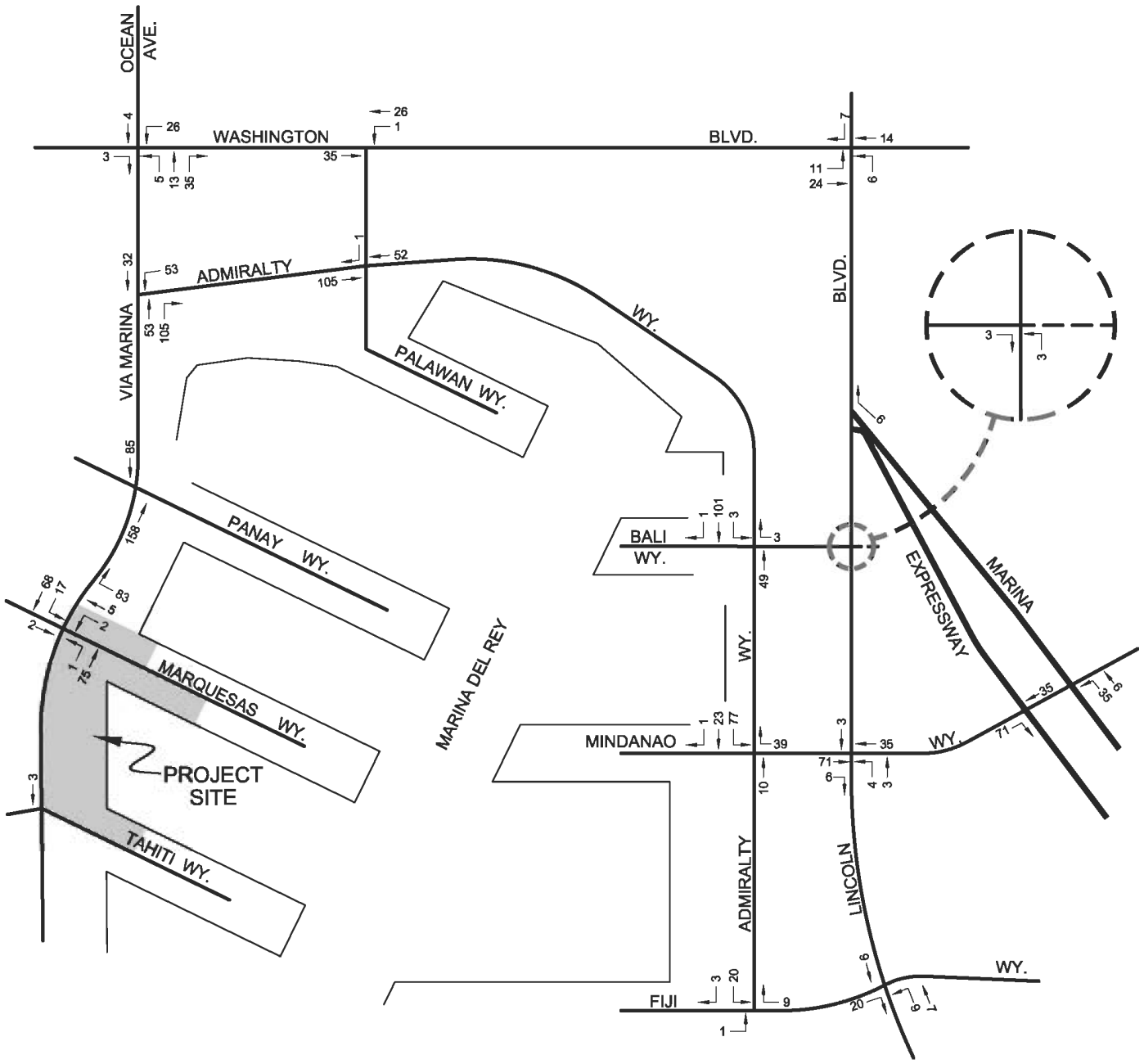
Trip Distribution Percentages (Parcel FF)



SOURCE: Crain & Associates - May 2007

FIGURE **5.7-7**

Trip Distribution Percentages (Parcel 9U)



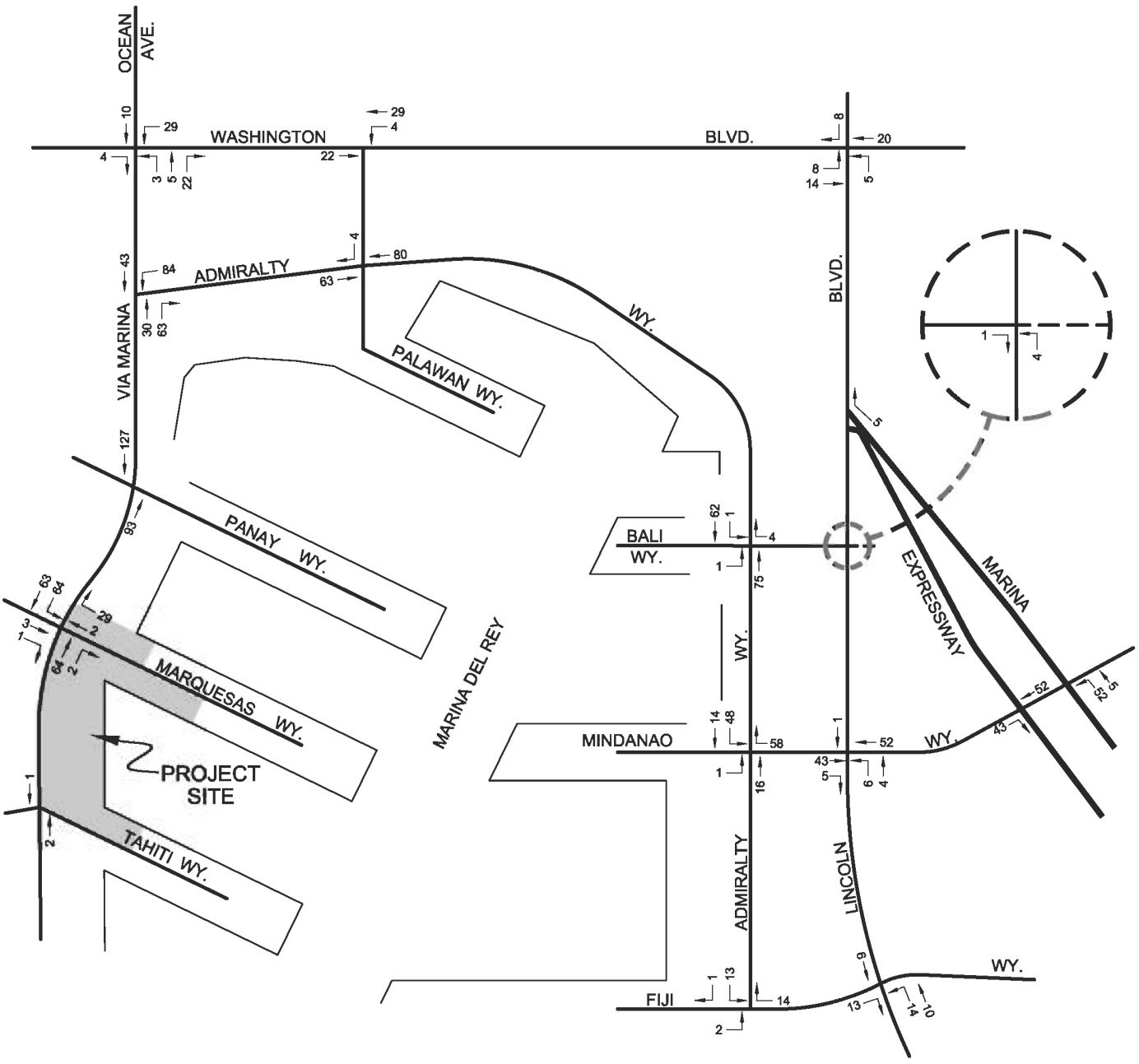
NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-8**

Traffic Volumes - Net Project Traffic - AM Peak Hour

480-004•08/08

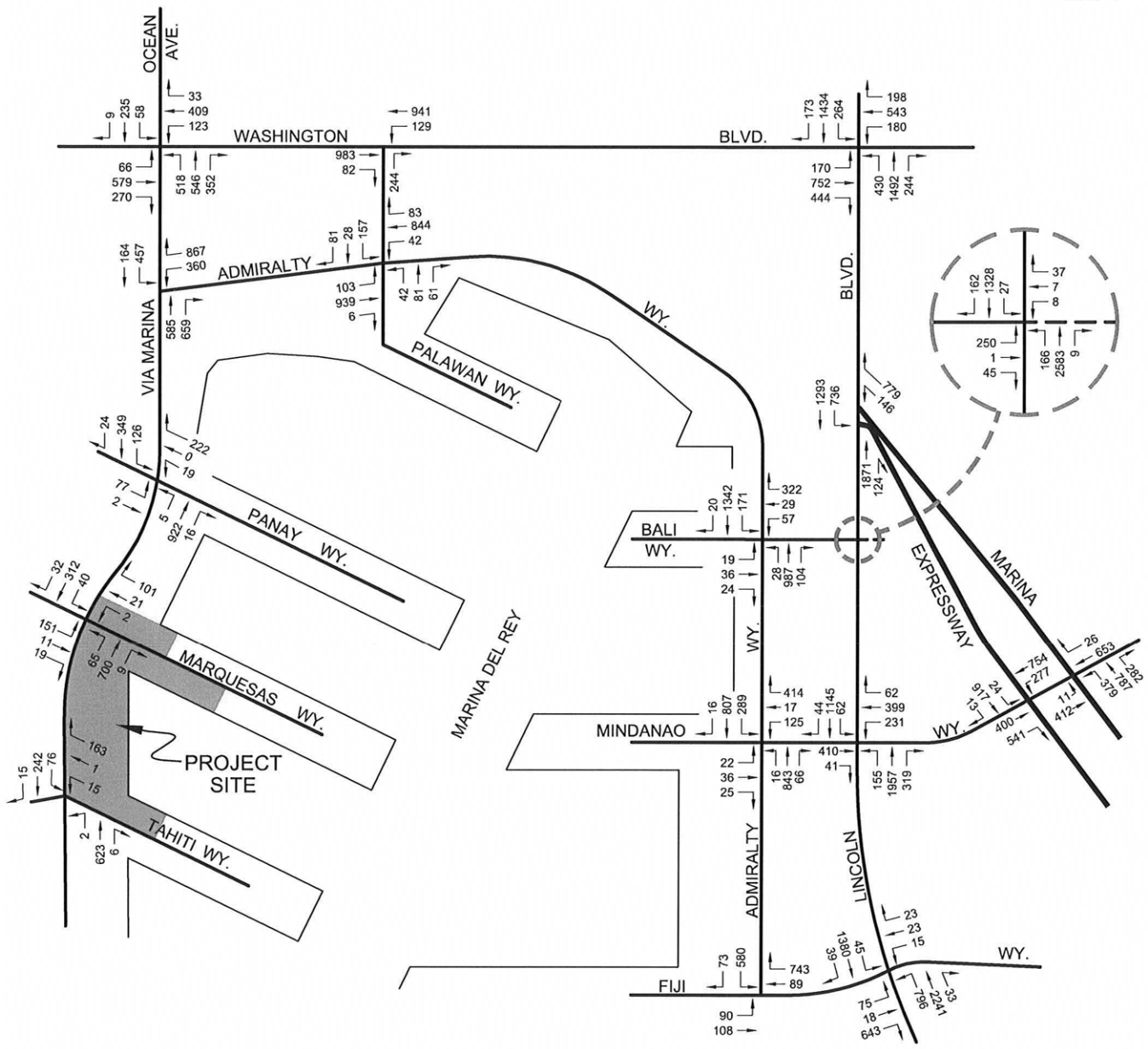


NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-9**

Traffic Volumes - Net Project Traffic - PM Peak Hour



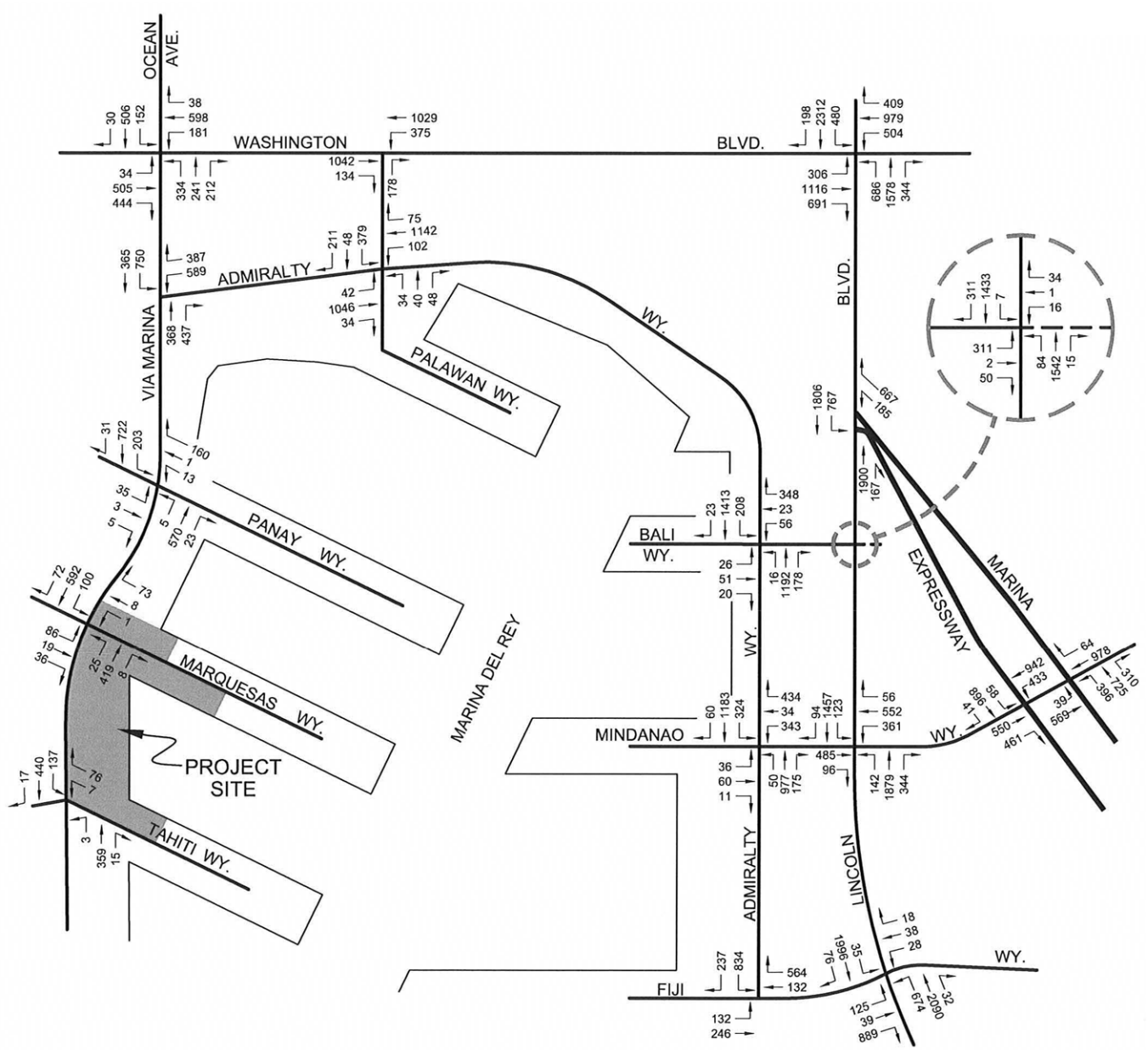
NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-10**

Future (2013) Traffic Volumes Without Project (Ambient Growth) - AM Peak Hour

480-004•03/08

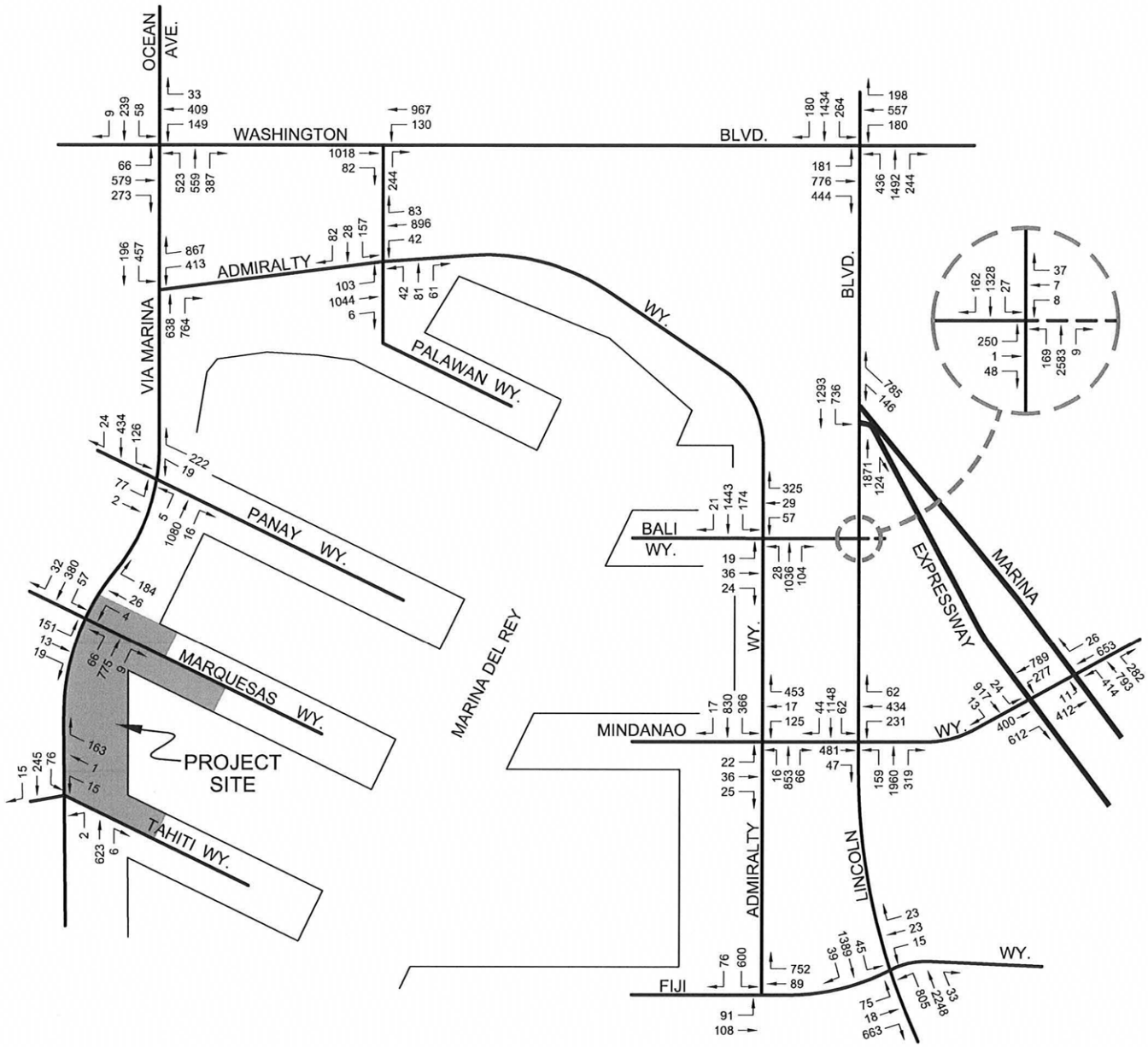


NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-11**

Future (2013) Traffic Volumes Without Project (Ambient Growth) - PM Peak Hour



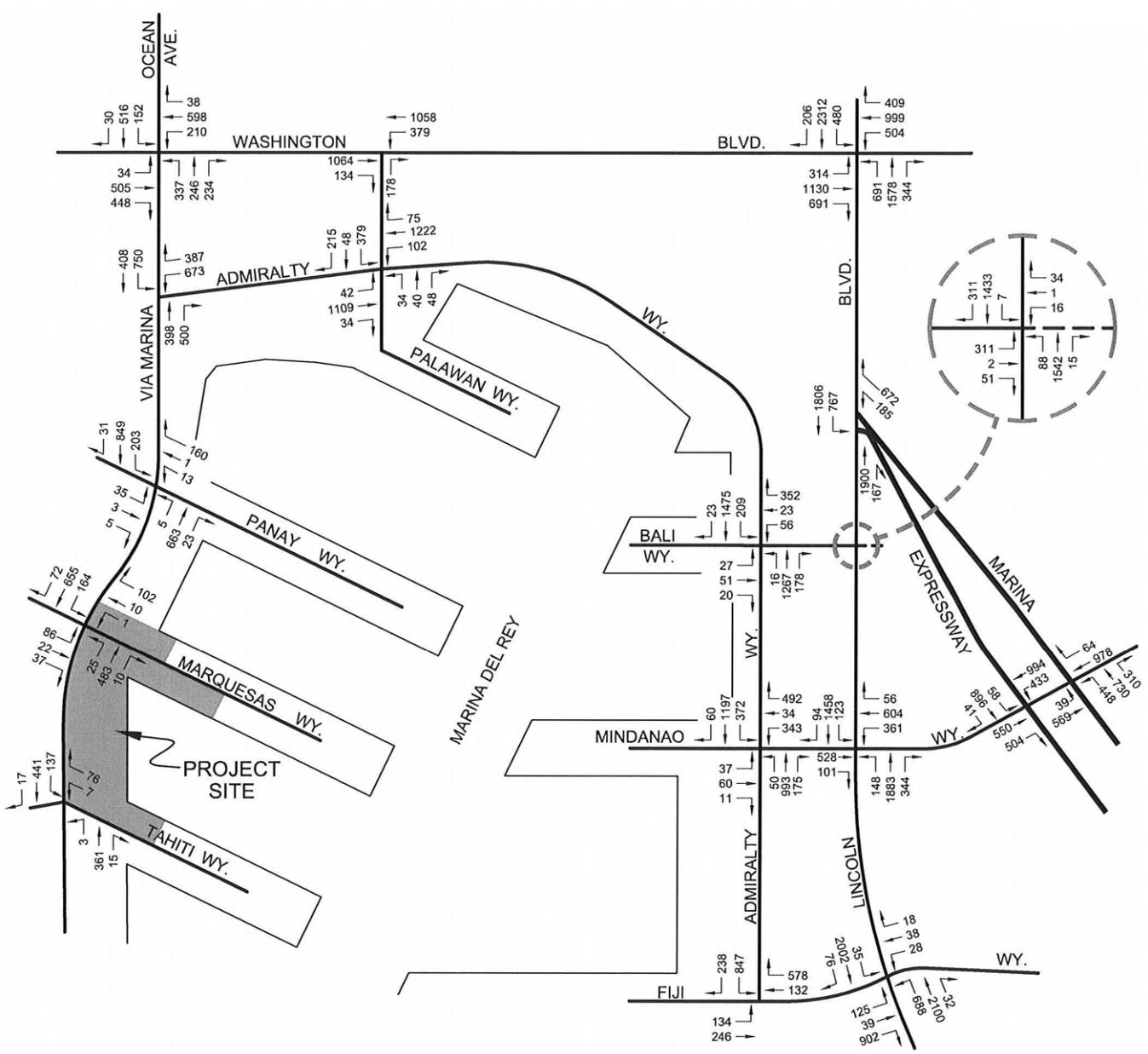
NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-12**

Future (2013) Traffic Volumes With Project - AM Peak Hour

480-004•03/08



NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-13**

Future (2013) Traffic Volumes With Project - PM Peak Hour

480-004•03/08

Table 5.7-~~12~~13
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – PM Peak Hour

		Without Project		With Project		
No.	**Intersection**	**CMA**	**LOS**	**CMA**	**LOS**	**Impact**
1.	Via Marina/Tahiti Way	0.179	A	0.180	A	+0.001
2.	Via Marina/Marquesas Way	0.188	A	0.231	A	+0.043
3.	Via Marina/Panay Way	0.263	A	0.280	A	+0.017
4.	Admiralty Way/Via Marina	0.783	C	0.826	D	+0.043*
5.	Washington Blvd./Ocean Ave./Via Marina	0.799	C	0.831	D	+0.032*
6.	Admiralty Way/Palawan Way	0.629	B	0.655	B	+0.026
7.	Washington Blvd./Palawan Way	0.747	C	0.759	C	+0.012
8.	Lincoln Blvd./Washington Blvd.	1.390	F	1.399	F	+0.009
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.751	C	0.751	C	+0.000
10.	Lincoln Blvd./Bali Way	0.534	A	0.537	A	+0.003
11.	Lincoln Blvd./Mindanao Way	0.884	D	0.901	E	+0.017*
12.	Lincoln Blvd./Fiji Way	0.762	C	0.769	C	+0.007
13.	Admiralty Way/Bali Way	0.602	B	0.631	B	+0.029
14.	Admiralty Way/Mindanao Way	0.772	C	0.835	D	+0.063*
15.	Admiralty Way/Fiji Way	0.386	A	0.390	A	+0.004
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.555	A	0.569	A	+0.014
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.769	C	0.779	C	+0.010

* *Denotes significant impact, prior to mitigation.*

Mitigation Measures: Through the implementation of area traffic improvement measures recommended in the adopted Marina del Rey Specific Plan Transportation Improvement Program (TIP) and the other measures identified below, ~~project~~ traffic related impacts (i.e., existing + ambient growth + project) ~~traffic related impacts~~ would be reduced to a less than significant level. The TIP includes specific detailed transportation and circulation improvements designed to fully mitigate the traffic generation of the Phase II development in Marina del Rey. In order to fund the recommended TIP roadway improvements, all projects developed within the Marina, including the proposed project, are required to pay a traffic mitigation fee imposed by the County of Los Angeles pursuant to the Marina del Rey Specific Plan Transportation Improvement Program. This fee is intended to fund the Category 1 (local Marina) and Category 3 (regional) roadway improvements described in the TIP, by providing fair share contributions toward the improvements, based on the amount of project PM peak hour trips. (Category 2 roadway improvements are reserved for Area A, which is DZ 15 and is part of the Playa Vista Development on the Marina.) These improvements address local traffic generated in and confined to the Marina, as well as

trips ~~which~~ that leave or pass through the Marina (regional trips). For new Phase 2 development projects in Marina del Rey, ~~T~~the County's traffic mitigation fee structure is currently $5,690 per PM peak hour trip generated. Based on the expected net project trip generation of 228 PM peak hour trips, the project would be required to pay $1,297,320 in trip mitigation fees ($716,940 attributable to Legacy Partners and $580,380 attributable to Woodfin). A portion of these fees is designated toward the Category 3 (regional) transportation improvements.

The County Department of Public Works has expressed that it prefers to implement the Marina del Rey TIP-recommended roadway improvements as a single major project in order to minimize traffic disruptions and construction time. Therefore, payment of the traffic impact mitigation fee is the recommended mitigation over the partial construction by this project of portions of the relevant TIP roadway improvements.

However, should the County decide that roadway improvement measures must be implemented earlier to assure that the project's direct significant impacts are reduced to less than significant levels on or before project occupancy, the following measures are recommended:

- **Admiralty Way and Via Marina** – Reconstruct the intersection to provide for a realignment of Admiralty Way as a through roadway with the southern leg of Via Marina, instead of widening the south side of Admiralty Way to accommodate a triple westbound left turn movement, and two lanes eastbound on Admiralty Way with a right-turn merge lane from northbound Via Marina as proposed under the Marina del Rey TIP Category 1 improvement. This improvement is identified in the Marina del Rey TIP as a Category 3 improvement, and will enhance traffic flow within the Marina.

- **Washington Boulevard and Via Marina/Ocean Avenue** – No feasible physical improvements are identified in the TIP that remain available to mitigate this potential direct project traffic impact. However, the County of Los Angeles Department of Public Works has identified an improvement at the nearby intersection of Washington Boulevard and Palawan Way that would provide additional egress from the Marina, reducing traffic volumes on the northbound approach of Via Marina at this intersection, and providing mitigation for the impacts. The proposed improvement would reconstruct the intersection of Washington Boulevard and Palawan Way to allow for dual northbound left-turns onto westbound Washington Boulevard, and install a new traffic signal at that intersection. The improvement will provide an additional means of accessing westbound Washington Boulevard from westbound Admiralty Way, reducing the existing high northbound volumes at Washington Boulevard and Via Marina/Ocean Avenue. (See "Washington Boulevard and Palawan Way" below for additional details.) It should be noted that this improvement is not included in the TIP. As such, the proposed project would be conditioned to contribute fair share funding to this improvement, above and beyond the previously identified traffic mitigation fees. The project's fair share proportion is 18.4 percent or approximately $61,180, as determined by the County.

- **Lincoln Boulevard and Mindanao Way** – Widen the west side of Lincoln Boulevard both north and south of Mindanao Way, and relocate and narrow the median island on Lincoln Boulevard to provide a right-turn lane in the northbound direction. This improvement is identified in the Marina del Rey TIP as a Category 1 improvement, and will enhance traffic flow within the Marina.

- **Admiralty Way and Mindanao Way** – Install dual left-turn lanes on Admiralty Way for southbound travel at the approach to Mindanao Way and modify the traffic signal to provide a westbound right-turn phase concurrent with the southbound left-turn movement. The dual left-turn lanes on Admiralty Way will enhance egress from the Marina at Mindanao Way, has already been approved as part of a previous project (~~Marina Two~~Esprit I Apartments), and would mitigate to less than significance the combined traffic impacts of both projects. It should be noted that this improvement is not included in the TIP. As such, the proposed project would be conditioned to contribute fair share funding to this improvement above and beyond the previously identified traffic mitigation fees. The project's fair share proportion would be negotiated between the ~~proposed project~~project applicants and the County.

To determine the quantitative effect of these mitigation measures on the project-specific significant impact, a supplemental analysis was performed. This analysis utilized the same analysis procedures and techniques as were used in the preceding analysis of intersection conditions, with the exception that the proposed mitigation measures were assumed to be in place for the With Mitigation scenario. The results of the supplemental With Mitigation analysis are presented in **Table 5.7-~~13~~ 14** and show that, once installed, these mitigation measures will reduce the traffic impacts of the proposed project to a less than significant level, and no additional project-specific traffic improvements are necessary. However, if any of the required measures or other measure of equal effectiveness are delayed or not implemented (because the County is unable to formally establish an enforceable TIP-type mechanism for collecting fair-share contributions or otherwise), a significant impact would remain.

Table 5.7-~~13~~14
Summary of Critical Movement Analysis
Future (2013) Traffic Conditions – With Project Plus Mitigation

		Without Project		With Project			With Mitigation		
No.	**Intersection**	**CMA**	**LOS**	**CMA**	**LOS**	**Impact**	**CMA**	**LOS**	**Impact**
4.	**Admiralty Way and Via Marina**								
	AM Peak Hour	0.730	C	0.749	C	+0.019	0.637	B	-0.093
	PM Peak Hour	0.783	C	0.826	D	+0.043*	0.725	C	-0.047
5.	**Washington Boulevard and Via Marina/Ocean Avenue**								
	AM Peak Hour	0.744	C	0.774	C	+0.030	0.689	B	-0.055
	PM Peak Hour	0.799	C	0.831	D	+0.032*	0.791	C	-0.008
11.	**Lincoln Boulevard and Mindanao Way**								
	AM Peak Hour	0.754	C	0.782	C	+0.028	0.704	C	-0.050
	PM Peak Hour	0.884	D	0.901	E	+0.017*	0.819	D	-0.065
14.	**Admiralty Way and Mindanao Way**								
	AM Peak Hour	0.654	B	0.712	C	+0.058*	0.608	B	-0.046
	PM Peak Hour	0.772	C	0.835	D	+0.063*	0.734	C	-0.038

* *Denotes significant impact, prior to mitigation.*

Conclusion: Less than significant.

5.7.5.3.2.2 Threshold: Would project-generated traffic interfere with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities).

Analysis: As discussed in the project description of this EIR, the proposed project would adhere to County standards regarding access roads and driveway locations.

According to the traffic distribution for the project that was reviewed and agreed to by the County Department of Public Works, Traffic and Lighting Division, approximately 5 percent of the project traffic is anticipated to access and depart from the project site using Via Dolce. Based on the trip generation from Table 5 of the traffic impact study, the project would contribute about eight net trips (about one trip every 7.5 minutes) during the AM peak hour and six net trips (about one trip every 10 minutes) during the PM peak hour to the traffic on Via Dolce. The segment of the roadway west of Via Marina currently carries about 288 trips during the AM peak hour and 236 trips during the PM peak hour. With cumulative project traffic, the roadway is anticipated to carry about 317 trips during the AM peak hour and 270 trips during the PM peak hour. As the project, traffic contribution on Via Dolce will be minimal and the peak-hour traffic volumes are and would continue to be well below its capacity, no significant project or cumulative traffic impact is expected to occur on this roadway.

As described in the previous section and in **Table 5.7-~~14~~15, Parking Tabulation for the Proposed Project Parcels 10R, FF, and 9U**, parking for the proposed project site (Parcels FF, 10R, and 9U) is generally provided in parking structures beneath or adjacent to each building. The project would also meet the County standards regarding parking requirements. The comparison of County Code requirements and proposed project parking is shown below.

As shown in **Table 5.7-~~14~~15**, the proposed development on Parcel 10R will require a total of 777 parking spaces for the residents and guests of the 400 apartments, plus an additional 131 spaces for boat slip parking needs, for a total of 908. The project will provide a minimum of 908 spaces to meet the total amount of parking required for the Parcel 10R development. **Table 5.7-~~14~~–15** shows that the residential development on Parcel FF will require a total of 242 parking spaces for the residents and guests of the 126 apartments. The project will provide 242 resident parking spaces including a minimum of 32 guest parking spaces on Parcel FF in order to meet the total amount of parking required for this parcel. Since the proposed project developments on Parcels 10R and FF meet parking requirements both on an overall basis and for each individual use, no parking spillover onto area streets or into the nearby neighborhoods is anticipated, and no parking-related impacts are expected as a result of the project components on these two parcels.

Table 5.7-~~14~~15
Parking Tabulation for the Proposed Project-Parcels 10R, FF, and 9U

Site	Type of Unit	Number of Units	Spaces Per Unit[1]	Total
Parcel 10R	1 Bedroom	246	1.50	369
	2 Bedroom	154	2.00	308
			Subtotal Resident Only	**677**
	Guests	400	0.25	100
			Subtotal Guests Only	**100**
	Boat Slips	174 slips	.75/slip	131
			Subtotal Boat Slips Only	**131**
			Total Required	**908**
			Total Parking Provided	**908**
Parcel FF	1 Bedroom	94	1.50	141
	2 Bedroom	24	2.00	48
			Subtotal Resident Only	**210**
	Guests	126	0.25	32
			Subtotal Guests Only	**32**
			Total Required	**242**
			Total Parking Provided	**242**
Parcel 9U	Hotel-2 Bedroom	83	**1/unit**	**83**
	Hotel-1 Bedroom	205	**0.5/unit**	**103**
	Sundry Shop	1,176 sq. ft	**4/1,000 sq. ft.**	**5**
	Spa	111 Occupants	**1/3 Occupants**	**37**
	Ballroom	347 Occupants	**1/3 Occupants**	**116**
	Meeting Room	227 Occupants	**1/3 Occupants**	**76**
	Restaurant	407 Occupants	**1/3 Occupants**	**136**
			Total Stand-Alone Rates	**556[2]**
			Total Parking Provided	**360**
			Project Parking Provided Total	**1,510**

[1] *Pursuant to Los Angeles County Code.*

[2] *~~S~~stand-alone parking rate does not reflect the true demand of a full-scale hotel development. Major hotel developments typically have a variety of facilities and are designed to be 24-hour mixed-use facilities. According to the ULI* Shared Parking *document, parking demand for the hotel uses and the demand for the various uses include the guest rooms, meeting rooms, ballrooms, retail, spa and restaurant, peak at different times of the day. To require parking per code for each hotel use would result in excess parking. The shared parking analysis, included in* ***Appendix 5.7*** *of this EIR concluded that the maximum number of parking spaces required would be 345, during 9 PM and 10 PM on a typical summer weekend, resulting in 15 surplus spaces during the peak parking demand period.*

[3] *Employee parking rates are included within the standard Los Angeles County parking rates and are accounted for within the table above.*

As summarized in **Table 5.7-~~14~~15**, approximately 556 on-site parking spaces would be required for the proposed hotel/timeshare resort component on Parcel 9U if the resort's primary and accessory uses were analyzed as stand-alone facilities. However, stand-alone parking often does not reflect the true parking demand of a mixed-used development. Therefore, County Code allows for an analysis to be made of the

project uses on a shared parking basis. A shared parking analysis, prepared using Urban Land Institute (ULI) procedures as detailed in **Appendix 5.7**, concludes that the maximum parking demand for the project site would be approximately 345 parking spaces and would occur between 9:00 PM and 10:00 PM on a typical summer weekend, with a slightly lower maximum parking demand of 344 spaces on atypical summer weekday. The proposed hotel/timeshare resort will accommodate a total of 360 spaces including 21 fee-based self-park spaces located on the second parking level, and 339 valet spaces located on all other parking levels. Thus, no parking spillover onto area streets or into the nearby neighborhoods is anticipated, and no parking-related impacts are expected as a result of the proposed hotel/timeshare resort development on Parcel 9U.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.2.3 Threshold: Would the proposed project cause an adverse impact to the existing regional transportation system.

