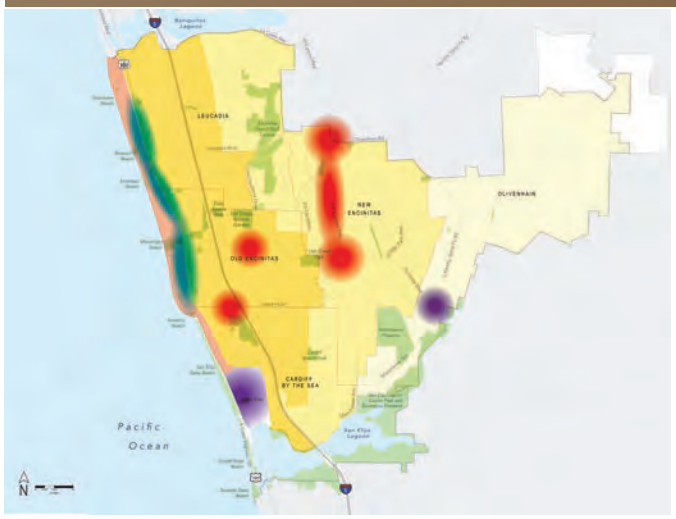
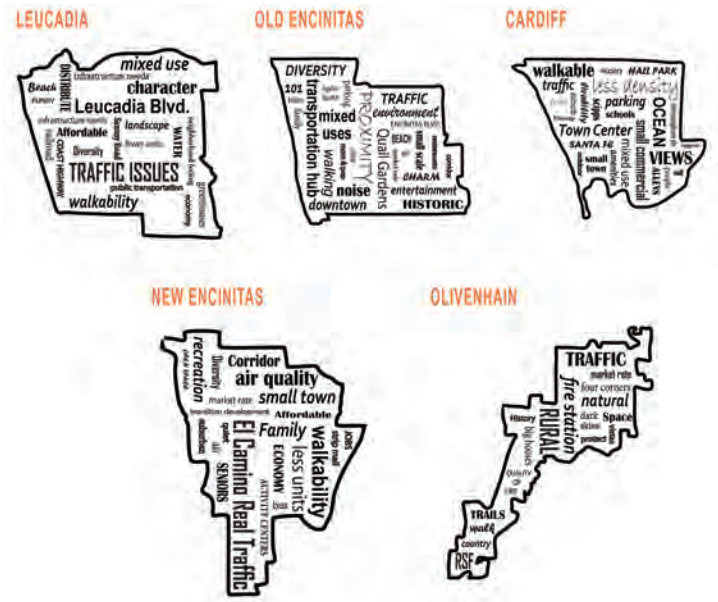
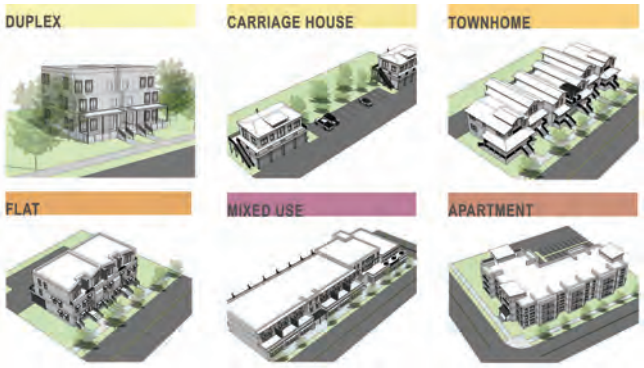
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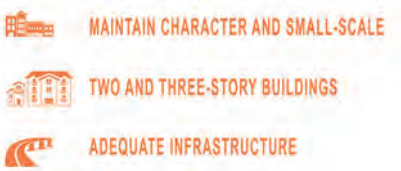
@HOME IN ENCINITAS











Draft Environmental Assessment/ Program Environmental Impact Report for *At Home in Encinitas*, the City of Encinitas Housing Element Update Encinitas, California SCH #2015041044

Prepared for
City of Encinitas
Planning & Building Department
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Prepared by
RECON Environmental, Inc
1927 Fifth Avenue
San Diego, CA 92101
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RECON Number 7722
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TABLE OF CONTENTS

List of Abbreviated Terms ..... **ix**

Executive Summary **S-1**

1.0 Introduction **1-1**

1.1 EIR Purpose and Intended Uses 1-2
1.2 EIR Legal Authority 1-2
1.3 EIR Scope and Content and Format 1-3
1.4 EIR Process 1-6

2.0 Environmental Setting **2-1**

2.1 Regional Setting 2-1
2.2 Project Location 2-1
2.3 Physical Environment 2-1
2.4 Planning Context 2-10

3.0 Project Description **3-1**

3.1 Project Background and History 3-1
3.2 Regional Housing Needs Assessment 3-2
3.3 Project Objectives 3-34
3.4 Project Components 3-36
3.5 Buildout Projections for Future Site Development 3-54
3.6 Discretionary Actions 3-61

4.0 Environmental Analysis **4-1**

4.1 Aesthetics 4.1-1
4.2 Air Quality 4.2-1
4.3 Biological Resources 4.3-1
4.4 Cultural Resources 4.4-1
4.5 Geology and Soils 4.5-1
4.6 Greenhouse Gas Emissions 4.6-1
4.7 Hazards and Hazardous Materials 4.7-1
4.8 Hydrology and Water Quality 4.8-1
4.9 Land Use and Planning 4.9-1
4.10 Noise 4.10-1
4.11 Population and Housing 4.11-1
4.12 Public Services and Facilities 4.12-1
4.13 Transportation and Traffic 4.13-1
4.14 Public Utilities 4.14-1

5.0 Significant Unavoidable Environmental Effects/ Significant Irreversible Environmental Changes/Energy Conservation 5-1

5.1 Significant Environmental Effects Which Cannot Be Avoided if the Project is Implemented 5-1

5.2 Significant Irreversible Environmental Changes Which Would Result if the Project is Implemented 5-2

5.3 Energy Conservation 5-3

6.0 Growth Inducement 6-1

6.1 Population and Housing Growth 6-1

6.2 Removal of an Impediment to Growth 6-3

6.3 Conclusion 6-4

7.0 Cumulative Impacts 7-1

7.1 Cumulative Analysis Setting and Methodology 7-1

7.2 Cumulative Effect Analysis 7-4

8.0: Effects Found Not to be Significant 8-1

8.1 Agricultural and Forestry Resources 8-1

8.2 Mineral Resources 8-2

8.3 Hazards and Hazardous Materials 8-2

8.4 Noise 8-2

9.0 Project Alternatives 9-1

9.1 Introduction 9-1

9.2 Alternative Sites Considered but Rejected 9-8

9.3 Alternatives Fully Analyzed 9-12

9.4 Environmentally Superior Alternative 9-53

10.0 References Cited 10-1

11.0 Individuals and Agencies Consulted 11-1

12.0 Certification Page 12-1

FIGURES

2-1: Regional Location 2-2
2-2: Project Location 2-3
2-3: Old Encinitas – Community Character Overview Map 2-8
2-4: New Encinitas – Community Character Overview Map 2-9
2-5: Leucadia – Community Character Overview Map 2-11
2-6: Cardiff – Community Character Overview Map 2-12
2-7: Olivenhain – Community Character Overview Map 2-14
3-1: Key Activity Centers 3-7
3-2: Community Character 3-9

FIGURES (cont.)

3-3a: Neighborhood Prototypes: Neighborhood Center/Mixed Use – Large Site.....3-10
3-3b: Neighborhood Prototypes: Residential Infill – Medium to Large Site.....3-11
3-3c: Neighborhood Prototypes: Neighborhood Center/Mixed Use – Medium Site....3-12
3-3d: Neighborhood Prototypes: Residential Infill –Small Site.....3-13
3-3e: Neighborhood Prototypes: Main Street/Mixed Use – Small Site 3-14
3-4a: Housing Sites – Old Encinitas 3-18
3-4b: Housing Sites – New Encinitas.....3-19
3-4c: Housing Sites – Leucadia 3-20
3-4d: Housing Sites – Cardiff 3-21
3-4e: Housing Sites – Olivenhain.....3-22
3-5a: Housing Strategy 1 – Ready Made (RM) 3-31
3-5b: Housing Strategy 2 – Build Your Own (BYO).....3-32
3-5c: Housing Strategy 3 – Modified Mixed Use Places (MMUP).....3-33
4.1-1: Scenic Resources – Leucadia 4.1-4
4.1-2: Scenic Resources – Old Encinitas 4.1-5
4.1-3: Scenic Resources – Cardiff and Olivenhain.....4.1-6
4.1-4: Scenic Resources – New Encinitas and Olivenhain 4.1-7
4.3-1a: Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites 4.3-2
4.3-1b: Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites.....4.3-3
4.3-1c: Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites.....4.3-4
4.3-1d: Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites.....4.3-5
4.3-2a: Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites....4.3-12
4.3-2b: Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites....4.3-13
4.3-2c: Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites....4.3-14
4.3-2d: Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites....4.3-15
4.3-3: MHCP Preserve Areas in the HEU Housing Sites 4.3-20
4.5-1: Relative Landslide Susceptibility – City of Encinitas 4.5-6
4.7-1: Very High Fire Hazard Severity Zone.....4.7-9
4.8-1: Hydrological Features in the City of Encinitas.....4.8-2
4.8-2: Flood Hazards in the City of Encinitas 4.8-4
4.8-3: 303(d) List of Impaired Water Quality Segments for the City of Encinitas.....4.8-7
4.9-1a: Existing Land Uses.....4.9-4
4.9-1b: Existing Land Uses.....4.9-5
4.9-1c: Existing Land Uses.....4.9-6
4.9-1d: Existing Land Uses.....4.9-7
4.9-2: Project in Relation to Coastal Zone Area.....4.9-14
4.9-3: Project in Relation to Specific Plans.....4.9-26
4.9-4: Future Vehicle Traffic Noise Contours – Housing Strategy 1 (RM) 4.9-80
4.9-5: Future Vehicle Traffic Noise Contours – Housing Strategy 2 (BYO) 4.9-81
4.9-6: Future Vehicle Traffic Noise Contours – Housing Strategy 3 (MMUP).....4.9-82
4.10-1: Noise Measurement Locations.....4.10-4
4.12-1: Locations of Existing Fire Stations.....4.12-2
4.12-2: Elementary School District Boundaries 4.12-5

FIGURES (cont.)

4.12-3: City of Encinitas Parks, Open Space and Trails System....4.12-11
4.13-1: Existing Roadway Network....4.13-2
4.13-2: Year 2035 + Housing Strategy 1 (RM) Roadway LOS....4.13-41
4.13-3: Year 2035 + Housing Strategy 2 (BYO) Roadway LOS....4.13-42
4.13-4: Year 2035 + Housing Strategy 3 (MMUP) Roadway LOS....4.13-43
4.14-1: City of Encinitas Wastewater Collection System....4.14-2
4.14-2: City of Encinitas - Water District Boundaries....4.14-5
9-1: Alternative Site Locations....9-9
9-2: No Project/Adopted General Plan Alternative....9-14
9-3: Sustainable Mixed Use Places Housing Strategy Alternative....9-31

TABLES

2-1: Existing Land Use Summary....2-6
2-2: Housing Site Existing Condition Summary....2-20
3-1: Housing Strategies and Housing Sites....3-34
3-2: General Plan Land Use Designation....3-43
3-3: Proposed Floating Zones....3-48
3-4a: Housing Strategy 1: Ready Made (RM) Maximum Realistic Yield: Residential....3-57
3-4b: Housing Strategy 2: Build Your Own (BYO) Residential Buildout....3-57
3-4c: Housing Strategy 3: Modified Mixed Use Places (MMUP) Residential Buildout....3-58
3-5: Housing Strategy Comparison: Residential Maximum Realistic Yield....3-58
3-6a: Housing Strategy 1: Ready Made (RM) Maximum Realistic Yield: Commercial....3-59
3-6b: Housing Strategy 2: Build Your Own (BYO) Maximum Realistic Yield: Commercial....3-60
3-6c: Housing Strategy 3: Modified Mixed Use Places (MMUP) Maximum Realistic Yield: Commercial....3-60
3-7: Housing Strategy Comparison: Commercial Maximum Realistic Yield....3-61
4.1-1: Goals and Policies Related to Visual Aesthetics....4.1-9
4.2-1: Ambient Air Quality Standards....4.2-3
4.2-2: Summary of Air Quality Measurements Recorded at the Del Mar—Mira Costa College, Escondido—East Valley Parkway and Camp Pendleton Monitoring Stations....4.2-4
4.2-3: Goals and Policies Related to Air Quality....4.2-11
4.2-4: Total Operational Emissions....4.2-14
4.2-5: Summary of Worst-case Construction Emissions....4.2-17
4.2-6: Summary of Project Operational Emissions....4.2-19
4.2-7: Maximum Buildout CO Concentrations....4.2-26
4.3-1: Housing Sites Identified as Containing or with Potential to Contain Sensitive Vegetation Communities....4.3-8
4.3-2: Housing Sites Identified as Containing or with Potential to Contain Jurisdictional Wetlands or Waters....4.3-16
4.3-3: Goals and Policies Related to Sensitive Biological Resources....4.3-21

TABLES (cont.)

4.3-4: Potential Impacts to Sensitive Biological Resources 4.3-28
4.3-5: Potential Impacts to Sensitive Wildlife Species 4.3-30
4.4-1: Historical Resources Known to Occur within the HEU Sites 4.4-5
4.4-2: Housing Sites with Potential to Contain Archaeological Resources 4.4-7
4.4-3: Goals and Policies Related to Sensitive Cultural Resources 4.4-13
4.5-1: Goals and Policies Related to Geology and Soils 4.5-7
4.6-1: Global Warming Potentials and Atmospheric Lifetimes 4.6-2
4.6-2: California GHG Emissions by Sector in 1990, 2008 and 2012 ..... 4.6-4
4.6-3: San Diego Region GHG Emissions by Sector in 2010 ..... 4.6-5
4.6-4: Encinitas Community-Wide GHG Emissions in 2005 ..... 4.6-5
4.6-5: Encinitas Government Operations GHG Emissions in 2005 ..... 4.6-6
4.6-6: Goals and Policies Related to GHG Emissions 4.6-12
4.6-7: Year 2020 GHG Emissions (MT CO_2E) 4.6-15
4.6-8: VMT to Trip Generation Efficiency – HEU Growth in Land Use 4.6-17
4.6-9: San Diego Forward Applicable Policies 4.6-17
4.6-10: Scoping Plan Regulatory Programs Implemented to Reduce GHG Emissions 4.6-22
4.7-1: Listed Hazardous Materials Sites 4.7-3
4.7-2: Goals and Policies Related to Hazards 4.7-16
4.7-3: Housing Sites Identified as Containing Hazardous Materials 4.7-21
4.8-1: Housing Sites Identified as Containing or with Potential to Contain Flood Hazards 4.8-5
4.8-2: 303(d) List of Impaired Water Quality Segments for the City of Encinitas 4.8-8
4.8-3: Housing Sites Identified as Discharging or with Potential to Discharge to Impaired Water Bodies 4.8-8
4.8-4: General Plan Policies Related to Hydrology and Water Quality 4.8-14
4.9-1: Existing Land Use Distribution 4.9-2
4.9-2: City of Encinitas Existing Housing Types 4.9-9
4.9-3: Goals and Policies Related to Land Use 4.9-20
4.9-4: Goals and Policies Related to Land Use and Housing 4.9-22
4.9-5: City of Encinitas Exterior Noise Limits – Adopted Noise Element 4.9-24
4.9-6: Downtown Encinitas Specific Plan 1994 (2010) 4.9-25
4.9-7: Encinitas Ranch Specific Plan 1994 (2005) 4.9-27
4.9-8: North 101 Corridor Specific Plan 1997 (2005) 4.9-29
4.9-9: Cardiff-by-the-Sea Specific Plan 2010 (2013) 4.9-30
4.9-10: General Plan Land Use Distribution 4.9-31
4.9-11: City of Encinitas Existing Community Housing Needs and State Targets 4.9-35
4.9-12: Project Inconsistencies with Existing City General Plan 4.9-36
4.9-13: Trip Generation and VMT Summary 4.9-41
4.9-14: VMT to Trip Generation Efficiency – City-wide (all) Land Uses 4.9-42
4.9-15: VMT to Trip Generation Efficiency – HEU Growth over No Project/Adopted General Plan (Ambient Growth) 4.9-42
4.9-16: Vehicle Traffic Parameters 4.9-48
4.9-17: Noise and Land Use Compatibility Guidelines 4.9-57
4.9-18: Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances 4.9-58

4.9-19: Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances....4.9-65

TABLES (cont.)