Analysis: As mentioned previously, a traffic analysis is required at all arterial monitoring intersections where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours. In addition, a traffic analysis is also required at all mainline freeway monitoring locations where the project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

One CMP intersection, Lincoln Boulevard and Marina Expressway, was identified in the project area. The proposed project is not expected to add 50 or more trips to this intersection during either the AM or PM weekday peak hours. However, this intersection was included as a study intersection and analyzed due to its close proximity to the project site. In addition, a traffic analysis is also required at all mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours. A review of the project's net trip generation assignments, as shown previously in **Figures 5.7-12** and **5.7-13**, indicates that the project is not expected to add substantial traffic volumes to the regional transportation system. The maximum amount of project traffic added to any particular freeway segment would occur along the eastbound Marina Expressway/Freeway east of Mindanao Way during the AM peak hour. During this time, the project would add approximately 71 trips, which is substantially less than the Los Angeles CMP threshold of 150 peak hour trips added to any freeway segment in a single direction. Based on this information, the impact criteria will not be exceeded, and no significant regional impacts on arterial monitoring intersections and mainline freeway locations would occur. Therefore, this is considered a less than significant impact.

According to the County of Los Angeles Congestion Management Program (CMP), the project including both the residential component (Parcels FF and 10R) and the hotel/timeshare resort component (Parcel 9U) could add new transit riders to existing transit facilities. The wetland park and public-serving boat slips addition to new transit riders would be negligible. Therefore, a transit impact analysis was performed per the CMP guidelines. The net project vehicular generation of 253 AM and 228 PM peak-hour trips were converted to 354 and 319 person trips, respectively, by applying the CMP person-trip conversion factor of 1.4. According to the CMP guidelines and given the transit level of accessibility to and from the site, it is estimated that approximately 3.5 percent of these project person trips would be assigned to transit. This amount of transit usage by the project (12 transit trips during the AM peak-hour and 11 transit trips during the PM peak-hour) would not be expected to result in a significant transit impact. The three buses that stop within walking distance (within 0.25 mile) from the project site and the two additional buses that also serve this portion of the Marina del Rey community (along Washington Boulevard) would be able to adequately accommodate this usage.

It should be noted that no transit trip credits were assumed for the analysis of project trip generation, as required by the County; transit ridership created by the project was calculated using the CMP transit rates in order to determine a worst case transit impact scenario. The hotel component of the project, however, proposes to establish a Transportation Demand Management (TDM) program to encourage transit use and to reduce potential traffic impacts. Even without taking into account the implementation of the hotel's TDM program, however, the project is not expected to result in a significant transit impact due to the trip generation of the hotel.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.2.4 Threshold: Would the project be consistent with the Marina del Rey Land Use Plan.

Analysis: The portion of the project within DZ 2 consists of the 288 ~~unit~~ room hotel/timeshare resort on the northern portion of Parcel 9U and an approximately 1.46-acre public wetland park on the southern portion of the parcel. Parcel 9U is currently vacant. The 1.46-acre public wetland park is to replace the area of Parcel FF (located at the northeast corner of the intersection of Marquesas Way and Via Marina) designated as Open Space in the LCP. Although not specifically noted in the development allowances, public open space development within the Marina is encouraged and is considered to be compatible with the intent of the LUP development standards. The original development allowances for DZ 2 included a total of 275 dwelling units, 288 hotel rooms and 76 boat slips. Thus, the proposed project development in DZ 2, with 288 hotel/timeshare suites, accessory resort uses and a public park, would be consistent with the development allowances for this zone.

A portion of DZ 3 will also be developed as part of this project. The 136 existing apartments located on Parcel 10R along Via Marina and Marquesas Way will be removed. A total of 400 and 126 new apartments will be constructed on Parcels 10R and FF, respectively, for a total of 526 new apartments within DZ 3. Parcel FF is currently developed with ~~an approximately 207~~201-space surface parking lot. The project will also remove a total of 198 existing boat spaces and develop 174 new boat slips adjacent to Parcel 10R. Thus, the proposed project will result in a net increase of 390 apartments, and a decrease of 24 boat slips within DZ 3.

The original development allowances for DZ 3 included a total of 320 dwelling units, a total of 15,000 square feet of visitor-serving retail, and 76 boat slips; however, the development potential for each development zone is granted on a "first come, first served" basis.

As noted previously, another project (~~Marina Two~~Esprit I Apartments) ~~is currently approved for development~~has recently opened in DZ 3 pursuant to development approvals granted by the County and the Coastal Commission ~~in DZ 3~~. The ~~Marina Two~~Esprit I project is developed at the terminus of Marquesas Way on Parcel 12, which abuts Parcel 10R to the east~~included development on both Parcel 12, within DZ 3, and Parcel 15 within DZ 4. Only the DZ 3 portion of the development is pertinent to the proposed project. T~~Within DZ 3 (on Parcel 12), the ~~Marina Two~~Esprit I project was approved to develop a total of 437 residential dwelling units, 2,000 square feet of visitor-serving retail, and 227 boat slips ~~on parcels~~ ; to make way for the Esprit I project, ~~containing~~ a total of 120 existing dwelling units, 5,600 square feet of visitor-serving retail, and 464 boat slips~~, all of which would~~ were removed from Parcel 12. ~~be removed.~~ The net effect of the ~~Marina Two~~ Esprit I project on the DZ 3 remaining allowable development ~~is~~ was the utilization of 317 dwelling units, thereby reducing the remaining allowable development potential for DZ 3 to ~~only~~ three (3) dwelling units. However, no change in the allowable development potential for the visitor-serving retail or boat slips would occur due to the ~~Marina Two~~Esprit I project, since the approved development actually reduces the amount of visitor-serving retail on the site by 3,600 square feet, and the number of DZ 3 boat slips by 237 slips. Since the Phase II LUP development allowances were based on development beyond the existing conditions at the time of its adoption, the ~~Marina Two~~Esprit I project's reductions in retail space and boat slips are not considered to affect the allowable Phase II development amounts for these uses, which remain at 15,000 square feet of visitor-serving retail and 76 boat slips, respectively.

Consequently, the proposed net increase of 264 dwelling units on Parcel 10R and 126 dwelling units on Parcel FF (390 net combined) is 387 dwelling units more than the three dwelling units currently available in DZ 3. Therefore, to facilitate these proposed projects on Parcels 10R and FF, the County is requesting an amendment to the LCP to transfer "unused" residential development ~~rights~~ units from other adjoining and/or nearby development zones to allow for the proposed increase in dwelling units within DZ 3.

The proposed project would transfer development allowances for Parcel 10R of approximately 261 dwelling units (out of ~~an allowable~~ total of 275 available dwelling units) from the abutting DZ 2. The transfer of 261 dwelling units from DZ 2 plus the 3 remaining allowable units for DZ 3 would allow for the development increase of 264 dwelling units on Parcel 10R. In addition, the proposed project would transfer development allowances from the remaining 14 dwelling units within DZ 2, and transfer 112 dwelling unit allowances from nearby DZ 1 (the "Bora Bora" DZ comprised of parcels at near the terminus of Via Marina) into DZ 3. As a result, DZ 2 would have no allowable dwelling units remaining. However, as noted earlier, this condition will not significantly affect development within DZ 2, since the only project proposed for this zone is the subject 288-room hotel/timeshare resort, which ~~is currently allowed~~ is consistent with the hotel room buildout potential of DZ 2. Thus, the proposed residential development allowance transfers from DZ 1 and DZ 2 would permit the entire proposed Parcel 10R and FF development within DZ 3 to be consistent with the development allowances described in the Marina del Rey LUP.

The Marina del Rey LUP also requires that proposed projects demonstrate compatibility with the Circulation Element of the Plan, based upon a comparison of the number of trips generated by the allowable development and the trips generated by the proposed project. As noted previously, the Phase II development potential for each ~~zone~~ DZ is based upon the Marina's ultimate capacity to accommodate traffic. To determine the compatibility of the proposed development with the Circulation Element, the PM peak hour trip generation potentials for both the proposed and allowable land uses were computed. The trip generation rates used in this comparison are specified in Table 2 of Appendix G, Transportation Improvement Program (TIP), of the Marina del Rey Local Implementation Program, which is, in turn, a part of the LUP. These trip rates were used to determine the number of trips attributable to the allowed Phase II development levels, and to assess the need for and effectiveness of the roadway improvements required as part of the Phase II development. The calculation of the number of allowable and proposed PM peak hour trips for DZ 2 and DZ 3 is summarized in **Table 5.7-~~15~~16, Development Zone 2 and 3 PM Peak-Hour Trips**.

Table 5.7-~~15~~ 16 shows that the project development proposed for DZ 2 is well within the allowable buildout trip limits for that zone, as determined based on the allowed development land uses specified in the LUP. No other developments have occurred under the Phase II Marina development for DZ 2, and as such, development of the proposed project including the residential development transfer of 275 dwelling units from DZ 2 to DZ 3 leaves 9.58 net allowable trips remaining for future development in this Zone.

Development Zone 3 exhibits a similar situation. The potential development listed in the Marina del Rey Land Use Plan ~~Development~~ for ~~Zone~~ DZ 3 would allow a total of 180.50 net new PM trips. However, the approved ~~Marina Two~~Esprit I project on Parcel 12 results in a net total of 49.59 trips, leaving

130.91 remaining allowable trips. The project development proposed for DZ 3 would produce a total of 125.88 net new PM peak-hour trips. In addition, the proposed residential development allowance transfer would increase the trip allowance by 126.16 trips. As a result, following development of the proposed project, the allowable trips available for future development for this ~~Zone~~ DZ ~~following the proposed project~~ would be approximately 131.19 trips. As such, the proposed project is compatible with the trip generation limit identified in the Marina del Rey LUP for both Development Zones 2 and 3.

Additionally, overall development within the Marina is projected to remain well within established ~~acceptable~~ limits. The Marina del Rey Phase II Buildout development allowed by the LUP and the TIP, as summarized in **Table 5.7-7**, produces a total of 2,750 net new PM peak hour trips for the Marina, beyond those trips occurring at the time those documents were certified. The LUP and its supporting documents were updated and certified most recently in February ~~of~~ 1996. ~~Only four~~Several projects have been developed to date under the allowed Phase II development, ~~although~~ and several additional developments are pending, approved, or currently being constructed. ~~The developed p~~Projects having been approved and constructed after certification of the Major Amendment to the MDR LCP in February 1996 include: ~~(~~

- Dolphin ~~Marina~~ Marina congregate care apartments at Parcel 18 on Panay Way, within DZ 4 (5 PM peak hour trips);
- Dolphin Marina apartments at Parcel 18 on Panay Way, within DZ 4 (22 trips);
- ~~and the~~ Capri Apartments at Parcel 20 on Panay Way, ~~Development~~ within DZ 4 (41 trips)~~,~~;
- ~~t~~The Villas at Marina Harbor Apartments at Parcel 112 at the intersection of Bora Bora Way and Via Marina ~~Development,~~ within DZ 1 (-4 trips)~~,~~;
- The Marina Gateway Shopping Center renovation project on Parcel 97 at the intersection of Washington Boulevard and Via Marina, within DZ 5 (2 trips);
- The Marina Waterside Shopping Center rehabilitation project on ~~and~~ Parcel~~s~~ 50 and 83, within DZ 9 (28 trips)~~) result in an increase of 26.97 PM peak hour trips~~;
- The Villas at Admiralty Way Apartments at Parcel 140 at the intersection of Palawan Way and Admiralty Way, within DZ 5 (37 trips); and
- Esprit I apartments at Parcel 12 on Marquesas Way, within DZ 3 (52 trips).

These constructed projects comprise approximately~~, an increase of 25.80 PM peak hour trips, a decrease of 3.87 net PM peak hour trips, and an increase of 20.87 PM peak hour trips, respectively, for a total of 69.77 trips, which is about~~ seven (~~2.5~~7) percent (or 183 PM peak hour trips) of the total allowable Phase II trips. However, several development proposals~~, including the subject project,~~ have been approved~~, are~~

~~under construction,~~ for development and are pending construction or are currently proceeding through the approval process (which includes the subject projects). These projects will also contribute toward the overall Marina trip cap. As shown in **Table 5.7-~~15~~16**, the proposed project will result in a net trip generation of approximately 227.54 PM peak hour trips.

The other currently approved or ~~,~~ proposed~~, or potential~~ (i.e., those for which development applications have been filed with the County) projects within the Marina include:

- ~~Marina Two~~Esprit II project on Parcel 15 (~~152.34~~approved; 120.00 trips ~~total trips on both Parcels 12 and 15~~)
- The Jamaica Bay Inn hotel expansion project on Parcel 27 (approved; 24.36 trips)
- Marina del Rey Fuel Dock redevelopment project on Parcel 1S (approved; 0 net additional trips)
- The Shores Apartments on Parcels 100 and 101 (approved; 111.49 trips)
- ~~Redevelopment of~~Marina West Shopping Center project on Parcel~~s~~ 95 (pending approval; ~~135.26~~120 trips)

~~•The approved redevelopment of Parcel 97 (2.16 trips)~~

~~•The Parcel 140 residential project (37.49 trips)~~

- Villa Venetia apartments project on Parcel 64 (pending approval; 87.39 trips ~~on Parcel 64~~)

~~•The Parcel 27 hotel expansion project (24.36 trips)~~

- Fisherman's Village redevelopment project~~Mixed use expansion development~~ on Parcels 55, 56 and W (pending approval; ~~209~~220 trips)

~~•The approved Del Rey Shores Project (111.49 trips on both Parcels 100 and 101)~~

- ~~A proposed hotel project on~~Residence Inn hotel project on Parcel IR (pending approval; 51.89 trips)
- The Waterfront mixed residential/commercial project on Parcels 33/NR (pending approval; 22.07 trips)
- The Boat Central~~/Pacific Marina Development~~ Dry Stack Boat Storage project on Parcels 52/GG (pending approval; 51.38 trips)
- ~~The proposed~~ Congregate-care Retirement Facility on Parcel OT and Holiday Harbor Courts project on Parcel 21 (pending approval; 30.54 trips)
- Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project on Parcels 10R, FF and 9U (pending approval; 228 trips)

These developments could potentially add a total of approximately ~~972.83~~1066.66 net new trips to the Marina. With buildout of the already developed projects ~~(Dolphin Marina and the Parcels 20, 112 and 50/83 Developments)~~ and the above pending ~~proposed~~ project~~s~~, a net total addition of approximately

~~1,212.68~~1,249.667 PM trips, or approximately ~~44~~ 45.44 percent of the total of 2,750 PM peak hour trips allowed under the development and mitigation scenarios approved for Marina del Rey, would result.

This level of overall trip generation from the developed, approved and proposed Marina projects is less than the 50 percent development level at which Category 3 System-Wide Improvements (as described in the LCP), such as the Admiralty Way improvement to five lanes or the realignment of the intersection of Admiralty Way and Via Marina, are warranted before any additional development can occur. It should also be noted that the proposed project has identified several Category 3 improvements as mitigation measures for the cumulative traffic impacts, described in detail below.

Mitigation Measure: None required.

Conclusion: Less than significant.

Table 5.7-~~15~~16
Development Zone 2 and 3 PM Peak-Hour Trips

Development Zone 2		
Allowable Phase II Development (Without Proposed Project)		
275 dwelling units x 0.326 trips/unit	=	89.65 trips
288 hotel rooms x 3.53 trips/room	=	101.66 trips
76 boat slips x 0.126 trips/slip	=	9.58 trips
Total Allowable Trips		*200.89 trips*
Approved/Constructed Phase II Development		
None	=	0.00 trips
Remaining Allowable Phase II Trips		*200.89 trips*
Proposed Development (Parcel 9U)		
288 hotel units x 0.353 trips/unit	=	101.66 trips
1.46-acre park x 0.00 trips/acre	=	0.00 trips
Net Parcel 9U Project Trips	=	*101.66 trips*
Proposed Residential Development Allowance Transfers		
275 new dwelling units x 0.326 trips/unit (To DZ 3)		89.65 trips
Total Transferred Residential Trips		***89.65 trips***
Surplus/(Deficit) Development Zone 2 Allowable Trips		**9.58 trips**
Development Zone 3		
Allowable Phase II Development (Without Proposed Project)		
275 dwelling units x 0.326 trips/unit	=	104.32 trips
15,000 sq. ft. visitor-serving retail x 4.44 trips/KSF	=	66.60 trips
76 boat slips x 0.126 trips/slip	=	9.58 trips
Total Allowable Trips		*180.50 trips*

Approved Phase II Development (Parcel 12)		
402 new dwelling units x 0.326 trips/unit	=	131.05 trips
35 new senior dwelling units x 0.100 trips/unit	=	3.50 trips
2,000 sq. ft. visitor-serving retail x 4.44 trips/KSF	=	8.88 trips
227 boat slips x 0.126 trips/slip	=	28.60
Total Approved		*172.03 trips*
Less 120 existing dwelling units x 0.326 trips/unit	=	-39.12 trips
~~Approved Phase II Development (Parcel 12)~~		
Less 5,600 sq. ft. existing retail x 4.44 trips/KSF	=	-24.86 trips
Less 464 boat slips x 0.126 trips/slip	=	~~-58.46 trips~~
Net Approved Trips		*49.59 trips*
Remaining Allowable Phase II Trips		*130.91 trips*
Development Zone 3		
Proposed Development (Parcels 10R and FF)		
Parcel 10R		
400 new dwelling units x 0.326 trips/unit	=	130.40 trips
174 new boat slips x 0.126 trips/slip	=	21.92 trips
		152.32 trips
Less 136 existing dwelling units x 0.326 trips/unit	=	-44.34 trips
Less 184 existing boat slips x 0.126 trips/slip	=	-23.18 trips
Net Parcel 10R Project Trips	=	*84.80 trips*
Parcel FF		
126 new dwelling units x 0.326 trips/unit	=	41.08 trips
Net Parcel FF Project Trips	=	*41.08 trips*
Proposed Residential Development Allowance Transfers		
112 new dwelling units x 0.326 trips/unit (from DZ 1)	=	36.51 trips
275 new dwelling units x 0.326 trips/unit (from DZ 2)	=	89.65 trips
Total Transferred Residential Trips	=	*126.16 trips*
Surplus/(Deficit) Development Zone 3 Allowable Trips		**131.19 trips**

5.7.5.3.3 Neptune Marina Parcel 10R Project

The applicable thresholds of significance are listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts, if applicable.

5.7.5.3.3.1 Threshold: Would the project cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system.

Threshold: Would the project exceed an LOS standard established by the county congestion management agency for designated roads and highways.

Threshold: Would the project cause an increase in the CMA value of 0.010 or more, when the final With Project LOS is E or F (CMA > 0.900); or cause an increase in the CMA of 0.020 or more at LOS D (CMA > 0.800 to 0.900); or cause an increase in the CMA of 0.040 or more at LOS C (CMA > 0.700 to 0.800).

Threshold: Would the traffic generated by the project if added to existing traffic volumes, exceed the design capacity of an intersection or roadway, contribute to an unacceptable LOS, or exacerbate an existing congested condition.

Analysis:

Demolition, Excavation and Construction Impacts. See analysis under **Section 5.7.5.3.2.1** above. Maximum daily construction traffic, after adjustment to PCE for truck traffic, (809 trips), would be less than the daily trips from the existing development (1069 trips). Maximum peak-hour trips would be greater (111 in the AM and 107 in the PM) than the existing peak hour trips (70 in the AM and 69 in the PM) but less than the impacts at buildout for the project as a whole. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel 10R itself would be less than significant as well.

The installation of the project water lines on Via Marina extending into Parcel 10R will need to occur for approximately 6–8 weeks during the project construction period. This installation will require that one lane be closed during off-peak hours along this roadway. However, all lanes would remain open during peak time periods (7:00–9:00 AM and 4:00–6:00 PM) and at least one travel lane in each direction would remain open at all times. The project would be required to obtain and implement a Worksite Traffic Control (WTC) Plan, as mentioned earlier, for all work within the right-of-way.

Operational Impacts: Using the trip generation rates provided in **Table 5.7-1**, Parcel 10R is expected to generate approximately 1017~~1,045~~ net new trips per day. Of this total, an estimated 9~~3~~2 trips would occur during the morning peak hour, and 85~~86~~ new trips would occur during the evening peak hour. These new trips would be added to the project area roadway network once the existing development is removed and the proposed project is completed and fully occupied. Estimated trip generation figures for the project are provided in **Table 5.7-~~10~~11**.

These general geographic trip distribution percentages from **Table 5.7-5** were then assigned to specific travel routes in the study area and are assumed to be the same during both the AM and PM peak hours. Using the directional distribution percentages shown in **Figures 5.7-5, 5.7-6** and **5.7-7, Trip Distribution Percentages**, the number of trips along each roadway were calculated. These roadway trips were then assigned to specific routes serving the project. The results of this traffic assignment provide the necessary level of detail to conduct the future traffic analysis. Traffic assignments for the AM and PM peak-hour project traffic on the nearby street system are shown in **Figure 5.7-14, Traffic Volumes – Parcel 10R Residential Project Traffic – AM Peak Hour,** and **Figure 5.7-15, Traffic Volumes – Parcel 10R Residential Project Traffic – PM Peak Hour**.

Future "With Project" Traffic Conditions

The analysis of future conditions (i.e., existing + ambient growth + project) traffic in the project area was performed using the same CMA procedures described previously in this report. For future project conditions, the roadway system was considered to have no improvements beyond existing conditions. Traffic volumes for the analysis were developed as follows:

- Future-year traffic volumes for the project vicinity were determined by applying a 0.6 percent per year ambient growth factor to the 2007 traffic counts, to estimate area traffic growth.

- Traffic volumes generated by the project were combined with these benchmark Without Project volumes to form the With Project traffic conditions and to determine traffic impacts directly attributable to the proposed development.

The 2013 baseline Without Project AM and PM peak-hour traffic volumes for the project are shown in **Figure 5.7-8, Future (2013) Traffic Volumes without Project (Ambient Growth) – AM Peak Hour**, and **Figure 5.7-9, Future (2013) Traffic Volumes without Project (Ambient Growth) – PM Peak Hour**, respectively. Future year 2013 With Project traffic volumes are shown in **Figure 5.7-16, Future (2013) Traffic Volumes with Parcel 10R – AM Peak Hour**, and F**igure 5.7-17, Future (2013) Traffic Volumes with Parcel 10R – PM Peak Hour**, for the AM and PM peak hours, respectively.

Study Area Intersection Impacts

The results of the CMA for future traffic conditions at the 17 study area intersections are summarized in **Table 5.7-~~16~~17, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – AM Peak Hour**, and **Table 5.7-~~17~~18, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – PM Peak Hour**. The table shows that both the Without Project and With Project intersection traffic conditions would range between LOS A and LOS F at the most congested study intersections during both the AM and PM peak hours. The incremental project traffic would not cause the LOS at any intersection to degrade, which is considered a less than significant impact.

5.7.5.3.3.2 Threshold: Would project-generated traffic interfere with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities).

Analysis: See analysis under **Section 5.7.5.3.2.2** above. Parcel 10R would generate fewer trips on Via Dolce than the project as a whole. In addition, Parcel 10R development would provide parking in accordance with County requirements. Parking related impacts for Parcel 10R were included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel 10R itself would be less than significant as well.

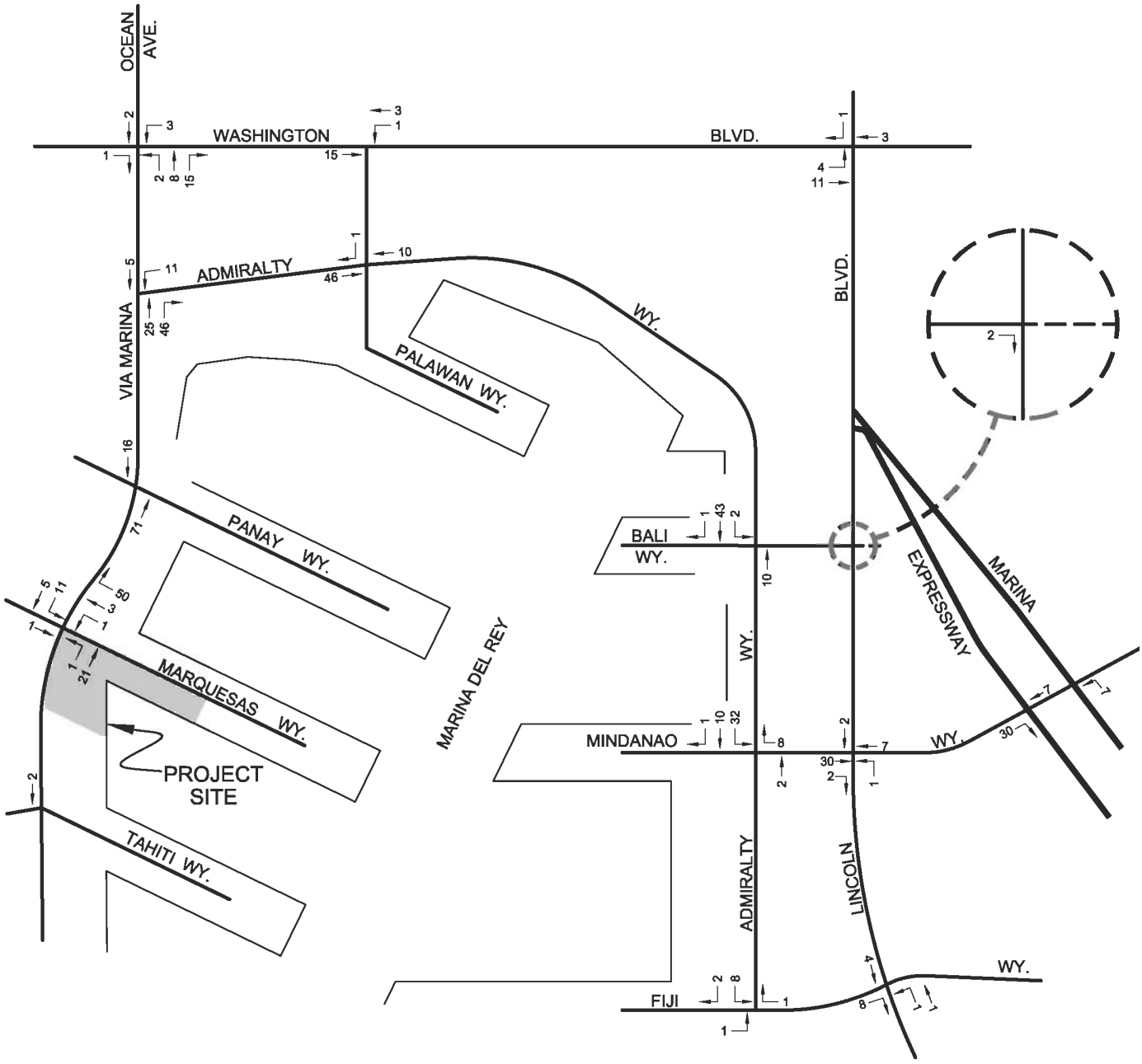
Mitigation Measure: None required.

Table 5.7-~~16~~17
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – AM Peak Hour

		Without Project		With Project		
No.	**Intersection**	**CMA**	**LOS**	**CMA**	**LOS**	**Impact**
1.	Via Marina/Tahiti Way	0.276	A	0.276	A	+0.000
2.	Via Marina/Marquesas Way	0.271	A	0.304	A	+0.033
3.	Via Marina/Panay Way	0.360	A	0.372	A	+0.012
4.	Admiralty Way/Via Marina	0.730	C	0.739	C	+0.009
5.	Washington Blvd./Ocean Ave./Via Marina	0.744	C	0.753	C	+0.009
6.	Admiralty Way/Palawan Way	0.444	A	0.447	A	+0.003
7.	Washington Blvd./Palawan Way	0.668	B	0.673	B	+0.005
8.	Lincoln Blvd./Washington Blvd.	0.807	D	0.811	D	+0.004
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.707	C	0.707	C	+0.000
10.	Lincoln Blvd./Bali Way	0.677	B	0.677	B	+0.000
11.	Lincoln Blvd./Mindanao Way	0.754	C	0.765	C	+0.011
12.	Lincoln Blvd./Fiji Way	0.613	B	0.614	B	+0.001

No.	Intersection	Without Project CMA	Without Project LOS	With Project CMA	With Project LOS	Impact
13.	Admiralty Way/Bali Way	0.480	A	0.489	A	+0.009
14.	Admiralty Way/Mindanao Way	0.654	B	0.672	B	+0.018
15.	Admiralty Way/Fiji Way	0.266	A	0.268	A	+0.002
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.423	A	0.423	A	+0.000
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.641	B	0.648	B	+0.007

* *Denotes significant impact, prior to mitigation.*



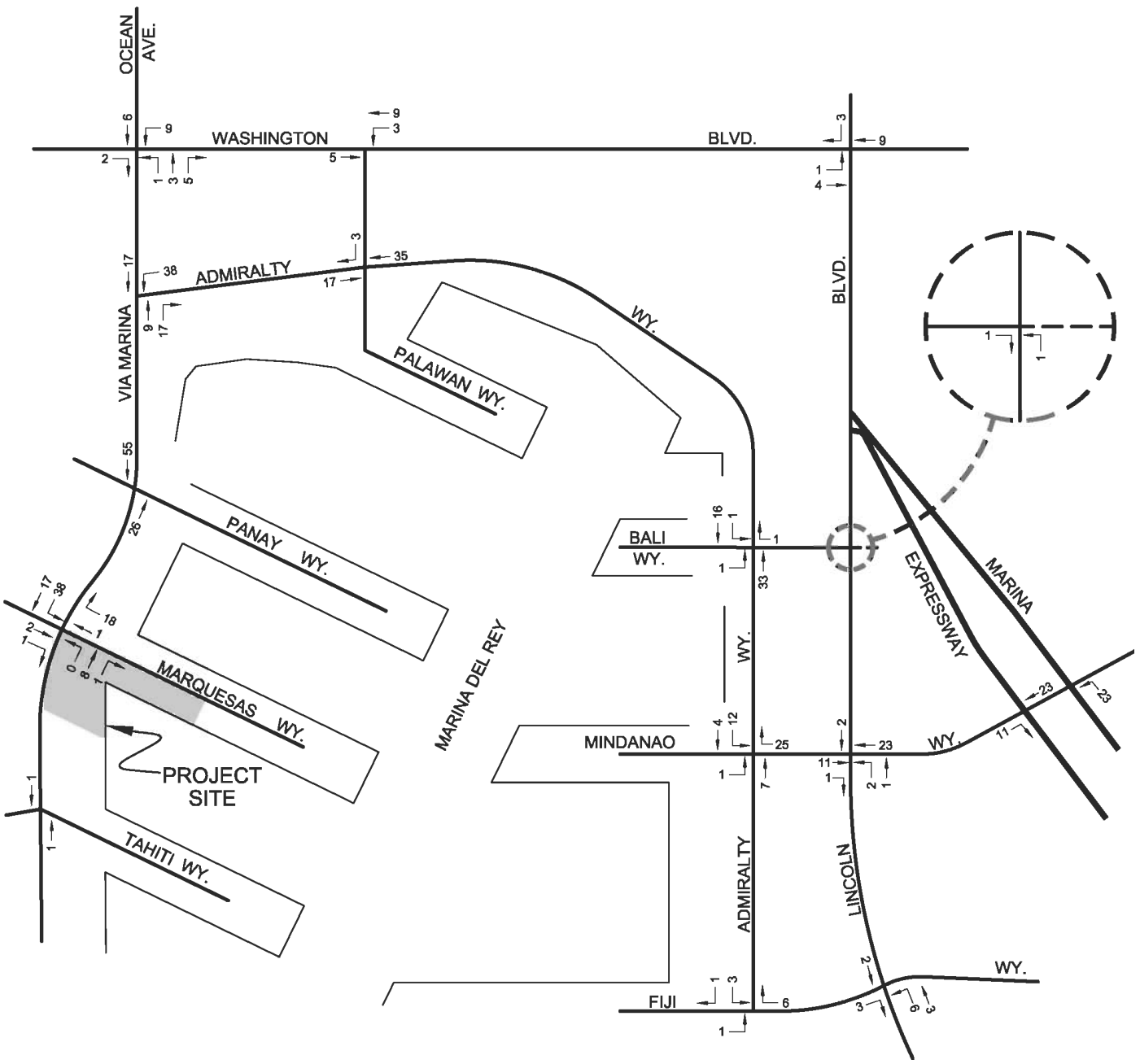
NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-14**

Traffic Volumes - Parcel 10R Residential Project Traffic - AM Peak Hour

480-004•08/08

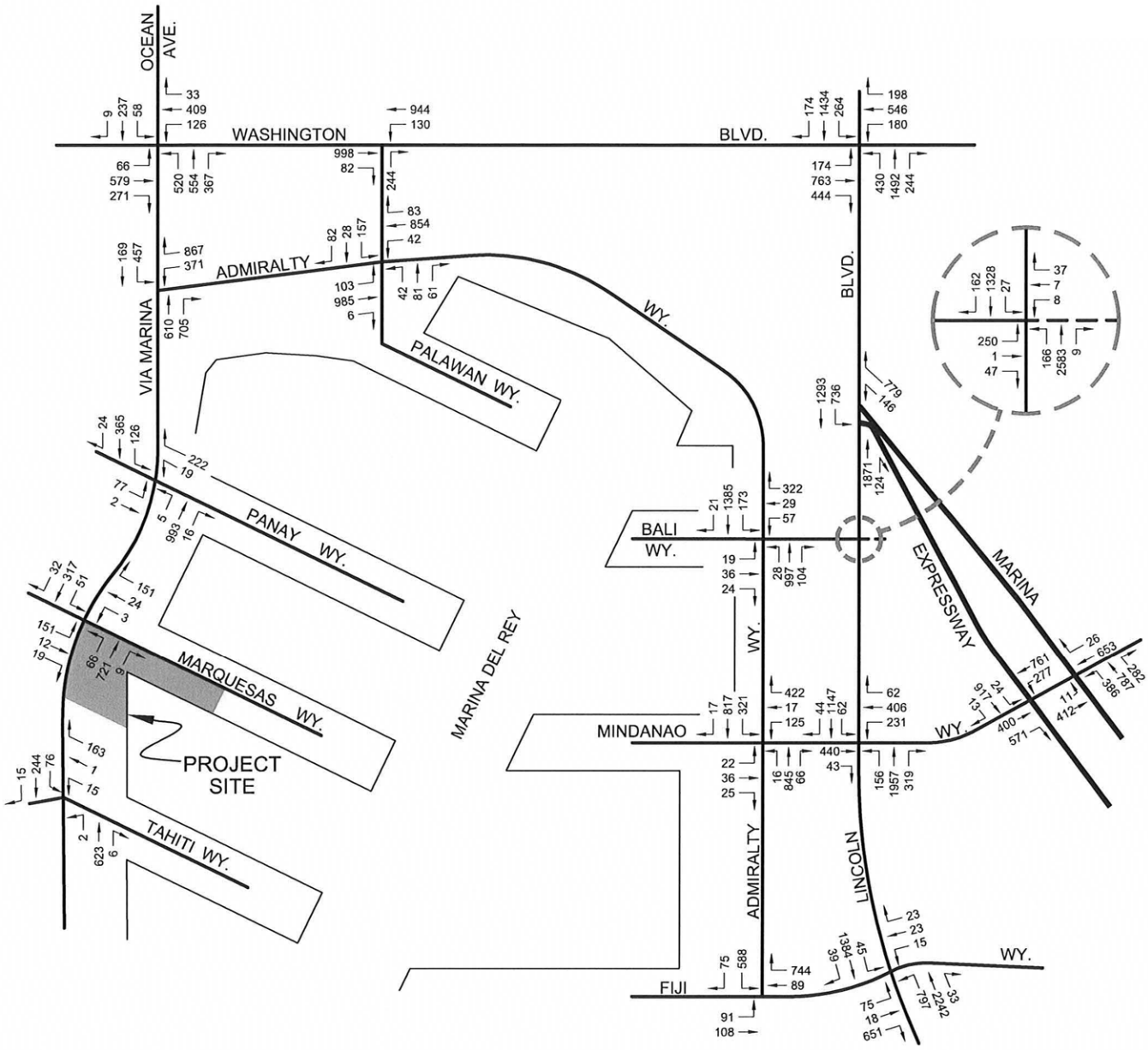


NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-15**

Traffic Volumes - Parcel 10R Residential Project Traffic - PM Peak Hour



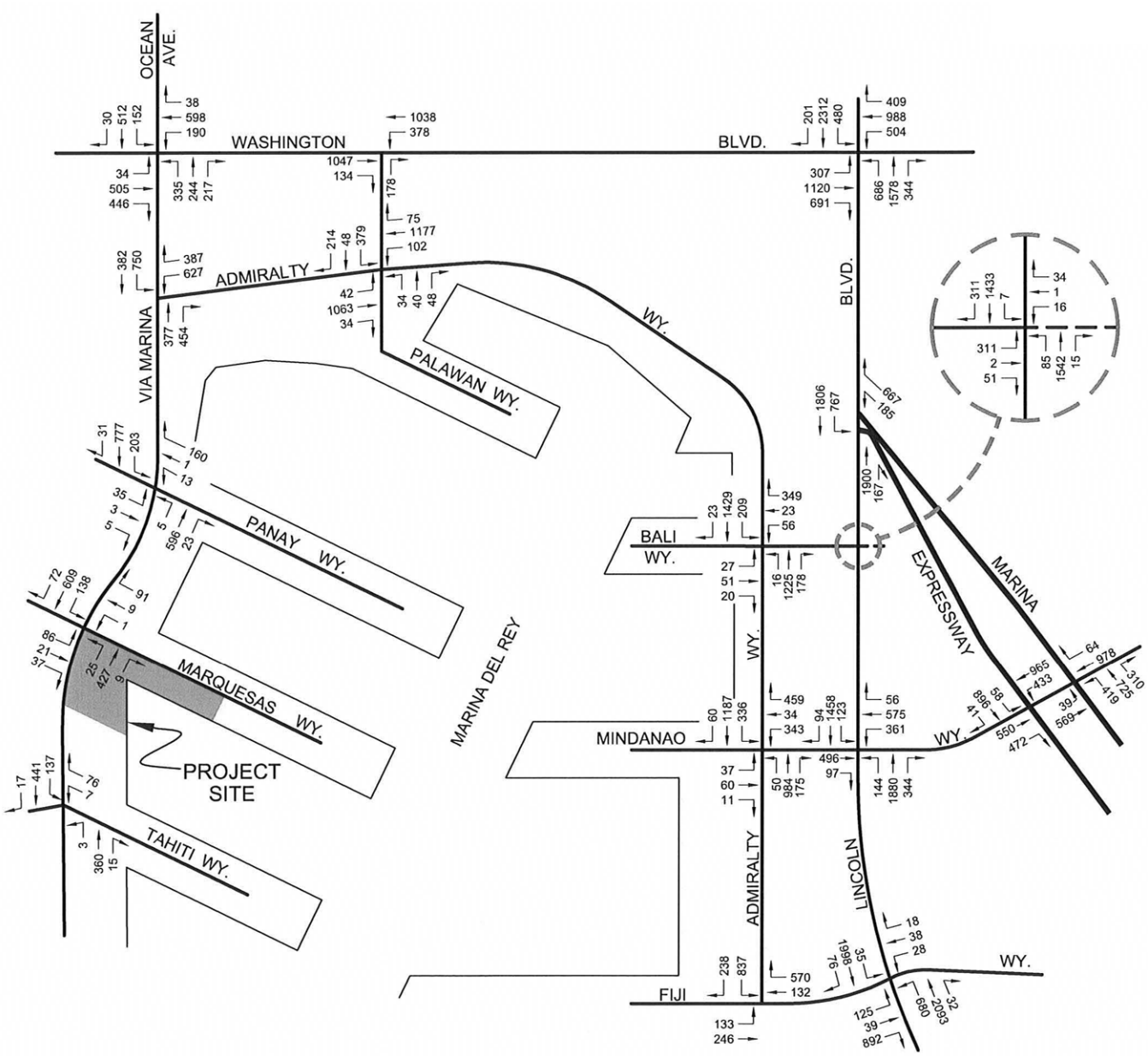
NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-16**

Future (2013) Traffic Volumes With Parcel 10R - AM Peak Hour

480-004•03/08



NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-17**

Future (2013) Traffic Volumes With Parcel 10R - PM Peak Hour

480-004•03/08

Table 5.7-~~17~~18
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – PM Peak Hour

		Without Project		With Project		
No.	**Intersection**	**CMA**	**LOS**	**CMA**	**LOS**	**Impact**
1.	Via Marina/Tahiti Way	0.179	A	0.179	A	+0.000
2.	Via Marina/Marquesas Way	0.188	A	0.209	A	+0.021
3.	Via Marina/Panay Way	0.263	A	0.268	A	+0.005
4.	Admiralty Way/Via Marina	0.783	C	0.800	C	+0.017
5.	Washington Blvd./Ocean Ave./Via Marina	0.799	C	0.812	D	+0.013
6.	Admiralty Way/Palawan Way	0.629	B	0.641	B	+0.012
7.	Washington Blvd./Palawan Way	0.747	C	0.752	C	+0.005
8.	Lincoln Blvd./Washington Blvd.	1.390	F	1.392	F	+0.002
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.751	C	0.751	C	+0.000
10.	Lincoln Blvd./Bali Way	0.534	A	0.535	A	+0.001
11.	Lincoln Blvd./Mindanao Way	0.884	D	0.888	D	+0.004
12.	Lincoln Blvd./Fiji Way	0.762	C	0.765	C	+0.003
13.	Admiralty Way/Bali Way	0.602	B	0.616	B	+0.014
14.	Admiralty Way/Mindanao Way	0.772	C	0.797	C	+0.025
15.	Admiralty Way/Fiji Way	0.386	A	0.387	A	+0.001
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.555	A	0.560	A	+0.005
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.769	C	0.772	C	+0.003

* *Denotes significant impact, prior to mitigation.*

Mitigation Measure: None required.

~~**Conclusion**: Less than significant.~~

Conclusion: Less than significant.

5.7.5.3.3.3 Threshold: Would the proposed project cause an adverse impact to the existing regional transportation system.

Analysis: See analysis under **Section 5.7.5.3.2.3** above. Impacts to the existing regional transportation system for Parcel 10R, including impacts to transit system, were included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel 10R itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.3.4 Threshold: Would the project be consistent with the Marina del Rey Land Use Plan.

Analysis: See analysis under **Section 5.7.5.3.2.4** above. Consistency with the Marina del Rey LUP for Parcel 10R was included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel 10R itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.4 Neptune Marina Parcel FF Project

The applicable thresholds of significance are listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts, if applicable.

5.7.5.3.4.1 Threshold: Would the project cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system.

Threshold: Would the project exceed an LOS standard established by the county congestion management agency for designated roads and highways.

Threshold: Would the project cause an increase in the CMA value of 0.010 or more, when the final "With Project" LOS is E or F (CMA > 0.900); or cause an increase in the CMA of 0.020 or more at LOS D (CMA > 0.800 to 0.900); or cause an increase in the CMA of 0.040 or more at LOS C (CMA > 0.700 to 0.800).

Threshold: Would the traffic generated by the project if added to existing traffic volumes, exceed the design capacity of an intersection or roadway, contribute to an unacceptable LOS, or exacerbate an existing congested condition.

Analysis:

Demolition, Excavation and Construction Impacts: See analysis under **Section 5.7.5.3.2.1** above. Construction at Parcel FF would generate a maximum of 432 daily, 59 AM peak hour, and 57 PM peak hour trips, after adjustment to PCE for truck traffic, Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel FF itself would be less than significant as well.

The installation of the project water lines on Via Marina extending into Parcel FF will need to occur for approximately 3–4 weeks during the project construction period. This installation will require that one lane be closed during off-peak hours along this roadway. However, all lanes would remain open during peak time periods (7:00–9:00 AM and 4:00–6:00 PM) and at least one travel lane in each direction would remain open at all times. The project would be required to obtain and implement a Worksite Traffic Control (WTC) Plan, as mentioned earlier, for all work within the right-of-way.

Operational Impacts: Using the trip generation rates provided in **Table 5.7-1**, the Parcel FF is expected to generate approximately 499 net new trips per day. Of this total, an estimated 44 trips would occur during the morning peak hour, and 41 new trips would occur during the evening peak hour. These new trips would be added to the project area roadway network once the existing development is removed and the proposed project is completed and fully occupied. Estimated trip generation figures for the project are provided in **Table 5.7-~~10~~11**.

These general geographic trip distribution percentages from **Table 5.7-5** were then assigned to specific travel routes in the study area and are assumed to be the same during both the AM and PM peak hours. Using the directional distribution percentages shown in **Figure 5.7-5, 5.7-6, and 5.7-7, Trip Distribution Percentages**, the number of trips along each roadway were calculated. These roadway trips were then assigned to specific routes serving the project. The results of this traffic assignment provide the necessary level of detail to conduct the future traffic analysis. Traffic assignments for the AM and PM peak-hour project traffic on the nearby street system are shown in **Figure 5.7-18, Traffic Volumes – Parcel FF Project Traffic – AM Peak Hour,** and **Figure 5.7-19, Traffic Volumes – Parcel FF Project Traffic – PM Peak Hour**.

Future "With Project" Traffic Conditions

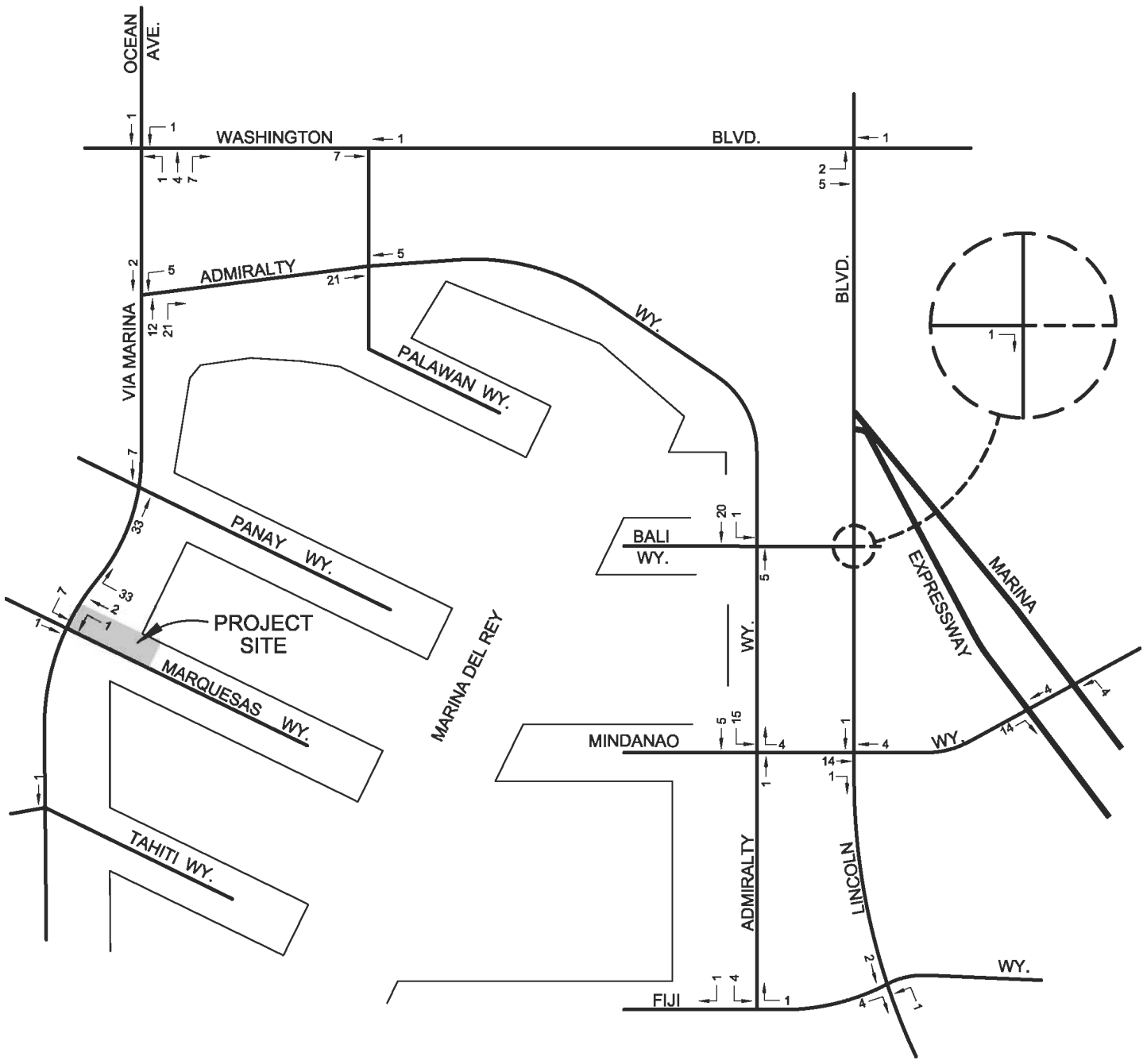
The analysis of future (i.e., existing + ambient growth + project) traffic conditions in the project area was performed using the same CMA procedures described previously in this report. For future project conditions, the roadway system was considered to have no improvements beyond existing conditions. Traffic volumes for the analysis were developed as follows:

- Future-year traffic volumes for the project vicinity were determined by applying a 0.6 percent per year ambient growth factor to the 2007 traffic counts, to estimate area traffic growth.
- Traffic volumes generated by the project were combined with these benchmark Without Project volumes to form the With Project traffic conditions and to determine traffic impacts directly attributable to the proposed development.

The 2013 baseline Without Project AM and PM peak-hour traffic volumes for the project are shown in **Figure 5.7-8, Future (2013) Traffic Volumes without Project (Ambient Growth) – AM Peak Hour**, and **Figure 5.7-9, Future (2013) Traffic Volumes without Project (Ambient Growth) – PM Peak Hour**, respectively. Future year 2013 With Project traffic volumes are shown in **Figure 5.7-20, Future (2013) Traffic Volumes with Parcel FF – AM Peak Hour**, and **Figure 5.7-21, Future (2013) Traffic Volumes with Parcel FF– PM Peak Hour**, for the AM and PM peak hours, respectively.

Study Area Intersection Impacts

The results of the CMA for future traffic conditions at the 17 study area intersections are summarized in **Table 5.7-~~18~~19, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – AM Peak Hour**, and **Table 5.7-~~19~~20, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – PM Peak Hour**. The table shows that both the Without Project and With Project intersection traffic conditions would range between LOS A and LOS F at the most congested study intersections during both the AM and PM peak hours. The incremental project traffic would not cause the LOS at any intersection to degrade, which is considered a less than significant impact.

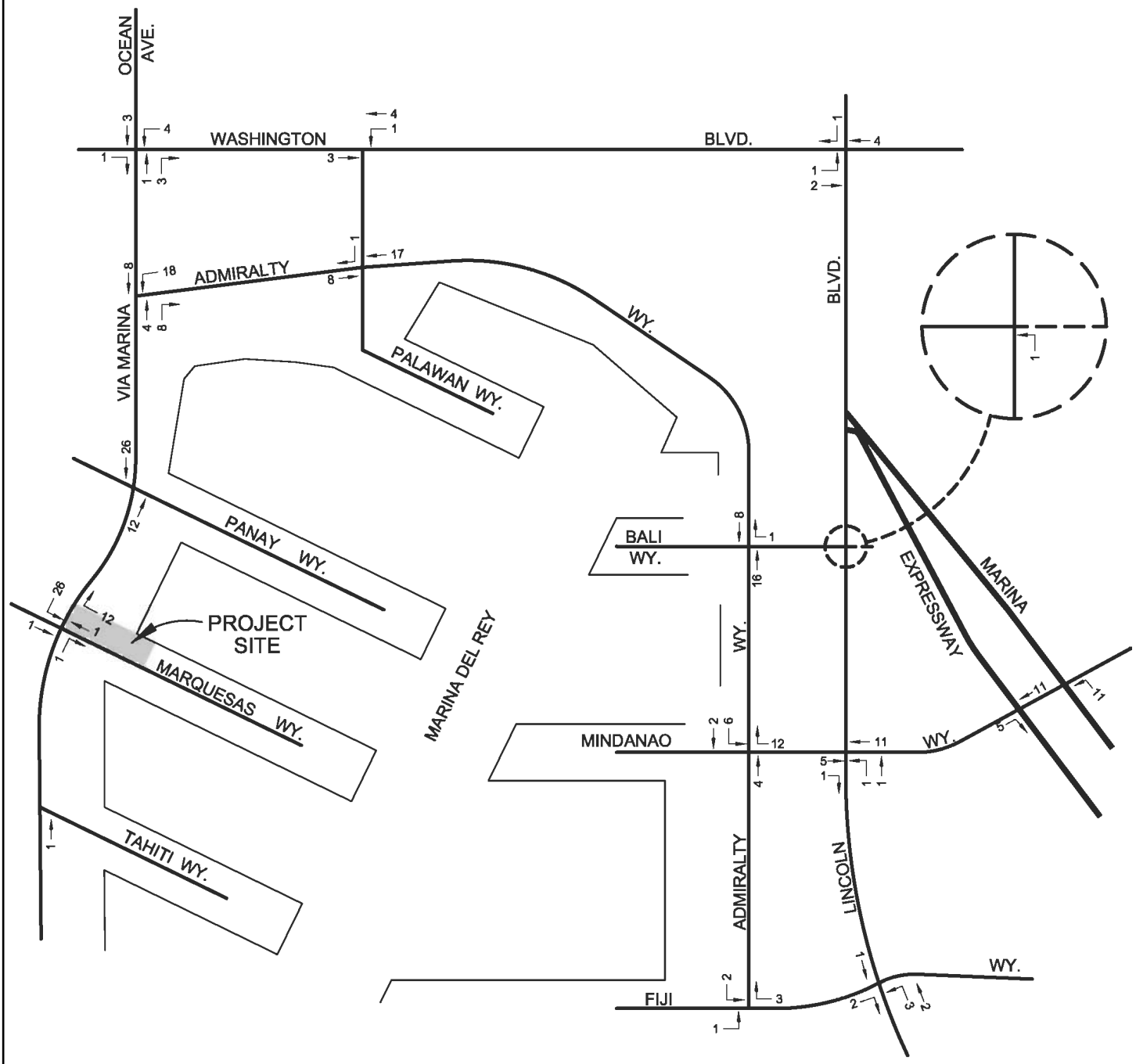


NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-18**

Traffic Volumes - Parcel FF Residential Project Traffic - AM Peak Hour

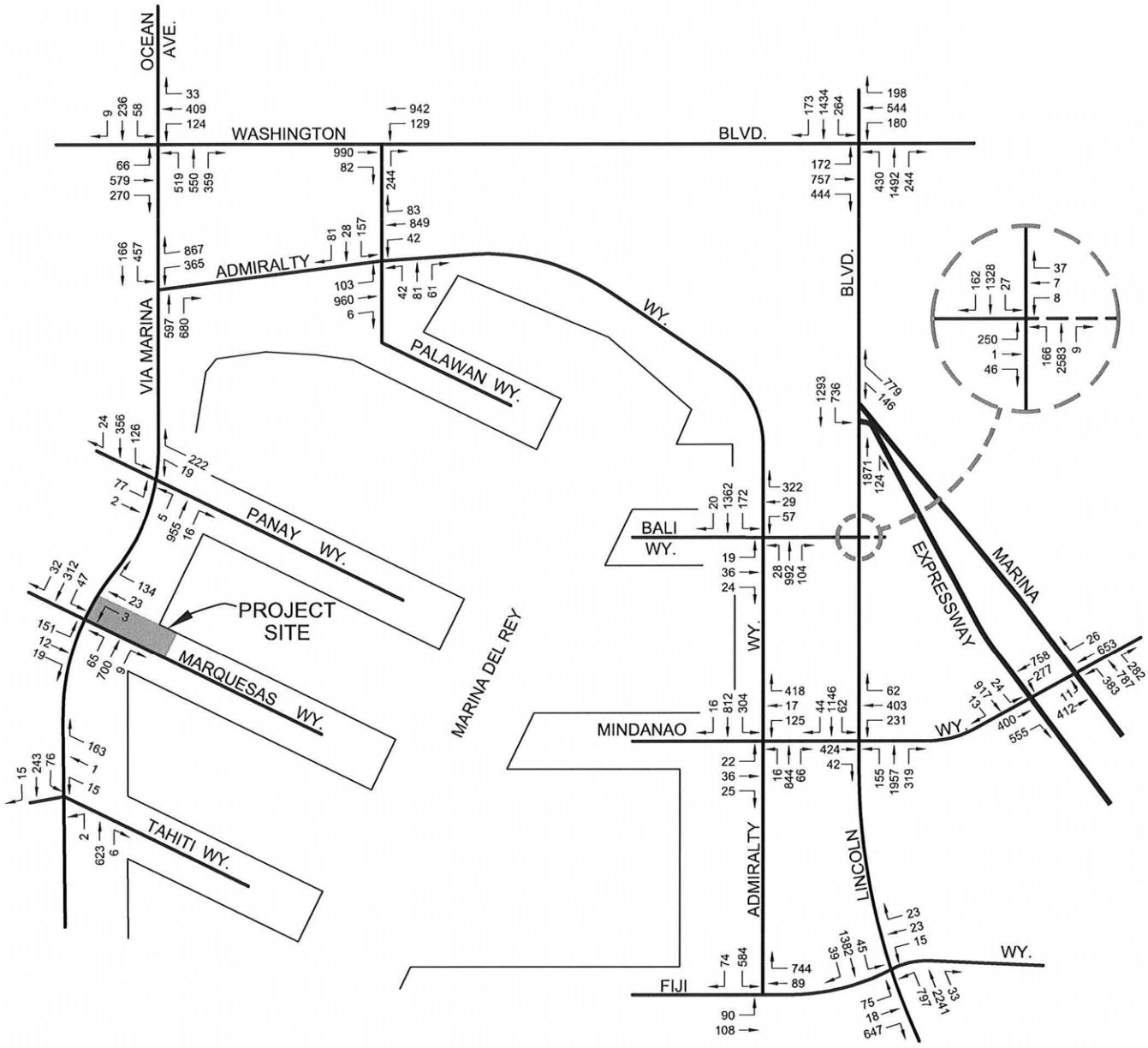


NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-19**

Traffic Volumes - Parcel FF Residential Project Traffic - PM Peak Hour



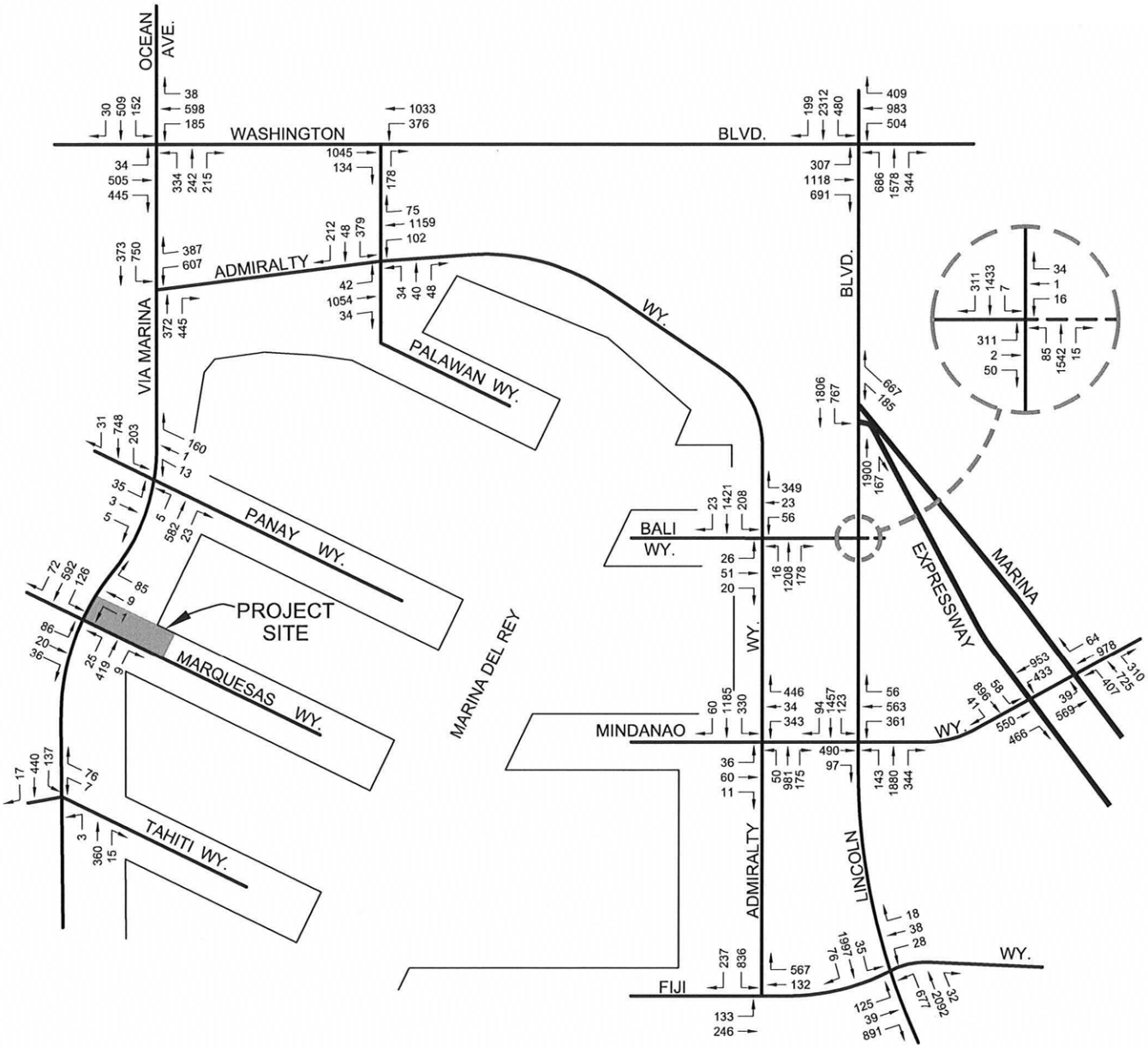
NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-20**

Future (2013) Traffic Volumes With Parcel FF - AM Peak Hour

480-004•03/08



NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-21**

Future (2013) Traffic Volumes With Parcel FF - PM Peak Hour

480-004•03/08

Table 5.7-~~18~~19
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – AM Peak Hour

		Without Project		With Project		
No.	Intersection	CMA	LOS	CMA	LOS	Impact
1.	Via Marina/Tahiti Way	0.276	A	0.276	A	+0.000
2.	Via Marina/Marquesas Way	0.271	A	0.290	A	+0.019
3.	Via Marina/Panay Way	0.360	A	0.366	A	+0.006
4.	Admiralty Way/Via Marina	0.730	C	0.734	C	+0.004
5.	Washington Blvd./Ocean Ave./Via Marina	0.744	C	0.748	C	+0.004
6.	Admiralty Way/Palawan Way	0.444	A	0.445	A	+0.001
7.	Washington Blvd./Palawan Way	0.668	B	0.670	B	+0.002
8.	Lincoln Blvd./Washington Blvd.	0.807	D	0.808	D	+0.001
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.707	C	0.707	C	+0.000
10.	Lincoln Blvd./Bali Way	0.677	B	0.677	B	+0.000
11.	Lincoln Blvd./Mindanao Way	0.754	C	0.759	C	+0.005
12.	Lincoln Blvd./Fiji Way	0.613	B	0.614	B	+0.001
13.	Admiralty Way/Bali Way	0.480	A	0.474	A	+0.002
14.	Admiralty Way/Mindanao Way	0.654	B	0.662	B	+0.008
15.	Admiralty Way/Fiji Way	0.266	A	0.267	A	+0.001
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.423	A	0.423	A	+0.000
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.641	B	0.644	B	+0.003

* *Denotes significant impact, prior to mitigation.*

Table 5.7-~~19~~20
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – PM Peak Hour

		Without Project		With Project		
No.	Intersection	CMA	LOS	CMA	LOS	Impact
1.	Via Marina/Tahiti Way	0.179	A	0.179	A	+0.000
2.	Via Marina/Marquesas Way	0.188	A	0.201	A	+0.013
3.	Via Marina/Panay Way	0.263	A	0.266	A	+0.003
4.	Admiralty Way/Via Marina	0.783	C	0.791	C	+0.008
5.	Washington Blvd./Ocean Ave./Via Marina	0.799	C	0.805	D	+0.006
6.	Admiralty Way/Palawan Way	0.629	B	0.635	B	+0.006
7.	Washington Blvd./Palawan Way	0.747	C	0.748	C	+0.001
8.	Lincoln Blvd./Washington Blvd.	1.390	F	1.391	F	+0.001
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.751	C	0.751	C	+0.000

No.	Intersection	Without Project		With Project		
		CMA	LOS	CMA	LOS	Impact
10.	Lincoln Blvd./Bali Way	0.534	A	0.535	A	+0.001
11.	Lincoln Blvd./Mindanao Way	0.884	D	0.887	D	+0.003
12.	Lincoln Blvd./Fiji Way	0.762	C	0.763	C	+0.001
13.	Admiralty Way/Bali Way	0.602	B	0.608	B	+0.006
14.	Admiralty Way/Mindanao Way	0.772	C	0.784	C	+0.012
15.	Admiralty Way/Fiji Way	0.386	A	0.387	A	+0.001
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.555	A	0.558	A	+0.003
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.769	C	0.770	C	+0.001

* *Denotes significant impact, prior to mitigation.*

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.4.2 Threshold: Would project-generated traffic interfere with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities).

Analysis: See analysis under **Section 5.7.5.3.2.2** above. Parcel FF would generate fewer trips on Via Dolce than the project as a whole. In addition, Parcel FF development would provide parking in accordance with County requirements. Parking related impacts for Parcel FF were included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel FF itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.4.3 Threshold: Would the proposed project cause an adverse impact to the existing regional transportation system.

Analysis: See analysis under **Section 5.7.5.3.2.3** above. Impacts to the existing regional transportation system for Parcel FF, including impacts to transit systems, were included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel FF itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.4.4 Threshold: Would the project be consistent with the Marina del Rey Land Use Plan.

Analysis: See analysis under **Subsection 5.7.5.3.2.4** above. Consistency with the Marina del Rey LUP for Parcel FF was included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Parcel FF itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.5 Woodfin Suite Hotel and Timeshare Resort Project

The applicable thresholds of significance are listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts, if applicable.

5.7.5.3.5.1 Threshold: Would the project cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system.

Threshold: Would the project exceed an LOS standard established by the county congestion management agency for designated roads and highways.

Threshold: Would the project cause an increase in the CMA value of 0.010 or more, when the final "With Project" LOS is E or F (CMA > 0.900); or cause an increase in the CMA of 0.020 or more at LOS D (CMA > 0.800 to 0.900); or cause an increase in the CMA of 0.040 or more at LOS C (CMA > 0.700 to 0.800).

Threshold: Would the traffic generated by the project if added to existing traffic volumes, exceed the design capacity of an intersection or roadway, contribute to an unacceptable LOS, or exacerbate an existing congested condition.

Analysis: **Demolition, Excavation and Construction Impacts**. See analysis under **Section 5.7.5.3.2.1,** above. Construction of the Woodfin Suite Hotel and Timeshare Resort Project would generate a maximum of 432 daily, 59 AM peak hour, and 57 PM peak hour trips, after adjustment to PCE for truck traffic. Because less than significant impacts were identified for the project as a whole, impacts associated with the Woodfin Suite Hotel and Timeshare Resort Project would be less than significant as well.

While not required for implementation of the Woodfin Suite Hotel and Timeshare Resort Project, it is likely that water lines may be installed on Via Marina and extending into Parcel 9U during the project construction period. This water line installation may need approximately 6–8 weeks to complete. This installation, a component of the Marina del Rey water infrastructure improvement, will require that one lane be closed during off-peak hours along this roadway. However, all lanes would remain open during peak time periods (7:00–9:00 AM and 4:00–6:00 PM) and at least one travel lane in each direction would remain open at all times. The construction would be required implementation of a Worksite Traffic Control (WTC) Plan, as mentioned earlier, for work within the right-of-way.

Operational Impacts: Using the trip generation rates provided in **Table 5.7-1**, the Woodfin Suite Hotel and Timeshare Resort Project ~~Parcel 9U~~ is expected to generate approximately 1,538 net new trips per

day. Of this total, an estimated 117 trips would occur during the morning peak hour, and 102 new trips would occur during the evening peak hour. These new trips would be added to the project area roadway network once the existing development is removed and the proposed project is completed and fully occupied. Estimated trip generation figures for the project are provided in **Table 5.7-~~10~~11**.

These general geographic trip distribution percentages from **Table 5.7-5** were then assigned to specific travel routes in the study area and are assumed to be the same during both the AM and PM peak hours. Using the directional distribution percentages shown in **Figures 5.7-5, 5.7-6, and 5.7-7, Trip Distribution Percentages**, the number of trips along each roadway were calculated. These roadway trips were then assigned to specific routes serving the project. The results of this traffic assignment provide the necessary level of detail to conduct the future traffic analysis. Traffic assignments for the AM and PM peak-hour project traffic on the nearby street system are shown in **Figure 5.7-22, Traffic Volumes – Parcel 9U Project Traffic – AM Peak Hour,** and **Figure 5.7-23, Traffic Volumes – Parcel 9U Project Traffic – PM Peak Hour**.

Future "With Project" Traffic Conditions

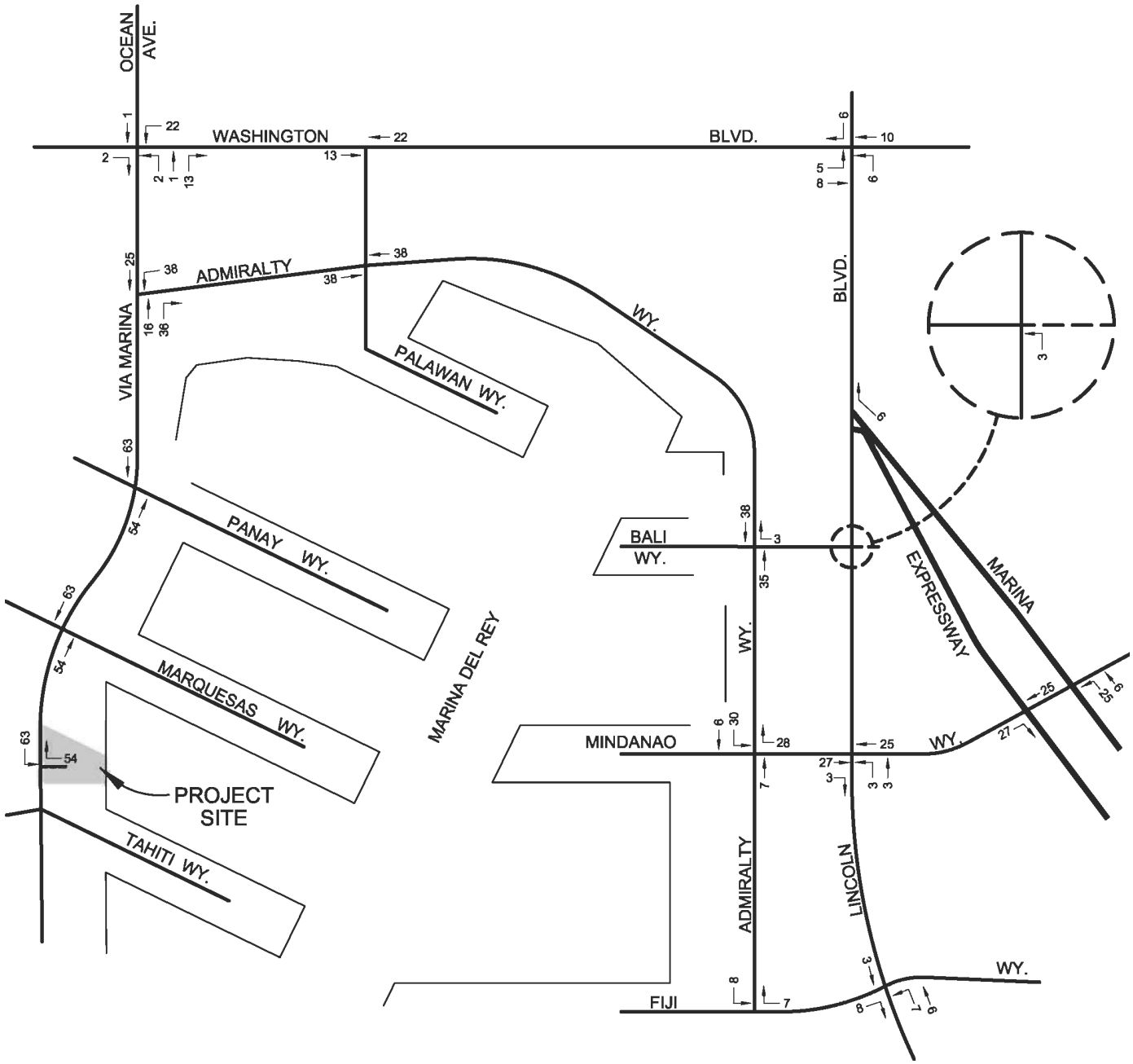
The analysis of future (i.e., existing + ambient growth + project) traffic conditions in the project area was performed using the same CMA procedures described previously in this report. For future project conditions, the roadway system was considered to have no improvements beyond existing conditions. Traffic volumes for the analysis were developed as follows:

- Future-year traffic volumes for the project vicinity were determined by applying a 0.6 percent per year ambient growth factor to the 2007 traffic counts, to estimate area traffic growth.
- Traffic volumes generated by the project were combined with these benchmark Without Project volumes to form the With Project traffic conditions and to determine traffic impacts directly attributable to the proposed development.