4.9-20: Housing Strategy 3 (MMUP Future Vehicle Traffic Noise Contour Distances....4.9-72
4.10-1: Human Response to Different Levels of Groundborne Vibration....4.10-3
4.10-2: Ambient Noise Measurements....4.10-5
4.10-3: Goals and Policies Related to Noise....4.10-7
4.10-4: City of Encinitas Exterior Noise Limits....4.10-9
4.10-5: City of Encinitas Vibration Limits....4.10-11
4.10-6: Representative Vibration Source Levels for Construction Equipment....4.10-13
4.10-7: Housing Strategy 1 (RM) Increases in Ambient Noise....4.10-16
4.10-8: Housing Strategy 2 (BYO) Increases in Ambient Noise....4.10-24
4.10-9: Housing Strategy 3 (MMUP) Increases in Ambient Noise....4.10-32
4.10-10: Property Line Noise Level Limits....4.10-40
4.10-11 Potential Construction Noise Impacts....4.10-46
4.11-1: Regional Population and Future Population Forecasts....4.11-2
4.11-2: City of Encinitas Population and Future Population Forecasts....4.11-3
4.11-3: Population Growth - Housing Strategy 1 (Ready Made)....4.11-8
4.11-4: Population Growth - Housing Strategy 2 (Build Your Own)....4.11-9
4.11-5: Population Growth - Housing Strategy 3 (Modified Mixed Use Places)....4.11-10
4.12-1: School Districts Serving the City of Encinitas....4.12-6
4.12-2: Future Enrollment Capacity of Schools in Encinitas....4.12-6
4.12-3: Libraries Serving the City of Encinitas....4.12-7
4.12-4: City of Encinitas Existing Parks and Open Space....4.12-10
4.12-5: Goals and Policies Related to Public Services....4.12-13
4.12-6: Student Generation Within School Districts Serving the City of Encinitas Strategy 1....4.12-19
4.12-7: Student Generation Within School Districts Serving the City of Encinitas Strategy 2....4.12-19
4.12-8: Student Generation Within School Districts Serving the City of Encinitas Strategy 3....4.12-20
4.13-1: Existing Roadway Segment Level of Service....4.13-11
4.13-2: Existing Intersection Level of Service....4.13-22
4.13-3: Existing Freeway Segment Level of Service....4.13-25
4.13-4: Existing Ramp Intersection Capacity Analysis....4.13-26
4.13-5: Existing Ramp Metering Analysis....4.13-27
4.13-6: General Plan Goals and Policies Related to Transportation/Traffic....4.13-33
4.13-7: SANTEC/ITE Measure of Significant Project Traffic Impacts....4.13-37
4.13-8: County Measures of Significant Project Impacts to Road Segments....4.13-38
4.13-9: Trip Generation and VMT Summary....4.13-39
4.13-10: VMT to Trip Generation Efficiency – Growth in Land Use Only....4.13-40
4.13-11: Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis....4.13-45
4.13-12: Housing Strategy 1 (Ready-Made) - Future Year 2035 Freeway Segment Level of Service....4.13-52

TABLES (cont.)

4.13-13: Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis 4.13-55
4.13-14: Housing Strategy 2 (Build Your Own) - Future Year 2035 Freeway Segment Level of Service 4.13-62
4.13-15: Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis 4.13-65
4.13-16: Housing Strategy 3 (Modified Mixed Uses) - Future Year 2035 Freeway Segment Level of Service 4.13-72
4.13-17: Housing Strategy 3 (Modified Mixed Use Plan) - Future Year 2035 Intersection Level of Service 4.13-73
4.13-18: Housing Strategy 3 (Modified Mixed Use Plan) – Future Year 2035 Ramp Intersection Capacity Analysis 4.13-75
4.13-19: Ramp Metering Analysis – Future Year 2035 Strategy 3 (Modified Mixed Use Plan) 4.13-76
4.13-20: Operational Traffic Significant Impact Summary 4.13-78
4.13-21: Traffic Mitigation Improvements 4.13-80
4.14-1: San Dieguito Water District Projected Water Supply and Demand 4.14-6
4.14-2: Olivenhain Municipal Water District Projected Water Supply and Demand 4.14-7
4.14-3: Goals and Policies Related to Public Services 4.14-10
5-1: General Plan Resource Management Element: Goals and Policies Related to Energy Conservation 5-7
5-2: Encinitas Climate Action Plan State and Federal Strategy Measures 5-8
6-1: Yield of Proposed Housing Sites in the City of Encinitas 6-2
9-1: Maximum Potential Residential and Commercial Buildout Comparison of HEU Housing Strategies and Alternatives 9-4
9-2: Matrix Comparison of the HEU Housing Strategies and Alternatives 9-5
9-3: No Project/Adopted General Plan Alternative Commercial/Residential Yield and Land Use/Zoning 9-15
9-4: Matrix Comparison of the Housing Sites and Significant Mitigated (SM)/ Significant Unavoidable (SU) Impacts 9-32
9-5: Sustainable Mixed Use Places Alternative: Matrix Comparison of the Housing Sites and Significant Mitigated (SM)/ Significant Unavoidable (SU) Impacts 9-33

APPENDIXES (bound under separate cover)

A-1: HCD Letter Review
A-2: NOP and Comments
B: Housing Site Summaries
C: Project History
D: E-Town Hall/Community Dialogue Session Materials and Housing Strategies
E: Draft Housing Element
F-1: General Plan Land Use Designations
F-2: Proposed Zoning Code
G: Proposed Design Guidelines
H: Conforming and Ancillary General Plan and Municipal Code Amendments
I: Photo Survey
J: Air Quality Methodology and Modeling
K-1: Sensitive Plant Species Known to Occur within the Vicinity of the HEU
K-2: Sensitive Wildlife Species Known to Occur within the Vicinity of the HEU
K-3: Coastal California Gnatcatcher Presence/Absence Survey Guidelines (USFWS 1997)
K-4: Least Bell's Vireo Survey Guidelines (USFWS 2001)
L: Greenhouse Gas Methodology and Modeling
M: General Plan Consistency Analysis
N: Traffic Impact Study
O: Noise Methodology and Modeling

List of Abbreviated Terms

°F	degrees Fahrenheit
µg/m3	micrograms per cubic meter
AB	Assembly Bill
ACM	asbestos-containing materials
AMSL	above mean sea level
ASTM	American Society of Testing and Materials
BAU	Business as usual
BIA	Building Industry Association of San Diego County
BMP	best management practice
BYO	Build Your Own
C&D	Construction & Demolition
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH_4	Methane
CIP	Capital Improvement Project
City	City of Encinitas
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CO_2	Carbon dioxide
COPPS	Community Oriented Policing and Problem Solving
CPUC	California Public Utilities Commission
CRC	California Residential Code
CSA	County Service Area
CSD	Cardiff School District
CSD	Cardiff Sanitation District
CUPA	Certified Unified Program Agency
CWA	Clean Water Act

dB	Decibel
dB(A)	A-weighted decibels
DDT	dichloro-diphenyl-trichloroethane
DEH	Department of Environmental Health
DHS	Department of Health Services
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDCO	EDCO Waste and Recycling Services
EFD	Encinitas Fire Department
EMS	Emergency Medical Services
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmental Site Assessment
ESD	Encinitas Sanitary Division
EWA	Encina Wastewater Authority
FAR	Floor area ratio
FEMA	Federal Emergency Management Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic information system
gpm	gallons per minute
GWP	global warming potential
HSC	Health and Safety Code
H_2S	hydrogen sulfides
HA	Hydrological Area
HCD	Housing and Community Development
HEU	Housing Element Update
HMBP	Hazardous Materials Business Plans
HMD	Hazardous Materials Division
HU	Hydrological Unit
HVAC	heating, ventilation, and air conditioning
I-5	Interstate 5
ICLEI	International Council for Local Environmental Initiatives
in/sec	inches per second
IP	Implementation Plan
IRWM	Integrated Regional Water Management
IWRP	Integrated Water Resources Plan
JRMP	Jurisdictional Runoff Management Plan
JURMP	Jurisdictional Urban Runoff Management Program
LBP	lead-based paint
LCP	Local Coastal Plan
LCPA	Local Coastal Plan Amendment
LCS	lead-containing surfaces
L_{dn}	day-night equivalent level
LEED	Leadership in Energy and Environmental Design

L_{eq}	Average sound level
LID	low impact development
LOS	Leve of Service
Lpw	sound power
LRA	Local Responsibility Area
LUE	Land Use Element
LUP	Land Use Plan
LUST	leaking underground storage tanks
LWD	Leucadia Wastewater District
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MHCP	Multiple Habitat Conservation Program
MHMP	Multi-Jurisdictional Hazard Mitigation Plan
MMT CO_2E	Million metric tons of CO_2 equivalent
MMUP	Modified Mixed Use Places
mpg	Miles per gallon
MPO	Metropolitan Planning Organizations
MS4	municipal separate storm sewer system
MT CO_2E	metric tons of CO_2 equivalent
MWD	Metropolitan Water District of Southern California
N_2O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCTD	North County Transit District
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OES	Office of Emergency Services
OMWD	Olivenhain Municipal Water District
OPR	Office of Planning and Research
PAHS	polynuclear aromatic hydrocarbons
Pb	lead
PCB	polychlorinated biphenyls
PCE	Tetrachloroethylene
PEIR	Program Environmental Impact Report
PM_{10}	10-micron particulate matter
$PM_{2.5}$	2.5-micron particulate matter
ppb	parts per billion
ppd	pounds per person per day
ppm	parts per million
PPV	peak particle velocity

PRD	planned residential developments
PSE	Public Safety Element
PV	photovoltaic
RAC	Regional Advisory Committee
RAQS	Regional Air Quality Strategy
RCP	Regional Comprehensive Plan
RCRA	Federal Resource Conservation and Recovery Act
RHNA	Regional Housing Needs Assessment
RM	Ready Made
RME	Resource Management Element
ROG	Reactive organic gas
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Plan
RWMG	Regional Water Management Group
RWQCB	Regional Water Quality Control Board
SAM	Site Assessment and Mitigation
SANDAG	San Diego Association of Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAB	South Coast Air Basin
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SDMSE	San Diego Medical Services Enterprise
SDUHSD	San Dieguito Union High School District
SDWD	San Dieguito Water District
SEWRF	San Elijo Water Reclamation Facility
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SOI	Sphere of Influence
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflows
STC	sound transmission class
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TAIC	Technology Associates International Corporation
TCM	transportation control measures
TDS	total dissolved solid
TMDL	total maximum daily loads
U.S. DOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency

U.S.C.	United States Code
UDC	Unified Disaster Council
URMP	Urban Runoff Management Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UST	underground storage tanks
UWMP	Urban Water Management Plan
vdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles travelled
VOC	volatile organic compounds
WRCC	Western Regional Climate Center
WSA	Water Supply Assessment
WURMP	Watershed Urban Runoff Management Program

S.0 Executive Summary

S.1 Project Synopsis

This summary provides a brief synopsis of: (1) the proposed Housing Element Update (HEU) , (2) the results of the environmental analysis contained within this Program Environmental Impact Report (PEIR), (3) the major areas of controversy and issues to be resolved by decision-makers, and (4) the alternatives to the project that were considered. This summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

S.1.1 Project Location and Setting

The City of Encinitas (City) and Sphere of Influence are composed of approximately 13,328 acres of land in the County of San Diego, roughly 20 miles north of downtown San Diego and 95 miles south of Los Angeles. The jurisdictions that surround the City include: on its north side, the City of Carlsbad; on its south side, the City of Solana Beach; and on the east side, the unincorporated area of Rancho Santa Fe. On the City's west side lies the Pacific Ocean. The project area is located within the Coastal Zone and encompasses five communities—Leucadia, New Encinitas, Olivenhain, Old Encinitas, and Cardiff. The City is characterized by cliffs, coastal beaches, flat-topped coastal areas, rolling hills, and steep mesa bluffs. Batiquitos Lagoon is located in the north and the San Elijo Lagoon to the south of the City. The project area is generally accessed by Coast Highway 101 and Interstate 5 (I-5), both of which run north–south in the western portion of the project area.

S.1.2 Project Objectives

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the Lead Agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The purpose of the project is to address the housing needs and objectives of the City and to meet the requirements of State law. The project has the following objectives:

S.1.2.1 Housing Element Update

1. **Housing Choice.** Accommodate a variety of housing types to meet the needs of all Encinitas residents, creating opportunities for attainably priced housing for all income groups.

2. **Adequate Supply.** Provide adequate sites with corresponding density to meet the City's Regional Housing Needs Assessment allocation, inclusive of prior planning cycle carryover housing units.

3. **Effective Implementation.** Deliver State-mandated and locally desired programs to implement the City's Housing Element.

S.1.2.2 Housing Mapping Strategies

1. **Maintain Community Character.** Integrate future development using a blend of two- and three-story buildings or building elements into the City's seven community character contexts through appropriately located sites and project design, and embrace the unique cultural identities expressed in each of the five communities.

2. **Emphasize Mixed Use.** Accommodate mixed use, walkable places in key activity centers of every Encinitas community, while allowing for some standalone housing.

3. **Achieve a Variety of Neighborhood Types.** Provide a mix of building types and varied site designs that incorporate existing community character contexts to achieve a variety of neighborhood types in which to develop new housing and mixed use.

4. **Consider Infrastructure Conditions.** Ensure adequate infrastructure to support new housing by locating future development in areas that have existing or potential capacity for infrastructure and public services to accommodate it.

5. **Address Mobility Needs.** Maintain or enhance community access and mobility networks.

6. **Strive for a Sustainable Encinitas.** Coordinate planning for land use, transportation and housing to reduce environmental impacts and preserve a natural, healthy environment.

7. **Strengthen the Local Economy.** Locate housing in the right places to grow the economy organically by supporting local businesses and making the City more fiscally sustainable.

8. **Equitably Distribute Multifamily Housing.** Distribute attached and multi-family housing to the City's five communities.

S.1.3 Project Description

The project is *At Home in Encinitas*, the City's General Plan Housing Element Update (HEU) for the housing cycle 2013–2021. The State of California mandates that all cities and counties prepare a Housing Element as part of the comprehensive General Plan. The 2013–2021 Housing Element represents the City's effort in fulfilling the requirements under the State Housing Element law. The San Diego Association of Governments (SANDAG) Board of Directors adopted the final Regional Housing Needs Assessment (RHNA) Plan for this Housing Element cycle on October 28, 2011. The RHNA identified a housing need of 1,283 low and very low income housing units in the City, which also includes a carryover of 253 prior housing cycle units. These are attached and multi-family housing units.

The project includes an update to the uncertified 1992 Housing Element, including revised goals and policies, along with new and continuing implementation programs to ensure consistency with current State housing law. The update also integrates updated socioeconomic data, as well as other population and household characteristics to support the development of the Housing Element.

To meet these future housing needs, the City has identified 33 potential sites to accommodate new housing within each community. Various combinations of these viable housing sites comprise three concept housing strategy maps, which were selected by City Council for analysis in the PEIR. Each strategy includes a description of land uses, type of development, and basic site design that could be attained. Each of the three strategy maps are studied in detail in the PEIR. A fourth strategy map is studied as a feasible alternative in Chapter 9.0. Once a preferred plan is adopted by the City Council (estimated in spring/summer of 2016), the HEU would be presented to the voters of the City in November 2016.

In conjunction with the HEU, the City will adopt an implementation program that includes a General Plan Land Use Plan amendments; rezoning of housing sites; Zoning Code amendments; Municipal Code amendments; new Design Guidelines; amendments to the North 101 Corridor Specific Plan, Downtown Encinitas Specific Plan, Encinitas Ranch Specific Plan, and Cardiff-by-the-Sea Specific Plan; a Local Coastal Program Amendment; and the adoption of other programs necessary to implement the Housing Element, as set forth in the implementation program. A Noise Element amendment is being processed concurrently to resolve internal inconsistencies in the existing element and reflect contemporary noise standards. Finally, an amendment to the Community Character and Voters' Rights Initiative portion of the Land Use Element and Zoning Code Chapter 30.00 would modify building height limitations and authority to grant land use change approvals in very specific circumstances. Collectively, these actions would serve as a blueprint to accommodate future housing and provide housing-related services within the City.

S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects

Table S-1, located at the end of this section, summarizes the significant and less than significant effects identified during the environmental analysis completed for the project. Table S-1 also includes a mitigation framework to reduce the significant environmental effects, with a conclusion as to whether the impact has been mitigated to below a level of significance. The mitigation measures listed in Table S-1 are also discussed within each relevant topical area in Chapter 4.0.

S.3 Areas of Controversy

The Notice of Preparation (NOP) was distributed on April 10, 2015, for a 30-day public comment period. In addition, a public scoping meeting was held on Thursday, April 23, 2015 at

5:00 p.m. at City Hall. Public comments received in conjunction with community outreach for the HEU and on the NOP reflect controversy related to several environmental issues. The NOP, comment letters, and transcription of the scoping meeting comments are included in this EIR as Appendix A-2. Potentially significant impacts related to the following environmental issue areas are analyzed in detail in the PEIR:

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Geology and Soils
4.6 Greenhouse Gas Emissions
4.7 Hazards and Hazardous Materials
4.8 Hydrology and Water Quality
4.9 Land Use and Planning
4.10 Noise
4.11 Population and Housing
4.12 Public Services and Facilities
4.13 Transportation and Traffic
4.14 Public Utilities

S.4 Issues to be Resolved by the Decision-Making Body

Issues to be resolved include how to reduce significant, unavoidable adverse environmental impacts associated with the HEU to the maximum extent feasible while achieving HEU objectives, by adoption of mitigation measures and/or alternatives to the HEU identified in the PEIR. With regard to the 33 housing sites, the PEIR provides a discussion and evaluation of the location and proposed intensity of development at each of the individual sites and collectively, as housing strategies. The decision-making body will be required to select a housing strategy that balances local values and community character with State housing law.