The 2013 baseline Without Project AM and PM peak-hour traffic volumes for the project are shown in **Figure 5.7-8, Future (2013) Traffic Volumes without Project (Ambient Growth) – AM Peak Hour**, and **Figure 5.7-9, Future (2013) Traffic Volumes without Project (Ambient Growth) – PM Peak Hour**, respectively. Future year 2013 With Project traffic volumes are shown in **Figure 5.7-24, Future (2013) Traffic Volumes with Parcel 9U – AM Peak Hour**, and **Figure 5.7-25, Future (2013) Traffic Volumes with Parcel 9U – PM Peak Hour**, for the AM and PM peak hours, respectively.

Study Area Intersection Impacts

The results of the CMA for future traffic conditions at the 17 study area intersections are summarized in **Table 5.7-~~20~~21, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – AM Peak Hour**, and **Table 5.7-~~21~~22, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – Without and With Project – PM Peak Hour**. The table shows that both the Without Project and With Project intersection traffic conditions would range between LOS A and LOS F at the most congested study intersections during both the AM and PM peak hours. The incremental project traffic would not cause the LOS at any intersection to degrade, which is considered a less than significant impact.



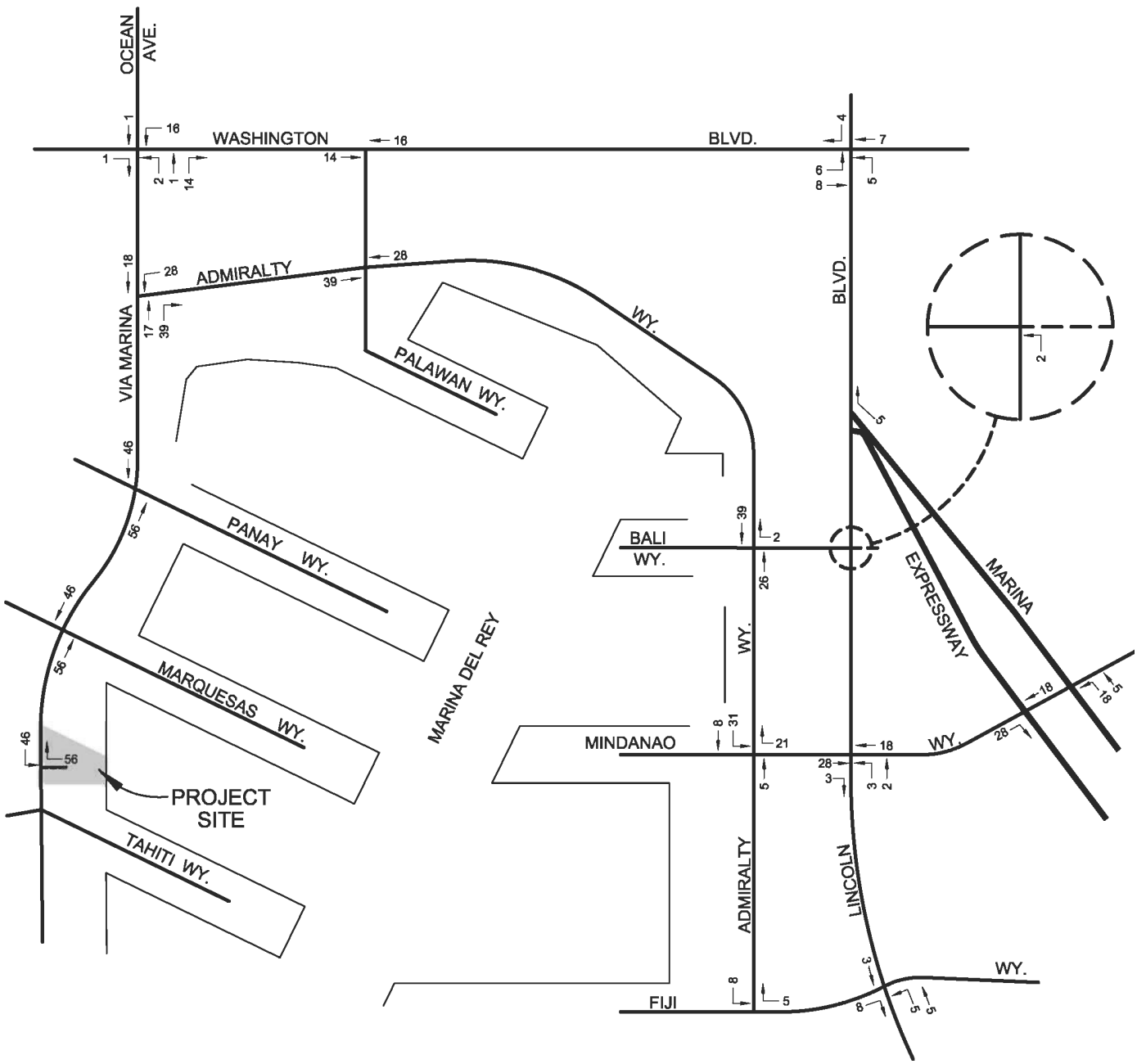
NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-22**

Traffic Volumes - Parcel 9U Hotel Project Traffic - AM Peak Hour

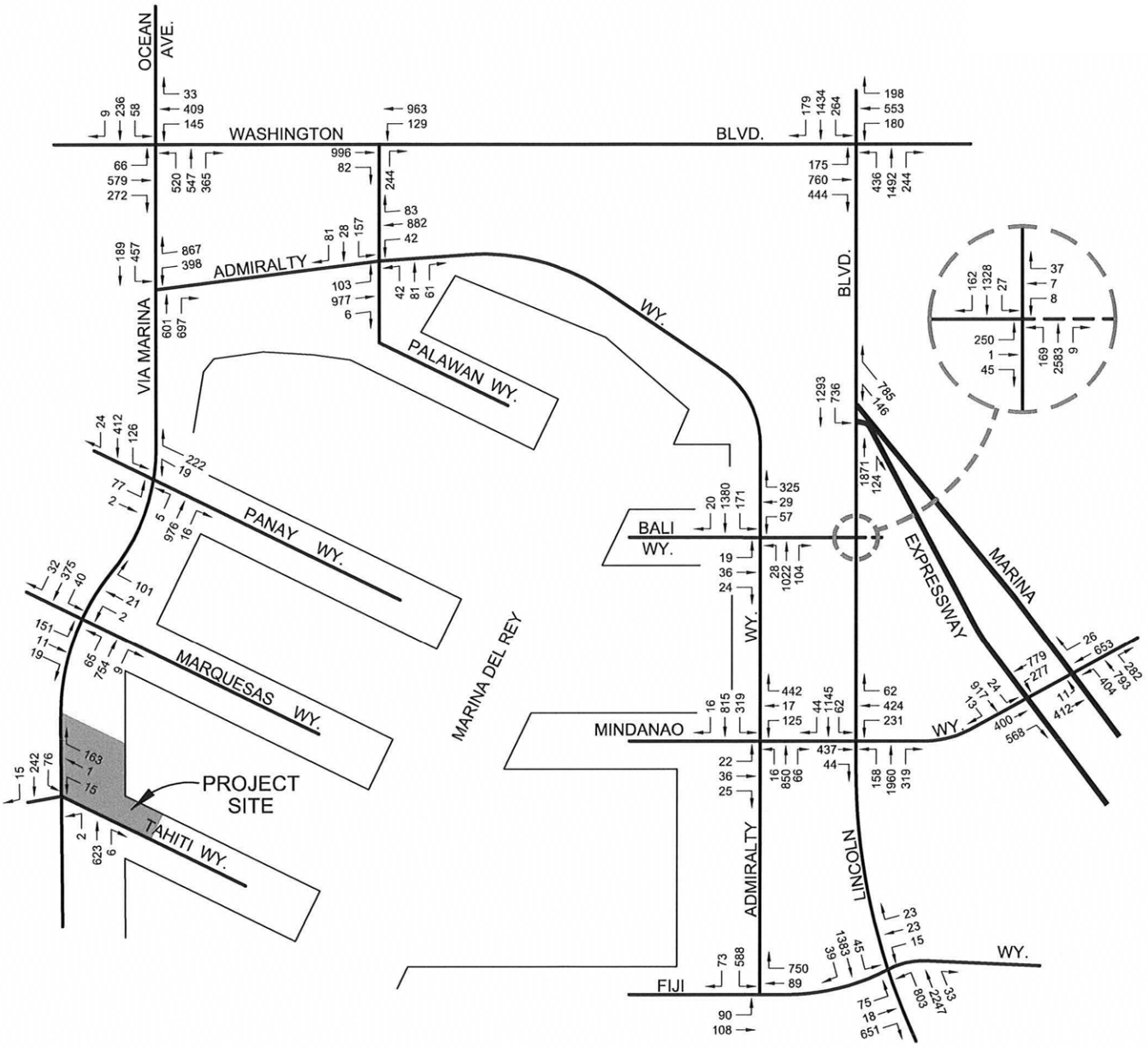
480-004•08/08



SOURCE: Crain & Associates - May 2007

FIGURE **5.7-23**

Traffic Volumes - Parcel 9U Hotel Project Traffic - PM Peak Hour



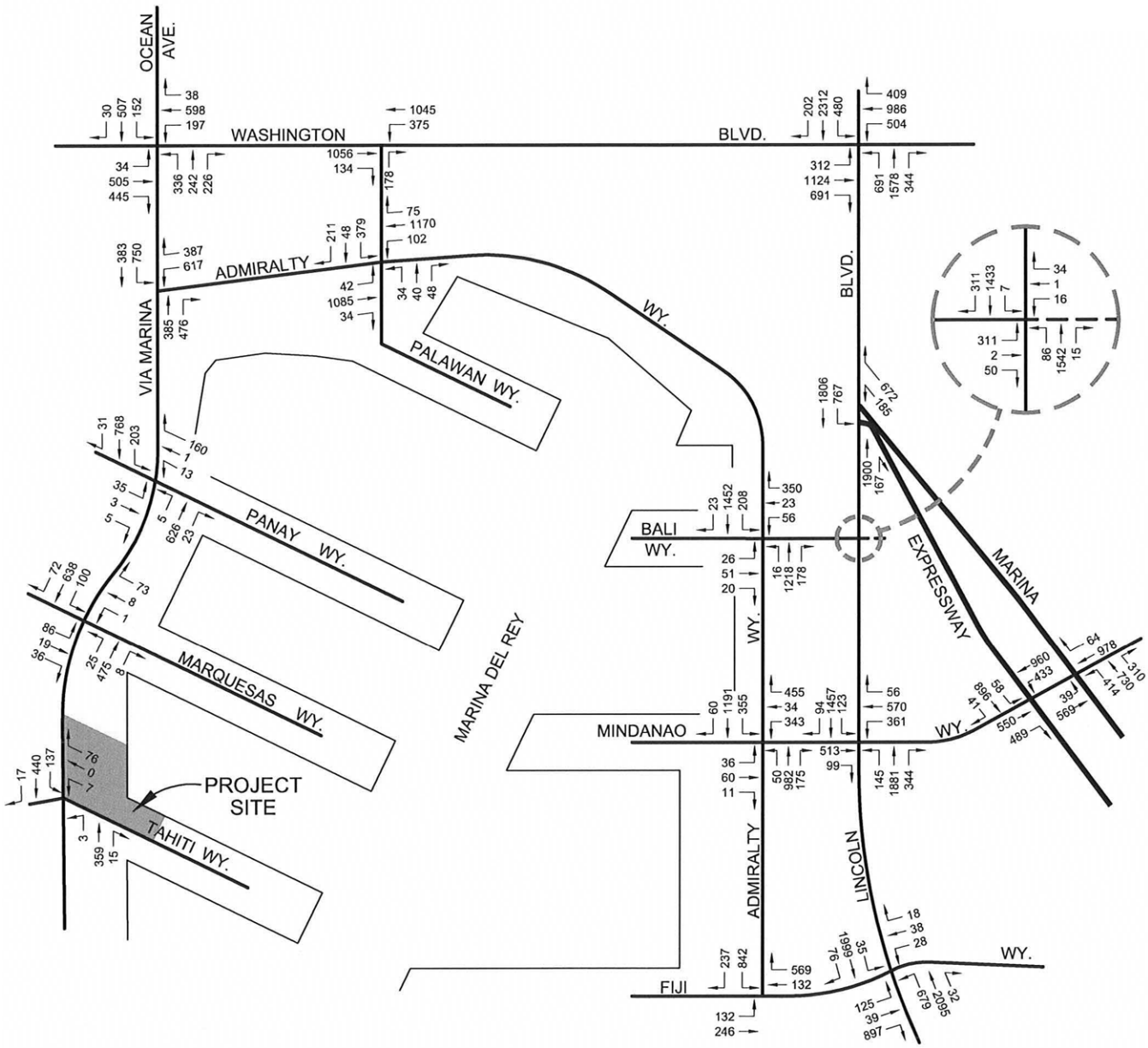
NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-24**

Future (2013) Traffic Volumes With Parcel 9U - AM Peak Hour

480-004•03/08



NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-25**

Future (2013) Traffic Volumes With Parcel 9U - PM Peak Hour

480-004•03/08

Table 5.7-~~20~~21
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – AM Peak Hour

		Without Project		With Project		
No.	Intersection	CMA	LOS	CMA	LOS	Impact
1.	Via Marina/Tahiti Way	0.276	A	0.276	A	+0.000
2.	Via Marina/Marquesas Way	0.271	A	0.281	A	+0.010
3.	Via Marina/Panay Way	0.360	A	0.370	A	+0.010
4.	Admiralty Way/Via Marina	0.730	C	0.736	C	+0.006
5.	Washington Blvd./Ocean Ave./Via Marina	0.744	C	0.760	C	+0.016
6.	Admiralty Way/Palawan Way	0.444	A	0.456	A	+0.012
7.	Washington Blvd./Palawan Way	0.668	B	0.673	B	+0.005
8.	Lincoln Blvd./Washington Blvd.	0.807	D	0.814	D	+0.007
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.707	C	0.707	C	+0.000
10.	Lincoln Blvd./Bali Way	0.677	B	0.677	B	+0.000
11.	Lincoln Blvd./Mindanao Way	0.754	C	0.765	C	+0.011
12.	Lincoln Blvd./Fiji Way	0.613	B	0.616	B	+0.003
13.	Admiralty Way/Bali Way	0.480	A	0.493	A	+0.013
14.	Admiralty Way/Mindanao Way	0.654	B	0.686	B	+0.032
15.	Admiralty Way/Fiji Way	0.266	A	0.268	A	+0.002
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.423	A	0.426	A	+0.003
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.641	B	0.647	B	+0.006

* *Denotes significant impact, prior to mitigation.*

Table 5.7-~~21~~22
Summary of Critical Movement Analysis Future (2013) Traffic Conditions
Without and With Project – PM Peak Hour

		Without Project		With Project		
No.	Intersection	CMA	LOS	CMA	LOS	Impact
1.	Via Marina/Tahiti Way	0.179	A	0.179	A	+0.000
2.	Via Marina/Marquesas Way	0.188	A	0.198	A	+0.010
3.	Via Marina/Panay Way	0.263	A	0.273	A	+0.010
4.	Admiralty Way/Via Marina	0.783	C	0.799	C	+0.016
5.	Washington Blvd./Ocean Ave./Via Marina	0.799	C	0.812	D	+0.013
6.	Admiralty Way/Palawan Way	0.629	B	0.638	B	+0.009
7.	Washington Blvd./Palawan Way	0.747	C	0.752	C	+0.005
8.	Lincoln Blvd./Washington Blvd.	1.390	F	1.396	F	+0.006
9.	Lincoln Blvd./Marina Expressway (SR-90)	0.751	C	0.751	C	+0.000

No.	Intersection	Without Project		With Project		
		CMA	LOS	CMA	LOS	Impact
10.	Lincoln Blvd./Bali Way	0.534	A	0.536	A	+0.002
11.	Lincoln Blvd./Mindanao Way	0.884	D	0.896	D	+0.012
12.	Lincoln Blvd./Fiji Way	0.762	C	0.765	C	+0.003
13.	Admiralty Way/Bali Way	0.602	B	0.612	B	+0.010
14.	Admiralty Way/Mindanao Way	0.772	C	0.799	C	+0.027
15.	Admiralty Way/Fiji Way	0.386	A	0.388	A	+0.002
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.555	A	0.560	A	+0.005
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.769	C	0.775	C	+0.006

* *Denotes significant impact, prior to mitigation.*

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.5.2 Threshold: Would project-generated traffic interfere with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities).

Analysis: See analysis under **Subsection 5.7.5.3.2.2** above. The Woodfin Suite Hotel and Timeshare Resort Project would generate fewer trips on Via Dolce than the project as a whole. In addition, p~~P~~arking related impacts for Woodfin Suite Hotel and Timeshare Resort Project ~~Parcel 9U~~ were included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Woodfin Suite Hotel and Timeshare Resort Project ~~Parcel 9U~~ itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.5.3 Threshold: Would the proposed project cause an adverse impact to the existing regional transportation system.

Analysis: See analysis under **Subsection 5.7.5.3.2.3** above. Impacts to the existing regional transportation system for Woodfin Suite Hotel and Timeshare Resort Project, including transit system impacts, ~~Parcel 9U~~ were included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Woodfin Suite Hotel and Timeshare Resort Project ~~Parcel 9U~~ itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.5.3.5.4 Threshold: Would the project be consistent with the Marina del Rey Land Use Plan.

Analysis: See analysis under **Subsection 5.7.5.3.2.4** above. Consistency with the Marina del Rey LUP for Woodfin Suite Hotel and Timeshare Resort Project ~~Parcel 9U~~ was included in the overall analysis. Because less than significant impacts were identified for the project as a whole, impacts associated with Woodfin Suite Hotel and Timeshare Resort Project ~~Parcel 9U~~ itself would be less than significant as well.

Mitigation Measure: None required.

Conclusion: Less than significant.

5.7.6 MITIGATION MEASURES

5.7.6.1 Mitigation Measures Already Incorporated into Project

The project applicant would construct all on-site circulation improvements to LACDPW and LADOT standards.

5.7.7 CUMULATIVE IMPACTS

5.7.7.1 Threshold: Would the project exceed an LOS standard established by the county congestion management agency for designated roads and highways.

Threshold: Would the traffic generated by the project, if added to existing traffic volumes, exceed the design capacity of an intersection or roadway, contribute to an unacceptable LOS, or exacerbate an existing congested condition.

Analysis:

Construction.: Construction activity from other nearby projects, such as the City of Los Angeles' proposed Venice Dual Force Main Sewer upgrade project, and The Shores project may occur during the same time period that the Neptune Marina Apartments and Anchorage and Woodfin Suite Hotel and Timeshare Resort projects are actively under demolition or construction. These simultaneous construction activities could limit access along both Via Marina and Marquesas Way. Under one of the three proposed alignments, the Venice Dual Force Main Sewer upgrade project would be constructed in Via Marina, the consequence of which would be the temporary reduction to a single travel lane in each direction on Via Marina, which may result in delays during the peak commuting periods. However, the combined short-term traffic due to the construction activities of the Venice Dual Force Main project and the peak level of activity of the proposed project would be lower than that of the completed project. Further, such impacts would be temporary and of short duration. In addition, as noted previously, Worksite Traffic Control (WTC) Plans will be developed and approved for the Neptune Marina Apartments and Anchorage and Woodfin Suite Hotel and Timeshare Resort projects. The WTC Plans will also coordinate with the construction activities of the Venice Dual Force Main project and The Shores project to minimize any short-term construction traffic impacts. The WTC Plans will also ensure that resident and emergency access will not be impeded, and that pedestrian safety will be maintained.

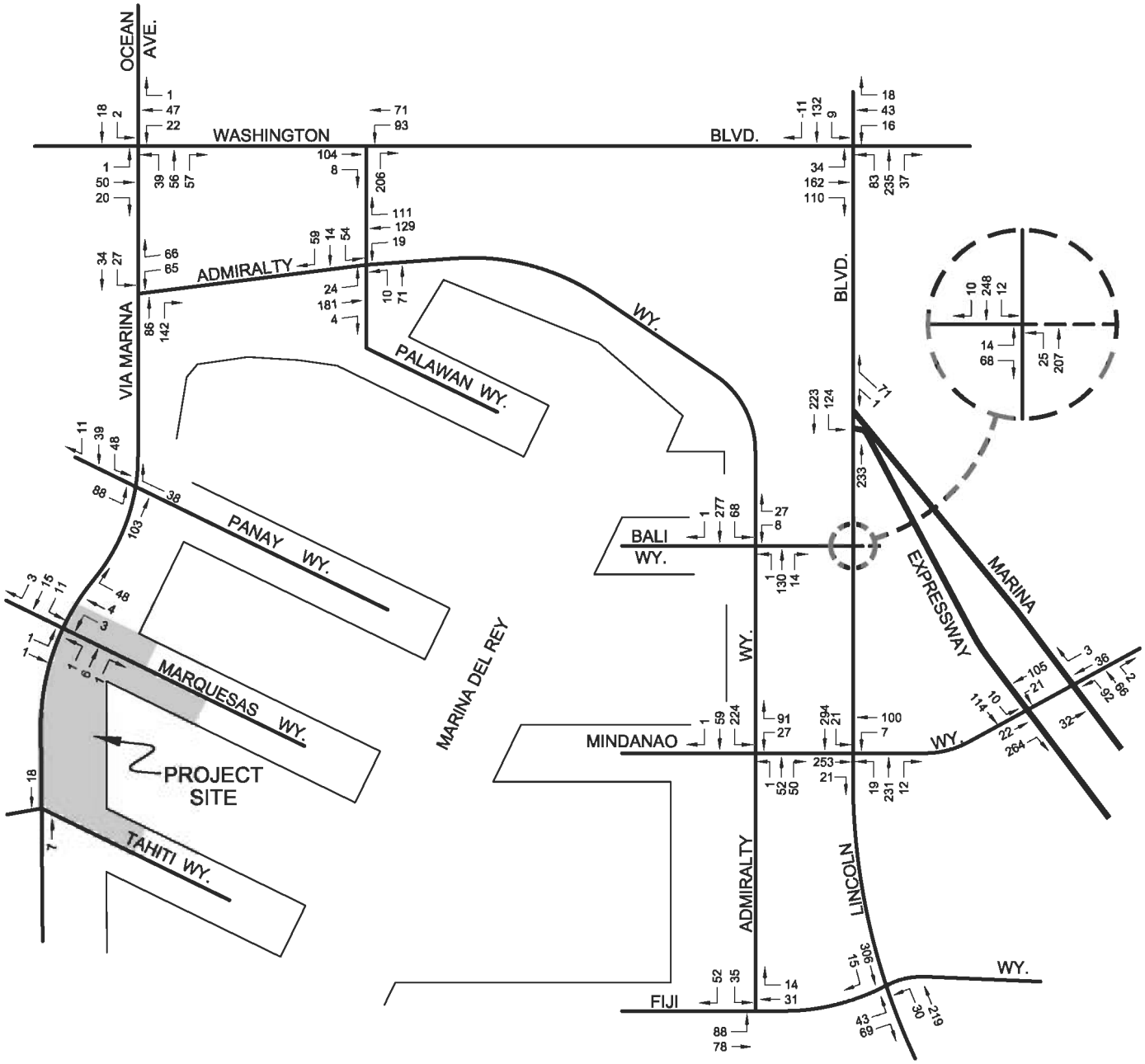
The installation of the project water lines on Via Marina extending into Parcels FF, 10R and possibly 9U will also need to occur for approximately 6–8 weeks during the project construction period. This installation will require that one lane be closed during off-peak hours along this roadway. A separate closure of a southbound Via Marina lane is also anticipated to occur for the Venice Dual Force Main Project, if the Via Marina alignment is chosen. All lane closures would be restricted to off-peak (9:00 AM to 4:00 PM) time periods. As a worst case scenario, these closures could overlap. However, all lanes would remain open during peak time periods (7:00–9:00 AM and 4:00–6:00 PM) and at least one travel lane in each direction would remain open at all times. The project would be required to obtain and implement a Worksite Traffic Control (WTC) Plan for work within the right-of-way, which would need to

coordinate with the Venice Dual Force Main Project activities. This coordination will minimize cumulative traffic impacts should these two in-street construction projects occur simultaneously.

Operation: Traffic resulting from the previously identified 41 related projects would also contribute to impacts at the study intersections that are part of the proposed project. In order to gauge the effects of this additional traffic, an additional level of analysis was conducted. Although the 0.6 percent annual growth factor is expected to fully represent all area traffic increases, for the purposes of conservative analysis, traffic generated from nearby related projects was added to these future baseline traffic volumes, to form the basis for the Without Project conditions. Further, in order to present a conservative analysis of future conditions, most of the 41 related projects were assumed to be completed and fully occupied by the study year (2013), although in reality, many of the related projects are still speculative, have not yet been approved, or are sufficiently large or complicated that they will not be constructed within the assumed study timeframe.

Figure 5.7-26, Related Project Traffic Volumes – AM Peak Hour, and **Figure 5.7-27, Related Project Traffic Volumes – PM Peak Hour** show the anticipated AM and PM peak-hour traffic at the study intersections resulting from the expected cumulative development in the study area. The related project traffic volumes were added to the future (2013) With Project traffic conditions shown previously in **Figure 5.7-10** and **Figure 5.7-11** to obtain projections of the ultimate expected future year 2013 traffic. These cumulative traffic volumes are shown in **Figure 5.7-28, Future (2013) Traffic Volumes – With Project and Related Projects – AM Peak Hour**, and **Figure 5.7-29, Future (2013) Traffic Volumes – With Project and Related Project Traffic – PM Peak Hour**. The analysis of the cumulative traffic conditions was performed using the same CMA methodology described earlier.

The results of the cumulative development analysis are summarized in **Table 5.7-~~22~~23, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – With Cumulative Development – AM Peak Hour**, and **Table 5.7-~~23~~24, Summary of Critical Movement Analysis Future (2013) Traffic Conditions – With Cumulative Development – PM Peak Hour**, and show that the potential additional traffic resulting from area-wide development would significantly impact 12 of the 17 study intersections, resulting in several locations nearing or exceeding capacity. The Neptune Marina Apartments and Anchorage/Woodfin Suites Hotel and Timeshare Resort Project would also contribute incrementally to these cumulative impacts.

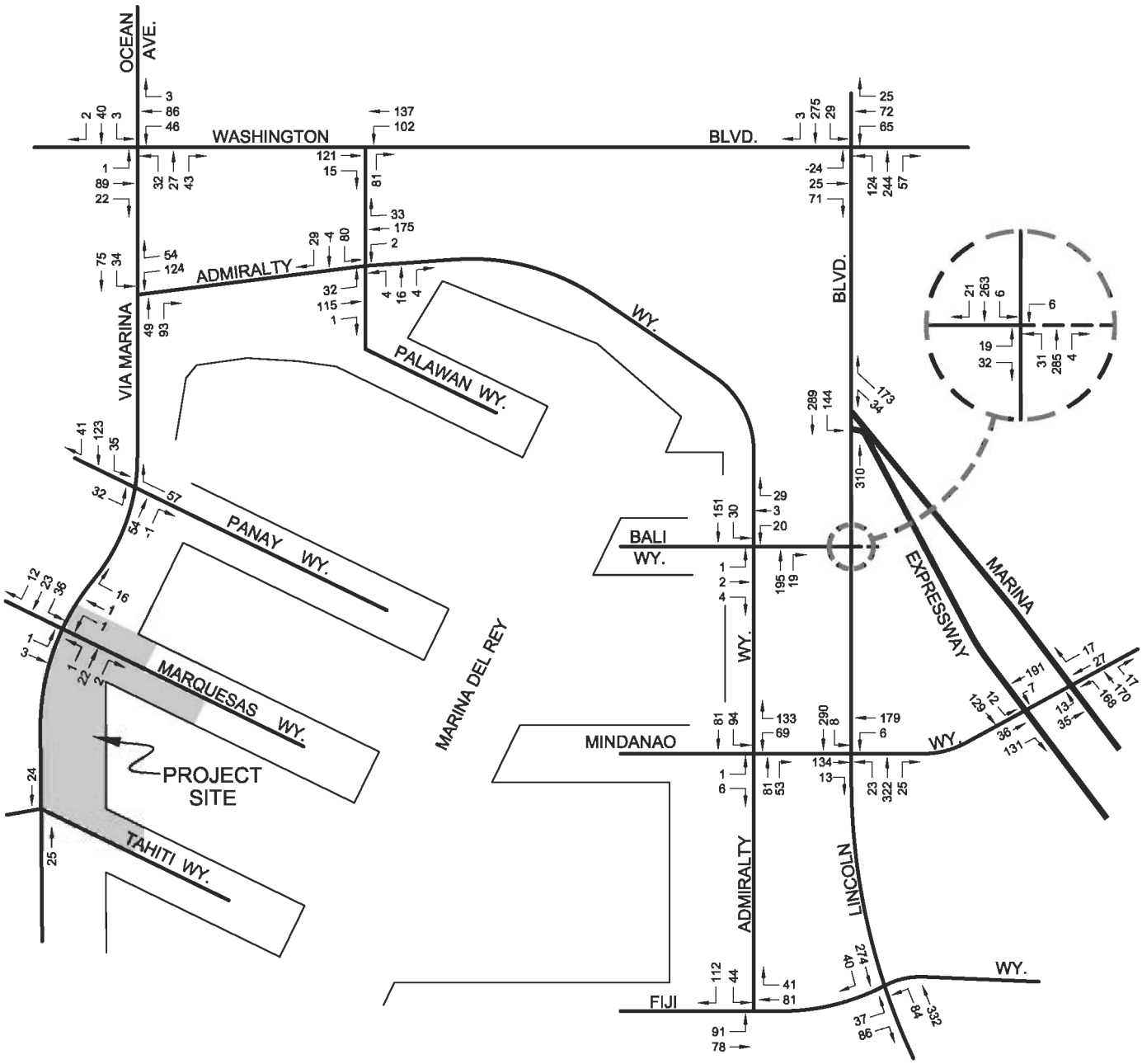


SOURCE: Crain & Associates - May 2006

FIGURE **5.7-26**

Related Project Traffic Volumes - AM Peak Hour

480-004•08/08



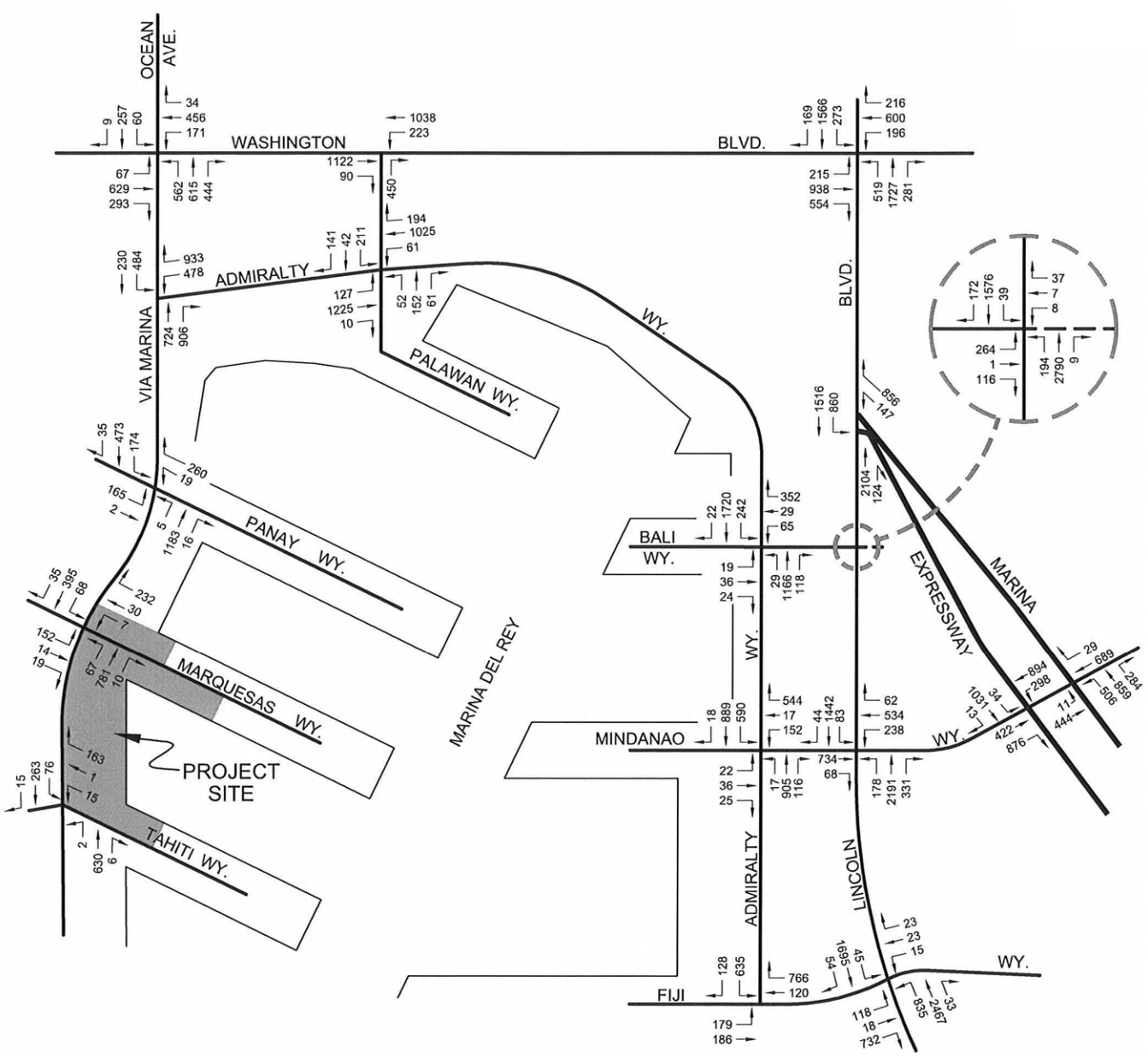
NOT TO SCALE

SOURCE: Crain & Associates - May 2007

FIGURE **5.7-27**

Related Project Traffic Volumes - PM Peak Hour

480-004•08/08



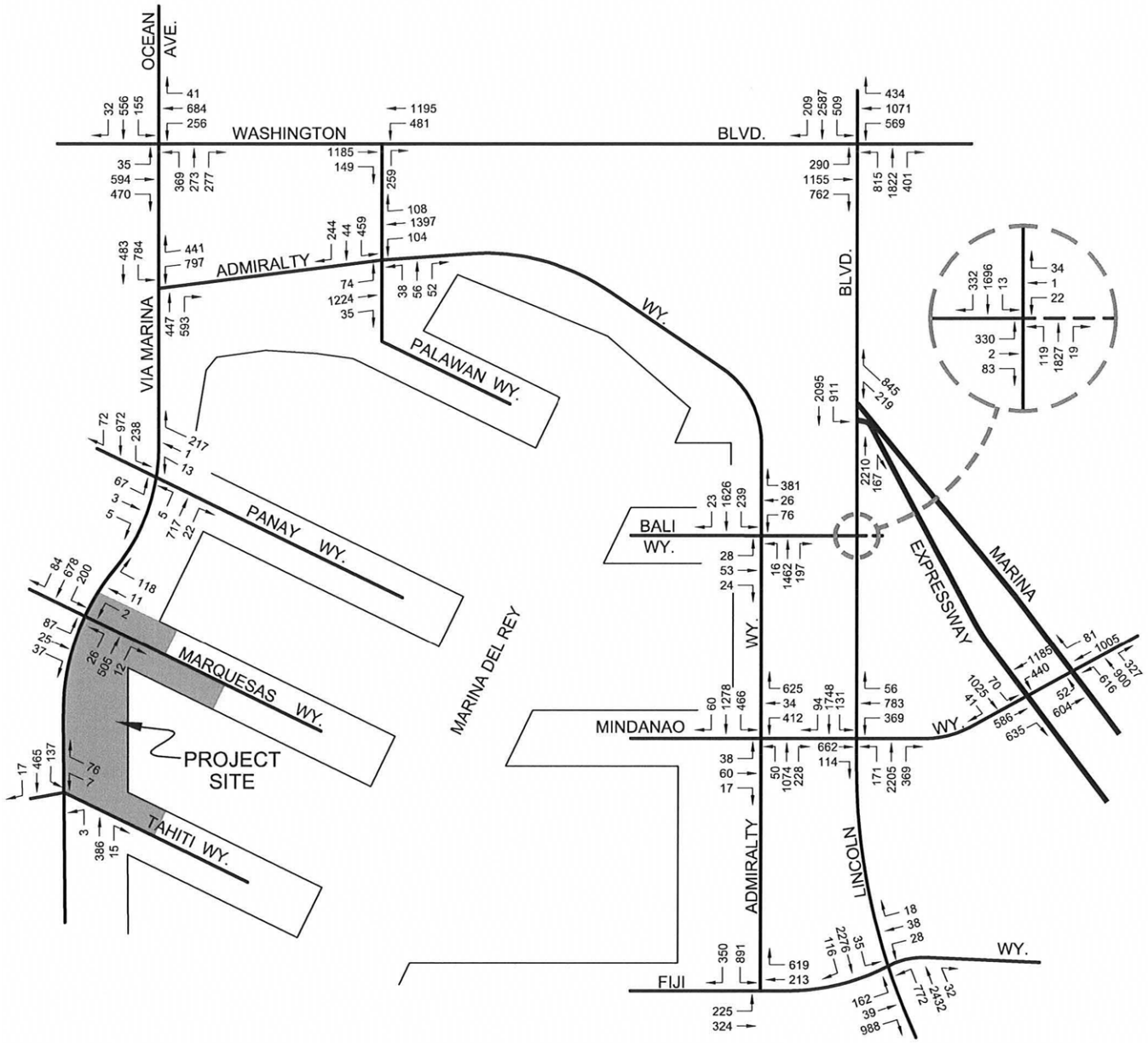
NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-28**

Future (2013) Traffic Volumes With Project and Related Projects - AM Peak Hour

480-004•03/08



NOT TO SCALE

SOURCE: Crain & Associates - December 2007

FIGURE **5.7-29**

Future (2013) Traffic Volumes With Project and Related Projects - PM Peak Hour

480-004•03/08

5.7.7.1 Cumulative Mitigation Measures

All 41 projects identified in the cumulative projects list would be required to undergo a traffic impact analysis similar to the analysis prepared for this project. Such analyses would include mitigation measures (similar to those recommended for this project), where feasible, that would reduce their traffic impacts to less than significant, both on a project level as well as on a cumulative projects level. However, this analysis conservatively does not assume that the related projects will implement such measures. The intersection improvement measures recommended to address these cumulative traffic impacts are described below.

- **Admiralty Way and Via Marina** – Participate in the reconstruction of the intersection to provide for a realignment of Admiralty Way as a through roadway with the southern leg of Via Marina. As described above, the northern leg of Via Marina, south of Washington Boulevard, will intersect into Admiralty Way in a "T" configuration. The striping for turning movements at the reconfigured intersection will be constructed as dual left and dual/triple right-turning movements. This improvement is identified in the Marina del Rey TIP as Category 3 improvement, and will enhance traffic flow within the Marina.

- **Washington Boulevard and Via Marina/Ocean Avenue** – No feasible physical improvements are identified in the TIP that remain available to mitigate this potential direct project traffic impact. However, the County of Los Angeles Department of Public Works has identified an improvement at the nearby intersection of Washington Boulevard and Palawan Way that would provide additional egress from the Marina, reducing traffic volumes on the northbound approach of Via Marina at this intersection, and providing mitigation for the cumulative impacts. The proposed improvement would reconstruct the intersection of Washington Boulevard and Palawan Way to allow for dual northbound left-turns onto westbound Washington Boulevard, and install a new traffic signal at that intersection. The improvement will provide an additional means of accessing westbound Washington Boulevard from westbound Admiralty Way, reducing the existing high northbound volumes at Washington Boulevard and Via Marina/Ocean Avenue. (See "Washington Boulevard and Palawan Way" below for additional details.)

- In addition, the Marina del Rey TIP also identified an improvement at the intersection of Via Marina and Admiralty Way that will enhance traffic flow between Admiralty Way and Via Marina south of Admiralty Way within the Marina, reducing the northbound right-turn traffic volumes on Via Marina at Washington Boulevard. This improvement would reconstruct the Admiralty Way/Via Marina intersection to realign Admiralty Way as a through roadway with the southern leg of Via Marina. The northern leg of Via Marina, south of Washington Boulevard, will intersect into Admiralty Way in a "T" configuration. The striping for turning movements at the reconfigured intersection will be constructed as dual left and dual/triple right-turning movements. As a result, northbound traffic volumes on Via Marina would need to turn left (instead of making a through movement) at Admiralty Way to access eastbound Washington Boulevard. Due to the high left-turn volume on northbound Via Marina at Admiralty Way, some of these traffic volumes would reroute along eastbound Admiralty Way and turn left at Palawan Way.

    - **Admiralty Way and Palawan Way** – Restripe the southbound approach to convert the through lane into a left/through shared lane. Restripe the northbound approach to provide an exclusive

left-turn only lane, in addition to a shared right-turn/through lane. In addition, add a third westbound through lane to Admiralty Way within the existing right-of-way by moving the median and restriping Admiralty Way. These measures are identical to or consistent with the improvements in the Marina del Rey TIP. If the measure is not implemented by the time the anticipated cumulative traffic growth occurs, a temporary significant cumulative impact would remain. Furthermore, if this measure or another measure of equal effectiveness are not implemented (because the County is unable to formally establish an enforceable TIP-type mechanism for collecting fair-share contributions or otherwise), a significant cumulative traffic impact would remain at this location.

Table 5.7-~~22~~23
Summary of Critical Movement Analysis
Future (2013) Traffic Conditions – With Cumulative Development
AM Peak Hour

		Without Project		With Project			With Project Plus Cumulative Development			Project % of Total
No.	Intersection	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact	Impact
1.	Via Marina & Tahiti Way	0.276	A	0.276	A	+0.000	0.278	A	+0.002	0.0%
2.	Via Marina & Marquesas Way	0.271	A	0.333	A	+0.062	0.364	A	+0.093	67.0%
3.	Via Marina & Panay Way	0.360	A	0.388	A	+0.028	0.508	A	+0.148	19.0%
4.	Admiralty Way & Via Marina	0.730	C	0.749	C	+0.019	0.821	D	+0.091*	21.0%
5.	Washington Blvd. & Ocean Ave./Via Marina	0.744	C	0.774	C	+0.030	0.858	D	+0.114*	26.0%
6.	Admiralty Way & Palawan Way	0.444	A	0.461	A	+0.017	0.620	B	+0.176	10.0%
7.	Washington Blvd. & Palawan Way	0.668	B	0.682	B	+0.014	0.935	E	+0.267*	5.0%
8.	Lincoln Blvd. & Washington Blvd.	0.807	D	0.820	D	+0.013	0.947	E	+0.140* 0	9.0%
9.	Lincoln Blvd. & Marina Expressway (SR-90)	0.707	C	0.707	C	+0.000	0.810	D	+0.103*	.0%
10.	Lincoln Blvd. & Bali Way	0.677	B	0.677	B	+0.000	0.741	C	+0.064*	0.0%
11.	Lincoln Blvd. & Mindanao Way	0.754	C	0.782	C	+0.028	0.959	E	+0.205*	14.0%
12.	Lincoln Blvd. & Fiji Way	0.613	B	0.619	B	+0.006	0.735	C	+0.122*	5.0%
13.	Admiralty Way & Bali Way	0.480	A	0.510	A	+0.030	0.605	B	+0.125	24.0%
14.	Admiralty Way & Mindanao Way	0.654	B	0.712	C	+0.058*	0.889	D	+0.235*	25.0%

No.	Intersection	Without Project		With Project			With Project Plus Cumulative Development			Project % of Total Impact
		CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact	
15.	Admiralty Way & Fiji Way	0.266	A	0.272	A	+0.006	0.346	A	+0.080	8.0%
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.423	A	0.428	A	+0.005	0.479	A	+0.056	9.0%
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.641	B	0.657	B	+0.016	0.783	C	+0.142*	11.0%

** Denotes significant impact, prior to mitigation.*

Table 5.7-~~23~~24
Summary of Critical Movement Analysis
Future (2013) Traffic Conditions – With Cumulative Development
PM Peak Hour

No.	Intersection	Without Project		With Project			With Project Plus Cumulative Development			Project % of Total Impact
		CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact	
1.	Via Marina & Tahiti Way	0.179	A	0.180	A	+0.001	0.186	A	+0.007	14.0%
2.	Via Marina & Marquesas Way	0.188	A	0.231	A	+0.043	0.254	A	+0.066	65.0%
3.	Via Marina & Panay Way	0.263	A	0.280	A	+0.017	0.346	A	+0.083	20.0%
4.	Admiralty Way & Via Marina	0.783	C	0.826	D	+0.043*	0.915	E	+0.132*	33.0%
5.	Washington Blvd. & Ocean Ave./Via Marina	0.799	C	0.831	D	+0.032*	0.918	E	+0.119*	27.0%
6.	Admiralty Way & Palawan Way	0.629	B	0.655	B	+0.026	0.809	D	+0.180*	14.0%
7.	Washington Blvd. & Palawan Way	0.747	C	0.759	C	+0.012	0.910	E	+0.163*	7.0%
8.	Lincoln Blvd. & Washington Blvd.	1.390	F	1.399	F	+0.009	1.552	F	+0.162*	6.0%
9.	Lincoln Blvd. & Marina Expressway (SR-90)	0.751	C	0.751	C	+0.000	0.892	D	+0.141*	0.0%
10.	Lincoln Blvd. & Bali Way	0.534	A	0.537	A	+0.003	0.640	B	+0.106	3.0%
11.	Lincoln Blvd. &	0.884	D	0.901	E	+0.017*	1.049	F	+0.165*	10.0%

No.	Intersection	Without Project		With Project			With Project Plus Cumulative Development			Project % of Total
		CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact	Impact
	Mindanao Way									
12.	Lincoln Blvd. & Fiji Way	0.762	C	0.769	C	+0.007	0.901	E	+0.139*	5.0%
13.	Admiralty Way & Bali Way	0.602	B	0.631	B	+0.029	0.740	C	+0.138*	24.0%
14.	Admiralty Way & Mindanao Way	0.772	C	0.835	D	+0.063*	1.013	F	+0.241*	26.0%
15.	Admiralty Way & Fiji Way	0.386	A	0.390	A	+0.004	0.519	A	+0.133	3.0%
16.	Marina Expressway (SR-90) WB/Mindanao Way	0.555	A	0.569	A	+0.014	0.672	B	+0.117	12.0%
17.	Marina Expressway (SR-90) EB/Mindanao Way	0.769	C	0.779	C	+0.010	0.868	D	+0.099*	10.0%

**Denotes significant impact, prior to mitigation.*

- **Washington Boulevard and Palawan Way** – Install a new traffic signal at this intersection (as described above as in-lieu mitigation for the cumulative impact at Washington Boulevard and Via Marina/Ocean Avenue). The south leg of the intersection should be realigned to reduce the angle of the northbound right-turn only lane, and provide a more perpendicular approach, and provide northbound dual left-turn lanes. While this improvement is currently being investigated by the County for implementation as a new TIP-type measure, funded by fair share contributions by projects within Marina del Rey, it is not currently included in the TIP improvement program. As such, the proposed project would be conditioned to contribute fair share funding to this improvement above and beyond the previously identified traffic mitigation fees. Cost estimates for this traffic signal improvement are currently being finalized, but are expected to be approximately $332,500, with a project responsibility of approximately $61,180. If the measure is not implemented by the time the anticipated cumulative traffic growth occurs, a temporary significant cumulative impact would remain. Furthermore, if this measure or another measure of equal effectiveness are not implemented (because the County is unable to formally establish an enforceable TIP-type mechanism for collecting fair share contributions or otherwise), a significant cumulative traffic impact would remain at this location.

- **Lincoln Boulevard and Washington Boulevard** – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR-90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the key intersection of Lincoln Boulevard and Washington Boulevard. However, it should be noted that a temporary cumulative traffic impact would remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. This measure is identified in Appendix G of the Marina del Rey Local Implementation Program and must have approval by the Board of Supervisors, the City of Los Angeles, and Caltrans. Furthermore, if the

extension of the SR-90 is not constructed (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles, and Caltrans, or for other reasons) or another measure of equal effectiveness is not implemented, a significant cumulative traffic impact would remain at this location.

- **Lincoln Boulevard and Marina Expressway (SR-90)** – Extend Route 90 to connect to Admiralty Way across Lincoln Boulevard. The extension would reconstruct and expand the at-grade intersection, providing additional capacity for all approaches. This improvement is currently included in the TIP roadway improvements funded by the trip fee.

  However, it should be noted that a temporary cumulative traffic impact would remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. Furthermore, if the extension of the SR-90 is not constructed at all (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles, and Caltrans, or for other reasons) or another measure of equal effectiveness is not implemented, a significant cumulative traffic impact would remain at this location.

- **Lincoln Boulevard and Bali Way** – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR-90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the intersection of Lincoln Boulevard and Bali Way. However, it should be noted that a temporary cumulative traffic impact would remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. The SR-90 extension is identified in Appendix G of the Marina del Rey Local Implementation Program and must receive approval from the Board of Supervisors, the City of Los Angeles, and Caltrans.

  Furthermore, if the extension of the SR-90 is not constructed (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles, and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a significant cumulative traffic impact would remain at this location.

- **Lincoln Boulevard and Mindanao Way** – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR-90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the intersection of Lincoln Boulevard and Mindanao Way, which currently provides direct access from the SR-90 to Admiralty Way in the Marina, by providing a direct access alternative route. However, it should be noted that a temporary cumulative traffic impact would remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. The SR-90 extension is identified in Appendix G of the Marina del Rey Local Implementation Program and must have approval by the Board of Supervisors, the City of Los Angeles, and Caltrans. Furthermore, if the extension of the SR-90 is not constructed (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles, and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a significant cumulative traffic impact would remain at this location.

- **Lincoln Boulevard and Fiji Way** – No feasible physical improvements are currently available to mitigate this potential cumulative impact. However, regional transportation improvements being considered include the future extension of the Marina Freeway (SR-90) westward to connect with Admiralty Way. The extension, slated for completion by the year 2016, will help alleviate traffic congestion in the area, including at the intersection of Lincoln Boulevard and Fiji Way. However, it should be noted that a temporary cumulative traffic impact would remain at this location if the extension of the SR-90 or another measure of equal effectiveness is not implemented by the time the anticipated cumulative traffic growth occurs. The SR-90 extension is identified in Appendix G of the Marina del Rey Local Implementation Program and must receive approval from the Board of Supervisors, the City of Los Angeles, and Caltrans.

  Furthermore, if the extension of the SR-90 is not constructed (due to not having concurrent approval by the Board of Supervisors, the City of Los Angeles, and Caltrans, or for other reasons) or another measure of equal effectiveness is not identified, a significant cumulative traffic impact would remain at this location.

- **Admiralty Way and Bali Way** – Add a third westbound through lane to Admiralty Way within the existing right-of-way by moving the median and restriping Admiralty Way, as identified in the TIP as Category 1 improvement.

- **Admiralty Way and Mindanao Way** – ~~Widen northbound Admiralty Way to provide a right-turn lane at Mindanao Way, as identified in the TIP.~~ In addition, ~~i~~nstall dual left-turn lanes on Admiralty Way for southbound travel at the approach to Mindanao Way and modify the traffic signal to provide a westbound right-turn phase concurrent with the southbound left-turn movement. The dual left-turn lanes on Admiralty Way will enhance egress from the Marina at Mindanao Way, and has already been approved as part of a previous project (Marina Two). It should be noted that the installation of dual left-turn lanes on Admiralty Way and the traffic signal modification is not identified in the TIP. The TIP identified widening of northbound Admiralty Way to provide a right-turn lane at Mindanao Way is no longer possible due to right-of-way constraints. Optimizing signal operation at adjacent intersections is recommended. As such, the proposed project would be conditioned to contribute "fair share" funding to this non-TIP improvement above and beyond the previously identified traffic mitigation fees. The project's "fair share" proportion would be negotiated between the proposed project and the County. Furthermore, if this measure or another measure of equal effectiveness is not implemented (because the County is unable to formally establish an enforceable TIP-type mechanism for collecting fair share contributions or otherwise), a significant cumulative traffic impact would remain at this location.

- **Marina Expressway (SR-90) Eastbound and Mindanao Way** – Restripe the ~~we~~astbound approach of Mindanao Way ~~at the eastbound Marina Expressway~~ to provide two through lanes and one free-right-turn lane. This improvement is not identified in the TIP. As such, the proposed project would be conditioned to contribute fair share funding to this non-TIP improvement above and beyond the previously identified traffic mitigation fees. The project's fair share proportion would be negotiated between the proposed project and Caltrans. If the measure is not implemented by the time the anticipated cumulative traffic growth occurs, a temporary significant cumulative impact would remain. Furthermore, if this measure or another measure of equal effectiveness are not implemented (because the County and/or Caltrans is unable to formally establish an enforceable TIP-type mechanism for collecting fair share contributions or otherwise), a significant cumulative traffic impact would remain at this location.

The effectiveness of these recommended cumulative mitigation measures was evaluated in a supplemental analysis. This With Cumulative Development Plus Mitigation analysis in **Table 5.7-~~24~~25, Summary of Critical Movement Analysis – Future (2013) With Cumulative Development Traffic Conditions**, utilized the same methodologies and assumptions as described previously, again with the exception that the recommended cumulative improvement measures described above were assumed to be in place for the With Cumulative Development Plus Mitigation scenario. This assumption also included the redistribution of traffic at several intersections (Via Marina at Washington Boulevard, Admiralty Way, and Panay Way, and Palawan Way at Washington Boulevard and Admiralty Way) as a result of anticipated travel pattern changes resulting from the mitigation measure at Washington Boulevard and Palawan Way, and at Via Marina and Admiralty Way. As discussed above, mitigation of cumulative traffic impacts to less than a level of significance may not occur if one or more mitigation measures is not implemented.

As shown in **Table 5.7-~~24~~25**, the implementation of the cumulative mitigation measures cited above could result in a reduction of cumulative impacts at most study intersections. The LUP identifies implementation of the SR-90 extension as a Category 3 mitigation measure to mitigate cumulative impacts of Phase 2 development in the Marina, and the County is preparing an EIR for the SR-90 extension. However, the exact design and alignment of this improvement is still being defined, and the precise beneficial effects of this improvement on the study intersections cannot be quantified at this time. Therefore, it is conservatively assumed that significant cumulative impacts will remain at the following intersections even with implementation of the SR-90 extension: Lincoln Boulevard and Washington Boulevard; Lincoln Boulevard and Marina Expressway; Lincoln Boulevard and Bali Way; Lincoln Boulevard and Mindanao Way; and Lincoln Boulevard and Fiji Way. At intersections where the With Cumulative Development Plus Mitigation traffic conditions that can be evaluated, cumulative impacts would be reduced to a less than significant level.

Table 5.7-~~24~~25
Summary of Critical Movement Analysis
Future (2013) With Cumulative Development Traffic Conditions

			Without Project		With Cumulative Development			With Cumulative Development Plus Mitigation		
No.	Intersection	Peak Hour	CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
4.	Admiralty Way/	AM	0.730	C	0.821	D	0.091*	0.508	A	-0.222
	Via Marina	PM	0.783	C	0.915	E	0.132*	0.546	A	-0.237
5.	Washington Blvd./	AM	0.744	C	0.858	D	0.114*	0.774	C	0.030
	Ocean Ave./	PM	0.799	C	0.918	E	0.119*	0.807	D	0.008
	Via Marina									

No.	Intersection	Peak Hour	Without Project		With Cumulative Development			With Cumulative Development Plus Mitigation		
			CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact
6.	Admiralty Way and Palawan Way	AM	0.444	A	0.620	B	0.176	0.607	B	0.163
		PM	0.629	B	0.809	D	0.180*	0.658	B	0.029
7.	Washington Blvd./	AM	0.668	B	0.935	E	0.267*	0.671	B	0.003
	Palawan Way	PM	0.747	C	0.910	E	0.163*	0.719	C	-0.028
8.	Lincoln Blvd./	AM	0.807	D	0.947	E	0.140*	NA	NA	NA
	Washington Blvd.	PM	1.390	F	1.552	F	0.162*	NA	NA	NA
9.	Lincoln Blvd./	AM	0.707	C	0.810	D	0.103*	NA	NA	NA
	Marina Expressway (SR-90)	PM	0.751	C	0.892	D	0.141*	NA	NA	NA
10.	Lincoln Blvd./	AM	0.677	B	0.741	C	0.064*	NA	NA	NA
	Bali Way	PM	0.534	A	0.640	B	0.106*	NA	NA	NA
11.	Lincoln Blvd./ Mindanao Way	AM	0.754	C	0.959	E	0.205*	NA	NA	NA
		PM	0.884	D	1.049	F	0.165*	NA	NA	NA
12.	Lincoln Blvd./Fiji Way	AM	0.613	B	0.735	C	0.122*	NA	NA	NA
		PM	0.762	C	0.901	E	0.139*	NA	NA	NA
13.	Admiralty Way/Bali Way	AM	0.480	A	0.605	B	0.125	0.605	B	0.125
		PM	0.602	B	0.740	C	0.138*	0.579	A	-0.023
14.	Admiralty Way/	AM	0.654	B	0.889	D	0.235*	0.655	B	0.001
	Mindanao Way	PM	0.772	C	1.013	F	0.241*	0.787	C	0.015
17.	Marina Expressway (SR-90) EB/ Mindanao Way	AM	0.641	B	0.783	C	0.142*	0.624	B	-0.017
		PM	0.769	C	0.868	D	0.099*	0.788	C	-0.019

** Indicates significant impact, prior to mitigation.*
NA = Design of future extension of SR-90 to Admiralty Way not finalized. CMA value could not be calculated.

In summary, the cumulative mitigation measures include measures specifically identified in the TIP, including funding for larger long-term improvements such as widening the Lincoln Boulevard Corridor and the planned Marina Expressway (SR-90) extension to Admiralty Way that will increase area-wide traffic capacity and help alleviate existing and future congestion in the study area. If these or other equally effective measures are not installed, significant cumulative traffic impacts would remain.

The improvements described above, with the exceptions of the new traffic signal at Washington Boulevard and Palawan Way, the installation of the dual left-turn lanes and traffic signal modification at Admiralty Way and Mindanao Way, the improvements at Admiralty Way and Palawan Way, and the installation of dual left-turn lanes on Mindanao Way in the westbound direction at the SR-90 eastbound

approach, are identical to or consistent with the area-wide roadway improvements identified in Appendix G (Transportation Improvement Program) of the Marina del Rey Local Implementation Program, and funded through payment of the traffic impact fees. The project is responsible for its fair share portion of implementation of the cumulative mitigation (or other County approved) improvements through payment of the $1,297,320 trip fee, plus the pro-rata share for the added measures.

5.7.8 UNAVOIDABLE SIGNIFICANT IMPACTS

Pursuant to *State CEQA Guidelines* Section 15130(d), the project's cumulative impacts may be found to be less than cumulatively considerable/less than significant because they are consistent with (and indeed less severe than predicted in) the cumulative traffic analysis in the Certified LCP (a "comparable programmatic plan …") that is hereby incorporated by reference.

As to intersections within the County and LCP, the project's significant cumulative impacts are rendered less than cumulatively considerable (less than significant) because the project is required to pay the MDR traffic fees (i.e., its fair share of improvements designed to alleviate the cumulative impacts at the five intersections within Marina del Rey and that are controlled by the LACDPW) for improvements identified in the TIP and fair-share contribution for non-TIP improvements identified above. As such, all impacts can be reduced to a level of less than significant with implementation of identified mitigation measures. However, if these or other equally effective measures are delayed or not installed, significant cumulative traffic impacts would remain. Furthermore, as the precise benefits of the SR-90 extension cannot be quantified at this time, it is conservatively concluded that significant cumulative impacts will remain at the following intersections even with implementation of the SR-90 extension: Lincoln Boulevard and Washington Boulevard; Lincoln Boulevard and Marina Expressway; Lincoln Boulevard and Bali Way; Lincoln Boulevard and Mindanao Way; and Lincoln Boulevard and Fiji Way.

5.8 SEWER SERVICE

SUMMARY

Wastewater in Marina del Rey is collected and conveyed by a sewer system owned and operated by the Los Angeles County Department of Public Works (LACDPW), which is regulated in the Marina Sewer Maintenance District (MSMD). Treatment of domestic sewage and wastewater occurs at the City of Los Angeles Hyperion Treatment Plant (HTP) in El Segundo.

The proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would generate approximately ***160,096*** ~~*151,100*~~ *gallons of wastewater per day. This represents a net increase of approximately* ~~*130*~~*139,****696***~~*,700*~~ *gallons per day when compared with existing uses. The HTP currently has adequate capacity to treat sewage generated by the projects. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project applicant(s) must pay connection fees to the City of Los Angeles in order to retroactively fund recent treatment plant improvements. This connection fee program occurs through a developer fee paid to the County and a corresponding payment of fees from the County to the City of Los Angeles. The project applicant must also obtain a "will serve" letter prior to issuance of building permits demonstrating the ability of the treatment plant and collection system to accommodate project generated effluent. Based on the above, no significant impacts to wastewater treatment facilities would occur as a result of the proposed project.*

The LACDPW requires that any developer constructing a new sewer line coordinate the construction and dedication of any new sewer facilities with LACDPW's ~~*Water Works and*~~ *Sewer Maintenance Division, which would be responsible for future operation and maintenance. All* ~~*local collector*~~ *sewer lines for*~~*within*~~ *the project* ~~*boundaries*~~ *would be constructed to standards set forth by LACDPW, and would be sized to accommodate sewage flows generated at project buildout. Impacts to the wastewater collection system would be less than significant.*

5.8.1 INTRODUCTION

This EIR section presents an overview of the existing sewer collection, treatment, and disposal systems in the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project area. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project (Parcels 10R, FF, and Parcel 9U) is comprised of five parts: Neptune Marina Parcel 10R, Neptune Marina Parcel FF, the Woodfin Suite Hotel and Timeshare Resort Project, a 1.46-acre public park consisting of a 0.46-acre restored wetland and 0.99-acre upland buffer, and 7 to 11 public-serving boat spaces. Impacts are discussed for the combined project (i.e., the Neptune Marina Apartments and Anchorage/Woodfin

Suite Hotel and Timeshare Resort Project), as well as for each part independently (in case one was to proceed separately).

Construction and operation of the 1.46-acre public park and between 7 to 11 public-serving boat spaces would not generate domestic sewage in a quantifiable amount. As such, impacts associated with the 1.46-acre public park and between 7 and 11 public-serving boat spaces are not considered further in the analysis of project impacts (with the exception of brief descriptions defined in **subsection 5.8.3**).

This section also includes a discussion of the cumulative impacts of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project in conjunction with other related projects. Where impacts are identified, mitigation measures are recommended to reduce such impacts to acceptable levels. This analysis is primarily based on information obtained from the *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., (~~September~~ May ~~2005~~2009; reference **Appendix 5.8**) and a sewer capacity report prepared by Hunsaker Associates (September 2006). Additional sources of information include written and oral communication with LACDPW staff, staff of the ~~Waterworks and~~ Sewer Maintenance Division, and information derived from the Marina del Rey Land Use Plan. A sewer area study report prepared by Hunsaker Associates (dated July 2008) also provided information. An updated sewer master plan has been prepared by Los Angeles County Department of Public Works in 2007 and was incorporated as part of this analysis.

5.8.2 EXISTING CONDITIONS

Wastewater collection and treatment for the Marina del Rey area is provided by LACDPW and the City of Los Angeles HTP. The LACDPW's ~~Water Works and~~ Sewer Maintenance Division is charged with maintaining the sewer collection and conveyance system, which is regulated in the Marina Sewer Maintenance District (MSMD). Wastewater collected within the MSMD system is ultimately directed to the City of Los Angeles HTP treatment facility under a contract between the City and the County of Los Angeles.

5.8.2.1 Regional Wastewater Treatment Facilities

Wastewater from the Marina del Rey area, including the existing apartments on Parcel 10R, is treated at the HTP in El Segundo, located southwest of the Los Angeles International Airport. The drainage area served by the HTP is approximately 328,000 acres of developed land. The HTP treats wastewater from portions of the City of Los Angeles as well as from seven cities that it contracts with, including Santa Monica, Beverly Hills, Burbank, Culver City, El Segundo, Glendale, and San Fernando. HTP also treats wastewater from portions of Los Angeles County and 29 contract agencies.

Completed in 1950, the HTP was originally designed with a treatment capacity of 320 million gallons per day (mgd). Since that time, the plant's capacity has increased to 4580 mgd and now includes full secondary treatment of wastewater. The HTP is currently treating 36250 mgd of effluent flow to secondary treatment standards, 88130 mgd below its maximum operating capacity.[1]

The HTP service area also includes two inland reclamation plants: the Los Angeles/Glendale Water Reclamation Plant (LAGWRP) and the Tilman Water Reclamation Plant (TWRP). These plants partially treat upstream flows generated by urban uses in the San Fernando Valley and route the partially treated flows to the HTP. The LAGWRP was completed in 1976 and is capable of processing approximately 30 mgd of wastewater. The TWRP became operational in 1985 and was designed to process 40 mgd of wastewater. An expansion of TWRP was completed in October 1991, which increased its current capacity to 80 mgd. In total, the Hyperion Treatment System, inclusive of LAGWRP and TWRP, has the capacity to treat 5590 mgd of domestic wastewater under normal operating conditions. Presently, the HTP system is treating 36250 mgd, 188240 mgd below its rated capacity. This excess capacity is due in part to water conservation measures now required as part of the City of Los Angeles Uniform Building Code (UBC).

The Regional Water Quality Control Board (RWQCB) regulates the treatment of wastewater at treatment plants and the discharge of the treated wastewater into receiving waters. Therefore, the HTP is responsible for adhering to RWQCB regulations as they apply to wastewater generated by Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project.

Until recently, the Marina Sewer Maintenance District (MSMD) had contractual rights to 0.97 mgd of treatment capacity at HTP, which is the capacity required to serve existing development within Marina del Rey. To accommodate future growth, the MSMD has contracted for additional capacity and has obtained contractual rights to 3.0 mgd of treatment plant capacity at HTP. ~~Therefore, 2.03 mgd of unused capacity is available to the MSMD~~Under the most current conveyance, treatment, and disposal agreement between the County and the City, MSMD's flow entitlement has been eliminated. Instead, MSMD is allowed to discharge all flows generated within the MSMD to the City. MSMD is now required to pay its proportionate share of the City's total Amalgamated System Sewage Facilities Charge, which includes capital improvement, operation and maintenance costs, based on actual volume and strength of MSMD discharges into the City's conveyance and HTP facilities. Developers of new and expanded developments in the MSMD will be required to pay the Amalgamated System Sewage System Facilities Charge (Connection Fee) directly to the City. These charges, as determined by the City, represent the costs to the

1 "Major Activities – Wastewater Collection and Treatment," http://www.cityofla.org/SAN/sanmact.htm~~Doug Bohlmann, Shift Superintendent II, Hyperion Treatment Plant, telephone conversation, August 27, 2004~~.

City to provide the needed amalgamated system capacity to accommodate the anticipated increase wastewater discharge.

5.8.2.2 Wastewater Collection System

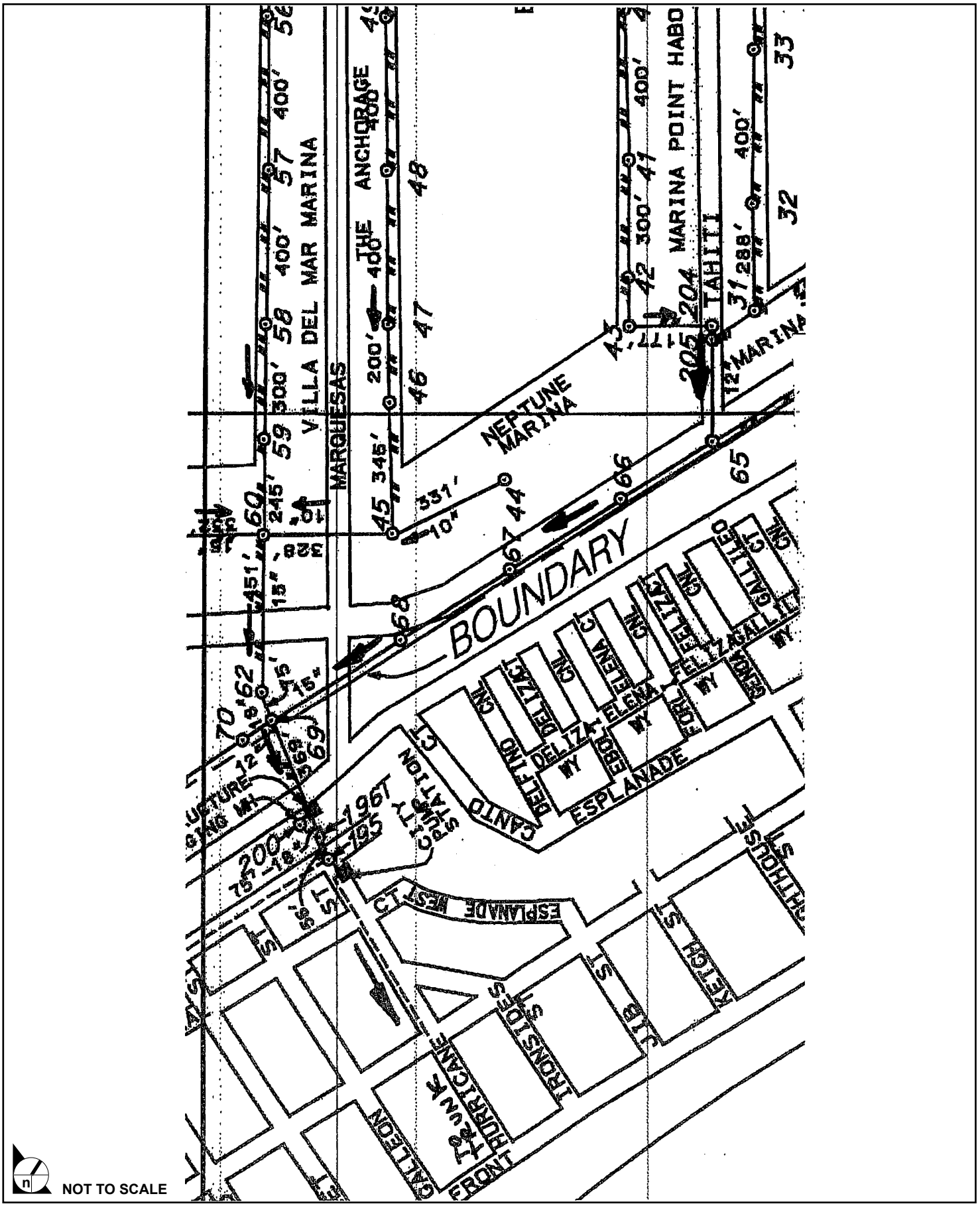
In the vicinity of the project site, existing 12-inch and 15-inch VCP (vitrified clay pipe) sewer mains occur in Dell Avenue and Via Marina, respectively, and an ~~18~~8-inch main crosses the property parallel to Marquesas Way. These mains join at manhole 69 (**Figure 5.8-1**). As shown on **Figure 5.8-1**, from manhole 69, an existing 18-inch main connects the system to a City of Los Angeles owned and operated pumping station before it discharges into a force main. On the project site, a 10-foot-wide sewer easement is present. In conformance with normal building requirements, no structures occur or are proposed within this existing easement.