S.5 Project Alternatives

To fully evaluate the environmental effects of projects, CEQA mandates that alternatives to the project be analyzed. Section 15126.6 of the CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project," even if these alternatives would impede to some degree the attainment of the project objectives.

Chapter 9.0 provides a discussion of the Alternatives Considered but Rejected, a detailed analysis of the No Project (Development Under the Adopted General Plan) Alternative (No

Project Alternative) and the Sustainable Mixed Use Places Alternative (SMUP Alternative), and identifies the SMUP as the environmentally superior alternative, as required under CEQA.

S.5.1 No Project Alternative (Development Under the Adopted General Plan)

Consistent with CEQA Guidelines Section 15126.6(e)(3)(A), the No Project Alternative represents the continued implementation of the adopted General Plan land use designations and zoning for the housing sites. Presently adopted land use designations, zoning and potential buildout yield for each housing site is summarized in Table 9-3. Total buildout potential for all 33 housing sites under the adopted General Plan and zoning would include 837 residential units and 2,175,291 square feet of commercial development. Presently, the housing sites contain only 101 existing residential units; therefore, buildout of the No Project Alternative has the potential to yield an additional 736 additional units. Approximately 625,000 square feet of additional commercial development is anticipated on the housing sites under buildout of the adopted General Plan, although redevelopment also could occur. Mixed-use development is permitted under the some of the City's adopted land use designations and zoning. Future projects consistent with the adopted General Plan, and therefore under the No Project Alternative, would be discretionary because nearly all projects in the City are required to undergo design review. In addition to design review, subdivision maps, conditional use permits, and Master Design Review Permits (MDPs) may be required for the entitlement of future development. Only custom single-family detached housing outside of the Coastal Zone may be developed ministerially.

Development under the No Project Alternative would not be in compliance with State law with regards to providing an adequate number of sites with high density residential zoning. This alternative would not satisfy the project objectives stated in Chapter 3.0, Project Description, which are restated above.

S.5.2 Sustainable Mixed Use Places Housing Strategy Alternative

The SMUP Alternative would meet the City's RHNA obligation, while providing adequate buffer to ensure compliance with State law requiring no net loss of adequate sites. This alternative incorporates those housing sites that: (1) have fewer combined unmitigated/unavoidable impacts than the other three housing strategies; and (2) presents the fewest constraints to future implementation of future housing at those locations (refer to Tables 9-4 and 9-5).

The SMUP Alternative represents an alternative to the HEU housing strategies addressed as the project in Chapter 3.0. It is an alternative that refines, but would have fewer impacts than the project's MMUP strategy, which was developed in response to substantial public input. This environmental analysis and the determination of substantial compliance for the draft Housing Plan by Housing and Community Development (HCD) (see Appendix A-1), occurred

subsequent to the creation of the MMUP strategy. With the benefit of the analysis and findings in this PEIR, along with the review of HCD, the SMUP Alternative was created. All sites that comprise the SMUP would meet the project's objectives. The differences and explanation for the changes from the MMUP housing strategies are as follows:

S.5.2.1 Sites Removed from the MMUP Housing Strategy in Development of the SMUP

C-2: The removal of housing site C-2 from the analysis reduced traffic trips.

CBHMG-1: The removal of housing site CBHMG-1 from the analysis reduced traffic trips. This site was also removed because the site is needed to remain in its existing condition for public utility purposes.

L-7: The removal of housing site L-7 from the analysis reduced multiple significant unmitigated aesthetic impacts.

O-2: This site was removed the SMUP strategy because the lower population of Olivenhain would adequately be served by a single, new mixed activity center, which is accomplished with housing sites ALT-4 and O-3 on the opposite side of Rancho Santa Fe Road. Additionally, removing O-2 would allow Rancho Santa Fe Road to serve as a visual break between more urban development on the west side of the road to a rural character on the east side. The removal of housing site O-2 also reduced impacts to cultural resources.

O-4: The removal of housing site O-4 from the analysis reduced multiple significant unmitigated aesthetic impacts.

ALT-5: The removal of housing site Alt-5 from the analysis reduced traffic trips.

ALT-6: Housing site Alt-6 was removed from the analysis because is the site is physically constrained and is needed to service transportation-related purposes at the Encinitas Transit Center.

S.5.2.2 Sites Included in the SMUP

a. Leucadia

ALT-2: Housing site Alt-2 was included in the SMUP Alternative because this site provides an opportunity to strengthen the walkable Main Street Corridor character of Leucadia. Additionally, its inclusion helps meet project objectives by transitioning residential yields from moderate-income categories to lower income categories.

b. Old Encinitas

OE-1: Housing site OE-1 was included in the SMUP Alternative because it provides an opportunity to convert incompatible heavy commercial and light industrial land uses adjacent to Moonlight Beach and the downtown walkable Main Street corridor with complementary and

visitor-serving uses. Visitor-serving uses are an important consideration adjacent to the beach in the Coastal Zone.

OE-4: Housing site OE-4 was included in the SMUP Alternative because it provides an opportunity for redevelopment of the underutilized City Hall sites into a mixed use place immediately adjacent to the Encinitas transit center.

ALT-7: Housing site Alt-7 was included in the SMUP Alternative because it provides an opportunity to strengthen the walkable Main Street corridor character of Downtown Encinitas by converting underutilized sites to stitch together the whole of the downtown. Additionally, its inclusion helps meet project objectives by transitioning residential yields from moderate-income categories to lower income categories.

OE-7: Housing site OE-7 was included in the SMUP Alternative because while there is potential for biological resources, the site is isolated being fully surrounded by urbanization. Changing the land use from commercial to residential would reduce overall traffic trips and takes advantage of adjacent bus service.

c. Cardiff

C-1: Housing site C-1 was included in the SMUP Alternative because it provides an opportunity to complement the Encinitas Community Park by improving entrance aesthetics and allowing residents to walk to the park rather than drive from a distant site.

C-3: The addition of housing site C-3 is included in the SMUP alternative as a result of reduced traffic trips. C-3 also meets project objectives, particularly by accommodating mixed use to strengthen walkability of the area.

C-6: Housing site C-6 was included in the SMUP Alternative because it provides an opportunity to meet diverse housing needs.

d. New Encinitas

ALT-3: Housing site Alt-3 was included in the SMUP Alternative because it provides an opportunity to improve the aesthetics in the heart of the City's commercial corridor.

NE-1: Housing site NE-1 was included in the SMUP Alternative because it reduces traffic trips and provides a mixed-use walkable place adjacent to existing shopping, park facility and planned cultural facility.

NE-7: Housing site NE-7 was included in the SMUP Alternative because it reduces traffic trips and provides a mixed-use walkable place for New Encinitas. It also provides an opportunity to improve the aesthetics in the heart of the City's commercial corridor.

e. Olivenhain

ALT-4: Housing site Alt-4 was included in the SMUP Alternative because it focuses the change in land use to only one of the "four corners" of Olivenhain and supports the viability of the adjacent new mixed use site, O-3.

O-3: Included because it strongly meets the project objectives; reduces traffic trips compared to the No Project Alternative in providing a mixed use walkable place for Olivenhain.

S.6 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from the other alternatives. The project itself may not be identified as the environmentally superior alternative.

The SMUP Alternative is considered the environmentally superior alternative, because it would incrementally reduce significant impacts associated with aesthetics, air quality, biological resources (sensitive wildlife/vegetation species and wetlands), cultural/paleontological resources, land use (neighborhood compatibility and proximity to agricultural sites), hazardous materials, and hydrology compared to the project's HEU housing strategies (refer to Table 9-2). Although traffic impacts would remain significant and unavoidable for the HEU, the SMUP Alternative would reduce these impacts through the selection of housing sites described above in the SMUP Alternative to reduce trips generation while improving aesthetics and alternative transit opportunities. Thus, the SMUP Alternative would meet all the project's objectives and would result in compliance with State Housing Element law while meeting the City's share of allocated RHNA units. In conclusion, the SMUP Alternative is considered the environmentally superior alternative, because it would result in fewer impacts than any of the project's three HEU housing strategies and still meets the project's objectives.

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Aesthetics			
Issue 1: Plan Consistency Would the project conflict with any City policy or regulation relative to the protection of visual resources (i.e., General Plan/LCP policies, Hillside/Inland Bluff Overlay Zone, Scenic Visual Corridor Overlay Zone/Design Review Guidelines) thereby resulting in a negative aesthetic/visual impact?	The HEU would not conflict with any City policy or regulation relative to the protection of visual resources; thus, impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 2: Public Views Would the project result in development that: a. is incompatible in shape, form, or intensity, such that public views from designated open space areas, view corridors or scenic highways, or to any significant visual landmarks or scenic vistas would be substantially blocked? b. is located in a highly visible area (e.g., on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage, or architectural projections?	One housing site, site O-4, would result in a potentially significant impact (Impact VIS-1) on scenic views of the San Elijo Lagoon from the scenic roadways South El Camino Real and Manchester Avenue particularly for southbound travelers along South El Camino Real to southbound Manchester where expansive views toward San Elijo Lagoon would be substantially blocked by development of a Neighborhood Center/Mixed Use-Large Site housing site neighborhood prototype. Development of all other housing sites would result in a less than significant impact to public views.	As the floating zone standards and design guidelines are intended to maximize consistency with the surrounding land use context, including preserving significant views, the project already incorporates standards to maximize protection of views to the extent feasible. Thus, no further mitigation has been identified at the plan level to minimize the adverse impact to views resulting from development of site O-4.	Site O-4 – Significant and Unavoidable Remaining Sites – Less than Significant
Issue 3: Community Character Would the project introduce features which would conflict with important visual elements or the quality of the community/neighborhood (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, light/glare, etc.) and would thereby negatively and substantially alter the existing character of neighborhoods?	Implementation of the HEU on housing sites L-7, O-4, and O-5 would result in potentially significant impacts to community character (Impacts VIS-2, VIS-3, and VIS-4 respectively) because even with application of the zoning standards and design guidelines, development of these sites at the intensity required to meet housing elements goals would result in a scale of development inconsistent with the surrounding low-scale, rural environment. Development of all other housing sites would result in less than significant impacts associated with community character.	As the floating zone standards and design guidelines are intended to maximize consistency with the surrounding land use context and character of individual neighborhoods, the project already incorporates features to maximize protection of community character to the extent feasible. Thus, no further mitigation is available at the program-level to reduce the adverse impact resulting from development of sites L-7 (Impact VIS-2), O-4 (Impact VIS-3), and O-5 (Impact VIS-4).	Sites L-7, O-4, O-5 – Significant and Unavoidable Remaining Sites - Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Scenic Resources Would the project result in the physical loss, isolation, degradation or destruction of a visual resource or community identification symbol or landmark or other features that contribute to the valued visual character or image of the neighborhood, community, or localized area (e.g., a stand of mature trees, coastal bluff, native habitat, historic landmark)?	Development of housing site O-4 would result in a significant impact to scenic resources (Impact VIS-5) because it would impact views of the mature vegetation that is a visual extension of the natural open space associated with Escondido Creek and the San Elijo Lagoon to the south.	Implementation of the floating zone standards and design guidelines would preserve scenic resources to the greatest extent feasible. No additional mitigation at the program-level is available to avoid the adverse impact to scenic resources resulting from development of site O-4.	Site O-4 – Significant and Unavoidable Remaining Sites - Less than Significant
Air Quality			
Issue 1: Consistency with RAQS Would the project conflict with the primary goals of the RAQS?	The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by cities. As such, projects that propose development that is consistent with the growth anticipated by the general plan (or less dense) would be consistent with the RAQS. If a project proposes development that is greater than that is assumed in SANDAG's growth projections upon which the RAQS is based, then the project would be in conflict with the RAQS and SIP. However, the current population and housing in the County are lower than what was projected for the region, and therefore it is unlikely that the additional units from the HEU would interfere with the SDAPCD's goals for improving air quality in the SDAB. However, from a long-term planning standpoint, implementation of any of the housing strategies would not comply with the existing assumptions of density and land use utilized to develop the RAQS and applicable SIP. Therefore, a revised housing forecast will need to be provided to SANDAG to ensure that the next revisions to the RAQS and the SIP accurately reflect the anticipated growth. SANDAG housing forecasts are updated every four years. The next forecast is scheduled for revision in 2019. Because the HEU would result in emissions that are greater than what is currently accounted for in the RAQS. The significant air quality impacts would contribute to a pollutant for which the area is non-attainment. Therefore, this is considered to be a significant impact (Impact AQ-1).	The following mitigation measure will address the project's inconsistency. **AQ-1**: Prior to the next update of the regional housing needs assessment within six months of the certification of the final EIR, the City shall provide a revised housing forecast to SANDAG to ensure that any revisions to the population and employment projections used by SDAPCD in updating the RAQS and the SIP will accurately reflect anticipated growth due to the HEU.	Significant and Unavoidable
Issue 2: Criteria Pollutants Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors)?	Operational emissions associated with all housing sites would be less than significant. Construction of the following 11 housing sites would result in emissions of ROG that exceed the significance threshold of 250 pounds per day: ALT-7, ALT-2, NE-4, ALT-3, OE-5, ALT-5, OE-8, C-2, NE-3, C-1 and NE-1 (Impact AQ-2). For all other housing sites, construction emissions would be less than significant.	**AQ-2**: For future development of housing sites consistent with the HEU Floating Zone Program, wherein the City has determined a potential for ROG emissions impacts could occur, the Planning and Building Department shall require that the construction contractor be limited to the use of architectural coating (paint and primer) products that have a low- to no-VOC rating.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Sensitive Receptors Would the project expose sensitive receptors to substantial pollutant concentrations?	**Diesel Particulate Matter** A majority of the housing sites are located more than 500 feet from I-5, and impacts associated with exposure to diesel particulate matter would be less than significant. However, the following five housing sites are located within 500 feet from I-5: C-1, CBHMG-1, OE-2, L-4 and L-5. Impacts associated with diesel particulate matter exposure would be potentially significant (Impact AQ-3). **Carbon Monoxide Hot Spots** The CO hot spot analysis only evaluated three intersections because of the propensity of these intersections to represent the worst-case scenario for hazards and impacts. The hot spot analysis indicated that the increases of CO due to the implementation of any of the three housing strategies would be below the Federal and State 1-hour and 8-hour standards. For conducting the analysis, the land use buildout assumptions for housing strategy 3 (MMUP) was utilized because it contributes the highest level of new growth to these intersections. Housing strategy 3 (MMUP) was below the Federal and State standards. Housing strategies 1 (RM) and 2 (BYO) would generate less traffic than housing strategy 3 (MMUP), thus CO concentrations at intersections would be less than those evaluated. Therefore, the adoption and implementation of the HEU would not result in the exposure of people working or residing in the area to harmful concentrations of CO and impact to localized air quality from CO, emissions would be less than significant.	**AQ-3**: In order to reduce impacts associated with exposure to diesel particulate matter, the following mitigation is recommended. • Future development under with the HEU floating zone program shall be designed to minimize exposure to roadway-related pollutants and exposure shall be mitigated to the maximum extent feasible. Design features may include but are not be limited to: maximizing the distance between the roadway and sensitive receptors; locating air intake at the non-roadway facing sides of buildings, and ensuring that windows nearest to the roadway do not open. The orientation and placement of outdoor facilities designed for moderate physical activity shall be placed as far from the emission source as possible. Mitigation may also include installing mechanical ventilation systems with fresh air filtration and constructing a physical barrier between the roadway source and receptors of pollutants (e.g., sound wall or vegetative planting). • New parks with athletic fields, courts, and other outdoor facilities designed for moderate to vigorous activity under the HEU floating zone program should be sited at least 500 feet from the freeway. Exceptions to this recommended practice should be made only upon a written finding from a decision-making body that the benefits of such development outweigh the public health risks or that a site-specific analysis demonstrates a less than significant risk. . • Ventilation Systems: Ventilation systems that are rated at Minimum Efficiency Reporting Value of "MERV13" or better for enhanced particulate removal efficiency shall be provided on all residential units within the HEU floating zone, located within 500 feet of I-5. • City staff shall ensure that the aforementioned requirements are included on plans associated with any permit for future development consistent with the HEU floating zone program and submitted for approval. The City shall verify compliance on-site prior to occupancy clearance. Staff shall also review the future Covenants, Conditions and Restrictions for inclusion of guidelines pertaining to the proper maintenance/replacement of filters.	Less than significant.