This sewer system discharges to the City of Los Angeles' system through a metering station located at Via Dolce at Marquesas Way. Sewage is then pumped via the Venice Pumping Plant at Hurricane Street and Esplanade. The pump station has five pumps: three running and two parallel-force main systems. Based on growth in the marina and other projects that occur in the marina area, this system of pumps and connecting lines is reaching capacity. The City of Los Angeles has plans to upgrade the pump station force main. As a normal practice, the costs of these improvements are paid for by sewer connection fees paid by developers to the City of Los Angeles.

From the Venice Pumping Plant, sewage flows via the Coastal Interceptor Sewer (CIS) System, which transmits sewage to the HTP. Currently, ~~there~~ the City of Los Angeles is ~~a~~ proposal foring a new parallel force main system (Venice Pumping Plant Dual Force Main Project) to provide relief for the existing CIS System.

5.8.2.3 Funding

~~The marina area holds contractual flow rights, purchased from the City, for use of pipe and pumping systems as well as treatment at HTP. Payment for these rights is based on the proportionate share of capital costs and annual costs for the system used, based on the relation of its contractual capacity to the design capacity of the system.~~



NOT TO SCALE

SOURCE: Fuscoe Engineering, Inc. - 2005

FIGURE **5.8-1**

Existing Wastewater Collection and Conveyance System

460-04•04/07

The LACDPW requires that new local sewer lines connect to the MSMD's existing sanitary sewer system. Moreover, LACDPW requires that any developer constructing a new local sewer line or sewer network not only coordinate its construction with the MSMD, but also dedicate the sewer line or network to the MSMD. Upon dedication, the MSMD would be responsible for future operation and maintenance. Prior to any demolition/construction, the City of Los Angeles must ensure adequate capacity in the receiving trunk sewers and receiving water reclamation plant. If adequate capacity does not exist in the City of Los Angeles' system to accommodate the additional flows, the receiving trunk sewers and/or WRP may require expansion.

The mechanism used to fund improvements to the City of Los Angeles' system is the connection fee program. This connection fee program occurs through a developer fee paid to the City of Los Angeles. Prior to connection of the local sewer network to the City of Los Angeles' system, all new users are required to pay a fair share contribution for City of Los Angeles' sewage system expansions. This connection fee is used by the City of Los Angeles to finance periodic expansion of treatment capacity and trunk lines. The connection fee varies in relation to the number of plumbing fixtures associated with a proposed project.

5.8.2.4 Existing Wastewater Generation

5.8.2.4.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

As shown in **Table 5-8.1**, operation of the 136 existing apartments located on Parcel 10R generates a total of 20,400 gallons per day (gpd). ~~Please see **Appendix 5.8** for calculation worksheets.~~

Table 5.8-1
Existing Wastewater Generation

Land Use	Units	Generation Factor[1] (gal./day/unit)	Daily Generation (gal./day)
Residential	136 du	150	20,400
Total:			**20,400**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] The generation factor is from the Los Angeles County Sewer Maintenance Division and City of Los Angeles Bureau of Sanitation (reference Appendix G in the Sewer Capacity Report by Fuscoe, May 2009)~~Marina del Rey Apartment Community Draft EIR, Impact Sciences, Inc., May 2000~~, unless otherwise noted.

Parcel FF consists of a total of 2.05 acres. The only existing land uses on the parcel is a 2-acre surface parking lot. Parcel 9U is an undeveloped vacant lot. As such, the existing uses on Parcel FF or 9U do not currently generate wastewater that is directed to County- or City-owned facilities.

5.8.3 ENVIRONMENTAL IMPACTS

5.8.3.1 Project Improvements

Implementation of the proposed Neptune Marina and Woodfin Suite Hotel and Timeshare Resort Project would result in the development of 526 residential dwelling units; 19-story building with 288 hotel and timeshare suites; 174 private and between 7 to 11 public-serving boat spaces; and a restored public wetland and upland park area. There are 136 existing apartments and 198 boat spaces presently on site. Therefore, completion of the proposed Neptune Marina and Woodfin Suite Hotel and Timeshare Resort Project would result in a net increase of 390 apartment units, 288 hotel and timeshare suite, a net decrease of up to 17 boat spaces, and a 1.46-acre public park containing a 0.47-acre restored wetland and 0.99-acre upland buffer.

5.8.3.2 Thresholds of Significance

The County of Los Angeles Department of Regional Planning has not adopted County specific significance thresholds. Based on Appendix G of the most recent update of the *State California Environmental Quality Act (CEQA) Guidelines*, impacts related to sewer service are considered significant if the project would

- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- result in the determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.8.3.3 Impact Analysis

5.8.3.3.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.8.3.3.1.1 Threshold: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Threshold: Have insufficient water supplies available to serve the project from existing entitlements and resources, or would require expanded entitlements.

Threshold: Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.

Construction Impacts: Construction activities on Parcel 10R are expected to begin in ~~Januar~~May ~~2009~~ 2011 and would require a total of approximately ~~33~~ 30 months to complete. Anticipated buildout would occur in ~~Sept~~November ~~2011~~2013.

Construction activities on Parcel FF are expected to begin in ~~April~~October ~~2010~~ 2011 and would require approximately ~~18~~ 24 months to complete. Buildout of the project is anticipated to occur in ~~Septem~~October ~~2011~~2013.

Construction activities on Parcel 9U are expected to begin in ~~Januar~~May ~~2009~~ 2011 and would require approximately ~~24~~ 30 months to complete. Anticipated buildout would occur ~~January~~ November ~~2011~~2013.

Demolition of existing on-site uses would not disrupt sewer services to adjacent uses, as the lines will be disconnected prior to removal of the existing structures. Construction contractors would provide portable on-site sanitation facilities for use during demolition and construction that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater that would be generated would not have a significant impact on wastewater disposal and treatment facilities due to the temporary nature of construction activity and the available capacity of the treatment facilities.

Operation Impacts; Wastewater Collection System Improvements: Based on information obtained from the *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., ~~September~~ May ~~2005~~2009, the sewage collection and conveyance system designed to serve the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would connect to the existing sewer facilities. Proposed sewer improvements for the Neptune Marina Apartments and Anchorage Project require the abandonment of approximately 650 linear feet (466 feet within Parcel 10R, 130 feet within Parcel FF, and 54 feet within Marquesas Way right-of-way) of the existing 10-inch sewer main and 240 linear feet of an existing 8-inch line within Parcel 10R due to the main's location beneath a proposed structure, and the development of a new 10-inch main. The ~~precise~~ alignment of the proposed 10-inch sewer main ~~has not~~would be~~en determined but would occur~~ within Marquesas Way, Via Marina and already graded portions of the project site. The existing 8-inch sewer main that parallels the Basin B bulkhead would ~~be~~ remo~~ved~~ain and ~~replaced with~~ a new ~~10~~8-inch main sewer line within Parcel 10R would be placed parallel to the existing line along the bulkhead. Each of these new mains would be connected to the existing 15-inch main in Via Marina. Two new manholes would also be constructed, and new building laterals would be constructed connecting each new apartment building to the proposed 8-inch and 10-inch mains. The City and County of Los Angeles have evaluated the increase in sewer flows due to the project and has found there to be sufficient capacity. The *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., May 2009, (reference **Appendix 5.8**) concludes that there is sufficient sewer capacity for the both the apartments and the proposed Parcel 10R anchorage sewer pump.

Based on information obtained from the *Sewer Capacity Report* prepared by Hunsaker Engineering, Inc., September 2006, the sewage collection and conveyance system designed to serve the proposed Woodfin Suite Hotel and Timeshare Resort Project would connect to the existing sewer facilities. Proposed sewer improvements would involve construction of a new 10-inch line that will connect to the existing 15-inch line that is ~~existing~~ in Via Marina before it meets the existing 18-inch line located at manhole 69. ~~As defined above, t~~The precise alignment of the sewer main has not been determined but would occur within already graded portions of the project site. The City and County of Los Angeles have evaluated the increase in sewer flows due to the project and have found there to be sufficient capacity. The *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., May 2009, (reference **Appendix 5.8**) concludes that there is sufficient sewer capacity for the both the hotel and the proposed public-serving anchorage sewer pump serving four pumpout stations.

The LACDPW requires that any developer constructing a new sewer line must coordinate the construction and dedication of the sewer with the department's ~~Water Works and~~ Sewer Maintenance Division for future operation and maintenance. All local collector sewer lines within the project boundaries would be constructed to the standards set forth LACDPW, and would be sized to

accommodate sewage flows generated at project buildout. Impacts to the wastewater collection system would be less than significant.

Operation Impacts; Wastewater Treatment System: As shown below in **Table 5.8-2**, the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would generate approximately **160,096**~~151,100~~ gpd of domestic wastewater. This represents a net increase of ~~130~~139,**696**~~,700~~ gpd due to the increased number of dwelling units and the hotel project. ~~Please refer to **Appendix 5.8** for calculation worksheets.~~ With regard to wastewater generation from the Neptune Marina Anchorage sewage pumping station that will be included in the new anchorage at Parcel 10R, there are no standard rates or data available for wastewater generation rates for boats in the marina. However, the project would result in a net decrease in the number of boat spaces and no impact is anticipated.

Table 5.8-2
Proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project Wastewater Generation

Land Use	Units	Average Daily Generation (gal./day)
Neptune Marina Apartments and Anchorage		
1-Bedroom	330	49,500
2-Bedroom	196	39,200
Woodfin Suite Hotel and Timeshare Resort		
Hotel	152	22,800
1-Bedroom	68	~~13~~10,~~600~~200
2-Bedroom	68	~~17~~13,~~000~~600
Restaurant and accessory uses	NA	~~9~~24,~~000~~796
Subtotal:		**~~151~~160,~~100~~096**
Less Existing Residential	136 du	-20,400
Net Project Total:		**~~130~~139,~~700~~696**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] *The generation factor is from Los Angeles County Sewer Maintenance Division and City of Los Angeles Bureau of Sanitation (reference Appendix G in the* Sewer Capacity Report *by Fuscoe, May 2009) ~~the Marina del Rey Apartment Community Draft EIR, Impact Sciences, Inc., May 2000~~, unless otherwise noted.*

Sewage generated on the project site would be conveyed to the HTP for treatment, as described above. With the HTP currently operating ~~88~~130 mgd below capacity, the addition of approximately ~~130~~139,~~700~~ 696 net gpd generated by the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would not result in the plant exceeding capacity. Therefore, adequate capacity exists to treat sewage generated by the project, and the impact of the proposed project on the sewage treatment system is less than significant. As stated above in **5.8.2.1, Regional Wastewater Treatment Facilities**, the RWQCB is responsible for regulating the treatment of wastewater at treatment plants. Compliance with wastewater treatment requirements would not represent a significant impact.

As previously discussed, ~~Marina del Rey has had contractual rights to 0.97 mgd of treatment capacity at the HTP, which covers treatment of effluent generated by existing uses within Marina del Rey. Also as previously discussed, an additional 2.03 mgd is currently in place to accommodate future demand (inclusive of this project)~~developers of new and expanded developments, including~~. Further,~~ the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project applicants, must pay connection fees to the City of Los Angeles ~~in order~~ to ~~purchase~~ provide for future upgrades to the wastewater conveyance system~~the additional capacity necessary to convey and treat project-generated wastewater and fund incremental expansion of treatment capacity~~(reference **Appendix 5.8**). Prior to issuance of building permits, ~~T~~the project applicants must also, for their respective projects, ~~obtain a "will serve" letter prior to issuance~~provide Public Works' Building and Safety officials with (a) proof of payment of connection charges to the City and clearance from Public Works' Land Development Division, and (b) a "will serve" letter from LACDPW's Sewer Maintenance Division demonstrating sufficient sewage capacity for the respective project~~prior to issuance of building permitsdemonstrating the ability of the treatment plant and collection system to accommodate project generated effluent (reference **Appendix 5.8**)~~. Based on the above, no significant impacts to wastewater treatment facilities will occur as a result of the proposed project.

Mitigation Measures: The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project shall design and construct all sewer lines to the specifications and standards defined by LACDPW. The project applicants shall pay the required sewer connection and capacity fees that are used to fund expansion of facilities.

Mitigation Measures Recommended by the EIR:

5.8-1. Prior to issuance of building permits, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project applicants shall demonstrate sufficient sewage capacity for the proposed project by providing a "will serve" letter from LACDPW's ~~Waterworks and~~ Sewer Maintenance Division.

~~**5.8-2.**~~ ~~The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project applicants shall pay a "fair share" contribution to the amount of the cost to upgrade the downstream segments of the sewer trunk that are identified as inadequate to accommodate effluent generated by the proposed project. If deemed necessary, these improvements shall be funded and completed in accordance with County Department of Public Works procedures.~~

Conclusion: Less than significant.

5.8.3.3.2 Neptune Marina Parcel 10R Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.8.3.3.2.1 Threshold: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Threshold: Have insufficient water supplies available to serve the project from existing entitlements and resources, or would require expanded entitlements.

Threshold: Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.

Analysis:

Construction Impacts: Construction activities on the Neptune Marina Parcel 10R site is expected begin in ~~Januar~~May ~~2009~~ 2011 and would require ~~33~~ 30 months to complete. Anticipated buildout would occur in ~~Sept~~November ~~2011~~2013. Demolition of existing on-site uses would not disrupt sewer services to adjacent uses, as the lines will be disconnected prior to removal of the existing structures. Construction contractors would provide portable on-site sanitation facilities for use during demolition and construction that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater generated would not have a significant impact on wastewater disposal and treatment facilities due to the temporary nature of construction activity and the available capacity of the treatment facilities.

Operation Impacts; Wastewater Collection System Improvements: Based on information obtained from the *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., ~~September~~May ~~2005~~2009, the sewage collection and conveyance system designed to serve the proposed Neptune Marina Parcel 10R would connect to the existing sewer facilities. Proposed sewer improvements require the abandonment of approximately 466 linear feet within Parcel 10R of the existing 10-inch sewer main and 240 linear feet of an existing 8-inch line due to the main's current location, and the development of a new 10-inch main to be placed both within the Parcel 10R boundary and within Marquesas Way and Via Marina. The existing 8-inch sewer main that parallels the Basin B bulkhead would be rem~~oved and replaced with a new 10-inch main~~ain in place and a new 8-inch sewer line for the Parcel 10R would be placed parallel to the existing line. ~~The precise alignment of the sewer main has not been determined but would occur within~~

~~already graded portions of the project site.~~ Each of these new mains would be connected to the existing 15-inch main in Via Marina. Two new manholes would also be constructed, and new building laterals would be constructed connecting each new apartment building to the proposed 8-inch or 10-inch mains. The City and County of Los Angeles have evaluated the increase in sewer flows due to the project and has found there to be sufficient capacity. The *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., May 2009, (reference **Appendix 5.8**) concludes that there is sufficient sewer capacity for the both the apartments and the proposed Parcel 10R anchorage sewer pump.

The LACDPW requires that any developer constructing a new sewer line must coordinate the construction and dedication of the sewer with the department's ~~Water Works and~~ Sewer Maintenance Division for future operation and maintenance. All local collector sewer lines within the project boundaries would be constructed to the standards set forth LACDPW, and would be sized to accommodate sewage flows generated at project buildout. Impacts to the wastewater collection system would be less than significant.

Operation Impacts; Wastewater Treatment System: As shown below in **Table 5.8-3**, the proposed Neptune Marina Parcel 10R would generate approximately 67,700 gpd of domestic wastewater. This represents a net increase of 47,300 gpd due to the increase of dwelling units in the proposed project. ~~Please refer to **Appendix 5.8** for calculation worksheets.~~ With regard to wastewater generation from the Neptune Marina Anchorage, there is no standard rates or data available for wastewater generation rates for boats in the marina. However, as the project will result in a net decrease of 24 boat spaces (198 existing less 174 proposed) no increase in impact potential is anticipated.

Table 5.8-3
Proposed Neptune Marina Parcel 10R Project; Wastewater Generation

Land Use	Units	Generation Factor[1] (gal./day/unit)	Average Daily Generation (gal./day)
Proposed Residential			
1-Bedroom	246	150	36,900
2-Bedroom	154	200	30,800
Subtotal			**67,700**
Less Existing Residential	136 du	150	-20,400
Net Project Total:			**47,300**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] The generation factor is from the Los Angeles County Sewer Maintenance Division and City of Los Angeles Bureau of Sanitation (reference Appendix G in the Sewer Capacity Report *by Fuscoe, May 2009) ~~Marina del Rey Apartment Community Draft EIR, Impact Sciences, Inc., May 2000~~, unless otherwise noted.*

Sewage generated on the project site would be conveyed to the HTP for treatment as described above. With the HTP currently operating 88~~130~~ mgd below capacity, the addition of approximately 47,300 net gpd would not result in the plant exceeding capacity. Therefore, adequate capacity exists to treat sewage generated by the project, and the impact of the proposed project on the sewage treatment system is less than significant. As stated above in **5.8.2.1, Regional Wastewater Treatment Facilities**, the RWQCB is responsible for regulating the treatment of wastewater at treatment plants. Compliance with wastewater treatment requirements would not represent a significant impact.

As previously discussed, ~~Marina del Rey has had contractual rights to 0.97 mgd of treatment capacity at the HTP, which covers treatment of effluent generated by existing uses within Marina del Rey. Also as previously discussed, an additional 2.03 mgd is currently in place to accommodate future demand (inclusive of this project). Further,~~developers of new and expanded developments, including the Neptune Marina Parcel 10R applicant, must pay connection fees to the City of Los Angeles ~~in order~~ to ~~purchase~~ provide for future upgrades to the wastewater conveyance system~~the additional capacity necessary to convey and treat project generated wastewater~~ (reference **Appendix 5.8**)~~and fund incremental expansion of treatment capacity~~. Prior to issuance of building permits, t~~T~~he project applicant must also ~~obtain a "will serve" letter~~provide ~~to~~ Public Works' Building and Safety officials with (a) proof of payment of connection charges to the City and clearance from Public Works' Land Development Division, and (b) a "will serve" letter from LACDPW's Sewer Maintenance Division demonstrating sufficient sewage capacity for the respective project.~~prior to issuance of building permits demonstrating the ability of the treatment plant and collection system to accommodate project generated effluent (reference **Appendix 5.8**)~~. Based on the above, no significant impacts to wastewater treatment facilities will occur as a result of the proposed Neptune Marina Parcel 10R.

Mitigation Measures: The Neptune Marina Parcel 10R shall design and construct all sewer lines to the specifications and standards defined by LACDPW. The project applicant shall pay the required sewer connection and capacity fees that are used to fund expansion of facilities.

Mitigation Measures Recommended by the EIR:

Mitigation Measure~~s~~ 5.8-1 ~~and 5.8-2~~ would mitigate impacts associated with the Neptune Marina Parcel 10R Project.

Conclusion: Less than significant.

5.8.3.3.3 Neptune Marina Parcel FF Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.8.3.3.3.1 Threshold: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Threshold: Have insufficient water supplies available to serve the project from existing entitlements and resources, or would require expanded entitlements.

Threshold: Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.

Analysis:

Construction Impacts: Construction activities on the Neptune Marina Parcel FF site are expected to begin in ~~April~~October ~~2010~~ 2011 and would require a total of approximately ~~18~~ 24 months to complete. Buildout of the project is anticipated to occur in ~~Septem~~October ~~2011~~ 2013. Construction contractors would provide portable on-site sanitation facilities for use during demolition and construction that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater that would be generated would not have a significant impact on wastewater disposal and treatment facilities due to the temporary nature of construction activity and the available capacity of the treatment facilities.

Operation Impacts; Wastewater Collection System Improvements: Based on information obtained from the *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., ~~September~~ May ~~2005~~2009, the sewage collection and conveyance system designed to serve the proposed Neptune Marina Parcel FF would connect to the existing sewer facilities. ~~Proposed sewer improvements require the abandonment of the existing 10-inch sewer main due to the main's location, and the development of a new 10-inch main.~~ The existing 8-inch sewer main that parallels the Basin ~~B~~ C bulkhead would ~~be removed~~ remain and ~~replaced with a new 10~~new building laterals would connect to the 8-inch main. ~~The precise alignment of the sewer main has not been determined but would occur within already graded portions of the project site. Each of~~ Any ~~these~~ new mains would be connected to the existing 15-inch main in Via Marina. Two new manholes would also be constructed, and new building laterals would be constructed connecting the new apartment building to the proposed 10-inch mains. In addition, approximately 130 linear feet of existing 10-inch sewer main within Parcel FF would be abandoned due to the main's current location. The City

and County of Los Angeles have evaluated the increase in sewer flows due to the project and have found there to be sufficient capacity.

The LACDPW requires that any developer constructing a new sewer line must coordinate the construction and dedication of the sewer with the department's ~~Water Works and S~~ewer Maintenance Division for future operation and maintenance. All local collector sewer lines within the project boundaries would be constructed to the standards set forth LACDPW, and would be sized to accommodate sewage flows generated at project buildout. Impacts to the wastewater collection system would be less than significant.

Operation Impacts; Wastewater Treatment System: As shown in **Table 5.8-4**, the proposed Neptune Marina Parcel FF would generate approximately 21,000 gpd of domestic wastewater. ~~Please refer to **Appendix 5.8** for calculation worksheets.~~ Sewage generated on the project site would be conveyed to the HTP for treatment, as described above. With the HTP currently operating ~~130~~ 88 mgd below capacity, the addition of approximately 21,000 gpd would not result in the plant exceeding capacity. Therefore, adequate capacity exists to treat sewage generated by the project, and the impact of the proposed project on the sewage treatment system is less than significant.

Table 5.8-4
Proposed Neptune Marina Parcel FF Project; Wastewater Generation

Land Use	Units	Generation Factor[1] (gal./day/unit)	Average Daily Generation (gal./day)
Proposed Residential			
1-Bedroom	84	150	12,600
2-Bedroom	42	200	8,400
Project Total:			**21,000**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] *The generation factor is from the Los Angeles County Sewer Maintenance Division and City of Los Angeles Bureau of Sanitation (reference Appendix G in the* Sewer Capacity Report *by Fuscoe, May 2009)~~Marina del Rey Apartment Community Draft EIR, Impact Sciences, Inc., May 2000~~, unless otherwise noted.*

As previously discussed, developers of new and expanded developments, including ~~Marina del Rey has had contractual rights to 0.97 mgd of treatment capacity at the HTP, which covers treatment of effluent generated by existing uses within Marina del Rey. Also as previously discussed, an additional 2.03 mgd is~~

~~currently in place to accommodate future demand (inclusive of this project). Further,~~ the Neptune Marina Parcel FF applicant~~,~~ must pay connection fees to the City of Los Angeles ~~in order~~ to ~~purchase~~ provide for future upgrades to the wastewater conveyance system~~the additional capacity necessary to convey and treat project generated wastewater~~ (reference **Appendix 5.8**)~~and fund incremental expansion of treatment capacity~~. Prior to issuance of building permits, t~~T~~he project applicant must also provide Public Works' Building and Safety officials with (a) proof of payment of connection charges to the City and clearance from Public Works' Land Development Division prior to issuance of building permits, and (b) a "will serve" letter from LACDPW's Sewer Maintenance Division demonstrating sufficient sewage capacity for the project. ~~obtain a "will serve" letter prior to issuance of building permitsdemonstrating the ability of the treatment plant and collection system to accommodate project generated effluent (reference **Appendix 5.8**).~~ Based on the above, no significant impacts to wastewater treatment facilities will occur as a result of the proposed project.

Mitigation Measures: The Neptune Marina Parcel FF shall design and construct all sewer lines to the specifications and standards defined by LACDPW. The project applicant shall pay the required sewer connection and capacity fees that are used to fund expansion of facilities.

Mitigation Measures Recommended by the EIR:

Mitigation Measure~~s~~ 5.8-1 ~~and 5.8-2~~ would mitigate impacts associated with the Neptune Marina Parcel FF Project.

Conclusion: Less than significant.

5.8.3.3.4 Woodfin Suite Hotel/Timeshare Resort Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.8.3.3.4.1 Threshold: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Threshold: Have insufficient water supplies available to serve the project from existing entitlements and resources, or would require expanded entitlements.

Threshold: Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts.

Analysis:

Construction Impacts: Construction activities on the Woodfin Suite Hotel and Timeshare Resort Project would begin in ~~Januar~~May ~~2009~~ 2011 and would require ~~24~~ 30 months to complete. Buildout of the project is anticipated to occur in ~~January~~ November ~~2011~~2013. Construction contractors would provide portable on-site sanitation facilities for use during construction that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater that would be generated would not have a significant impact on wastewater disposal and treatment facilities due to the temporary nature of construction activity and the available capacity of the treatment facilities.

Operation Impacts; Wastewater Collection System Improvements: Based on information obtained from the *Sewer Capacity Report* prepared by Hunsaker Engineering, Inc., September 2006, the sewage collection and conveyance system designed to serve the proposed Woodfin Suite Hotel and Timeshare Resort Project would connect to the existing sewer facilities. Proposed sewer improvements would involve construction of a new 10-inch line that will connect to the existing 15-inch line that is existing in Via Marina before it meets the existing 18-inch line located at manhole 69. The precise alignment of the sewer main has not been determined but would occur within already graded portions of the project site. The City and County of Los Angeles have evaluated the increase in sewer flows due to the project and has found there to be sufficient capacity. The *Sewer Capacity Report* prepared by Fuscoe Engineering, Inc., May 2009 (reference **Appendix 5.8**) concludes that there is sufficient sewer capacity for the both the hotel and the proposed public-serving anchorage sewer pump serving four pumpout stations.

The LACDPW requires that any developer constructing a new sewer line must coordinate the construction and dedication of the sewer with the department's ~~Water Works and S~~ewer Maintenance Division for future operation and maintenance. All local collector sewer lines within the project boundaries would be constructed to the standards set forth by LACDPW, and would be sized to accommodate sewage flows generated at project buildout. Impacts to the wastewater collection system would be less than significant.

Operation Impacts; Wastewater Treatment System: As shown in **Table 5.8-5**, the proposed Woodfin Suite Hotel and Timeshare Resort Project would generate an average of approximately **71,396**~~62,400~~ gpd of domestic wastewater. ~~Please refer to **Appendix 5.8** for calculation worksheets.~~ Sewage generated on the project site would be conveyed to the HTP for treatment, as described above. With the HTP currently operating ~~130~~ 88 mgd below capacity, the addition of approximately **71,396**~~62,400~~ gpd generated by the proposed Woodfin Suite Hotel and Timeshare Resort Project would not result in the plant exceeding capacity. Therefore, adequate capacity exists to treat sewage generated by the project, and the impact of the proposed project on the sewage treatment system is less than significant.

Table 5.8-5
Proposed Woodfin Suite Hotel and Timeshare Resort; Wastewater Generation

Land Use	Units	Average Daily Generation[1] (gal./day)
Proposed Use		
Hotel	152	22,800
1-Bedroom	68	~~13~~10,~~600~~200
2-Bedroom	68	~~17~~13,~~000~~600
Restaurant and accessory uses	NA	~~9~~24,~~000~~796
Project Total:		**~~62~~71,~~400~~396**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] The generation factor is from Los Angeles County Sewer Maintenance Division and City of Los Angeles Bureau of Sanitation (reference Appendix G in the Sewer Capacity Report by Fuscoe, May 2009)~~the Marina del Rey Apartment Community Draft EIR, Impact Sciences, Inc., May 2000,~~ unless otherwise noted.

As previously discussed, developers of new and expanded developments, including~~Marina del Rey has had contractual rights to 0.97 mgd of treatment capacity at the HTP, which covers treatment of effluent generated by existing uses within Marina del Rey. Also as previously discussed, an additional 2.03 mgd is currently in place to accommodate future demand (inclusive of this project). Further,~~ the Woodfin Suite

Hotel and Timeshare Resort Project applicant, must pay connection fees to the City of Los Angeles ~~in order~~ to ~~purchase~~ provide for future upgrades to the wastewater conveyance system~~the additional capacity necessary to convey and treat project generated wastewater~~ (reference **Appendix 5.8**)~~and fund incremental expansion of treatment capacity~~. Prior to issuance of building permits, the project applicant must also provide Public Works' Building and Safety officials with (a) proof of payment of connection charges to the City and clearance from Public Works' Land Development Division prior to issuance of building permits, and (b) a "will serve" letter from LACDPW's Sewer Maintenance Division demonstrating sufficient sewage capacity for the project. ~~The project applicant must also obtain a "will serve" letter prior to issuance of building permits demonstrating the ability of the treatment plant and collection system to accommodate project generated effluent (reference **Appendix 5.8**).~~ Based on the above, no significant impacts to wastewater treatment facilities will occur as a result of the proposed project.

Mitigation Measures: The Woodfin Suite Hotel and Timeshare Resort Project shall design and construct all sewer lines to the specifications and standards defined by LACDPW. The project applicant shall pay the required sewer connection and capacity fees that are used to fund expansion of facilities.

Mitigation Measures Recommended by the EIR:

Mitigation Measures 5.8-1 and **5.8-2** would mitigate impacts associated with the Woodfin Suite Hotel and Timeshare Resort Project.

Conclusion: Less than significant.

5.8.4 CUMULATIVE IMPACTS

5.8.4.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project and Other Related Projects

The cumulative impacts on sewer service from the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project in conjunction with other related/approved projects identified in **Section 4.0**, **Cumulative Projects,** were analyzed. Related projects within the Marina Sewer Maintenance District are listed in **Table 5.8-6** below, including the Shores Project (No. 18). For this analysis, a cumulative development scenario is compared with existing conditions. The scenario includes the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project and other related projects occurring in MSMD. The Venice Pumping Plant Dual Force Main Project would improve infrastructure capacity once it is completed but has no negative impact on sewer service. The applicable thresholds are listed below in bold followed by an analysis of the cumulative impacts and their potential significance. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

The applicable thresholds are listed below in bold followed by an analysis of the cumulative impacts and their potential significance. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.8.4.1.1 Threshold: Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Threshold: Result in the determination by the wastewater treatment provider, which serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Cumulative Analysis: As shown in **Table 5.8-7**, buildout of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project and related projects occurring within the MSMD would generate an estimated 642,385~~653,346~~ gpd of domestic wastewater, which does not exceed the 88~~2.03~~ mgd currently available at the HTP. Therefore, capacity is available at the HTP under current contracts. In addition, each future project is required to provide adequate capacity to convey sewage to a safe point of discharge and pay fees to connect to the sewage system. In this manner, the existing sewage collection and conveyance system would be upgraded to accommodate sewage created by the development of future projects.

Mitigation Measures: None required.

Table 5.8-6
Cumulative Wastewater Generation
Related Projects within Marina Sewer Maintenance District

Project Number from Table 4.0-1	New Development	Existing Uses to be Replaced	Location (Address)
9.	600-du Condominium		4333 Admiralty Wy.
10.	158-du Condominium 3,178-sf Specialty Retail	48,000-sf Car Rental Facility	4363 Lincoln Bl.
11.	179-du Apartment	64-du Apartment	NWC Admiralty Wy./Palawan Wy. (Parcels 140)
12.	6,236-sf Retail	5,750-sf Retail	514-586 Washington Bl. Bet. Via Marina/ Palawan Wy. (Parcel 97)
13.	72-du Apartment 16,352-sf Retail 368-sf Restaurant 7,888-sf Office	9,180-sf Office 165-sf Restaurant 7,500-sf Drive-in Bank	S/s Washington Bl. Bet. Via Marina/Via Dolce (Parcel 95)
14.	147-rm Hotel		4175 Admiralty Wy.
16.	114-du Congregate Care Retirement Facility 5,000-sf Retail 6,000-sf Marine Commercial Office	6,000-sf Health Club	E/o Palawan Wy. Betw. Washington Bl. /Admiralty Wy. (Parcel OT)
18.	544-du Apartment	202-du Apartment	W/s Via Marina (Parcel 100 and 101)
19.	940-du Apartment 82-du Senior Apartment 4,000-sf Retail 6,000-sf Commercial 439 sl Boat	Project partially existing and partially under new construction	E/s Via Marina bet. Panay Wy./Marquesas Wy. (Parcels 12, 15)
20.	351-du Apartment 24,300-sf Retail 266-seat Restaurant (10,000 sf)	1,067-seat Restaurant (to be removed)	South Side of Admiralty Wy., East side of Palawan Wy. (Parcel 33/NR)
23.	478-du Apartment 500-sf Retail 34 sl Boat	224-du Apartment	Southern terminus of Fiji Wy. (Parcel 64)
37.	111-rm Hotel	42-rm Hotel	SWC Admiralty Wy. & Palawan Wy. (Parcel 27)

Project Number from Table 4.0-1	New Development	Existing Uses to be Replaced	Location (Address)
38.	132-rm Hotel 1,230-seat Restaurant 24,250-sf Retail 5,200-sf Office 26 sl Boat	12,984-sf Retail/Commercial 16,149-sf Restaurant 17 sl Boat	West of Fiji Wy. Near Terminus -Fisherman's Village (Parcels 55/56/W)
40.	345-Vessel Dry Stack Storage Facility 30-Vessel Mast Up Storage Space 1,500-sf Sheriff Boatwright Facility	Existing parking lot	N/s Fiji Wy, W/o Admiralty Wy (Parcel 52/GG)

sf = square foot; du = dwelling unit; rm = room; ac = acre; sl = slips; p = pump.

Table 5.8-7
Cumulative Wastewater Generation
Proposed Project and Related Projects

Land Use	Net Units	Generation Factor[1] (gal./day/unit)	Daily Generation (gal./day)
Related Projects			
Multi-Family[2]	3,435 du	150/gal/unit	515,250
Commercial	32,098 sf	~~0.10~~800 gal/day/10(	~~325,210~~678
~~Restaurant[3]~~	~~5946 sf~~	~~1.00 gal/day~~	~~5,946~~
~~Restaurant[4]~~Restaurant[3]	~~163~~ 100 seats	50 gal/seat	~~8~~ 5,~~150~~000
Office	9,908 sf	~~0.20~~800/ gal/day/10(	~~1~~7,~~982~~926
Subtotal:			~~522~~543,~~646~~854
Net Project Total:			~~1309~~8,~~700~~531
Total:			~~653~~642,~~346~~385

Source: Impact Sciences, Inc., March 2005.
Note: Numbers may not total exactly due to rounding.
du = dwelling unit; sf = square feet
[1] The generation factor is from the City of Los Angeles, Bureau of Sanitation letter of December 17, 2008, ~~the Marina del Rey Apartment Community Draft EIR, Impact Sciences, May, 2000,~~ unless otherwise noted.
[2] Includes senior care facilities, hotel and motel rooms; generation factor is an average.
[3] ~~The generation factor is from the Los Angeles County Sanitation Districts, Loadings for Each Class of Land Use (1998-99).~~
[4] The generation factor is from the Los Angeles County Sanitation Districts, Estimated Average Daily Flows for Various Occupancies.

5.8.5 UNAVOIDABLE SIGNIFICANT IMPACTS

With mitigation, development of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project (combined, separately, and cumulative with other related projects) would not significantly impact ~~the~~ sewer service~~s~~ ~~environment~~ during construction or operation.

5.10 SOLID WASTE SERVICE

SUMMARY

Residential, commercial, and industrial trash collection in the unincorporated areas of Los Angeles County, including the Marina del Rey area, is handled by private haulers who contract with property owners. When collected, the waste may be taken to any landfill or processing center that is willing to accept it. Private haulers are free to operate in any of the unincorporated areas of the County and may transfer waste to a variety of sites both inside of and outside the County.

Demolition of existing uses on the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort project site would generate approximately 12,600 cubic yards of solid waste. Construction debris would also contribute solid waste. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort project would also generate approximately 177,800 cubic yards of excess earth material (215,135 tons) that would be disposed of at the Puente Hills Landfill. During project operation, the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would generate a net increase of solid waste generation of approximately 2,868 pounds per day, or approximately 523 tons per year, assuming no solid wastes from the project would be recycled (a worst-case scenario).

The project would also generate some hazardous wastes consistent with typical residential land uses. Los Angeles County's landfills have adequate capacity to service the existing population and planned growth until the year 2017, and, capacity will likely extend well beyond the year 2017. Therefore, it is reasonable to assume that solid waste disposal facilities and other options will be available in the future. Hazardous debris generated during construction and operation can be accommodated by the permitted Class I and II landfills currently in operation within Southern and Central California. Mitigation to reduce the amount of project-generated solid waste disposed of at landfills is recommended. Project construction and operation solid waste impacts would be reduced to less than significant levels.

Because an adequate supply of landfill space has not been approved for beyond 2017 and because existing solid and hazardous waste management facilities in the County are inadequate, the project and cumulative increase in solid and hazardous waste generation from the project and the related projects would cause a significant impact unless additional landfill space or other disposal alternatives are approved.

5.10.1 INTRODUCTION

This section evaluates the potential impacts of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project on solid waste disposal services. The Neptune Marina/Woodfin Suite Hotel and Timeshare Resort Project (Parcels 10R, FF, and Parcel 9U) is

comprised of five parts, Neptune Marina Parcel 10R, Neptune Marina Parcel FF, the Woodfin Suite Hotel/Timeshare Resort Project, a 1.46-acre public park inclusive of a 0.47-acre restored wetland and 0.99-acre upland buffer and between 7 and 11 public-serving boat spaces. Impacts are discussed for the combined project (i.e., the Neptune Marina/Woodfin Suite Hotel and Timeshare Resort Project), as well as for each part independently (in case one were to proceed separately).

Construction and operation of the wetland park and between 7 and 11 public-serving boat spaces would not generate solid waste in a quantifiable amount. As such, impacts associated with the wetland park and between 7 and 11 public-serving boat spaces are not considered further in the analysis of project impacts.

This section also includes a discussion of the cumulative impacts of the Neptune Marina/Woodfin Suites Hotel and Timeshare Resort Project in conjunction with other related projects. Where impacts are identified, mitigation measures are recommended to reduce such impacts to acceptable levels. Information in this section was derived from the Los Angeles County Department of Public Works, the County Sanitation Districts of Los Angeles County, the California Integrated Waste Management Board, and a variety of documents including Los Angeles County Integrated Waste Management Plan; 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element; 2002 Annual Report on the Source Reduction and Recycling Element; Household Hazardous Waste Element, and 2004 Nondisposal Facility Element for the County of Los Angeles Unincorporated Areas.

5.10.2 EXISTING CONDITIONS

The Los Angeles County Department of Public Works (LACDPW) has the responsibility to develop plans and strategies to manage solid waste generated (including hazardous waste) in the County's unincorporated areas and to address the disposal needs of Los Angeles County as a whole. In the past, solid waste was simply collected and disposed of at landfills in the local vicinity. More recently, many jurisdictions, including the County of Los Angeles, have maintained that existing local landfill space may reach capacity in the very near future. While solid waste (including hazardous waste) continues to be generated and the public expects it to be collected and disposed of, the public has paradoxically strongly opposed opening new facilities or expanding existing ones. Even with waste reduction and recycling efforts, many jurisdictions are having difficulty siting new landfills or alternative means of disposal to address the anticipated shortage.

Options to reduce the amount of waste disposed of in landfills have traditionally included curbside pickup of recyclable materials and separate processing of these materials at recycling facilities. Solid waste collection has become highly privatized in recent years and a number of companies have created sophisticated recycling facilities that can process and sort recyclables from other wastes. In this

free-enterprise system, private industries now compete for contracts to collect and dispose of solid waste. After materials separation, these private haulers dispose of the remaining solid waste at whatever landfill they choose that can accept the materials. These facilities may be within the local geographic region, outside the County, or even outside the state. The LACDPW maintains that prudent public policy includes a balance of in County and out-of-County disposal capacity to provide for the long-term disposal needs of the County. Without multiple options, the County would have little negotiating leverage against unfavorable pricing structures.

Landfills in the Los Angeles County area are nearing capacity; however, it is unlikely that all existing landfill space will reach capacity and that no new landfill space or disposal options will be made available. Because untreated solid waste is a public health risk (e.g., from disease), it will be necessary for either local agencies or the state to intervene to assist with implementing new landfills and/or other disposal options. Discussion of such intervention is currently taking place at the state level.

Because of the difficulty in predicting what facilities private haulers will use, or predicting future waste disposal sites or methods, it was necessary in this EIR to formulate a method to evaluate impacts on the landfills that are most likely at present to serve the project site. Specifically, this EIR section compares the solid waste generation of the proposed project with the capacity of the existing landfills operating within Los Angeles County that accept waste from unincorporated areas. This is considered a worst-case scenario, as it does not assume development of any new landfills or the implementation of any other disposal options.

5.10.2.1 Plans and Policies for Solid Waste Disposal

5.10.2.1.1 California Integrated Waste Management Act

In response to reduced landfill capacity, the State of California passed in 1989 the California Integrated Waste Management Act (CIWMA). This legislation, generally known by the name of the enacting Assembly Bill (AB) 939, requires cities and counties to reduce the amount of solid wastes entering existing landfills, through recycling, reuse and waste prevention efforts.

AB 939 requires every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identifies how each jurisdiction planned to meet mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." Noncompliance with the goals and timelines set forth within the act can be severe, as the bill imposes fines up to $10,000 per day on jurisdictions not meeting these recycling and planning goals.

AB 939 requires jurisdictions to utilize "integrated waste management"—a variety of waste management practices to handle the municipal solid waste stream safely and effectively with the least adverse impact on human health and the environment. The act establishes the following waste management hierarchy:

- **Source Reduction** – "Source reduction" means any action that causes a net reduction in the generation of solid waste. Source reduction includes, but is not limited to, reducing the use of nonrecyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard wastes generated, establishing garbage rate structures with incentives to reduce the amount of wastes that generators produce, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials. Source reduction does not include steps taken after the material becomes solid waste.[1]

- **Recycling** – "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products, which meet the quality standards necessary to be used in the marketplace. Recycling does not include transformation.[2]

- **Composting** – "Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or which are separated at a centralized facility. Compost includes vegetable, yard, and wood wastes that are not hazardous waste.[3]

- **Transformation** – "Transformation" means incineration, pyrolysis, distillation, or biological conversion other than composting. Transformation does not include composting, gasification, or biomass conversion.[4]

- **Disposal** – "Solid waste disposal" or "disposal" means the final deposition of solid wastes onto land, into the atmosphere, or into the waters of the state.[5]

5.10.2.1.2 California Integrated Waste Management Board Model Ordinance

Subsequent to the passage of CIWMA, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Reuse and Recycling Access Act of 1991 (Section 42900–42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a "model ordinance" for the provision of adequate areas for collecting and loading recyclable materials in development projects. If, by September 1, 1994, a local agency did not

1 Public Resources Code, Section 40196.

2 Public Resources Code, Section 40180.

3 Public Resources Code, Section 40116.

4 Public Resources Code, Section 40201.

5 Public Resources Code, Section 40192.

adopt its own ordinance based on the CIWMB model, the CIWMB model ordinance took effect for that local agency. The County of Los Angeles chose to use the CIWMB model ordinance.

5.10.2.1.3 County of Los Angeles Solid Waste Management Action Plan

In 1988, the County of Los Angeles Board of Supervisors approved the Los Angeles County Solid Waste Management Action Plan to provide long-range management of the solid waste generated within the County. This plan includes such approaches as source reduction, recycling and composting programs, household hazardous waste management programs and public education awareness programs. The plan concludes that land filling will remain an integral part of the waste management system and calls for the establishment of 50 years of in-County permitted landfill capacity, as well as the County's support for the development of disposal facilities out of the County.

5.10.2.1.4 County of Los Angeles Source Reduction and Recycling Element

The Source Reduction and Recycling Element (SRRE) was prepared in response to AB 939. It describes policies and programs that will be implemented by the County for the County unincorporated areas to achieve the state's mandates of 25 and 50 percent waste disposal reductions by the years 1995 and 2000, respectively. Per the Integrated Waste Management Act of 1989, the Source Reduction and Recycling Element projects disposal capacity needs for a 15-year period. The current SRRE 15-year period commenced in 2002.

5.10.2.1.5 County of Los Angeles Household Hazardous Waste Element

AB 939 requires every city and county within the state to prepare a Household Hazardous Waste Element (HHWE) and to provide for management of household hazardous waste generated by the residents within its jurisdiction. The Countywide household hazardous waste management program, consisting of collection and public education/information services, has been formulated to serve residents throughout the County in a convenient and cost-effective manner. In addition to reducing the amount of waste that might otherwise be sent to a landfill, these programs are important facets in the County's effort to "clean up" the solid waste stream.

5.10.2.1.6 County of Los Angeles Non-Disposal Facility Element

AB 939 requires every city and county within the state to prepare and adopt a Non-Disposal Facility Element (NDFE) to identify all existing, proposed expansions of, and proposed new non-disposal facilities. These include source reduction and recycling facilities that are needed to implement the local jurisdiction's SRRE. Los Angeles County's NDFE identifies 20 existing materials recovery

facilities/transfer stations, and 9 proposed material recovery facilities as non-disposal facilities. In addition, the County's NDFE also identifies the utilization of four landfill facilities, operated by the County Sanitation Districts of Los Angeles County, for diversion of yard/green waste that is intended to be used as alternative daily cover at the landfills.

5.10.3 FUTURE SOLID WASTE MANAGEMENT CONDITIONS

Currently, most solid waste is disposed of in local landfills. In the future, the amount of waste diverted from landfills is expected to increase as jurisdictions throughout the state achieve compliance with the provisions of AB 939. This diversion will increase the life expectancy of landfills, but not eliminate the need for new landfills. As growth occurs throughout Southern California, new landfills will need to be developed and/or other waste disposal alternatives will need to be implemented.

Options that have been discussed include expanding existing landfills, developing new landfills locally, transferring solid waste out of the County or state by truck or rail car, or the incineration of solid waste in co-generation plants that generate electricity. New and expanded landfills are expected to be approved as part of a comprehensive solid waste program.

The transfer of solid waste either out of the County, or even out of the state, is also an option. Two landfills, which would receive Los Angeles area waste by rail car, have proposed to provide some long-term solid waste disposal for Los Angeles County. The Mesquite Regional Landfill in southern Imperial County and the Eagle Mountain Landfill in Riverside County are both owned by the Sanitation Districts of Los Angeles County (Sanitation Districts). The operation of both sites can provide more than 100 years of disposal capacity for Los Angeles County.[6] The Mesquite Regional Landfill is scheduled to be operational in 2008, and is permitted to accept up to 20,000 tons of waste each day.[7] However, waste from Los Angeles county would not be permitted until rail infrastructure to the landfill is completed, which would occur in 2011. The Sanitation Districts are currently performing due diligence examination of the Eagle Mountain Landfill. However, pending federal litigation could overturn this facility's current landfill permit.[8]

Though some landfills are currently restricted to accept solid waste from limited geographical areas, the US Supreme Court has held that restrictions limiting interjurisdictional transfers to landfills willing to accept solid waste are unconstitutional because such restrictions infringe on the landfill operator's ability

---

6 Sanitation Districts of Los Angeles County, *Fiscal Year 2003–2004 in Review*.

7 Ibid.

8 Ibid.

to actively participate in interstate commerce.[9] It is therefore likely that interjurisdictional transfers will increase as a method of managing solid waste.

Incineration facilities provide a dual function of disposing of solid waste and generating regional power supplies; their use may increase in the future as new plants are built.

Because the siting of future landfills, expansions of recycling efforts, and construction of co-generation plants is at this time speculative, this EIR methodology will focus only on the present conditions within Los Angeles County and/or those contracted with the County to receive waste but located outside of Los Angeles County. Specifically, this analysis will focus on (1) the capacity of the existing landfills operating within Los Angeles County that accept waste from unincorporated areas (including the project site), (2) landfills located outside the County that are owned and operated by the Los Angeles County Sanitation District, and (3) capacity at landfills outside the County that is available based on existing agreements.

5.10.3.1 Existing Solid Waste Generation

5.10.3.1.1 Statewide Solid Waste Generation

In the State of California, ~~71.8~~92 million tons of solid waste was generated in ~~2002~~2006.[10] Some of the solid waste stream was diverted from landfills through various source reduction, recycling, and re-use efforts. The diversion rate in the state was ~~48~~ 54 percent in ~~2000~~2006.[11]

5.10.3.1.2 Regional Solid Waste Generation

A total of 1.~~1~~ 45 million tons of solid waste was collected within unincorporated Los Angeles County for the year ~~2000~~2005.[12] Some of the solid waste stream was diverted from landfills through various source reduction, recycling, and re-use efforts. The diversion rate in unincorporated Los Angeles County has increased since 1995. Between 1995 and ~~2000~~2004, the diversion rate for the County has increased from 27 percent in 1995, 29 percent in 1996, 40 percent in 1998, and to ~~40~~ 53 percent in ~~1999~~2004.[13] The CIWMB reviewed waste diversion figures for 2003–2004 and official diversion rates for these years were

---

9 *Philadelphia vs. New Jersey, 98 Supreme Court 2531*, 1978.

10 California Integrated Waste Management Board. http://www.ciwmb.ca.gov/lgcentral/rates/Graphs/RateTable.htm. 2008.~~website, March 23, 2005. http//www.ciwmb.ca.gov.~~

11 Ibid.

12 California Integrated Waste Management Board, Jurisdiction Diversion and Disposal Profile: Los Angeles County, http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile2.asp?RG=U&JURID=274&JUR=Los+Angeles%2DUnincorporated. 2008.~~Los Angeles County at http://www.ciwmb.ca.gov/Profiles, March 23, 2005.~~

13 California Integrated Waste Management Board, http://www.ciwmb.ca.gov/lgtools/mars/drmcmain.asp?ju=274&VW=In. 2008.~~Ibid.~~

12 percent in 2003 and 53 percent for 2004. The biennial review has not been conducted yet for years 2005 and 2006, but is estimated to be at 54 percent[14]. For the purpose of this EIR, the 50 percent diversion rate mandated by the CIWMB will be used.

5.10.3.1.2.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

The proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site is currently developed with 136 residential units and 198 boat spaces (Parcel 10R only). Neptune Marina Project Parcel FF is currently a surface parking lot, while Parcel 9U is vacant undeveloped open space. Parcels FF and 9U generate no solid waste and as such are not considered further in this analysis of existing conditions. As shown in **Table 5.10-1**, operation of the 136 existing apartments on Parcel 10R generate a total of 872 pounds per day, or 159 tons per year, of solid waste. These quantities represent a worst-case scenario for solid waste sent to landfills, as information on the quantity diverted through recycling is not available. Using a 50 percent diversion rate, actual quantities of solid waste being sent to local landfills are likely 50 percent lower than what is shown below. ~~Please see **Appendix 5.10** for calculation worksheets.~~

Table 5.10-1
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project
Existing Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1] (lbs./day/unit)	Daily Generation (lbs./day)	Annual Generation (tons/year)
Residential	du	136	6.41	872	159
Total:		**136**	**6.41**	**872**	**159**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] Generation factor provided by the solid waste daily generation rates in tons per year are derived from the Ventura County Solid Waste. Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts.

5.10.3.2 Existing Solid Waste Collection

Residential, commercial, and industrial trash collection in unincorporated Los Angeles County, including the Marina del Rey, area is handled by private haulers. Once collected, the waste may be taken to any

[14] California Integrated Waste Management Board, http://www.ciwmb.ca.gov/lgtools/mars/drmcmain.asp?ju=274&VW=In. 2008~~Ibid~~.

landfill that is willing to accept it. Currently, about 120 haulers are permitted by the County of Los Angeles Department of Health Services to collect residential, commercial, and industrial waste in unincorporated Los Angeles County.[15]

5.10.3.3 Existing Solid Waste Disposal

Four types of solid waste facilities occur within Los Angeles County: (1) Class III landfills, (2) Unclassified landfills, (3) transformation facilities, and (4) materials recovery facilities (MRF). A Class-III landfill is a facility that accepts household waste and where site characteristics and containment structures isolate non-hazardous solid waste from the waters of the state. Unclassified landfills are facilities that accept materials such as soil, concrete, asphalt and other construction and demolition debris. Transformation facilities involve the incineration of municipal solid waste in order to generate energy. MRFs recover recyclable materials from other waste to provide for the efficient transfer of the residual waste to permitted landfills for proper disposal.

Currently most solid waste collected within Los Angeles County by private haulers is disposed of within the County. However, it is likely that independent solid waste haulers do and will continue to take solid wastes to facilities outside the County. Greater inter-County transfer of solid waste may occur in the near future if landfills outside of Los Angeles County provide greater economic advantages to haulers, or if landfills within the County reach capacity.

There are eight landfills in Los Angeles County that may accept solid waste from the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project site. **Figure 5.10-1** illustrates the locations of Los Angeles County landfills in relation to the project site.[16]

There have been recent expansions at the Antelope Valley, Bradley, Chiquita Canyon, Lancaster, and Puente Hills Landfills. These landfills have adequate capacity to service the existing population and planned growth until the year 2017. However, capacity will likely extend well beyond the year 2017.

A number of landfills that serve unincorporated Los Angeles County ~~unincorporated~~ have an anticipated life expectancy that extends beyond 2017. For example, the Lancaster Landfill was approved for expansion to extend the life of this landfill to 2030[17] and the Burbank, Chiquita Canyon, Pebbly Beach,

---

15 Telecommunication with Carlos Ruiz, Supervising Civil Engineer III, Head, Planning Section, Environmental Programs Division, Los Angeles County Department of Public Works, July 15, 2003.

16 **Table 5.10-1** is based on the Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, February 2004.

17 Telecommunication with Kay Krumwied, Lancaster Landfill, December 4, 2002. A life expectancy to 2030 assumes the acceptance of the maximum daily tonnage of 1,700 tons of solid waste.

San Clemente, Scholl, and Whittier (Savage Canyon) Landfills are permitted until 2054, 2019, 2033, 2032, 2019, and 2025, respectively.[18]

Other recent events have expanded landfill capacity within Los Angeles County. An agreement between Orange County and Waste Management, Inc. (WMI) would divert 168,000 tons per year of San Diego County's waste to Orange County instead of to Los Angeles County landfills. Also, an agreement between Orange County and Taormina Industries, which mainly serves Los Angeles County, calls for 2,000 tons of solid waste per day to be diverted to Orange County landfills.[19]

5.10.3.3.1 Puente Hills Landfill Disposal Protocols

Currently (2008), the Puente Hills landfill has a remaining capacity of 18.8 million tons, and operates on a six-day workweek. The landfill is closed on Sunday. The 2009 established Los Angeles County Daily Planning limit for this landfill is 13,200 tons per day. The landfill also operates a beneficial reuse program, which accepts up to 33,000 tons per week of five types of materials: ash (from incinerator locations in Long Beach and Commerce), asphalt, green waste, wood waste, and clean dirt. Clean dirt generated as part of the beneficial reuse program is utilized for daily cover operations and does not count towards daily maximum refuse permitted at the landfill. The landfill can accept 450 loads (up to 18 tons per load) of dirt per day as clean fill outside of the beneficial reuse amount; any loads over 450 fall into beneficial reuse tonnages. The tonnages taken of ash, asphalt, green waste, and wood waste dictate the daily capacity of dirt accepted. On average, 800 loads of dirt are accepted on Saturday, and the load count fluctuates throughout the week as the landfill approaches the tonnage limit. Dirt is collected for free between the hours of 7:30 AM until 5:00 PM, or until the daily load count has been reached.[20]

In the event that the landfill reaches the daily limit for dirt, the landfill will accept dirt as waste (rather than as cover material) until the normal closure time of 5:00 PM if the haulers pay standard refuse tipping fees, which is currently set at $29.42/ton. Any dirt accepted at the scales as waste is pushed into the landfill with the refuse for that day and is not used for daily cover operations.[21]

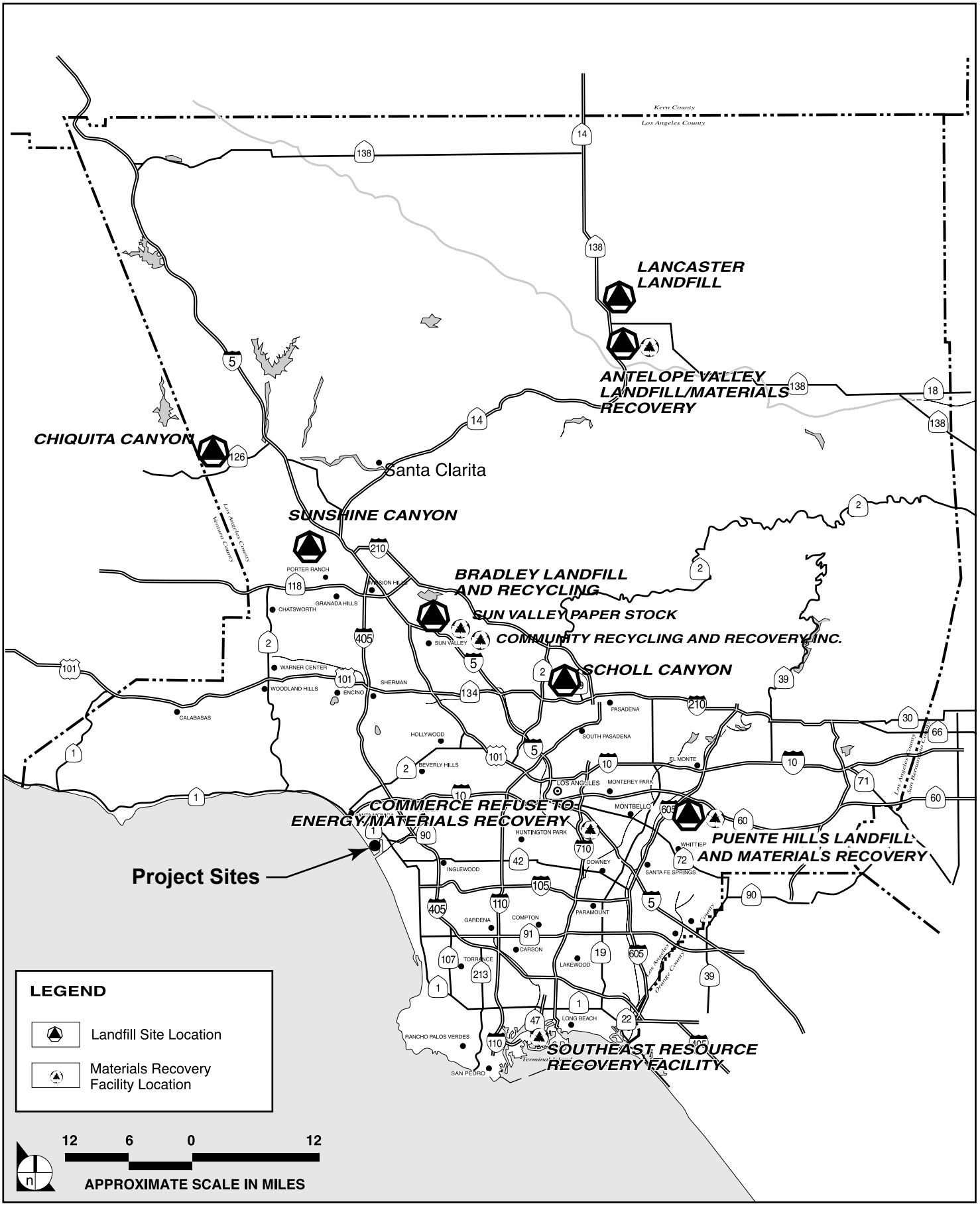
---

18 California Integrated Waste Management Board Web site, July 30, 2004.

19 GBB, Solid Waste Management Consultants, *Approaching an Integrated Solid Waste Management System for Los Angeles County, California*, May 2, 1997.

20 Larry Myers, Puente Hills Landfill, Supervising Engineering Technician II, personal communication with Lee Jaffe, June 25, 2008.

21 Ibid.



SOURCE: Impact Sciences, Inc. – May 2005

FIGURE **5.10-1**

Locations of Major Los Angeles County Landfills

5.10.3.3.2 Downtown Diversion Disposal Protocols

Non-hazardous demolition debris would be disposed of at the Downtown Diversion facility located in Los Angeles. The diversion facility is operates on a five-day workweek, starting on Monday and ending on Friday. The facility is permitted to accept up to 1,500 tons of waste per day. Downtown Diversion currently recycles 79.85 percent of all waste received and is then sold to various vendors. The remaining 20.15 percent of waste is exported to Los Angeles City's Lancaster Landfill.[22]

5.10.3.3.~~1~~3 Site-Specific Solid Waste Disposal

Residential, commercial, and industrial trash collection in the unincorporated areas of Los Angeles County, including the Marina del Rey area, is handled by private haulers. When collected, the waste may be taken to any landfill that is willing to accept it. Thus, solid wastes from the Marina del Rey area may be disposed of at any of the landfills described above.[23]

5.10.3.4 Hazardous Materials Collection and Disposal

Certain uses and activities generate hazardous waste that cannot be disposed of at Class III or unclassified landfills. The California Hazardous Waste Control Law (Health and Safety Code Section 25100 through Section 25249) requires that these hazardous materials be transported and disposed of or treated at a licensed facility. The disposal and transport of hazardous materials is complicated by the fact that there are many forms of hazardous materials. Operations that use hazardous materials and/or generate hazardous waste are responsible for the disposal of the waste.

LACDPW has indicated that existing hazardous waste management facilities within the County are inadequate to meet the hazardous waste currently generated within Los Angeles County. However, there are several Class I and II landfills that exist in Southern and Central California that can accept hazardous waste generated within the County. Each is identified briefly below.

- Laidlaw Landfill, Buttonwillow, Kern County, California: This facility accepts hazardous and non-hazardous waste and is permitted as a Class I landfill. The facility has no restrictions for the amount of waste that can be accepted on a daily basis.
- Kettleman Hills Landfill, Kettleman City, Kings County, California: This is a Class I permitted landfill that accepts hazardous and non-hazardous waste with no capacity restrictions.

---

22 Tom McCurry, LEED AP, Downtown Diversion, Construction, and Solid Waste Specialist, personal communication with Lee Jaffe, July 3, 2008.

23 Telecommunication with Carlos Ruiz, Assistant Division Engineer, Planning Section, Environmental Programs Division, Los Angeles County Department of Public Works, August 30, 2004.

- McKittrick Waste Treatment Site, McKittrick, Kern County, California: This facility is a Class II permitted landfill that accepts hazardous and non-hazardous waste. The facility has a capacity restriction of 412 cubic meters daily.

As discussed above, Los Angeles County has prepared a HHWE to provide for management of household hazardous waste generated by the residents within its jurisdiction.

5.10.4 ENVIRONMENTAL IMPACTS

5.10.4.1 Project Improvements

Implementation of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in the development of 526 residential dwelling units, a 19-story building with 288 hotel and timeshare suites, 174 private and between 7 and 11 public-serving boat spaces, and a 1.46-acre public park that includes a 0.47-acre restored wetland and 0.99-acre upland buffer. There are 136 existing apartments and 198 boat spaces presently on site. Therefore, completion of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would result in a net increase of 390 apartment units, 288 hotel and timeshare suites, a net decrease of up to 17 boat spaces, and a 1.46-acre public park containing a 0.47-acre restored wetland and 0.99-acre upland buffer.

5.10.4.2 Thresholds of Significance

The County of Los Angeles has not adopted significance thresholds for impacts related to solid waste. Based on Appendix G of the *State California Environmental Quality Act* (*CEQA*) *Guidelines*, impacts related to solid waste services are considered significant if the project would

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Not comply with federal, state, and local statutes and regulations related to solid waste.

5.10.4.3 Impact Analysis

5.10.4.3.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.10.4.3.1.1 Threshold: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Threshold: Not comply with federal, state, and local statutes and regulations related to solid waste.

Analysis:

Construction Impacts:

Construction of the Neptune Marina Parcel 10R project component would initiate in ~~Januar~~May ~~2009~~2011, and would require a total of approximately ~~33~~ 30 months to complete, in ~~Sept~~November ~~2011~~2013. Construction of the Neptune Marina Parcel FF project component would initiate in ~~April~~October ~~2010~~2011, and would require ~~18~~ 24 months to complete, in ~~September~~ October 201~~3~~1. Construction of the Woodfin Suite Hotel and Timeshare Resort project component is expected to begin in ~~Januar~~May ~~2009~~2011, and would require ~~24~~ 30 months to complete in ~~January~~ November ~~2011~~2013.

As proposed, the project would require the removal of the existing apartment buildings and existing boat spaces on Parcel 10R, and the existing surface parking lot on Parcel FF. Demolition of existing uses on Parcels 10R and FF would generate approximately ~~12~~14,~~600~~ 650 cubic yards of solid waste. Construction activities would also generate some debris; however, the amount is not quantifiable at this time and is expected to be less than the solid waste generated by the existing apartments and therefore less than significant.

Prior to the commencement of demolition, appropriate testing for asbestos containing materials and lead-based paint within the existing structures (Parcel 10R only) shall be completed. Abatement of identified materials will occur prior to building removal. Building materials containing asbestos, if any, would be handled, transported, and disposed of in accordance with applicable laws and regulations prior to building removal.

Waste materials generated during construction and operation are expected to be typical construction debris, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, and other inert wastes (i.e., wastes that are not likely to produce leachates of environmental concern), and green wastes.

On January 4, 2005, Los Angeles County adopted an amendment to Title 20, Utilities, of the Los Angeles County Code, to add Chapter 20.87, Construction and Demolition Debris Recycling, to provide for the recycling and reuse of construction and demolition debris in the unincorporated areas of the County of Los Angeles. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would comply with this amendment. The project proponent is required to prepare a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Reports would be submitted to the Los Angeles County Environmental Programs Division for review and approval.

Waste generated during demolition and construction would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County. Debris will be trucked from the site for disposal at unclassified landfills that accept these waste materials including, but not limited to, the Azusa Land Reclamation Co. Landfill in Azusa, Nu Way Live Oak and Reliance Pit No. 2 Landfills in Irwindale, or other appropriate landfills located within reasonable hauling distance from the project site that may be located outside Los Angeles County. The estimated closure dates for the Azusa Land Reclamation Co. Landfill, Nu Way Live Oak Landfill, and Reliance Pit No. 2 Landfill are 2025, 2010, and 2025, respectively.[24] As discussed above, the implementation of the proposed project would generate construction waste. The one-time disposal of solid waste associated with construction generated by the project could be accommodated at the facilities listed above. Therefore, with mitigation, the impact of construction waste on local landfills would be reduced to a less than significant level.

Site grading would require the export of ~~215~~240~~,135~~ 121 tons (~~177~~198~~,800~~ 450 cubic yards) of earth material in ~~2009 to 2010~~2011, or a maximum of 109 loads per day[25]. The excavated~~Excess~~ earth material would be disposed ~~of at landfills only if requested by landfill operators. As planned, excess cut material would be disposed of~~ at the Puente Hills landfill and would be used for daily cover operations. As noted above, the Puente Hills landfill can accept 450 loads per day of clean fill, plus an additional amount for beneficial reuse. Thus, the earth excavated from the project site would not be counted as part of the daily

24 California Integrated Waste Management Board website, Solid Waste Information System, Facility/Site Search, April 19, 2005.

25 This represents peak operations from concurrent operations at both Parcels 10R and 9U.

solid waste capacity. In any event, t~~T~~he Puente Hills landfill will have~~has~~ a remaining capacity of 6.4 million tons in 2011. Therefore, there would be sufficient capacity~~the capacity~~ to accommodate the approximately ~~215~~240,~~135~~ 121 tons of excess earth material that would be delivered in ~~2009 and 2010~~2011, in the event that some of the earth is not used for daily cover or beneficial reuse. ~~Given the significance threshold of "capacity"~~Therefore, the impact is not considered significant given the available capacity at the Puente Hills Landfill and~~.~~ ~~However, considering the threshold of "exceeding daily landfill planning limits" the impact of disposal of excess earth material is considered significant. This conclusion is based on the fact that in 2009, the Class III landfill disposal need would exceed the daily solid landfill planning limits defined by the County of Los Angeles[26]. If accepted, excess earth material disposed of at the Puente Hills landfill would be used for daily over capping operations. No~~ no mitigation is proposed or is required.

Operation Impacts – Solid Waste Generation and Disposal: As shown in **Table 5.10-2**, the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project would generate a net increase over existing uses of approximately 3,~~676~~ 076 pounds per day, or about ~~671~~ 561 tons per year, of solid waste. These quantities represent a worst-case scenario, with no recycling activities in place. However, project uses would be required to provide adequate areas for collecting and loading recyclable materials in accordance with the County's model ordinance to reduce the volume of solid waste entering landfills. This recycling, implemented in concert with the Countywide efforts and programs, would substantially reduce the volume of solid waste generated by the project and entering landfills. Although the project would generate approximately ~~523~~ 561 tons per year of solid waste per year, the inclusion of a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) would result in the project meeting at least the minimum recycling level established by Los Angeles County. If the project succeeds in achieving the 50 percent reduction level mandated for the County by CIWMA, it would divert at least ~~262~~ 281 tons of solid waste per year. ~~Please see **Appendix 5.10** for calculation worksheets.~~ Meeting the 2004 recycling levels (53 percent) would result in a further reduction of 16 tons of solid waste per year. With regard to solid waste generation from the boat spaces, there are no standard rates or data available for solid waste generation rates for boats in the marina available. However, as the project would result in a net decrease in the number of boat spaces, no increase in impact potential is anticipated.

According to the 2006 Annual Report for Los Angeles County, Countywide Integrated Waste Management Plan, the remaining permitted Class III landfill capacity in the County as of January 1, 2007, is estimated at 87.83 million tons (143.33 million cubic yards). One must compare the maximum

[26] Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, February 2004.

permitted daily capacity available with the County's daily disposal needs, with full consideration of the facilities' constraints, to determine when the shortfall in permitted daily capacity will occur. Additionally, waste disposal quantities must be adjusted to account for waste imports, and exports, in projecting when a disposal capacity shortfall may occur. With this consideration, the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project generated increase in solid waste of approximately 3,076 pounds per day, or about 561 tons per year, of solid waste would represent about 0.0006 percent of the remaining Class III landfill capacity.

The County of Los Angeles identifies landfill capacity in 15-year planning periods.[27] As discussed above, Los Angeles County's landfills have adequate capacity to service the existing population and planned growth until the year 2017, and as described in **Section 5.10.3.3**, capacity will likely extend well beyond the year 2017 because many of the landfills in the area are permitted beyond 2017, including 2025, 2033, and 2054). Additionally, recent agreements between the County and other nearby municipalities have been completed to divert solid waste from Los Angeles County landfills. However, because it is not possible to identify specific landfills that would accept solid waste from the project after 2017, this EIR conservatively concludes that the project will result in a significant solid waste impact beyond 2017. Therefore, ~~it is reasonable to assume that solid waste disposal facilities and other options will be available in the future beyond 2017. However,~~ mitigation to reduce the amount of project-generated solid waste disposed of at landfills is recommended ~~and based upon the above information and the inclusion of mitigation measures, solid waste impacts related to the project would be reduced to less than significant levels~~.

Table 5.10-2
Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort
Proposed Project Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1] (lbs./day/unit)	Daily Generation (lbs./day)	Annual Generation (tons/year)
Proposed Residential	du	526	6.41	3,372	615
Hotel	room	152	2.0	304	55
Timeshare Units	du	136	~~6~~2.~~41~~0	~~872~~272	~~159~~50
Less Existing Residential	du	136	6.41	-872	-159
Net Project Total:	**--**	**--**		**3,~~676~~076**	**~~671~~561**

Source: Impact Sciences, Inc., April 2007.
du = dwelling unit.
[1] *Generation factor provided by the solid waste daily generation rates in tons per year are derived from the Ventura County Solid Waste. Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts.*

27 Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element, page 38, February 2004.

Hazardous waste generation and disposal will be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any certain hazardous waste would be taken. At this time, hazardous wastes cannot be disposed of within Los Angeles County. However, hazardous debris generated during construction and operation can be accommodated by the permitted Class I and II landfills currently in operation within southern and central California, and no significant impact to hazardous waste disposal facilities are expected as a result of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project.

Mitigation Measures Recommended by the EIR:

5.10-1. The Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project shall comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction and Demolition Debris Recycling. The project proponent shall also provide a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. The Waste Management Plan shall be provided to the County of Los Angeles Department of Public Works for review and approval, prior to the issuance of the Certificate of Occupancy.