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Biological Resources			
Issue 1: Sensitive Species Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?	Direct impacts to sensitive plants and sensitive wildlife (Impact BIO-1) within housing sites ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant. Direct and/or indirect impacts to least Bell's vireo (Impact BIO-2) within housing sites ALT-7, NE-1, O-4, O-5, and OE-2 would be potentially significant. Direct impacts to migratory or nesting birds within housing sites ALT-2, ALT-4, ALT-5, ALT-7, C-2, C-6, CBHMG-1, L-4, L-5, L-7, NE-1, NE-3, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant (Impact BIO-3).	**BIO-1:** Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to sensitive biological resources, shall be required to comply with the following mitigation framework: a) A site-specific general biological resources survey shall be conducted to identify the presence of any sensitive biological resources, including any sensitive plant or wildlife species. A biological resources report shall be submitted to the City to document the results of the biological resources survey. The report shall include (1) the methods used to determine the presence of sensitive biological resources; (2) vegetation mapping of all vegetation communities and/or land cover types; (3) the locations of any sensitive plant or wildlife species; (4) an evaluation of the potential for occurrence of any listed, rare, and narrow endemic species; and (5) an evaluation of the significance of any potential direct or indirect impacts from the proposed project. If potentially significant impacts to sensitive biological resources are identified, future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive biological resources to the extent feasible, and the report shall also recommend appropriate mitigation to reduce the impacts to below a level of significance. b) If suitable habitat for sensitive species is identified within the housing site based on the general biological survey, then focused presence/absence surveys shall be conducted in accordance with applicable resource agency survey protocols.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
		BIO-2: Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program, wherein the City has determined to the potential for impacts to least Bell's vireo, shall require USFWS protocol surveys for least Bell's vireo should project construction occur within 300 feet of riparian habitat during the breeding season (April 10 to July 31). If least Bell's vireo are identified during the protocol surveys, then noise attenuation measures shall be required to ensure that noise levels from construction do not exceed a 60 A-weighted decibels [dB(A)] hourly average per hour at the edge of the riparian habitat or to the ambient noise level if it exceeds 60 dB(A) prior to construction. Construction noise monitoring shall be required to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average unless an analysis completed by a qualified acoustician shows that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat. **BIO-3:** Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program, wherein the City has determined the presence of mature trees and/or native vegetation suitable for nesting birds in the future, shall require a pre-construction survey to determine the presence of active bird nests if vegetation clearing is proposed during the typical bird breeding season (January 15–September 15). The nesting bird survey shall be performed by a qualified biologist within one week prior to the start of vegetation clearing or construction activities. No direct impacts shall occur to any nesting birds or their eggs, chicks, or nests. If an active nest is located, nest avoidance measures would be required in accordance with the MBTA and CDFW code.	

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Sensitive Vegetation Communities Would the project have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW or USFWS?	Direct impacts to sensitive vegetation communities (Impact BIO-4) within housing sites ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant and, therefore, require mitigation.	Mitigation measure **BIO-1** would require site-specific biology surveys, at the time future projects are proposed, as determined by the City based on the conditions at the time of application. Potentially significant impacts to sensitive vegetation communities shall be identified during the biology survey and project-specific mitigation measures to reduce the impacts to below a level of significance shall be identified in a biological resources report. Future development consistent with the HEU that would impact sensitive vegetation communities shall be required to comply with the following mitigation framework. **BIO-4:** Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program resulting in impacts to sensitive vegetation communities shall implement avoidance and minimization measures and provide suitable mitigation in accordance with the MHCP. Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, non-native grassland, and coastal sage scrub. Mitigation for impacts to sensitive upland habitats shall occur in accordance with the mitigation ratios identified in Tables 4-6 and 4-7 of the MHCP. Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Wetlands Would the project have a have a substantial adverse effect on wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Impacts to jurisdictional waters and wetlands (Impact BIO-5) within housing sites ALT-4, ALT-5, ALT-7, C-6, L-4, L-7, NE-1, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant.	**BIO-5:** Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program, wherein the City has determined the potential for impacts to sensitive biological resources, shall be required to prepare a site-specific biological resources survey. Should any potential jurisdictional waters be identified on-site during the general biological resources survey, then a jurisdictional wetlands delineation of the housing site shall be conducted following the methods outlined in the USACE's 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Delineation Manual for the Arid West Region. The limits of any riparian habitats on-site under the sole jurisdiction of CDFW shall also be delineated, as well as any special aquatic sites (excluding vernal pools) that may not meet Federal jurisdictional criteria but are regulated by CCC and the RWQCB. Avoidance measures based on project-level grading and site plans shall be incorporated into the project design to minimize direct impacts to jurisdictional waters consistent with Federal, State, and City guidelines. Unavoidable impacts to wetlands shall be minimized to the maximum extent practicable and would be subject to alternatives and mitigation analyses consistent with U.S. Environmental Protection Agency 404(b)(1) findings and procedures under the USACE's permit process. Unavoidable impacts would require the in-kind creation of new wetland of the same type lost, at a ratio determined by the applicable regulatory agencies that would prevent any net loss of wetland functions and values. Wetland creation on-site or within the same wetland system shall be given preference over replacement off-site or within a different system. The City shall also control use and development in surrounding areas of influence to wetlands with the application of buffer zones. At a minimum, 100-foot-wide buffers shall be provided upland of tidal wetlands with the exception of riparian areas which will require 50-foot-wide buffers, unless the applicant demonstrates that a buffer of lesser width would protect the resources of the wetland based on site-specific information. Use and development within buffer areas shall be limited to minor passive recreational uses with fencing, desiltation or erosion control facilities, or other improvements deemed necessary to protect the habitat, to be located in the upper	Less than Significant

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
		(upland) half of the buffer when feasible. All wetlands and buffers shall be permanently conserved or protected through the application of an open space easement or other suitable device.	
Issue 4: Wildlife Corridors Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) would not impact any wildlife movement corridors, as no significant wildlife movement corridors occur in any of the housing sites. Therefore, there would be no inherent differences in impacts among the housing strategies. No significant impacts associated with wildlife movement corridors would occur from housing strategies 1, 2, and 3.	Impacts would be less than significant. No mitigation is required.	Less than significant
Issue 5: Habitat Conservation Planning Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP?	Implementation of mitigation measures BIO-1 through BIO-4 would ensure project compliance with the MHCP. Therefore, there would be no impact to habitat conservation planning, and no inherent differences in impacts among the housing strategies.	Impacts would be less than significant. No mitigation is required.	Less than significant
Issue 6: Policies and Ordinances Protecting Biological Resources Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) would not conflict with any local policies or ordinances protecting biological resources, including the City's adopted Tree Ordinance and Urban Forest Management Program. Therefore, there would be no inherent differences in impacts among the housing strategies.	Impacts would be less than significant. No mitigation is required.	Less than significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Cultural Resources			
Issue 1: Historical Resources Would the project result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic structure, object or site?	Potential direct impacts to historical resources (Impact CUL-1) within housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) may be considered significant and would require mitigation.	**CUL-1:** Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to historical resources, shall be required to comply with the following mitigation framework: a) Prior to the issuance of any permit for a future development project, the age and original structural integrity and context of any buildings/structures occurring on the housing sites shall be verified. The project applicant shall submit in conjunction with the development permit application, verification of the age and original structural integrity of all on-site structures. b) For any building/structures in excess of 50 years of age having its original structural integrity intact, a qualified professional historian shall determine whether the affected building/structure is historically significant. The evaluation of historic architectural resources shall be based on criteria such as age, location, context, association with an important person or event, uniqueness, or structural integrity, as indicated in CEQA Guidelines Section 15064.5. A historical resource report shall be submitted by the project applicant to the City and shall include the methods used to determine the presence or absence of historical resources, identify potential impacts from the proposed project, and evaluate the significance of any historical resources identified.	Significant and Unavoidable

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Archaeological Resources Would the project result in any impact to existing religious or sacred uses within the potential impact area?	Potential direct and/or indirect impacts to archaeological resources within housing strategies 1, 2, and 3 (Impact CUL-2) would be considered significant and require mitigation.	CUL-2: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to historical resources, shall be required to comply with the following mitigation framework: Prior to the issuance of any permit for future development consistent with the HEU floating zone program located on a previously undisturbed housing site, an archaeological survey shall be conducted by a qualified archaeologist to evaluate the presence of archaeological resources and the need for project impact mitigation by preservation, relocation, or other methods. An archaeological resource report shall be submitted by the project applicant to the City and shall include the methods used to determine the presence or absence of archaeological resources, identify potential impacts from the proposed project, and evaluate the significance of any archaeological resources identified. If potentially significant impacts to an identified archaeological resource are identified, the report shall also recommend appropriate mitigation to reduce the impacts to below a level of significance.	Significant and Unavoidable
Issue 3: Paleontological Resources Result in the disturbance of any human remains, including those interred outside of formal cemeteries?	Impacts to paleontological resources within housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) (Impact CUL-3) would be significant and require mitigation.	CUL-3: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to paleontological resources, shall be required to comply with the following mitigation framework: A qualified paleontological monitor shall be present during grading on housing sites where development would require the excavation of over 1,000 cubic yards of a geologic formation with high resource potential to contain paleontological resources, excavation depths within the geologic formation of 10 feet or greater, or over 2,000 cubic yards of a geologic formation with moderate resource potential to contain paleontological resources. Geologic formations would be determined by a site-specific geotechnical study. The monitor shall have the authority to stop and/or divert grading, trenching, or excavating if a significant paleontological resource is encountered. An excavation plan shall be implemented to mitigate the discovery. Excavation shall include the salvage of the fossil remains (simple excavation or plaster-jacketing of larger and/or fragile specimens); recording stratigraphic and geologic data; and transport of fossil remains to laboratory for processing and curation.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Human Remains Allow development to occur that could significantly impact a unique paleontological resource or a geologic formation possessing a moderate to high fossil bearing potential?	Although grading activities associated with development of all housing sites within housing strategies 1 through 3 has the potential to inadvertently uncover human remains, state regulations control the procedures that must take place under these circumstances. There would be no inherent differences in impacts among the housing strategies. As regulations are in place to treat any inadvertent uncovering of human remains during grading, impacts to human remains would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Geology and Soils			
Issue 1: Seismic Hazards Impacts related to geology and soils would be significant if the project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: a. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); b. Strong seismic ground shaking; c. Seismic-related ground failure, including liquefaction; or d. Landslides.	Development of the housing sites in strategies 1 through 3 has the potential to result in impacts associated with risk of loss, injury, or death involving seismic hazards. Overall, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from housing strategies 1 through 3 would be less than significant. Adherence to the CBC, City of Encinitas Grading, Erosion and Sediment Control Ordinance, General Plan policies related to geology and soils, HEU policies (specifically 3.2, 3.7, and 3.10), and implementation of any recommendations described in a subsequent project's geotechnical investigation would avoid or reduce potentially significant seismic and geological impacts to below a level of significance.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 2: Soil Erosion Impacts related to geology and soils would be significant if the project would result in substantial soil erosion or the loss of topsoil.	Housing strategies 1 through 3 would result in soil erosion from future construction activities associated with development of the housing sites. Overall, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from housing strategies 1 through 3 would be less than significant. Adherence to the CBC; City Grading, Erosion and Sediment Control Ordinance; General Plan policies concerning soil erosion (see Table 4.5-2); and implementation of any recommendations described in subsequent project's SWPPP would avoid or reduce potentially significant soil erosion impacts to below a level of significance.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issues 3 and 4: Unstable and Expansive Soils Impacts related to geology and soils would be significant if the project would: • Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; or • Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Housing strategies 1 through 3 may expose people or structures to potential substantial adverse effects involving unstable or expansive soils. Overall, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from housing strategies 1 through 3 would be less than significant. Adherence to the CBC, City of Encinitas Grading, Erosion, and Sediment Control Ordinance, the City's General Plan policies, and implementation of any recommendations described in a site-specific geotechnical investigation would avoid or reduce potentially significant impacts related to unstable or expansive soils to below a level of significance.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Greenhouse Gas Emissions			
Issue 1: GHG Emissions Would the project generate GHG emissions that may have a significant impact on the environment?	No scientific or regulatory consensus exists regarding what particular quantity of GHG emissions is considered significant, and there remains no applicable, adopted numeric threshold for assessing the significance of a project's emissions. Therefore, the numeric increase of GHG emissions by approximately 42,812 to 55,865 MT CO2E annually, is not a sufficiently informative or reliable indicator of the significance of the project's GHG emissions. Therefore, as discussed, this analysis also considers compliance with regulatory programs intended to reduce GHG emissions in analyzing the significance of the HEU's GHG emissions. Based on the analysis of the available regulatory programs, future development under the HEU would result in significant impacts due to transportation, energy, water use, and area sources as described above.	The following mitigation measure would address the GHG emission impacts at the program-level. **GHG-1**: Within six months of adopting the HEU, the City shall provide a revised land use plan to SANDAG to ensure that any revisions to the population and employment projections used in updating the SCS will accurately reflect anticipated growth due to the HEU. Applications for future development of housing sites consistent with the HEU floating zone program shall be required to comply with the following mitigation framework: **GHG-2**: Demonstrate compliance with CalGreen Tier II standards. **GHG-3**: Multi-family residential development shall provide energy star appliances, including refrigerators, stoves, and dishwashers. **GHG-4**: Include 1 electric vehicle charging station for every 50 parking spaces. **GHG-5**: Demonstrate a 25 percent reduction in outdoor water use.	Significant and Unavoidable
Issue 2: Consistency with GHG Plans, Policies, and Regulations Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	The HEU would not conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs, and impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Hazards and Hazardous Resources			
Issues 1, 2, and 3: Hazardous Materials—Use, Transport, Disposal; Accidental Release; and Emissions near a School Impacts related to hazards and hazardous materials would be significant if the project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Impacts associated with the routine use, transport, and disposal of hazardous materials would be less than significant through compliance with local, State, and Federal regulations. Impacts associated with the accidental release of hazardous materials and emissions near a school during future buildout of the housing sites would be potentially significant.	Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts relative to known and unknown hazardous materials sites, shall be required to comply with the following mitigation framework: **HAZ-1:** Future projects shall be required to identify potential conditions, which require further regulatory oversight and demonstrate compliance based on the following measures prior to issuance of any permits: A. A Phase I Environmental Site Assessment (ESA) shall be completed in accordance with American Society of Testing and Materials (ASTM) Standards. If hazardous materials are identified requiring remediation, a Phase II ESA and remediation effort shall be conducted in conformance with Federal, State, and local regulations. B. If the Phase II ESA identifies the need for remediation, then the following shall occur prior to the issuance of grading permits: a. The applicant shall retain a qualified environmental engineer to develop a soil and/or groundwater management plan to address the notification, monitoring, sampling, testing, handling, storage, and disposal of contaminated media or substances (soil, groundwater). The qualified environmental consultant shall monitor excavations and grading activities in accordance with the plan. The groundwater management and monitoring plans shall be approved by the City prior to development of the site. b. The applicant shall submit documentation showing that contaminated soil and/or groundwater on proposed development parcels have been avoided or remediated to meet cleanup requirements established by appropriate local regulatory agencies (Regional Water Quality Control Board [RWQCB]/DTSC/DEH) based on the future planned land use of the specific area within the boundaries of the site (i.e., commercial, residential), and that the risk to human health of future occupants of these areas therefore has been reduced to below a level of significance.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
		c. The applicant shall obtain written authorization from the appropriate regulatory agency (RWQCB/DTSC/DEH) confirming the completion of remediation. A copy of the authorization shall be submitted to the City to confirm that all appropriate remediation has been completed and that the proposed development parcel has been cleaned up to the satisfaction of the regulatory agency. In the situation where previous contamination has occurred on a site that has a previously closed case or on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the DEH shall be notified of the proposed land use. d. All cleanup activities shall be performed in accordance with all applicable Federal, State, and local laws and regulations, and required permits shall be secured prior to commencement of construction to the satisfaction of the City and compliance with applicable regulatory agencies such as but not limited to the Encinitas Municipal Code.	
Issue 4: Hazardous Materials—Sites Impacts related to hazards and hazardous materials would be significant if the project would be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment.	No sites compiled pursuant to Government Code Section 65962.5 are present on the housing sites. Impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 5: Emergency Response and Evacuation Plans Impacts related to hazards and hazardous materials would be significant if the project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Housing strategies 1 through 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Overall, there would be no inherent differences in impacts among the housing strategies. Potential impacts associated with the interference of emergency response plans would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 6: Wildland Fires Impacts related to hazards and hazardous materials would be significant if the project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas, within brush fire management zones, or where residences are intermixed with wildlands.	Overall, there would be no inherent differences in impacts among the housing strategies. Adherence to the state and local fire codes and City Design Guidelines would reduce risks in conjunction with future development related to wildland fire. Potential impacts associated with wildland fire would be avoided through the implementation of existing local and state regulations. Mandatory compliance with these regulations would ensure that impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Hydrology and Water Quality			
Issues 1 and 6: Water Quality Impacts related to water quality would be significant if the project would: • Violate any water quality standards or waste discharge requirements or • Otherwise substantially degrade water quality.	While development of the housing sites has the potential to increase the amount of pollutants discharged into surface waters, all development would be subject to federal, state, and local regulations aimed at controlling water quality impacts. Thus, substantial adverse water quality impacts would be avoided and impacts resulting from buildout of the HEU would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 2: Groundwater Impacts related to groundwater would be significant if the project would: • Substantially deplete ground water supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).	While future development of the housing sites has the potential to increase impervious surfaces and decrease groundwater infiltration, requirements for LID and BMPs would reduce impacts. Therefore, impacts on groundwater levels and groundwater recharge resulting from buildout of the housing sites would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issues 3, 4, and 5: Drainage Pattern/Runoff Impacts related to drainage and runoff would be significant if the project would: • Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site; • Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or • Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.	Future development would conform to applicable federal, state, and City regulatory standards to effectively avoid and/or address potentially significant impacts related to hydrology; therefore, drainage and runoff impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issues 7, 8, 9, and 10: Flooding/Inundation Impacts related to flooding and inundation would be significant if the project would: • Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or FIRM or other flood hazard delineation map; • Place within a 100-year flood hazard area structures which would impede or redirect flood flows; • Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or • Result in inundation by seiche, tsunami, or mudflow.	Buildout of the housing sites would result in less than significant impacts relative to flooding associated with floodplains, seiche, tsunami and mudflow. Impacts associated with buildout of housing sites C-6, O-2, and O-4 would be potentially significant relative to dam inundation (Impact HYD-1).	The following mitigation framework applies to housing sites C-6, O-2, and O-4. **HYD-1**: Applications for future development on housing sites C-6, O-2 and O-4, shall be reviewed by the City for compliance with applicable components of the City's Floodplain Management Regulations, specifically Section 23.40.051, which includes standards for construction in areas of special flood hazard. All future development on housing sites located within mapped dam inundation areas, shall be designed to reduce potential flooding hazards subject to the satisfaction of the City Engineer.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Land Use and Planning			
Issue 1: Land Use Plans or Policies Would the project conflict with any applicable land use plan or policy of an agency with jurisdiction over the project?	Implementation of any of the housing strategies would be mostly consistent with regional and local plans and policies. Impacts associated with the project's conflict with any applicable land use plan or policy would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 2: State Planning Initiatives Would the project conflict with State Planning Initiatives?	Implementation of any of the housing strategies would be consistent with state planning initiatives. Impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 3: Neighborhood Compatibility Would the project result in substantial neighborhood compatibility impacts associated with significant traffic, noise, or aesthetics impacts?	a. Traffic Impacts As discussed in Section 4.13, the HEU would allow the development of new residential and mixed-use uses throughout the City resulting in a significant decrease in the LOS of existing roadways and intersections. Neighborhood incompatibility impacts from such traffic generation would be significant (Impact LU-1). b. Noise Impacts Ambient noise impacts were assessed by comparing future noise levels without implementation of the HEU and future noise levels with building of housing strategies. As shown, when compared to buildout of the no project condition, the increases in ambient noise would be less than 3 decibels adjacent to all roadway segments. Impacts would be less than significant. The HEU would allow the development of new residential uses adjacent to existing commercial and retail uses, or sometimes within the same structure as noise-generating commercial uses. As discussed in Section 4.10, noise levels resulting from existing and proposed noise-generating uses (i.e., commercial uses) could expose new noise-sensitive uses to noise levels in excess of the City's standards. Neighborhood incompatibility impacts from such noise generation would be significant (Impact LU-2). c. Aesthetic Impacts The HEU would allow development of new uses throughout existing communities of the City. While the application of Zoning regulation and design guidelines would allow most development to be compatible with the existing community characters throughout the City, development of housing sites L-7, O-4 and O-5 would not meet community character standards. Neighborhood incompatibility impacts from such the development of these locations would be significant. These impacts are discussed in Section 4.1.7 and identified as Impacts V-2, V-3, and V-4.	a. Traffic Impacts The mitigation framework and improvements required to reduce the potentially significant traffic impacts associated with the implementation of the HEU are detailed in Section 4.12.5.3. b. Noise Impacts Mitigation measure NOS-1, as detailed in Section 4.10.6.3, is required to be implemented to reduce significant impacts associated with on-site noise. c. Aesthetic Impacts As the floating zone standards and design guidelines are intended to maximize consistency with the surrounding land use context and character of individual neighborhoods, the project already incorporates features to maximize protection of community character to the extent feasible. Thus, no further mitigation has been identified at the plan level to minimize the adverse impact resulting from development of sites L-7 (Impact VIS-2), O-4 (Impact VIS-3), and O-5 (Impact VIS-4)	a. Traffic Impacts – Significant and Unavoidable b. Noise Impacts – Less than Significant c. Aesthetic Impacts – Significant and Unavoidable

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Proximity to Agricultural Sites Would the project result in land use conflicts in relation to the proximity of housing to existing agricultural uses/commodity sites (i.e., indirect impacts associated with pesticides, fugitive dust, noise, etc.)?	The HEU could allow the development of new uses adjacent to existing agricultural (greenhouse) operations. Due to the nature of such operations, land use conflicts in relation to the proximity of housing to existing agricultural uses would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 5: Noise/Land Use Compatibility Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan?	All of the housing sites are located adjacent to roadways or freeways that would generate noise levels greater than the City's normally acceptable compatibility level of 60 L_{dn}. Additionally, many of the housing sites are located adjacent to roadways or freeways that would generate noise levels greater than 70 L_{dn}. This is in excess of the City's conditionally acceptable exterior noise compatibility level. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required. Because no specific projects are proposed at this time, noise control measures cannot be practically designed, and impacts would be potentially significant (Impact LU-3). Future project's implemented under the HEU floating zone and located where exterior noise levels exceed 60 L_{dn} would be required to demonstrate compliance with Title 24 requirements as a part of the permitting process. Thus, interior noise impacts would be less than significant.	Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for noise impacts, shall be required to comply with the following mitigation framework: **LU-1:** As part of the City's design review and entitlement process for housing sites, to the extent practicable, the City should avoid siting sensitive exterior areas associated with future residential uses within the 70 L_{dn} exterior traffic noise contour distances to the extent practicable and in consideration of other Zoning Standards and Design Guidelines. If sensitive receptors are to be located within the 70 L_{dn} exterior noise contour, outdoor activity areas shall be shielded from the noise source using site design measures such as building orientation or sound walls to maintain a 70 L_{dn} exterior noise level for noise sensitive exterior areas.	Less than Significant
Noise			
Issue 1: Ambient Noise Levels Would the project result in a substantial permanent increase in ambient traffic noise levels in the project vicinity above levels existing without the project?	It should be noted that there would be an increase in existing ambient noise levels with or without buildout of the housing strategies. This is due to the increase in regional growth that would occur with or without implementation of the proposed HEU. Impacts were assessed by comparing future noise levels without implementation of the HEU and future noise levels with buildout of the three housing strategies. As shown, when compared to buildout of the no project condition, the increases in ambient noise would be less than 3 dB adjacent to all roadway segments. Impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: On-Site Generated Noise Would the project result in exposure of persons to or generation of noise levels in excess of limits established in the noise ordinance?	Stationary sources of noise include activities associated with a given land use. Future on-site generated noise sources have the potential to exceed to property line noise levels limits established in the City's Noise Ordinance. Without detailed operational data, it cannot be verified that future projects implemented in accordance with the HEU would be capable of reducing noise levels to comply with the City's Noise Ordinance property line standards. Impacts may be significant (Impact NOS-1).	NOS-1: Prior to the issuance of any permit for future development consistent with the HEU Floating Zone Program, whereon residential development would be located adjacent to commercial uses, the City shall require site-specific noise studies to determine if on-site generated noise levels exceed the property line noise level limits in the Noise Ordinance and to present appropriate mitigation measures, which may include, but are not limited to the following: • Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses and hours of delivery can be limited if determined as needed through the study. • Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible. • Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Temporary Noise 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?	Housing strategy 1 (RM) has the potential to result in significant temporary noise impacts due to construction activities at four housing sites (C-7, L-2, L-6, and OE-5) and housing strategy 3 (MMUP) has potential to result in significant temporary noise impacts due to construction activities at three housing sites (ALT-2, ALT-7, and CBHMG-1). Average construction noise levels at these housing sites would exceed the limit of 75 dB(A) Leq(8) established in the City's Municipal Code. Temporary noise impacts due to construction activities would be potentially significant (Impact NOS-2). The residential land uses located adjacent to the housing sites associated with housing strategy 2 are located more than 110 feet from the acoustic center of construction activities. Thus, construction noise levels at the residential properties located adjacent to these housing sites would not exceed 75 dB(A) Leq	**NOS-2:** Future projects shall ensure through contract specifications that a construction noise control plan, which demonstrates compliance with City standards and includes construction best management practices (BMPs) is in place and be implemented by the City prior to issuance of a grading or building permit for future development consistent with the HEU Floating Zone Program (whichever is issued first). The construction noise control plan can include, but is not limited to, the following: • Ensure that construction equipment is properly muffled according to industry standards and is in good working condition. • Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible. • Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources. • Use electric air compressors and similar power tools rather than diesel equipment, where feasible • Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes. • Construction shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. No construction is permitted on Sundays or legal holidays. • Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the County or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. • Project developers shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible. Contract specifications shall be included in construction documents, which shall be reviewed by the City prior to issuance of a grading permit.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Groundborne Noise and Vibration Would the project result in the generation of excessive groundborne vibration or groundborne noise levels in the project vicinity above levels existing without the project?	No operational components of future development consistent with the HEU floating zone would include significant groundborne noise or vibration sources. Operational vibration impacts would be less than significant. The construction activities that generate excessive vibrations are blasting and impact pile driving. Projects implemented under the HEU would be constructed using typical construction techniques; no blasting is contemplated. Heavy construction equipment (e.g., bulldozer and excavator) would generate a limited amount of groundborne vibration during construction activities at short distances away from the source, and would not be a significant source of excessive vibration. Non-pile driving or foundation work construction phases that have the highest potential of producing vibration (such as jackhammering and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. Therefore, the project would not expose persons to excessive ground-borne vibration, and as such, impacts would be less than significant.	Impacts would be less than significant. No mitigation is required. .	Less than Significant
Population and Housing			
Issue 1: Population Growth Would the project unduly concentrate population growth to an area not capable of supporting it?	Future projects implemented in accordance with any of the HEU strategies would be required to adhere to the General Plan, provide required development impact fees, and comply with applicable development regulations. Ultimately, all future projects would be required to provide a will-serve letter from the service provider in conjunction with their application to ensure adequate services and utilities are available. Thus population growth associated with the HEU would be within an area capable of supporting it; impacts would be less than significant. Overall, there would be no inherent differences in impacts among the housing strategies.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 2: Displacement of People Would the project displace substantial numbers of existing housing or people through redevelopment, necessitating the construction of replacement housing elsewhere?	The HEU would result in an increase in housing units in the City. While a temporary loss of existing housing could occur during construction, it would not necessitate the construction of replacement housing elsewhere. Impacts would be less than significant. Overall, there would be no inherent differences in impacts among the housing strategies.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Public Services and Facilities			
Issue 1a: Fire Service Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered fire emergency facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?	No new or expanded emergency response facilities are required in conjunction with the HEU. General Plan conformance, and implementation of the regulatory fire mitigation fee pursuant to Title 23 of the City's Municipal Code assure that future projects maintain adequate levels of service. At this programmatic level, impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 1b: Police Service Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered police protection facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?	No new or expanded police facilities are required in conjunction with the HEU. General Plan conformance would assure that future projects maintain adequate levels of service are available in conjunction with future development. At this programmatic level, impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 1c: Schools Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered school facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?	No new or expanded school facilities are required in conjunction with adoption of the HEU. With payment of statutory fees, school impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 1d: Library Services Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered library facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?	No new or expansion of library facilities are required in conjunction with adoption of the HEU. Impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issues 2 and 3: Recreation Would the project have a substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered park and recreation facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives associated with recreation?	No new or expansion of park/recreation facilities are required in conjunction with adoption of the HEU. Impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Transportation and Traffic			
Issues 1 and 2: Circulation System Capacity and Operations Would the project result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements)? Would the project conflict with other standards establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	**a. Housing Strategy 1 (RM)** Housing strategy 1 would result in 15 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-15. Impacts to freeway segments would be less than significant. b. **Housing Strategy 2 (BYO)** Housing strategy 2 would result in 20 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1, TRF-4 to TRF-12, and TRF-14 to TRF-21. Impacts to freeway segments would be less than significant. **c. Housing Strategy 3 (MMUP)** Housing strategy 3 would result in 20 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-20. Impacts to freeway segments would be less than significant. Housing strategy 3 (MMUP) would have two significant intersection impacts (TRF-22 and TRF-23), as well as three ramp intersection impacts (TRF-24 to TRF-26).	As demonstrated in the traffic analysis above, buildout of the HEU would result in significant impacts (Impacts TRF-1 through TRF-26) to roadway segments (all three strategies and intersections (as demonstrated by intersection analysis for Housing Strategy 3 (MMUP)). These are cumulative impacts of the HEU buildout that would potentially occur when buildout of the HEU is added to future growth in the surrounding area for the horizon year 2035. To reduce the potentially significant impacts, improvements to roadway segments and intersections would be required. Table 4.13-2 identifies the measures (TRF-1 through TRF-26) that would be required for each impacted roadway/intersection.to establish a program for funding improvements needed to address traffic impacts of the HEU. This program requires actions to be taken by both the City (establishment and implementation) as well as future projects. The City already has a city-wide capital improvement program in place to address traffic improvements needed for future buildout under the adopted General Plan. Since the HEU would result in additional impacts beyond buildout of the development consistent with the HEU floating zone program is required to fund improvements described in table 4.13-21. Such a program would be applied as future projects are processed. Mitigation measure TRF-27 is designed to establish a program for funding improvements needed to address traffic impacts of the HEU. This program requires actions to be taken by both the City (establishment and implementation) as well as future projects. General Plan, a program specifically related to the future **TRF-27**: Within 12 months of the public vote on the housing plan, the City shall complete a nexus study and adopt a floating zone fee mitigation program, as follows: a. To establish this mitigation program, the City shall identify the costs associated with feasible traffic improvements identified in Table 4.13-21. Once the costs are established, the City shall undertake a nexus study to identify how the funds will be collected on a per project basis (e.g., by trip generated, unit, etc.). Costs funded may include program administration, project administration and management, design and engineering, regulatory compliance, and construction.	Significant and Unavoidable

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
		b. Once the HEU traffic mitigation program is established, each project shall contribute its fair share of the traffic improvements as identified in the program prior to Certificate of Occupancy Permit. c. The City shall deposit the funds in a specific account dedicated for the use of completing the improvements identified in the HEU traffic mitigation program. d. The City shall complete an annual public report on the HEU traffic mitigation program within 180 days of the completion of the fiscal year pursuant to the Mitigation Fee Act (California Government Code Section 66000 et seq.). As identified in TRF-27, this program would provide the City of Encinitas with a mechanism for financing the implementation of the identified improvements required to mitigate cumulative impacts of the HEU through future year 2035. The program would assign a fair-share transportation impact fee to development projects based on a nexus between the cost to implement all proposed circulation improvements and the number of net new trips. Such a program would be consistent with the City's General Plan Goal 2 to "make every effort to develop a varied transportation system that is capable of serving both the existing population and future residents while preserving community values and character" as well as Goal 7 that requires development to "provide for all costs of the incremental expansion of the circulation system necessary to accommodate that development."	
Issue 3: Alternative Transportation Modes Would the project conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?	The future development allowed under the HEU floating zone program would be subject to the General Plan goals and policies regarding alternative transportation. Additionally, the Design Guidelines encourage access and connectivity be considered in the design of future projects. Thus, the HEU would not result in a conflict with the City's adopted General supporting alternative transportation modes. Impacts would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issues 4 and 5: Traffic Hazards and Emergency Access Would the project result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians? Would the project result in inadequate emergency access?	Adherence to the City's roadway design standards, City Municipal Code and California Fire Code emergency access requirements, as well as the City General Plan Goals and policies related to traffic would avoid or reduce potentially significant traffic hazard or emergency access impacts to below a level of significance.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Public Utilities			
Issue 1a: Storm Water System Would the project result in a need for new systems, or require substantial alterations to existing storm water infrastructure, the construction of which would create physical impacts?	Since there is adequate capacity in the storm water system and future projects are required to assure that storm water is adequately handled on-site, no construction or expansion of storm water facilities is required in conjunction with the HEU. Impacts to the City's storm water system would be less than significant.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 1b and 3: Wastewater Would the project: • Result in a need for new systems, or require substantial alterations to existing utilities, including wastewater, or reclaimed water infrastructure, the construction of which would create physical impacts? • Result in a demand for wastewater treatment such that local wastewater treatment provider(s) have inadequate capacity to serve project buildout in addition to the provider's existing commitments and new or expanded facilities are needed?	Sewer master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of storm water facilities is required in conjunction with the HEU. Impacts to the City's wastewater system would therefore be less than significant at the program-level.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 1c: Water System Would the project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Water master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of water facilities is required in conjunction with the HEU. Impacts to the City's water system would therefore be less than significant at the program-level.	Impacts would be less than significant. No mitigation is required.	Less than Significant
Issue 2: Water Supply Would the project require or result in the need for new water supply entitlements and resources?	Plans for water supply are in place to assure adequate facilities would be available to serve new development and, no construction or expansion of water supply facilities is required in conjunction with adoption of the HEU. Impacts to the City's water supply would therefore be less than significant at the program-level.	Impacts would be less than significant. No mitigation is required.	Less than Significant

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Solid Waste Disposal Would the project: • Be served by a landfill without sufficient permitted capacity to accommodate the project's waste disposal needs; or • Not comply with the federal, state, and local statutes and regulations regarding solid waste?	Solid waste and landfill planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of landfill facilities is required in conjunction with adoption of the HEU. Impacts to the City's solid waste disposal would therefore be less than significant at the program-level.	Impacts would be less than significant. No mitigation is required.	Less than Significant

1

Chapter 1
Introduction

This Environmental Assessment/Program Environmental Impact Report (PEIR; State Clearinghouse House [SCH] No. 2015041044) has been prepared pursuant to Government Code Section 65759 to address potential environmental effects associated with the proposed Housing Element Update (HEU) in the City of Encinitas (City). The project includes an update to the 1992 Housing Element (uncertified by State of California Department of Housing and Community Development), including revised goals and policies, along with new, modified, and continuing implementation programs to ensure consistency with current State housing law. The Housing Element is one of the seven mandated elements of a General Plan. The content and process by which a Housing Element is prepared is prescribed in Government Code Section 65583. Housing Element law, enacted in 1969, and subsequently amended over time, requires local governments to adequately plan for existing and projected housing needs of all economic segments of the community. Therefore, a major focus of this HEU addresses the provisions of accommodating future housing growth and identifying specific sites suitable for residential development. As part of this effort, the update integrates updated socioeconomic data, as well as other population and household characteristics to support the development of the Housing Element. In a letter issued to the City, the California Department of Housing and Community Development determined that the City's draft Housing Element meets statutory requirements and directed that the City take certain actions necessary to achieve certification following adoption of the HEU (Appendix A-1).