5.10-2. To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project applicants. This plan shall be reviewed and approved by the LACDPW. The plan shall identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles SRRE. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site residents.

5.10-3. If hazardous materials are encountered during demolition, the Neptune Marina Project Parcel 10R applicant shall arrange with a hazardous materials hauling company for materials collection and transport to an appropriate disposal or treatment facility located outside of Los Angeles County.

5.10-4. To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the applicant. This plan shall be reviewed and approved by the County of Los Angeles Department of Public Works. The plan shall identify methods to promote recycling and re-use of materials, as

well as safe disposal consistent with the policies and programs contained within the County of Los Angeles Source Reduction and Recycling Element. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site residents.

Conclusion:

Construction: Not significant.

Operation: ~~Not s~~Significant and unavoidable.

5.10.4.3.2 Neptune Marina Parcel 10R Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.10.4.3.2.1 Threshold: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Threshold: Not comply with federal, state, and local statutes and regulations related to solid waste.

Analysis:

Construction Impacts: Construction for Neptune Marina Parcel 10R is expected to begin in ~~Januar~~May ~~2009~~2011. Neptune Marina Parcel 10R would require a total of approximately ~~33~~ 30 months to complete. Given this construction schedule, Neptune Marina Parcel 10R would be operational in ~~Sept~~November ~~2011~~2013. As proposed, the project would require the removal of the existing apartment buildings, the existing boat spaces, and the surface parking lot surrounding the existing structures. Demolition of existing uses would generate approximately ~~11~~13,~~200~~ 300 cubic yards of solid waste. Construction debris would also generate solid waste; however, the amount is not quantifiable at this time.

Prior to the commencement of demolition, appropriate testing for asbestos containing materials and lead-based paint within the existing structures shall be completed. Abatement of identified materials will occur prior to building removal. Building materials containing asbestos, if any, would be handled, transported, and disposed of in accordance with applicable laws and regulations prior to building removal.

Waste materials generated during construction and operation are expected to be typical construction debris, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, and other inert wastes (i.e., wastes that are not likely to produce leachates of environmental concern), and green wastes.

On January 4, 2004, Los Angeles County adopted an amendment to Title 20, Utilities, of the Los Angeles County Code, to add Chapter 20.87, Construction and Demolition Debris Recycling, to provide for the recycling and reuse of construction and demolition debris in the unincorporated areas of the County of Los Angeles. The Neptune Marina Project Parcel 10R would comply with this amendment. The project proponent is required to prepare a Waste Management Plan to recycle, at a minimum, 50 percent of the

construction and demolition debris, and reports would be submitted to the Los Angeles County Environmental Programs Division.

Waste generated during demolition and construction would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County. Debris will be trucked from the site for disposal at unclassified landfills that accept these waste materials including, but not limited to, the Azusa Land Reclamation Co. Landfill in Azusa, Nu Way Live Oak and Reliance Pit No. 2 Landfills in Irwindale, or other appropriate landfills located within reasonable hauling distance from the project site that may be located outside Los Angeles County. The estimated closure dates for the Azusa Land Reclamation Co. Landfill, Nu Way Live Oak Landfill, and Reliance Pit No. 2 Landfill are 2025, 2010, and 2025, respectively.[28] The one-time disposal of solid waste associated with construction generated by the project could be accommodated at the facilities listed above. Therefore, with mitigation, the impact of construction waste on local landfills would be reduced to a less than significant level.

Site grading would require the export of ~~135~~150,~~518~~ 824 tons (~~112~~124,~~000~~ 650 cubic yards) of earth material in ~~2009 to 2010~~2011, or a maximum of 70 loads per day. The excavated~~Excess~~ earth material would be disposed ~~of at landfills only if requested by landfill operators. As planned, excess cut material would be disposed of a~~t the Puente Hills Landfill and would be used for daily cover operations. As noted above, t~~T~~he Puente Hills Landfill can accept 450 loads per day of clean fill, plus an additional amount for beneficial reuse. Thus, the earth excavated from the project site would not be counted as part of the daily solid waste capacity. In any event, the Puente Hills landfill will have~~has~~ a remaining capacity of 6.4 million tons in 2011, in the event that some of the earth is not used for daily cover or beneficial reuse. Therefore, there would be sufficient capacity~~the capacity~~ to accommodate the approximately ~~135~~150,~~518~~ 824 tons of excess earth material that would be delivered in ~~2009 and 2010~~2011. ~~Given the significance threshold of "capacity"~~Therefore, the impact is not considered significant given the available capacity at the Puente Hills Landfill~~. However, considering the threshold of "exceeding daily landfill planning limits" the impact of disposal of excess earth material is considered significant. This conclusion is based on the fact that in 2009, the Class III landfill disposal need would exceed the daily solid landfill planning limits defined by the County of Los Angeles[29]. If accepted, excess earth material disposed of at the Puente Hills Landfill would be used for daily over capping operations.~~ and n~~N~~o mitigation is proposed or is required.

---

28 California Integrated Waste Management Board Web site, Solid Waste Information System, http://www.ciwmb.ca.gov/Profiles. 2007.

29 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, February 2004.

Operation Impacts – Solid Waste Generation and Disposal: As shown in **Table 5.10-3**, the proposed Neptune Marina Project Parcel 10R would generate a net increase over existing uses of approximately 1,692 pounds per day, or about 309 tons per year, of solid waste. These quantities represent a worst-case scenario, with no recycling activities in place. However, the project uses would be required to provide adequate areas for collecting and loading recyclable materials in accordance with the County's model ordinance to reduce the volume of solid waste entering landfills. This recycling, implemented in concert with the Countywide efforts and programs, would substantially reduce the volume of solid waste generated by the project and entering landfills. The County diverted 53 percent of its waste in 2004. Although the project would generate approximately 309 tons per year, it can also be assumed that the project would at least achieve the 50 percent reduction level mandated by the CIWMB. Given a 50 percent diversion rate, the Neptune Marina Parcel 10R project would generate approximately 155 tons of solid waste per year. ~~Reference **Appendix 5.10** for calculation worksheets.~~ With regard to solid waste generation from the boat spaces, there are no standard rates or data available for solid waste generation rates for boats in the marina available. However, as the project will result in a net decrease in the number of boat spaces of 24 spaces (198 existing less 174 proposed) ~~and~~ no impact is anticipated.

<u>According to the 2006 Annual Report for Los Angeles County, Countywide Integrated Waste Management Plan, the remaining permitted Class III landfill capacity in the County as of January 1, 2007, is estimated at 87.83 million tons (143.33 million cubic yards). One must compare the maximum permitted daily capacity available with the County's daily disposal needs, with full consideration of the facilities' constraints, to determine when the shortfall in permitted daily capacity will occur. Additionally, waste disposal quantities must be adjusted to account for waste imports, and exports, in projecting when a disposal capacity shortfall may occur. With this consideration, the proposed Neptune Marina Parcel 10R Project generated increase in solid waste of approximately 1,692 pounds per day, or about 309 tons per year, of solid waste would represent about 0.00035 percent of the remaining Class III landfill capacity.</u>

Table 5.10-3
Neptune Marina (Parcel 10R) Proposed Project Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1] (lbs./day/unit)	Daily Generation (lbs./day)	Annual Generation (tons/year)
Proposed Residential	du	400	6.41	2,564	468
Less Existing Residential	du	136	6.41	-872	-159
Net Project Total:	**du**	**264**	**6.41**	**1,692**	**309**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] Generation factor provided by the solid waste daily generation rates in tons per year are derived from the Ventura County Solid Waste. Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts.

The County of Los Angeles identifies landfill capacity in 15-year planning periods.[30] As discussed above, Los Angeles County's landfills have adequate capacity to service the existing population and planned growth until the year 2017, and, capacity will likely extend well beyond the year 2017. However, because it is not possible to identify specific landfills that would accept solid waste from the project after 2017, this EIR conservatively concludes that the project will result in a significant solid waste impact beyond 2017. Therefore, ~~it is reasonable to assume that solid waste disposal facilities and other options will be available in the future. M~~mitigation to reduce the amount of project-generated solid waste disposed of at landfills is recommended. ~~Based upon this information and the inclusion of mitigation measures, project solid waste impacts would be reduced to less than significant levels.~~

Hazardous waste generation and disposal will be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any certain hazardous waste would be taken. At this time, hazardous wastes cannot be disposed of within Los Angeles County. However, hazardous debris generated during construction and operation can be accommodated by the permitted Class I and II landfills currently in operation within southern and central California, and no significant impact to hazardous waste disposal facilities are expected as a result of the Neptune Marina Project Parcel 10R.

Mitigation Measures Recommended by the EIR:

5.10-3. If hazardous materials are encountered during demolition, the Neptune Marina Project Parcel 10R applicant shall arrange with a hazardous materials hauling company for materials collection and transport to an appropriate disposal or treatment facility located outside of Los Angeles County.

5.10-4. The Neptune Marina Project Parcel 10R shall comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction and Demolition Debris Recycling. The project proponent shall also provide a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Documentation of this recycling program will be provided to the County of Los Angeles Department of Public Works, prior to the issuance of the Certificate of Occupancy.

5.10-5. To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the Neptune Marina

[30] Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element, page 38, February 2004.

Project Parcel 10R applicant. This plan shall be reviewed and approved by the County of Los Angeles Department of Public Works. The plan shall identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles Source Reduction and Recycling Element. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site residents.

~~**5.10-6.** If required, during demolition the Neptune Marina Project Parcel 10R applicant shall arrange with a hazardous materials hauling company for materials collection and transport to an appropriate disposal or treatment facility located outside of Los Angeles County~~

Conclusion:

Construction: Not significant.

Operation: ~~Not s~~Significant and unavoidable.

5.10.4.3.3 Neptune Marina Parcel FF Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.10.4.3.3.1 Threshold: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Threshold: Not comply with federal, state, and local statutes and regulations related to solid waste.

Analysis:

Construction Impacts: Construction for the Neptune Marina Parcel FF project is expected to begin in ~~April~~October ~~2011~~ 2011 and would require ~~18~~ 24 months to complete. Given this construction schedule, Neptune Marina Parcel FF would be operational in ~~Septem~~October ~~2012~~2013. Demolition of existing uses would generate approximately 1,~~400~~ 350 cubic yards of solid waste. Construction debris would also be generated; however, the amount is not quantifiable at this time.

On January 4, 2005, Los Angeles County adopted an amendment to Title 20, Utilities, of the Los Angeles County Code, to add Chapter 20.87, Construction and Demolition Debris Recycling, to provide for the recycling and reuse of construction and demolition debris in the unincorporated areas of the County of Los Angeles. The Neptune Marina Project Parcel FF would comply with this amendment. The project proponent is required to prepare a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Reports would be submitted to the Los Angeles County Environmental Programs Division for review and approval.

Waste generated during demolition and construction would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County. Debris will be trucked from the site for disposal at unclassified landfills that accept these waste materials including, but not limited to, the Azusa Land Reclamation Co., Landfill in Azusa, Nu Way Live Oak and Reliance Pit No. 2 Landfills in Irwindale, or other appropriate landfills located within reasonable hauling distance from the project site that may be located outside Los Angeles County. The estimated closure dates for the Azusa Land Reclamation Co. Landfill, Nu Way Live Oak Landfill, and Reliance Pit No. 2 Landfill are 2025, 2010, and 2025, respectively.[31] As discussed above, the implementation of the proposed

[31] California Integrated Waste Management Board website, Solid Waste Information System, Facility/Site Search, April 19, 2005.

project would generate 1,~~400~~ 350 cubic yards of solid waste for demolition activities. The one-time disposal of the construction waste generated by the project could be accommodated at the facilities listed above. Therefore, with mitigation the impact of the project is reduced to a less than significant level.

Site grading would require the export of ~~35~~38,~~815~~ 234 tons (~~29~~31,600 cubic yards) of earth material in ~~2009 to 2010~~2011, or a maximum of 37 loads per day. The excavated~~Excess~~ earth material would be disposed ~~of at landfills only if requested by landfill operators. As planned, excess cut material would be disposed of~~ at the Puente Hills ~~landfill~~Landfill and would be used for daily cover operations. As noted above, the Puente Hills landfill can accept 450 loads per day of clean fill, plus an additional amount for beneficial reuse. Thus, the earth excavated from the project site would not be counted as part of the daily solid waste capacity. In any event, t~~T~~he Puente Hills landfill ~~has~~ will have a remaining capacity of 6.4 million tons in 2011, in the event that some of the earth is not used for daily cover or beneficial reuse. Therefore, there would be sufficient~~the capacity~~ capacity to accommodate the approximately ~~35~~38,~~815~~ 234 tons of excess earth material that would be delivered in ~~2009 and 2010~~2011. ~~Given the significance threshold of "capacity"~~Therefore, the impact is not considered significant given the available capacity at the Puente Hills Landfill ~~. However, considering the threshold of "exceeding daily landfill planning limits" the impact of disposal of excess earth material is considered significant. This conclusion is based on the fact that in 2009, the Class III landfill disposal need would exceed the daily solid landfill planning limits defined by the County of Los Angeles[32]. If accepted, excess earth material disposed of at the Puente Hills landfill would be used for daily over-capping operations.~~ and n~~N~~o mitigation is proposed or is required.

Operation Impacts – Solid Waste Generation and Disposal: As shown in **Table 5.10-4**, the proposed Neptune Marina ~~Project~~ Parcel FF Project would generate a net increase over existing uses of approximately 808 pounds per day, or about 147 tons per year, of solid waste. These quantities represent a worst-case scenario, with no recycling activities in place. However, the project uses would be required to provide adequate areas for collecting and loading recyclable materials in accordance with the County's model ordinance to reduce the volume of solid waste entering landfills. This recycling, implemented in concert with the Countywide efforts and programs, would substantially reduce the volume of solid waste generated by the project and entering landfills. The County diverted 53 percent of its waste in 2004. Although the project would generate approximately 147 tons per year, it can be assumed the project would meet the 50 percent diversion rate mandated by the CIWMB. Given this assumption, the Neptune Marina Parcel FF project would generate and dispose approximately 74 tons per year of solid waste to local landfills. ~~Please see **Appendix 5.10** for calculation worksheets.~~ Based on the above, no significant impacts to solid waste will occur as a result of the proposed project.

---

32 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, February 2004.

According to the 2006 Annual Report for Los Angeles County, Countywide Integrated Waste Management Plan, the remaining permitted Class III landfill capacity in the County as of January 1, 2007, is estimated at 87.83 million tons (143.33 million cubic yards). One must compare the maximum permitted daily capacity available with the County's daily disposal needs, with full consideration of the facilities' constraints, to determine when the shortfall in permitted daily capacity will occur. Additionally, waste disposal quantities must be adjusted to account for waste imports, and exports, in projecting when a disposal capacity shortfall may occur. With this consideration, the proposed Neptune Marina Parcel FF Project generated increase in solid waste of approximately 808 pounds per day, or about 147 tons per year, of solid waste would represent about 0.0002 percent of the remaining Class III landfill capacity.

Table 5.10-4
Neptune Marina (Parcel FF) Proposed Project Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1] (lbs./day/unit)	Daily Generation (lbs./day)	Annual Generation (tons/year)
Proposed Residential	du	126	6.41	808	**147**

Source: Impact Sciences, Inc., March 2005.
du = dwelling unit.
[1] *Generation factor provided by the solid waste daily generation rates in tons per year are derived from the Ventura County Solid Waste. Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts.*

The County of Los Angeles identifies landfill capacity in 15-year planning periods.[33] As discussed above, Los Angeles County's landfills have adequate capacity to service the existing population and planned growth until the year 2017, and, capacity will likely extend well beyond the year 2017. However, because it is not possible to identify specific landfills that would accept solid waste from the project after 2017, this EIR conservatively concludes that the project will result in a significant solid waste impact beyond 2017. Therefore, ~~it is reasonable to assume that solid waste disposal facilities and other options will be available in the future. M~~mitigation to reduce the amount of project-generated solid waste disposed of at landfills is recommended. ~~Based upon this information and the inclusion of mitigation measures, project solid waste impacts would be reduced to less than significant levels.~~

Hazardous waste generation and disposal will be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any certain

[33] Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan*, "2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element," 2004, 38.

hazardous waste would be taken. At this time, hazardous wastes cannot be disposed of within Los Angeles County. However, hazardous debris generated during construction and operation can be accommodated by the permitted Class I and II landfills currently in operation within Southern and Central California, and no significant impact to hazardous waste disposal facilities are expected as a result of the Neptune Marina Project Parcel FF.

Mitigation Measures Recommended by the EIR:

5.10-~~7~~6. The Neptune Marina Project Parcel FF shall comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction and Demolition Debris Recycling. The project proponent shall also provide a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Documentation of this recycling program will be provided to the County of Los Angeles Department of Public Works, prior to the issuance of the Certificate of Occupancy.

5.10-~~8~~7. To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the Neptune Marina Project Parcel FF applicant. This plan shall be reviewed and approved by the County of Los Angeles Department of Public Works. The plan shall identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles Source Reduction and Recycling Element. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site residents.

5.10-~~9~~8. If required, during demolition the Neptune Marina Project Parcel FF applicant shall arrange with a hazardous materials hauling company for materials collection and transport to an appropriate disposal or treatment facility located outside of Los Angeles County.

Conclusion:

Construction: Not significant.

Operation: ~~Not s~~Significant and unavoidable.

5.10.4.3.4 Woodfin Suite Hotel and Timeshare Resort Project

The applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.10.4.3.4.1 Threshold: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Threshold: Not comply with federal, state, and local statutes and regulations related to solid waste.

Analysis:

Construction Impacts: Construction for the Woodfin Suite Hotel and Timeshare Resort project is expected to begin in ~~Januar~~May ~~2009~~ 2011 and would require ~~24~~ 30 months to complete. Given this construction schedule, the Woodfin Suite Hotel and Timeshare Resort project would become operational in ~~January~~ November ~~2011~~2013. Parcel 9U is currently vacant and demolition of existing uses (i.e., some existing concrete pilings) is expected to be negligible. Construction debris would also be generated; however, the amount is not quantifiable at this time.

On January 4, 2005, Los Angeles County adopted an amendment to Title 20, Utilities, of the Los Angeles County Code, to add Chapter 20.87, Construction and Demolition Debris Recycling, to provide for the recycling and reuse of construction and demolition debris in the unincorporated areas of the County of Los Angeles. The Woodfin Suite Hotel and Timeshare Resort Project would comply with this amendment. The project proponent is required to prepare a waste management plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Reports would be submitted to the Los Angeles County Environmental Programs Division for their review and approval.

Waste generated during demolition and construction would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County. Debris will be trucked from the site for disposal at unclassified landfills that accept these waste materials including, but not limited to, the Azusa Land Reclamation Co. Landfill in Azusa, Nu Way Live Oak and Reliance Pit No. 2 Landfills in Irwindale, or other appropriate landfills located within reasonable hauling distance from the project site that may be located outside Los Angeles County. The estimated closure dates for the Azusa Land Reclamation Co. Landfill, Nu Way Live Oak Landfill, and Reliance Pit No. 2

Landfill are 2025, 2010, and 2025, respectively.[34] Implementation of the proposed project would generate solid waste related to construction activities. It is expected that the one-time disposal of the minimal amount of construction debris generated by the project could be accommodated at the facilities listed above. Therefore, with mitigation the impact of the project is reduced to a less than significant level.

Site grading would require the export of ~~43~~51,~~801~~ 060 tons (~~36~~42,200 cubic yards) of earth material in ~~2009 to 2010~~2011, or a maximum of 39 loads per day.. The excavated~~Excess~~ earth material would be disposed ~~of at landfills only if requested by landfill operators. As planned, excess cut material would be disposed of~~ at the Puente Hills Landfill and would be used for daily cover operations. As noted above, the Puente Hills landfill can accept 450 loads per day of clean fill, plus an additional amount for beneficial reuse. Thus, the earth excavated from the project site would not be counted as part of the daily solid waste capacity. In any event, t~~T~~he Puente Hills Landfill ~~has~~ will have a remaining capacity of 6.4 million tons in 2011. Therefore, there would be sufficient~~the capacity~~ capacity to accommodate the approximately ~~43~~51,~~801~~ 060 tons of excess earth material that would be delivered in ~~2009~~2011, in the event that some of the earth is not used for daily cover or beneficial reuse. ~~Given the significance threshold of "capacity"~~Therefore, the impact is not considered significant given the available capacity at the Puente Hills Landfill~~. However, considering the threshold of "exceeding daily landfill planning limits" the impact of disposal of excess earth material is considered significant. This conclusion is based on the fact that in 2009, the Class III landfill disposal need would exceed the daily solid landfill planning limits defined by the County of Los Angeles[35]. If accepted, excess earth material disposed of at the Puente Hills Landfill would be used for daily over capping operations.~~ and n~~N~~o mitigation is proposed or is required.

Operation Impacts – Solid Waste Generation and Disposal: As shown in **Table 5.10-5**, the proposed Woodfin Suite Hotel and Timeshare Resort would generate a net increase over existing uses of approximately ~~1,1~~576 pounds per day, or about ~~215~~ 105 tons per year, of solid waste. These quantities represent a worst-case scenario, with no recycling activities in place. However, the project would be required to provide adequate areas for collecting and loading recyclable materials in accordance with the County's model ordinance to reduce the volume of solid waste entering landfills. This recycling, implemented in concert with the Countywide efforts and programs, would substantially reduce the volume of solid waste generated by the project and entering landfills. The County diverted 53 percent of its waste in 2004. Although the project would generate approximately ~~215~~ 105 tons of solid waste per year, it can be assumed the project would meet the 50 percent diversion rate mandated for the County by

---

34 California Integrated Waste Management Board Web site, Solid Waste Information System, "Facility/Site Search," 2005.

35 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan,* "2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element," 2004.

the CIWMB. Given this assumption, the project would generate and dispose approximately ~~107~~ 53 tons per year of solid waste to local landfills. ~~Reference **Appendix 5.10** for calculation worksheets.~~ Based on the above, no significant impacts to solid waste will occur as a result of the proposed project.

According to the 2006 Annual Report for Los Angeles County, Countywide Integrated Waste Management Plan, the remaining permitted Class III landfill capacity in the County as of January 1, 2007, is estimated at 87.83 million tons (143.33 million cubic yards). One must compare the maximum permitted daily capacity available with the County's daily disposal needs, with full consideration of the facilities' constraints, to determine when the shortfall in permitted daily capacity will occur. Additionally, waste disposal quantities must be adjusted to account for waste imports, and exports, in projecting when a disposal capacity shortfall may occur. With this consideration, the proposed Woodfin Suite Hotel and Timeshare Resort Project generated increase in solid waste of approximately 576 pounds per day, or about 105 tons per year, of solid waste would represent about 0.0001 percent of the remaining Class III landfill capacity.

Table 5.10-5
Woodfin Suite Hotel and Timeshare Resort
Proposed Project Solid Waste Generation (No Recycling)

Land Use	Units	Quantity	Generation Factor[1] (lbs./day/unit)	Daily Generation (lbs./day)	Annual Generation (tons/year)
Hotel	room	152	2.0	304	55
Timeshare	du	136	~~6.41~~2.0	~~872~~272	~~159~~50
Total				**~~1,1~~576**	**~~215~~105**

Source: Impact Sciences, Inc., April 2007.
du = dwelling unit.
[1] Generation factor provided by the solid waste daily generation rates in tons per year are derived from the Ventura County Solid Waste. Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts.

The County of Los Angeles identifies landfill capacity in 15-year planning periods.[36] As discussed above, Los Angeles County's landfills have adequate capacity to service the existing population and planned growth until the year 2017, and, capacity will likely extend well beyond the year 2017. However, because it is not possible to identify specific landfills that would accept solid waste from the project after 2017, this EIR conservatively concludes that the project will result in a significant solid waste impact beyond 2017. Therefore, ~~it is reasonable to assume that solid waste disposal facilities and other options will be available~~

36 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan*, "2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element," 2004, 38.

~~in the future. M~~mitigation to reduce the amount of project-generated solid waste disposed of at landfills is recommended. ~~Based upon this information and the inclusion of mitigation measures, project solid waste impacts would be reduced to less than significant levels.~~

Hazardous waste generation and disposal will be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any certain hazardous waste would be taken. At this time, hazardous wastes cannot be disposed of within Los Angeles County. However, hazardous debris generated during construction and operation can be accommodated by the permitted Class I and II landfills currently in operation within Southern and Central California, and no significant impact to hazardous waste disposal facilities are expected as a result of the Woodfin Suite Hotel and Timeshare Resort.

Mitigation Measures Recommended by the EIR:

5.10-~~10~~9. The Woodfin Suite Hotel and Timeshare Resort shall comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction and Demolition Debris Recycling. The project proponent shall also provide a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris. Documentation of this recycling program will be provided to the County of Los Angeles Department of Public Works, prior to the issuance of the Certificate of Occupancy.

5.10-~~11~~10. To reduce the volume of solid and hazardous waste generated by the operation of the project, a solid waste management plan shall be developed by the Neptune Marina Project Parcel ~~FF-~~9U applicant. This plan shall be reviewed and approved by the County of Los Angeles Department of Public Works. The plan shall identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles Source Reduction and Recycling Element. Methods shall include locating recycling bins in proximity to dumpsters used by future on-site residents.

Conclusion:

Construction: Not significant.

Operation: ~~Not s~~Significant and unavoidable.

5.10.5 CUMULATIVE IMPACTS

5.10.5.1 Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project and Other Related Projects

As discussed earlier in this section, new landfills must be developed and other waste disposal options implemented to accommodate future growth. These options may include diversion or transformation as the preferred methods for addressing solid waste and specific and practical applications (i.e., market development, public education and public policy initiatives).[37] Solid waste haulers will continue to have flexibility to determine where solid waste is ultimately disposed of based on economic factors.

Because solid waste (including hazardous waste) can be disposed of outside of Los Angeles County and because solid waste disposal is driven by a free-enterprise system, it is reasonable to assume that, to some degree, solid waste generated by cumulative development would be disposed of outside Los Angeles County, and possibly, outside of the State of California. Given this assumption, the cumulative projects area could encompass a geographic area beyond the jurisdictional boundaries of Los Angeles County and could, conceivably, extend beyond state boundaries. It is beyond the scope of this EIR and too speculative to attempt to quantify the solid waste that could be generated by cumulative development that is proposed in greater Los Angeles County or the region beyond, or to assess the landfills that might be available or, more importantly, other solid waste disposal options which could be available. Therefore, the focus of this cumulative impact analysis is the cumulative impacts of the proposed Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project in conjunction with the related/approved projects identified in **Section 4.0**, **Cumulative Projects**. The applicable thresholds are listed below in bold followed by an analysis of the cumulative impacts and their potential significance. Mitigation measures are also identified which would reduce or avoid potentially significant adverse impacts.

5.10.5.1.1 Threshold: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; and

Threshold: Not comply with federal, state, and local statutes and regulations related to solid waste.

Cumulative Analysis: As shown in **Table 5.10-6**, buildout of the Neptune Marina Apartments and Anchorage/Woodfin Suite Hotel and Timeshare Resort Project and other related projects would generate

---

37 GBB, Solid Waste Management Consultants, *Approaching an Integrated Solid Waste Management System for Los Angeles County, California*, 1997.

an estimated ~~29~~28,~~199~~ 599 pounds per day, or 5,~~329~~ 219 tons per year, of solid waste. These quantities represent a worst-case scenario, with no recycling activities in place. Other pending projects within the City would generate solid waste beyond the amounts generated by the project and the identified related projects. However, future projects would be required to provide adequate areas for collecting and loading recyclable materials in accordance with the County's Model Ordinance to reduce the volume of solid waste entering landfills. This recycling, implemented in concert with the Countywide efforts and programs, would substantially reduce the volume of solid waste generated by the project and entering landfills. Assuming that cumulative projects will divert at least 50 percent of the waste stream annually, the related~~cumulative~~ projects would generate approximately 2,~~664~~ 610 tons of solid waste per year. ~~Please see **Appendix 5.10** for calculation worksheets.~~

Table 5.10-6
Cumulative Solid Waste Generation (No Recycling)
Proposed Project and Related Projects

Land Use	Units	Quantity (Net)	Generation Factor[1] (lbs./day/unit)	Daily Generation (lbs./day)	Annual Generation (tons/year)
Related Projects					
Multi-Family[2]	du	3,668	6.41	23,512	4,291
Hotel/Motel[3]	rooms	348	2	696	127
Commercial	sq. ft.	-34,398	0.01	-344	-63
Restaurant[2]	sq. ft.	16314	0.06	979	145
Restaurant[4]	seat	797	1	797	179
Office	sq. ft.	-11692	0.01	-116	-21
Subtotal:				**25,523**	4,658
Proposed Project	**--**	**--**		**3,~~676~~076**	**~~671~~561**
Total:				**~~29~~28,~~199~~599**	**5,~~329~~219**

Source: Impact Sciences, Inc., April 2007.
du = dwelling unit; sq. ft. = square feet
Note: Numbers may not total exactly due to rounding.
[1] Generation factor provided by the Ventura County Solid Waste. Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts, unless otherwise noted.
[2] Includes senior care facilities.
[3] Generation factor from the California Integrated Waste Management Website, November 2003, which cites the Draft EIR for the North Hills Development which, in turn, cites the City of Los Angeles Bureau of Solid Waste, 1989.
[4] Generation factor from the California Integrated Waste Management Web site, accessed June 2007, which cites the draft EIR for the Stevenson Ranch (Phase IV) in Los Angeles County.

It is reasonable to assume the market forces that drive the waste disposal industry will place pressure on the industry and governmental agencies to continually identify new economically feasible means of

waste disposal in the future to accommodate this growth. However, because an adequate supply of landfill space has not been approved for beyond 2017 and because existing hazardous waste management facilities in the County are deemed inadequate, the cumulative increase in solid and hazardous waste generation would cause a significant impact unless additional landfill space or other disposal alternatives are approved. **Table 5.10-7 Disposal Capacity Need Analysis for Los Angeles County** indicates the capacity of the landfills within Los Angeles County.

Mitigation Measures: There are no cumulative mitigation measures known to be available that would mitigate significant impacts to a level of insignificance.

Conclusion: Significant and unavoidable.

5.10.6 UNAVOIDABLE SIGNIFICANT IMPACTS

Project construction and operation would generate an increase in demand for solid waste collection services in the County. While there is currently sufficient landfill capacity to accommodate solid waste generated by the project, an adequate supply of landfill space in the County has not been approved for beyond 2017. As a result, the project and cumulative projects could contribute to a decline in landfill capacity, resulting in a significant impact unless additional landfill space or other disposal alternatives are approved. There are no known mitigation measures that would mitigate these potentially project and cumulative significant impacts to a less than significant level.

Table 5.10-7
Disposal Capacity Need Analysis for Los Angeles County

Year	Waste Generation Rate (tpd-6)	Percent Diversion	Total L.A. Co. Disposal Need (tpd-6)	Imported Waste (tpd-6)	Waste Exports to Out-of-County Landfills (tpd-6)	Maximum Daily Transformation Capacity (tpd-6)	Class III Landfill Disposal Need (tpd-6)	1 Antelope Valley	2 Bradley	3 R Burbank	4 R Calabasas	5 Chiquita	6 Lancaster	7 Pebbly Beach	8 L Puente Hills	9 R San Clemente	10 R Scholl[6]	11 R Sunshine County	12 R Sunshine City	13 R Whittier	Class III Landfill Daily Disposal Capacity Shortfall (Excess)
								Expected Daily Tonnage 6 Day Average (tpd-6)													
								Remaining Permitted Landfill Capacity at Year's End (Million Tons)													
2006	76,305	50%	38,152	854	5,713	1,724	30,715	977	1,447	125	1,492	4,853	1,221	8.6	12,079	2.65	1,431	2,693	4,118	268	
								9.2	0.1	3.0	7.9	11.0	13.5	0.09	26.6	0.04	6.4	1.4	4.3	4.4	
2007	76,771	50%	38,386	900	7,5000	2,069	29,717	1,400	200	126	1,501	5,000	1,700	8.7	12,500	2.67	1,440	3,685	2,065	269	182
								8.8	C	3.0	7.4	9.5	12.9	0.085	22.7	0.040	6.0	0.2	3.6	4.3	
2008	77,772	50%	38,886	900	7,5000	2,069	30,217	1,800		127	1,521	5,000	1,700	8.8	12,500	2.70	1,459	3,000	4,500	273	1,675
								8.2		2.9	6.9	7.9	12.4	0.082	18.8	0.039	5.5	C	2.2	4.2	
2009	78,947	50%	39,474	900	10,000	2,069	28,305	1,800		129	1,544	5,000	1,700	8.9	13,200	2.74	1,481		4,500	277	1,338
								7.6		2.9	6.5	6.4	11.9	0.079	14.7	0.038	5.0		0.8	4.1	
2010	80,583	50%	40,292	900	10,000	2,069	29,123	1,800		132	1,576	5,000	1,700	9.1	13,200	2.80	1,512		4,500	283	592
								7.1		2.8	6.0	4.8	11.4	0.076	10.6	0.037	4.6		C	4.0	
2011	82,190	50%	41,095	900	25,000	2,069	29,926	1,800		135	1,607	5,000	1,700	9.3	13,200	2.86	1,543			288	10,358
								6.5		2.8	5.5	3.2	10.8	0.073	6.4	0.036	4.1			3.9	
2012	83,798	50%	41,899	900	25,000	2,069	30,730	1,800		137	1,639	5,000	1,700	9.5	13,200	2.91	1,572			294	9,625
								5.9		2.8	5.0	1.7	C	0.070	2.3	0.0354	3.6			3.8	
2013	85,501	50%	42,751	900	25,000	2,069	31,582	1,800		140	1,672	5,000		9.7	13,200	2.97	1,604			300	7,147
								5.4		2.7	4.4	0.1		0.067	C	0.0345	3.1			3.7	
2014	87,418	50%	43,709	900	25,000	2,069	32,540	1,800		143	1,710	5,000		9.9		3.04	1,640			307	(6,927)
								4.8		2.7	3.9	C		0.064		0.0335	2.6			3.6	
2015	89,207	50%	44,604	900	25,000	2,069	33,435	1,800		146	1,745			10.1		3.10	1,674			313	(12,744)
								4.3		2.6	3.4			0.061		0.0326	2.1			3.5	
2016	90,951	50%	45,475	900	25,000	2,069	34,306	1,800		149	1,779			10.3		3.16	1,706			319	(13,540)
								3.7		2.6	2.8			0.058		0.0316	1.5			3.4	
2017	92,686	50%	46,343	900	25,000	2,069	35,174	1,800		152	1,813			10..5		3.22	1,739			325	(14,332)
								3.1		2.5	2.2			0.055		0.0306	1.0			3.3	
2018	94,321	50%	47,160	900	25,000	2,069	35,991	1,800		155	1,845			10.7		3.28	1,769			331	(15,078)
								2.6		2.5	1.7			0.051		0.0296	0.4			3.2	
2019	95,958	50%	47,979	900	25,000	2,069	36,810	1,800		157	1,877			10.9		3.34	1,800			337	(15,825)
								2.0		2.4	1.1			0.048		0.0285	C			3.1	
2020	97,708	50%	48,854	900	25,000	2,069	37,685	1,800		160	1,911			11.1		3.40				343	(18,457)
								1.5		2.4	0.5			0.044		0.0275				3.0	
2021	99,537	50%	49,769	900	25,000	2,069	38,600	1,800		163	1,947			11.3		3.46				349	(19,326)
								0.9		2.3	C			0.044		0.0264				2.9	

ASSUMPTIONS:

1. *The Waste Generation Rate (excluding the inert waste being handled at unclassified landfills) was estimated using the CIWMB's adjustment methodology, utilizing population projection, employment and taxable sales projections available from UCLA.*
2. *Diversion Rate is 50 percent for years 2006 through 2021.*
3. *Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) landfills are based on the average daily tonnages for the period of 1/1/06 to 12/31/06.*
4. *Expected Daily Tonnage Rate for Bradley Landfill is based on the fact that the Landfill remained open through April 14, 2007.*
5. *"tpd-6": tons per day, 6 day per week average.*
6. *Assumes 15,000 tpd exported to Mesquite Regional Landfill at implementation of Waste-by-Rail program. Source: Appendix E-2.1.2, 2006 LA County Countywide Integrated Waste Management Plan, June 2008.*

LEGEND:

C Closure due to exhausted capacity
L Does not accept waste from the City of Los Angeles and Orange County
R Restricted Wasteshed
CIWMB California Integrated Waste Management Board
Source: Los Angeles County Department of Public Works, May 2008