The HEU includes other conforming General Plan and Municipal Code amendments as necessary for clarification and consistency purposes. Specifically, the HEU includes General Plan Land Use Plan amendments; rezoning of housing sites; Zoning Code amendments; Municipal Code amendments; new Design Guidelines; amendments to the North 101 Corridor Specific Plan, Downtown Encinitas Specific Plan, Encinitas Ranch Specific Plan, and Cardiff-by-the-Sea Specific Plan; a Local Coastal Program Amendment; and the adoption of other programs necessary to implement the Housing Element, as set forth in the implementation program. The HEU also includes an update to the Noise Element, which was found necessary to administer to address relevancy and consistency. A detailed description of the HEU, including the required discretionary approvals, is provided in the Project Description in Chapter 3 of this PEIR.

1.1 PEIR Purpose and Legal Authority

1.1.1 PEIR Purpose

The purpose of this PEIR is to provide an environmental assessment pursuant to Government Code Section 65759 and, through voluntary compliance with the California Environmental Quality Act (CEQA), to provide public agency decision-makers and members of the public with detailed information about the potential significant environmental effects of the project, possible ways to minimize its significant effects, and reasonable alternatives that would reduce or avoid identified significant effects.

On July 14, 2015, the City and the Building Industry Association of San Diego County (BIA) entered into a Settlement Agreement to resolve litigation filed by the BIA. The Settlement Agreement provides, in part, that the City must adopt: (1) an updated Housing Element; (2) conforming amendments to other General Plan elements; and (3) zoning ordinance amendments needed to implement the Housing Element. The proposed Housing Element, the other General Plan amendments, and the zoning ordinance amendments are all included in the project description in this PEIR.

The Settlement Agreement was incorporated into a Judgment Pursuant to Stipulation entered into by the San Diego County Superior Court on July 22, 2015. The Judgment provides in part that environmental review will be completed under the terms of Government Code Section 65759. Under Section 65759 and the Judgment:

1. CEQA does not apply to "any discretionary actions necessary to bring the Housing Element and relevant mandatory elements of the General Plan into compliance with State Law." Therefore, CEQA does not apply to the following actions included in the project description:

    a. Adoption of the Housing Element;

    b. Adoption of all amendments to the General Plan needed to bring the General Plan into compliance with State law, including:

        i. Amendment to the General Plan Land Use Element for conformance and add language that supports the floating zone program.
        ii. Amendment to Land Use Element Goals 2 and 4 for growth management program modification.
        iii. Amendment to the Community Character and Voters' Rights Initiative portion of the Land Use Element to modify building height limitations and authority to grant land use change approvals in very specific circumstances; and
        iv. Amendment to the North 101 Corridor Specific Plan to remove governmental constraints to housing development (i.e., ground-floor retail requirements and separate lot or air space requirements; and
        v. Required amendments to the Noise Element; and

c. Adoption of zoning and amendments to specific plans as needed (including the North 101 Corridor Specific Plan, the Encinitas Ranch Specific, the Downtown Encinitas Specific Plan, and the Cardiff Specific Plan) to provide sites that can ensure the continued availability to accommodate at least 1,093 lower income units throughout the entire Housing Element planning period utilizing mixed use sites and floating zones. Housing and Community Development (HCD) has stated that the adoption of the zoning as proposed is required for the City's Housing Element to be found in conformance with State law.

2. Even though CEQA does not apply to these actions, the City must complete an Initial Study and prepare an 'environmental assessment' in the form of a Draft Environmental Impact Report if any of the proposed actions may have a significant effect on the environment (Section 65759(a)). This PEIR constitutes the 'environmental assessment' required by Government Code Section 65759.

3. The City has voluntarily agreed to complete the full CEQA process if it can be completed by August 1, 2016. The City intends to issue a Draft EIR, accept comments during the comment period, respond to comments, issue a Final EIR, adopt all feasible mitigation measures, and prepare a Mitigation Monitoring and Enforcement Program as it would for any other City project.

4. Pursuant to Government Code Section 65759 (a)(3), the environmental assessment (this Draft PEIR) is deemed to be part of the City's General Plan.[1]

1.1.2 EIR Legal Authority

This PEIR has been prepared by the City as lead agency, in compliance with the criteria, standards, and procedures of the CEQA of 1970 as amended (Public Resources Code, Section 21000 et seq.), and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

1.1.2.1 Lead Agency

The City is the lead agency for the project, pursuant to Article 4 (Sections 15050 and 15051) of the CEQA Guidelines. The lead agency, as defined by CEQA Guidelines Section 15367, is the public agency that has the principal responsibility and authority for carrying out or

[1] "This judgment expressly incorporates the terms of the attached Settlement Agreement, including but not limited to, the provisions of Government Code Section 65759, which provides in part that the California Environmental Quality Act ("CEQA") 'does not apply to any action necessary to brings its general plan or relevant mandatory elements of the plan into compliance with any court order or judgment under this article,' provided the City will conduct the environmental assessment required by that provision. Pursuant to Section 65759, CEQA does not apply to any discretionary actions necessary to bring the Housing Element and relevant mandatory elements of the General Plan into compliance with State Law."

approving a proposed project. As lead agency, the City of Encinitas Planning and Building Department conducted a preliminary review of the project and determined that a PEIR was required. The analysis and findings in this PEIR reflect the independent, impartial conclusions of the City.

1.1.2.2 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by responsible and trustee agencies. A Responsible Agency, defined pursuant to CEQA Guidelines Section 15381, includes all public agencies other than the lead agency that have discretionary approval authority over one or more actions involved with project implementation. A Trustee Agency is defined in Section 15386 of the CEQA Guidelines as a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California.

Responsible/Trustee Agencies for the project include, but are not limited to:

- California Coastal Commission (CCC),
- San Diego County Air Pollution Control District (SDAPCD),
- San Diego Regional Water Quality Control Board (RWQCB),
- State Department of Housing and Community Development (HCD), and
- California Department of Transportation (Caltrans).

The CCC shall make a determination on certifying the Local Coastal Plan Amendment (LCPA). The CCC certification of the LCPA shall be scheduled after the proposed HEU is adopted. The LCPA portion of the HEU and associated amendments shall not be effective unless and until fully certified by the CCC.

The SDAPCD is an agency that regulates sources of air pollution within the county and would be responsible for issuing permits for construction of future projects associated with the HEU. The RWQCB regulates water quality through monitoring of compliance with the regional water quality general permit in accordance with the Clean Water Act (CWA) Section 401 certification process. The RWQCB would have the responsibility of approving the Notice of Intent to comply with the terms of the general permit to discharge storm water associated with future construction activity allowed by the HEU. The RWQCB would also be a Trustee Agency as it holds regional water quality in its trust through the National Pollutant Discharge Elimination System (NPDES) compliance review process. Additionally, Caltrans is an agency that is responsible for the state highway system, including freeway entrance and exit ramps.

1.2 EIR Type, Scope, Organization, and Content

1.2.1 Type of EIR

This EIR has been prepared as a PEIR, as defined in Section 15168 of the CEQA Guidelines. A PEIR is recommended for a series of actions that are related geographically, as logical parts in a chain of contemplated actions, or in connection with the issuance of plans that govern the conduct of a continuing program [per CEQA Guidelines, Section 15168(a)]. The advantages of a PEIR include the ability to provide a more exhaustive consideration of alternatives and cumulative effects than might be possible in a single project-specific EIR; to avoid duplication of basic policy considerations; and to provide the lead agency with the ability to consider broad program-wide policies and mitigation measures that would apply to specific projects within the overall program [CEQA Guidelines, Section 15168 (b)].

1.2.2 PEIR Scope

The scope of analysis for this PEIR was determined by the City as a result of initial project review, consideration of agency and public comments received in response to the Notice of Preparation (NOP) circulated April 10, 2015, and a scoping meeting held on April 23, 2015. The NOP and letters received in response are included in Appendix A-2 of this PEIR.

Through these scoping activities, the project was determined to have the potential to result in the following significant environmental impacts:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural/Paleontological Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation/Traffic
- Utilities and Service Systems

Pursuant to CEQA Guidelines Section 15126, impacts are identified as direct or indirect, short-term or long-term, and assessed on a “plan-to-ground” basis. The “plan-to-ground” analysis addresses the changes or impacts that would result from implementation of the project compared to existing ground conditions. An analysis of the impacts of the project compared to existing adopted plans, a “plan-to-plan” analysis, is presented within Chapter 9, Project Alternatives, under the No Project (Development under the Adopted General Plan) Alternative.

1.2.3 PEIR Organization and Content

1.2.3.1 Organization and Content

The PEIR has been organized in accordance with the most recent CEQA Guidelines. A brief summary of the organization and content of this PEIR is provided below:

- **Executive Summary** provides a brief description of the project, identification of areas of controversy, a summary of the PEIR analysis, and a summary table identifying significant impacts, proposed mitigation measures, and impact level after mitigation. A summary of the project alternatives and a comparison of the potential impacts of the alternatives with those of the project is also included.

- **Chapter 1.0 Introduction** contains an overview of the legal authority, purpose, and intended uses of the PEIR, as well as its scope and organization. It also provides a discussion of the CEQA environmental review process, including opportunities for public involvement.

- **Chapter 2.0 Environmental Setting** provides a description of the project's regional and local setting including its locational context, existing physical characteristics and land use, available public infrastructure and services, and relationship to other relevant plans.

- **Chapter 3.0 Project Description** provides a detailed description of the project, including background on its development, its main objectives, and key features. The discretionary actions required to fully adopt and implement the project are also described.

- **Chapter 4.0 Environmental Analysis** contains an evaluation of potential impacts for the environmental issues identified in the PEIR scope. Each issue evaluation includes discussion of the existing conditions, including the existing regulatory framework, identification of the thresholds and methodology for determining the significance of impacts, an assessment of potential impacts, and an evaluation of the significance of the impacts in light of the existing regulatory framework and/or new standards proposed in conjunction with the HEU. Where analysis demonstrates that potentially significant impacts could occur, an outline of the regulatory framework, including a mitigation framework for future projects consistent with the HEU is provided and a conclusion regarding the adequacy of the mitigation framework and significance of the impact after consideration of the mitigation framework is stated.

- **Chapter 5.0 Significant Unavoidable Environmental Effects/Significant Irreversible Environmental Changes/Energy** discusses the significant unavoidable or irreversible impacts that would occur with project implementation. This chapter describes the potentially significant irreversible changes that may be expected with implementation of the project and addresses the use of nonrenewable

resources during its construction and operational life. A discussion related to energy, pursuant to Appendix F of the CEQA guidelines also is included.

- **Chapter 6.0 Growth Inducement** evaluates the potential for the project to induce economic or population growth, either directly or indirectly, within the project area and region.

- **Chapter 7.0 Cumulative Impacts** identifies the impacts of the project in combination with other planned and future development in the region.

- **Chapter 8.0 Effects Found Not to be Significant** identifies all of the issues (agricultural and forestry resources and mineral resources) determined in the scoping and preliminary environmental review process to be not significant based on CEQA criteria, and briefly summarizes the basis for these determinations.

- **Chapter 9.0 Alternatives** provides a description and comparative analysis of the project alternatives, including the Alternatives Considered but Rejected; the No Project (Development under the Adopted General Plan) Alternative, and the Sustainable Mixed Use Places (SMUP) Alternative. A summary and tabular comparison of the three housing strategies and the alternatives is included in Chapter 9.0. Finally, as required by CEQA Guidelines Section 15126.6(e)(2), the PEIR identifies the environmentally superior alternative.

- **Chapter 10.0 References Cited** lists all of the reference materials cited in the PEIR.

- **Chapter 11.0 Individuals and Agencies Consulted** identifies all of the individuals and agencies consulted during preparation of the PEIR.

- **Chapter 12.0 Certification** identifies all of the agencies, organizations, and individuals responsible for the preparation of the PEIR.

1.2.3.2 Technical Appendices

Technical appendices, used as a basis for much of the environmental analysis in the PEIR, have been summarized in the PEIR, and are printed under separate cover as part of the PEIR. The technical appendices are available for review at the City of Encinitas Planning and Building Department at 505 South Vulcan Avenue, Encinitas, California 92024.

1.2.3.3 Incorporation by Reference

As permitted by CEQA Guidelines Section 15150, this PEIR has referenced several technical studies and reports. Information from these documents has been briefly summarized in this PEIR, and their relationship to this PEIR described. These documents are included in Chapter 10.0, References Cited, and are hereby incorporated by reference. They are available for review at the City of Encinitas Planning and Building Department at 505 South Vulcan Avenue, Encinitas, California 92024.

1.3 PEIR Intended Use and Review Process

1.3.1 PEIR Intended Use

This document is intended to be used by the City, as lead agency, in evaluating the HEU and related amendments. In addition, as a PEIR, this document is intended to be used by the City when taking action on subsequent applications for development on the housing sites consistent with the HEU, to ensure compliance with the housing goals and policies, zoning, design guidelines of the project, and mitigation framework.

1.3.2 PEIR Process

The PEIR review and certification process occurs in two basic stages. The first stage is the Draft PEIR, which offers agencies and the public the opportunity to comment on the document. The second stage is the Final PEIR, which provides the basis for approving the project.

1.3.2.1 Draft PEIR

In accordance with Sections 15085 and 15087 (a) (1) of the CEQA Guidelines and the City's CEQA Supplemental Regulations, upon completion of the Draft PEIR a Notice of Completion is filed with the State Office of Planning and Research and notice of availability of the Draft PEIR is issued in a newspaper of general circulation in the area.

The Draft PEIR is distributed for review to the public and interested and affected agencies for the purpose of providing comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (Section 15204, CEQA Guidelines).

The Draft PEIR and all related technical studies are available for review during the public review period at the offices of the City of Encinitas Planning and Building Department at 505 South Vulcan Avenue, Encinitas, California 92024. Copies of the Draft PEIR are also available at the following public location:

Encinitas Branch Library
540 Cornish Drive
Encinitas, California 92024

The draft PEIR can be downloaded from the City's website at: http://www.athomeinencinitas.info/documents/.

1.3.2.2 Final PEIR

Following public review of the Draft PEIR, the City will provide written responses to comments per CEQA Guidelines Section 15088 and will consider all comments in making its decision to certify the Final PEIR. Responses to the comments received during public

review, associated revisions to the Draft PEIR sections, a Mitigation Monitoring and Reporting Program, Findings of Fact, and a Statement of Overriding Considerations (if applicable) for any impacts identified in the Draft PEIR as significant and unmitigated, will be prepared and compiled as part of the Final PEIR. Findings of Fact and a Statement of Overriding Considerations are required for any impacts identified in the Draft PEIR as significant and unmitigated. The PEIR identified significant and unavoidable impacts relative to aesthetics, air quality, cultural resources, greenhouse gas emissions, land use, and traffic/circulation; therefore, a Findings of Fact and a Statement of Overriding Considerations will be prepared.

The culmination of this process is a public hearing where the City Council will determine whether to certify the Final PEIR as being complete and in accordance with CEQA. The Final PEIR will be available for public review at least 14 days before the decision-making bodies make a recommendation or final determination, in order to provide commenters the opportunity to review the written responses to their comment letters.

1.3.3 Subsequent Environmental Review

As allowed in CEQA Guidelines Section 15168, *Program EIR*, future development proposals within the project area will be reviewed in light of the Final PEIR by the City. The PEIR and subsequent project review process, defined in Section 15168 of the CEQA Guidelines, allows a PEIR to serve as the basis for environmental review of subsequent projects. Sections 15182 and 15183 of the CEQA Guidelines provide additional review guidance for projects proposed in accordance with an adopted specific plan, or consistent with an adopted community plan, general plan, or zoning.

If any future projects within the HEU area have potentially significant adverse environmental effects that were not examined in this PEIR, an Initial Study would be prepared for that project, leading to the preparation of either a Negative Declaration, Mitigated Negative Declaration, focused EIR, or supplement to this PEIR. When additional environmental documentation for a new project is necessary, this PEIR may be incorporated by reference to address regional context, secondary effects, cumulative impacts, alternatives, and other factors that apply to the program as a whole.

Additional information on future project approvals and procedures is included in Section 3.7 of this PEIR.

2

Chapter 2
Environmental Setting

2.1 Regional Setting

The City of Encinitas (City) is located in San Diego County, approximately 35 miles north of the United States–Mexico border in southern California. A regional reference map is provided in Figure 2-1. The City is roughly 20 miles north of downtown City of San Diego and 95 miles south of Los Angeles. The jurisdictions that surround the City include: on its north side, the City of Carlsbad; on its south side, the City of Solana Beach; and on the east side, the County of San Diego (San Dieguito Planning Area).

2.2 Project Location

The City comprises approximately 13,328 total acres of land within the Planning Area. The Planning Area includes the City's incorporated limits and Sphere of Influence (SOI), and is characterized by cliffs, coastal beaches, flat topped coastal areas, rolling hills, and steep mesa bluffs in northern San Diego County. The City lies within the Coastal Zone along 6 miles of Pacific Coastline, bordered by Batiquitos Lagoon to the north and San Elijo Lagoon to the south.

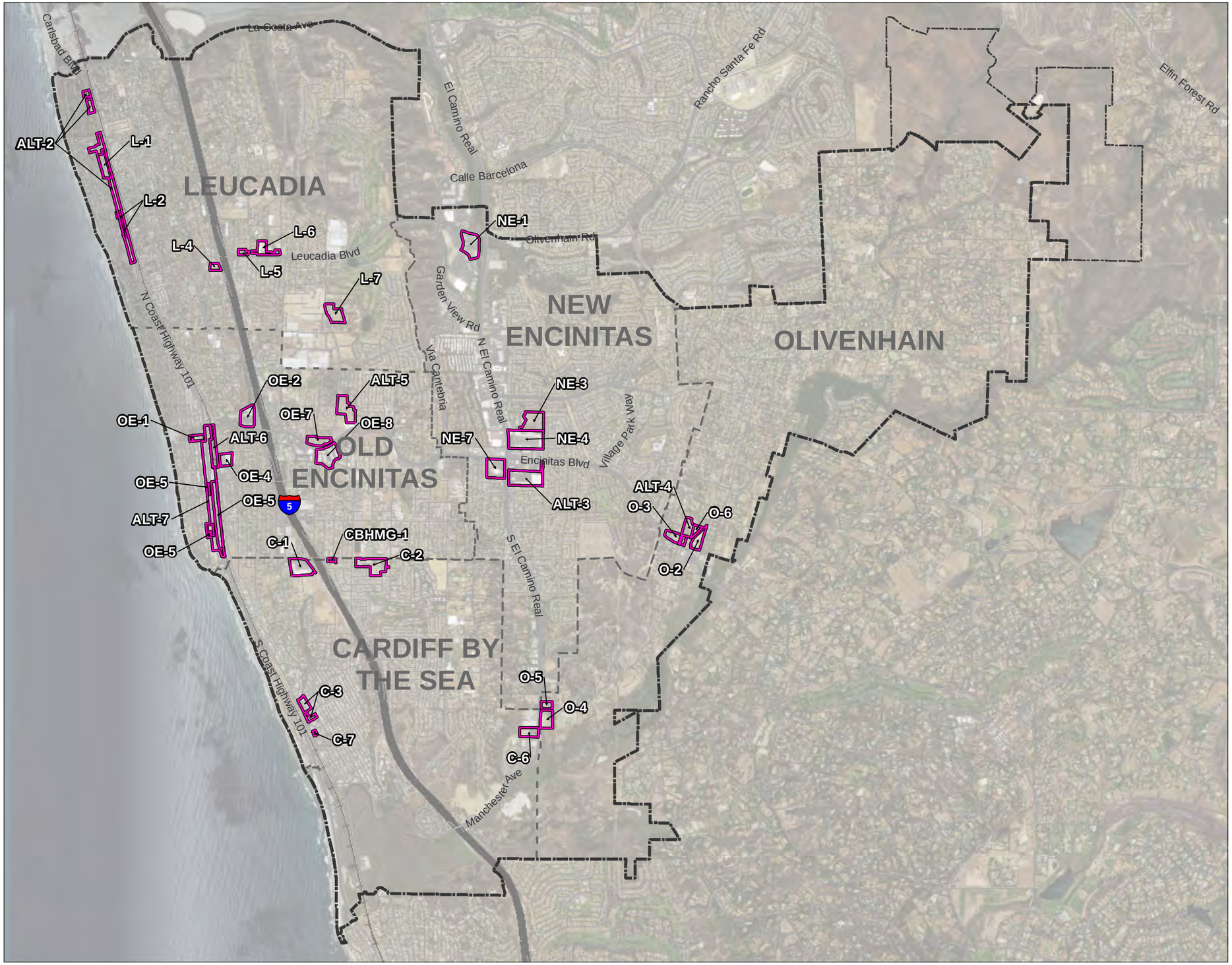
As shown in Figure 2-2, the project area includes the City's five distinct communities. The project area is generally accessed by Coast Highway 101 (Highway 101) and Interstate 5 (I-5), both of which run north–south in the western portion of the project area. Major east–west connectors in the project area include Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, and Manchester Avenue.



FIGURE 1
Regional Location

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City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

0 Miles 0.5

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FIGURE 2-2
Project Location

2.3 Natural Environment

2.3.1 Land Cover/Vegetation

The City is primarily developed with few natural open spaces (refer to Figures 4.3-1a-d). This land is used for residential, commercial, institutional, public and civic administration, industrial, and other developed purposes. Vegetation in the project area includes that which is typically associated with developed urban areas, including landscaping of commercial and residential uses, parks, civic uses, and streetscapes, as well as ornamental trees, parkways, lawns, and gardens. Sensitive vegetation communities which are found in the project area, specific to housing sites, include coastal sage scrub, annual grasslands, and wetland/riparian habitat.

The project area is mostly urbanized. A majority of the housing opportunity sites in each community are in developed or disturbed land. Biological resources are discussed in greater detail in Section 4.3.

2.3.2 Climate and Air Quality

The San Diego region has a Mediterranean climate that is characterized by warm, dry summers and mild, wet winters. An average of 10 inches of rain falls each year from November to early April, while the remainder of the year is typically dry.

Clear skies predominate for much of the year in the City due to a semi-permanent high-pressure cell located over the Pacific Ocean. This high-pressure cell also drives the dominant onshore circulation and helps to create subsidence and radiation temperature inversions. Subsidence inversions occur during the warmer months when descending air associated with the high-pressure cell comes in contact with cool marine air. Radiation inversions typically occur on winter nights when air near the ground cools by radiation and the air aloft remains warm.

The City lies within the San Diego Air Basin (SDAB), as identified by the California Air Resources Board (CARB). The region's climate and air circulation patterns, combined with heavy traffic and urbanized land uses, contribute to the region being classified by CARB as a State nonattainment area for ozone, PM_{10}, and $PM_{2.5}$. This means that air quality in the region violates State air quality standards for particulates. Air quality and climate are discussed in greater detail in Sections 4.2 and 4.6, respectively, of this PEIR.

2.3.3 Geology and Landform

The City is located in the southern Peninsular Ranges Province, an area that is exposed to risk from multiple earthquake fault zones. The highest risks originate from the Elsinore fault zone, the Rose Canyon fault zone and the offshore faults, each with the potential to cause moderate to large earthquakes that would cause ground shaking in Encinitas and nearby communities.

San Diego County can be divided between three distinct geomorphic regions: the Coastal Plain region as exposed west of the Peninsular Ranges, the Peninsular Range region, and the Salton Trough region as exposed east of the Peninsular Ranges. The project area is within the Coastal Plain region. The Coastal Plain region is underlain by a "layer cake" sequence of marine and non-marine sedimentary rock units that record portions of the last 140 million years of earth history. Over this period of time the relationship of land and sea has fluctuated drastically, so that today we have ancient marine rocks preserved up to elevations around 900 feet above sea level and ancient river deposits as high as 1,200 feet. Faulting related to the local La Nacion and Rose Canyon fault zones has broken up this "layer cake" sedimentary sequence into a number of distinct fault blocks in the southwestern part of the county. The geologic formations mapped within the City are described in Section 4.5 of this PEIR.

2.3.4 Hydrology and Water Quality

The City is situated entirely within the Carlsbad Hydrological Unit (HU) and is split between the San Marcos Hydrological Area (HA), Batiquitos Subunit (HAS 904.51) to the north and the Escondido Creek Hydrological Area, San Elijo Subunit (HAS 904.61) to the south. The City is naturally divided by eight distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins.

Three creeks drain the City: Cottonwood Creek, Encinitas Creek, and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. Encinitas Creek drains the north-central portion of the City into Batiquitos Lagoon. Escondido Creek drains the southern and northeast (Olivenhain) portion of the City into San Elijo Lagoon.

Runoff from developed portions of the City generally flows overland via the municipal drainage system and ultimately to the Pacific Ocean. Within the City, urban runoff is transmitted directly to the storm drain system (rather than the sewer system). Water quality issues are especially prevalent during rainy periods; however, due to urban runoff (e.g., irrigation or car washing) that is transferred to the storm drain system, pollution can be a year-round problem. Combinations of urban runoff, agricultural runoff, sewage spills, livestock, and domestic animals affect water quality within the San Marcos and Escondido Creek HAs. Impaired water bodies associated with the project area include Cottonwood Creek (listed for dichloro-diphenyl-trichloroethane (DDT), phosphorous and sediment toxicity stressors), the Pacific Ocean shoreline at Moonlight Beach and San Elijo Lagoon Outlet (listed for bacteria indicators due to urban runoff), Encinitas Creek (listed for phosphorous impairments), Escondido Creek (listed for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates and total dissolved solids), and San Elijo Lagoon (listed for sediment/siltation, bacteria indicators and eutrophic conditions). Groundwater quality of the two groundwater basins—Batiquitos Lagoon Valley and San Elijo Valley—in the City of Encinitas is also generally poor. Hydrology and water quality are discussed in greater detail in Section 4.8 of this PEIR.

2.4 Built Environment

2.4.1 Land Use

The City has a variety of land uses including residential, commercial and office, industrial, public and quasi-public (e.g., Encinitas Civic Center and Library), parks and open space, agriculture, vacant uses, and roads. Table 2-1 depicts the existing land use summary for the City. Please note that the total acreage reported below (13,328 acres) includes the incorporated area and the SOI. The SOI (approximately 1,075 acres) includes the unincorporated areas of San Diego County; and probable ultimate physical boundaries and service area of the City.

The incorporated City limits include approximately 12,253 acres of land and is comprised of five communities: Old Encinitas, New Encinitas, Leucadia, Cardiff, and Olivenhain. Each of the five communities contributes something different and unique. A detailed description of each community is in the following Section 2.2.4, Community Character. Land use is discussed in greater detail in Section 4.9 of this PEIR.

Table 2-1
Existing Land Use Summary

Land Use	Percentage (%)	Total (Acres)
Agriculture	3%	419
Commercial & Office	3%	417
Industrial	<1%	21
Parks & Recreation	22%	2,945
Public & Quasi-Public	6%	787
Residential	45%	5,925
Road Right-of-Way	11%	1,498
Vacant/Undeveloped	8%	1,075
Water	2%	240
TOTAL	**100%**	**13,328**

SOURCE: SanGIS Landbase, San Diego Association of Governments (SANDAG), San Diego County Assessor's Master Property Records, 2015a.

Existing land uses in the City are predominantly residential, accounting for about 45 percent of the City's land area. There are approximately 25,818 housing units in Encinitas as reported by San Diego Association of Governments (SANDAG; 2015b). Other predominant land uses include parks/recreation, which accounts for approximately 22 percent of the total land area, and road right-of-ways, which account for approximately 11 percent of the total land area. The remaining land uses of total land area in the City include agriculture (3 percent), commercial/office (3 percent), industrial (less than 1 percent), public/quasi-public (6 percent), water (2 percent), and vacant/undeveloped (8 percent).

2.4.2 Community Character

Each of the City's five communities exhibits a unique community character described below.

2.4.2.1 Old Encinitas

Old Encinitas has a variety of park, public, and residential uses located along its Pacific coastline. A commercial corridor is located along Highway 101, with additional commercial uses extending eastward along Encinitas Boulevard from Highway 101 past Quail Gardens Drive. Moonlight State Beach is adjacent to downtown and Swami's Beach is on the south end of downtown (Figure 2-3).

The western side of Highway 101, north of Moonlight Beach, is lined with auto-oriented commercial and general retail uses. Some of the commercial development in this area has specialty retail and office uses without storefront parking. South of Moonlight Beach, commercial and retail development is on both sides of the highway, creating a vibrant and pedestrian oriented shopping district featuring restaurants, offbeat sidewalk cafes, salons, boutiques, and clothing and specialty shops.

Residential zoning in Old Encinitas is high density along the coast (R-15 and R-25) and high, medium, and low density east of Highway 101 and I-5, where residential zoning ranges from RR-1 to R-25.

2.4.2.2 New Encinitas

New Encinitas is centrally located in the City and generally extends east from Via Cantebria (west boundary) toward Rancho Santa Fe Road to the east. Most of New Encinitas' residential neighborhoods include suburban housing styles typical of the 1980s and 1990s. The community's central commercial corridor is El Camino Real, an arterial road that extends from Manchester Avenue on the south to the City's northern boundary (Figure 2-4). Commercial development along the corridor (north of Encinitas Boulevard) includes "big box" retail and auto-oriented strip commercial centers occupied by a combination of local and national retailers.

The community's residential areas were mainly developed through planned residential developments (PRDs) and are generally characterized by lower density single-family neighborhoods, with pockets of medium-density single-family and multi-family residential (R-11, R-15, and R-25). A greenway traverses portions of the community, providing nearly uninterrupted open space. New Encinitas is primarily zoned for attached and detached single-family residential (R-5 and R-8). Many streets in the residential neighborhoods are not connected to discourage through-traffic and force automobiles onto major thoroughfares.

Map Source: City of Encinitas

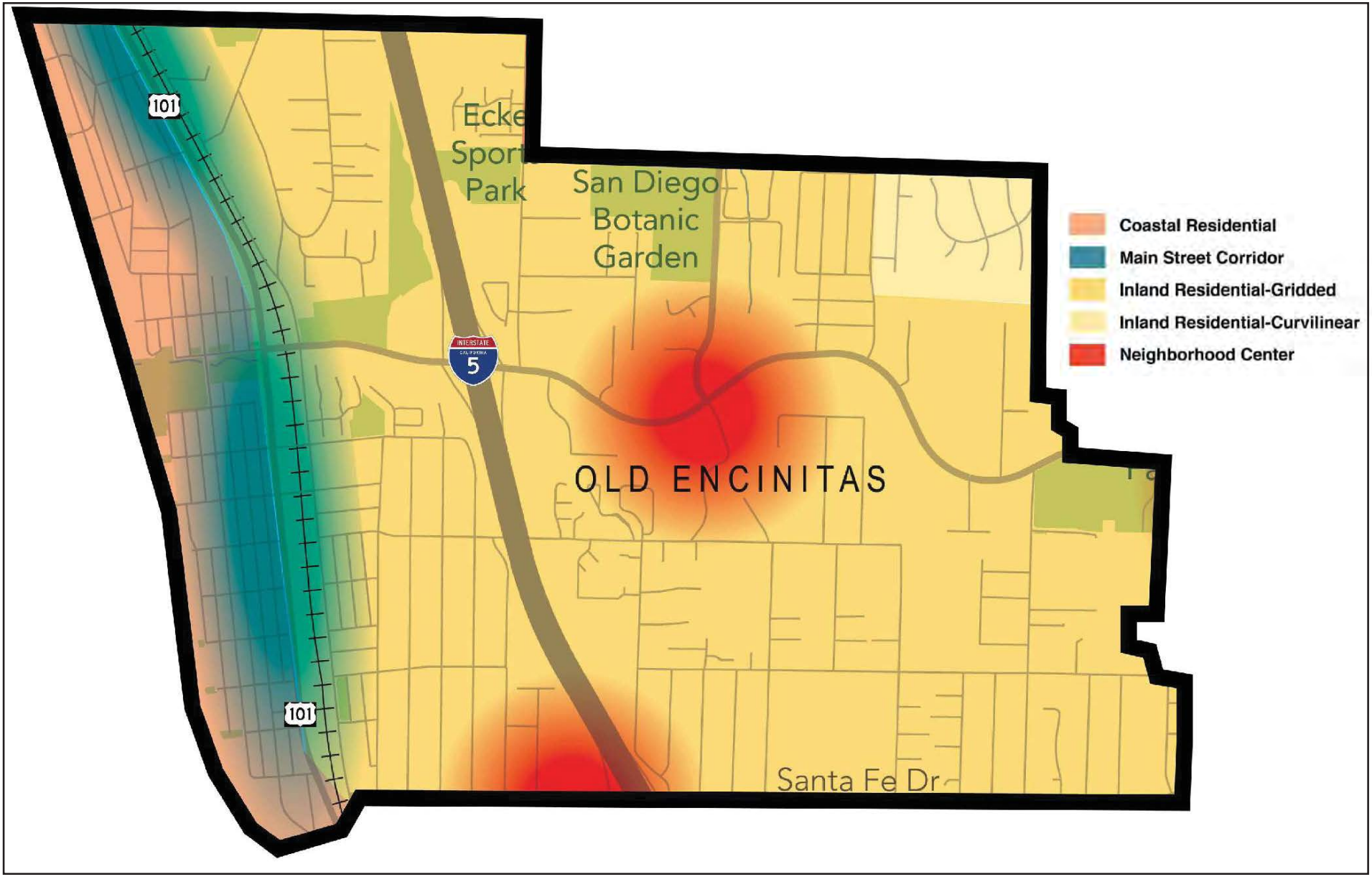


FIGURE 2-3

Old Encinitas – Community Character Overview Map

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Map Source: City of Encinitas

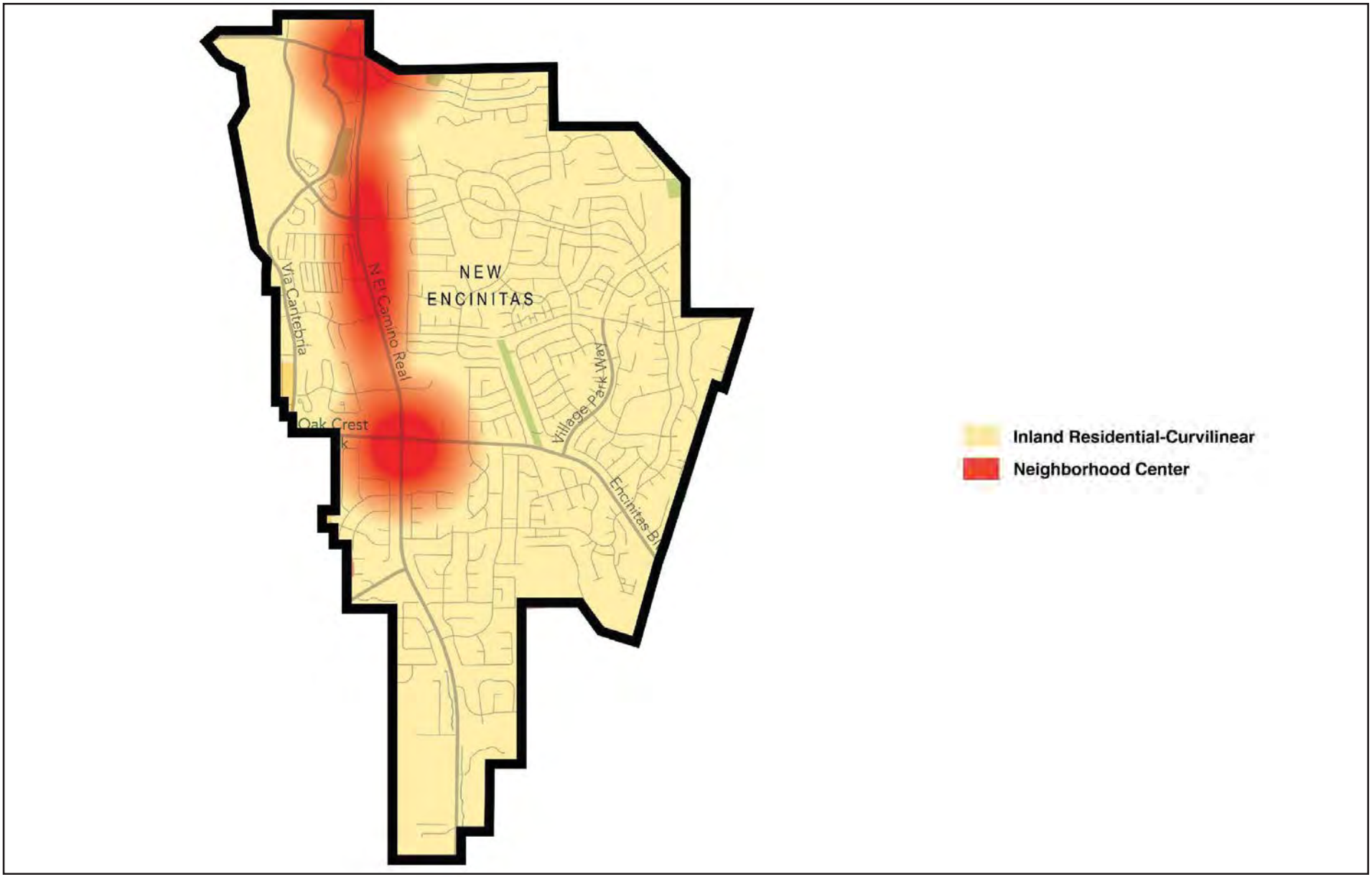


FIGURE 2-4
New Encinitas – Community Character Overview Map

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2.4.2.3 Leucadia

Leucadia is primarily a beach-oriented community located in the northern part of the City. Residential land uses predominate, with limited commercial and specialty retail along Highway 101. Recreation, parks, and open spaces, including the Encinitas Ranch Golf Course, are located along the coast and in the eastern part of the community (Figure 2-5). There are a few remaining agricultural uses east of I-5. Highway 101, the community's commercial corridor, includes a variety of strip commercial buildings that line the western side of the road. (LOSSAN rail right-of-way is to the east.) Businesses are typically set back behind storefront parking, but in some instances front directly onto the street. The railway corridor runs parallel to and directly east of Highway 101. There are few pedestrian amenities located along the length of Highway 101 through Leucadia, which limits pedestrian connectivity and direct east-west access. I-5 is a major freeway that acts as a barrier between Leucadia's eastern and western neighborhoods.

Residential zoning is high density along Highway 101 (R-8, R-11, and R-25). Almost all of the City's mobile home parks are located in Leucadia, off Vulcan Avenue or west of Highway 101. The remaining residential areas in this community have low density designations (R-2, R-3, and R-5).

2.4.2.4 Cardiff

Cardiff is a coastal community comprised primarily of single-family residential uses. Some limited multi-family uses are located west of I-5. Parks and recreation and agricultural uses are located along the community's Pacific coastline, east and west of I-5 and along the community's southern boundary around San Elijo Lagoon. Cardiff's western coastline is entirely comprised of the San Elijo State Beach and limited development west of Highway 101 (Figure 2-6).

Cardiff's main commercial district fronts San Elijo Avenue. However, Cardiff has other commercial areas located along Highway 101 near the lagoon crossing and at the I-5 off-ramps at Birmingham Avenue and Santa Fe Drive. The Town Center is characterized by auto-oriented, strip commercial buildings with deep setbacks for storefront parking. Pedestrian amenities in this area include wide, continuous sidewalks, which tend to terminate when entering residential districts.

Residential zoning in Cardiff contains higher density along the coast (R-8, R-11, and R-15); single-family uses and duplexes on small lots dominate much of this area. West of I-5, the street system takes advantage of the natural topography, maximizing views to the Town Center and coast. The community is considerably more rural in the eastern portion of the community (RR, RR-1, and RR-2).

Map Source: City of Encinitas

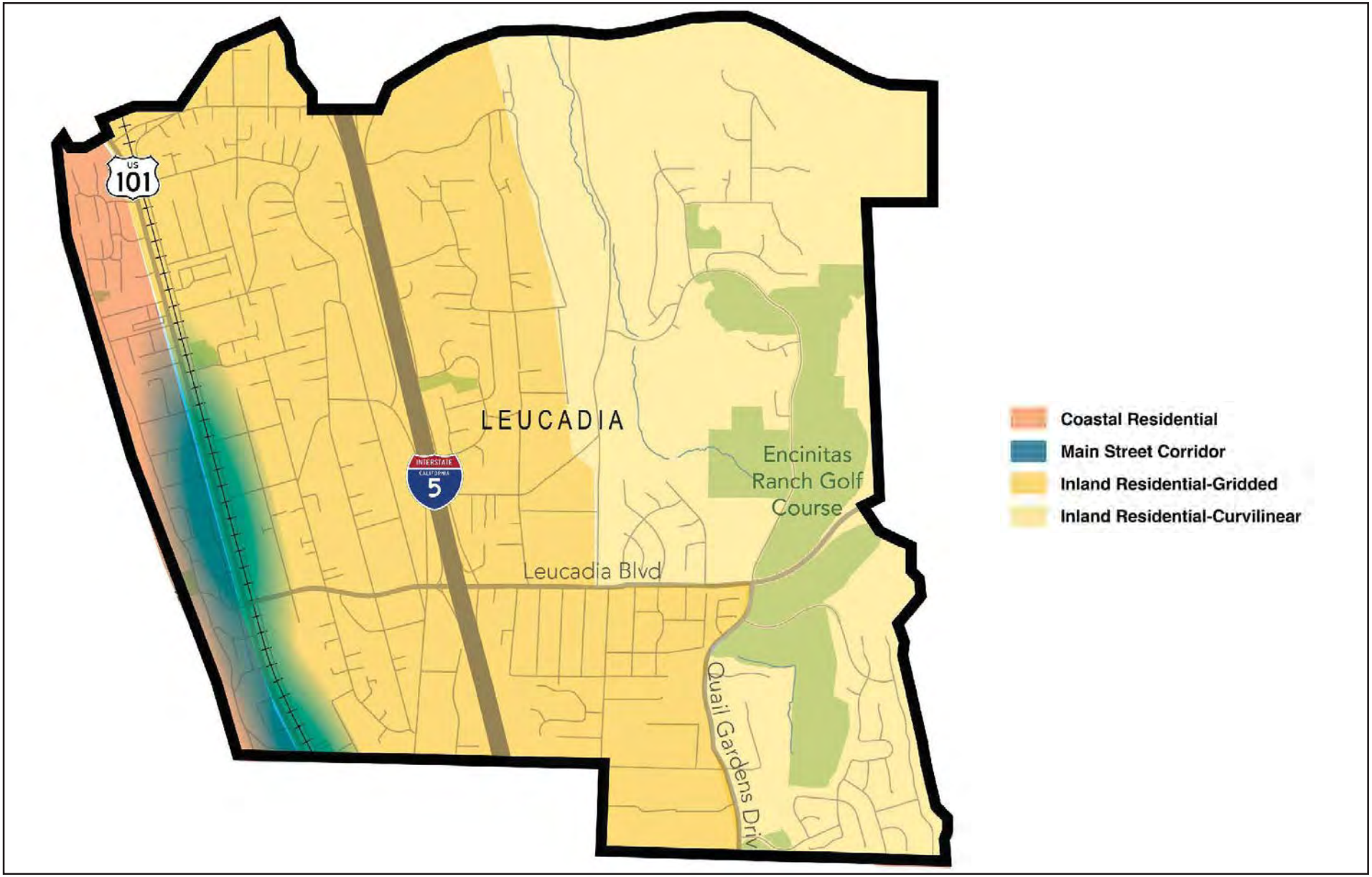


FIGURE 2-5
Leucadia – Community Character Overview Map

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Map Source: City of Encinitas

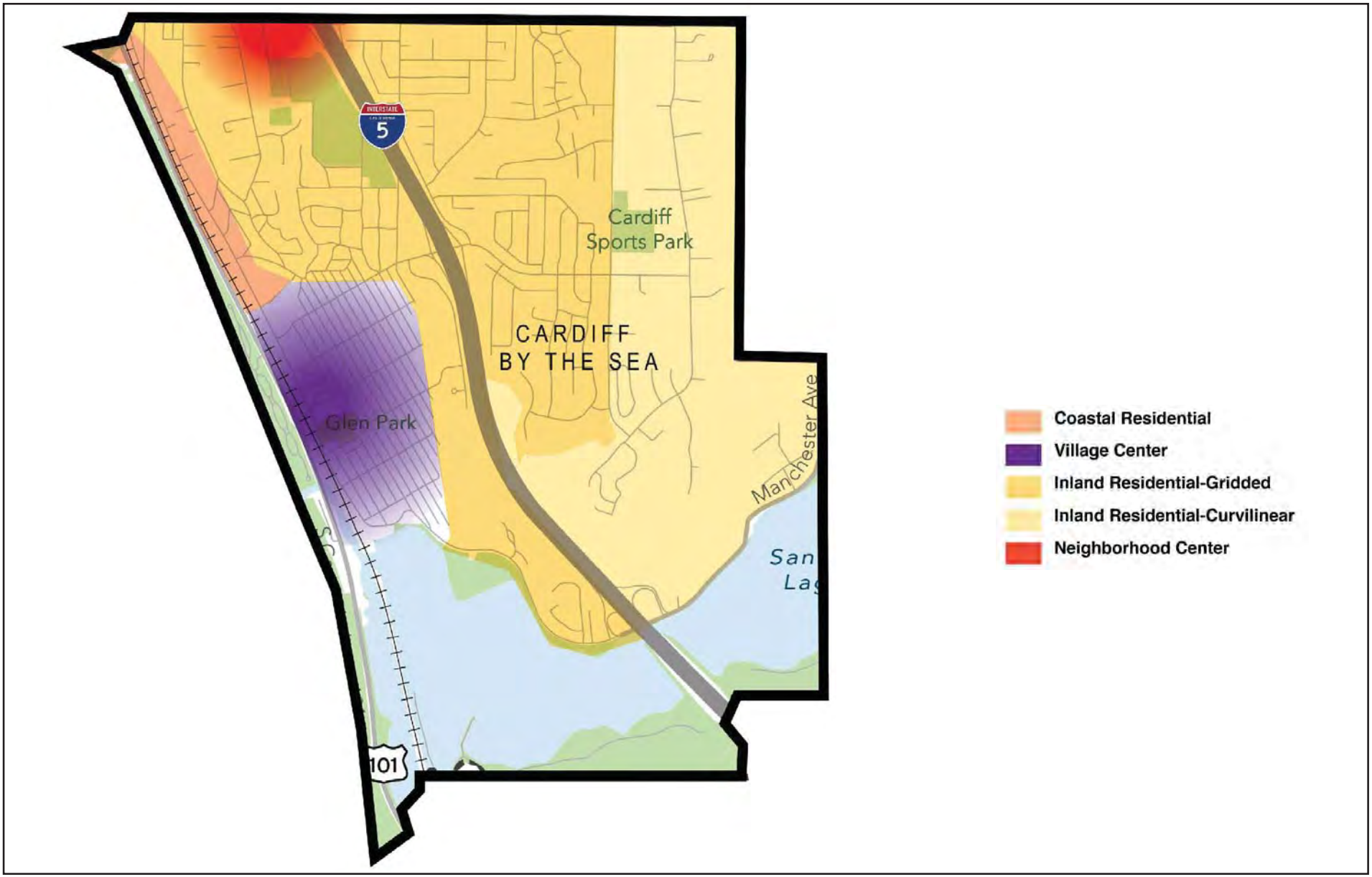


FIGURE 2-6
Cardiff - Community Character Overview Map

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2.4.2.5 Olivenhain

Olivenhain is characterized by rural, low density residential uses on large lots, considerably different than the coastal communities to the west. The community's only commercial uses are located at the intersection of Encinitas Boulevard and Rancho Santa Fe Road, with a few office uses on Rancho Santa Fe Road at 11th Street (Figure 2-7). Many parcels include orchards, horticultural uses, and grazing areas for horses. Several equestrian centers are located within the community and City trails for other horse riding opportunities.

Olivenhain's major corridor is Rancho Santa Fe Road, a three-lane roadway extending from the north City boundary to Encinitas Boulevard. South of Encinitas Boulevard, the street name changes to Manchester Avenue and continues south as a two-lane, rural roadway to connect ultimately to El Camino Real and I-5. Many of the community's roadways are rural, private roads, with few sidewalks or pedestrian amenities. Olivenhain is primarily zoned for large lot, rural development with very low densities (RRFP, RR, and RR-2), except for the area generally located at the Encinitas Boulevard and Rancho Santa Fe Road/Manchester Avenue intersection, where limited commercial land uses and activities help support the residential uses beyond.

2.4.3 Public Infrastructure and Services

Because the project area is already developed, infrastructure, including roads, water, sewer, energy, and telecommunications facilities, already exist. I-5 provides a regional north-south connection, and Highway 101 and El Camino Real provides additional connections to neighboring coastal cities. Public infrastructure and services are discussed in greater detail in Sections 4.12 and 4.14 of this PEIR.

2.4.3.1 Water Utilities

The City currently has three sources of water: raw water from the San Diego County Water Authority (SDCWA) through the State Water Project, treated water from the SDCWA, and runoff from the Lake Hodges watershed east of the City. The San Dieguito Water District (SDWD) is a subsidiary of the City and provides water to approximately 38,000 residents in the communities of Leucadia, Old Encinitas, Cardiff, and New Encinitas. The distribution system consists of approximately 170 miles of pipeline, a 2.5- and 7.5-million-gallon reservoir, and over 11,000 water meters. Approximately 30 percent of the District's water is from local sources and the remainder (70 percent) is imported. The SDWD receives local runoff water from Lake Hodges and imported raw water from the SDCWA. Both sources are treated at the R.E. Badger Filtration Plant located in Rancho Santa Fe. Treated water from the SDCWA can also be delivered directly to the SDWD.

Map Source: City of Encinitas

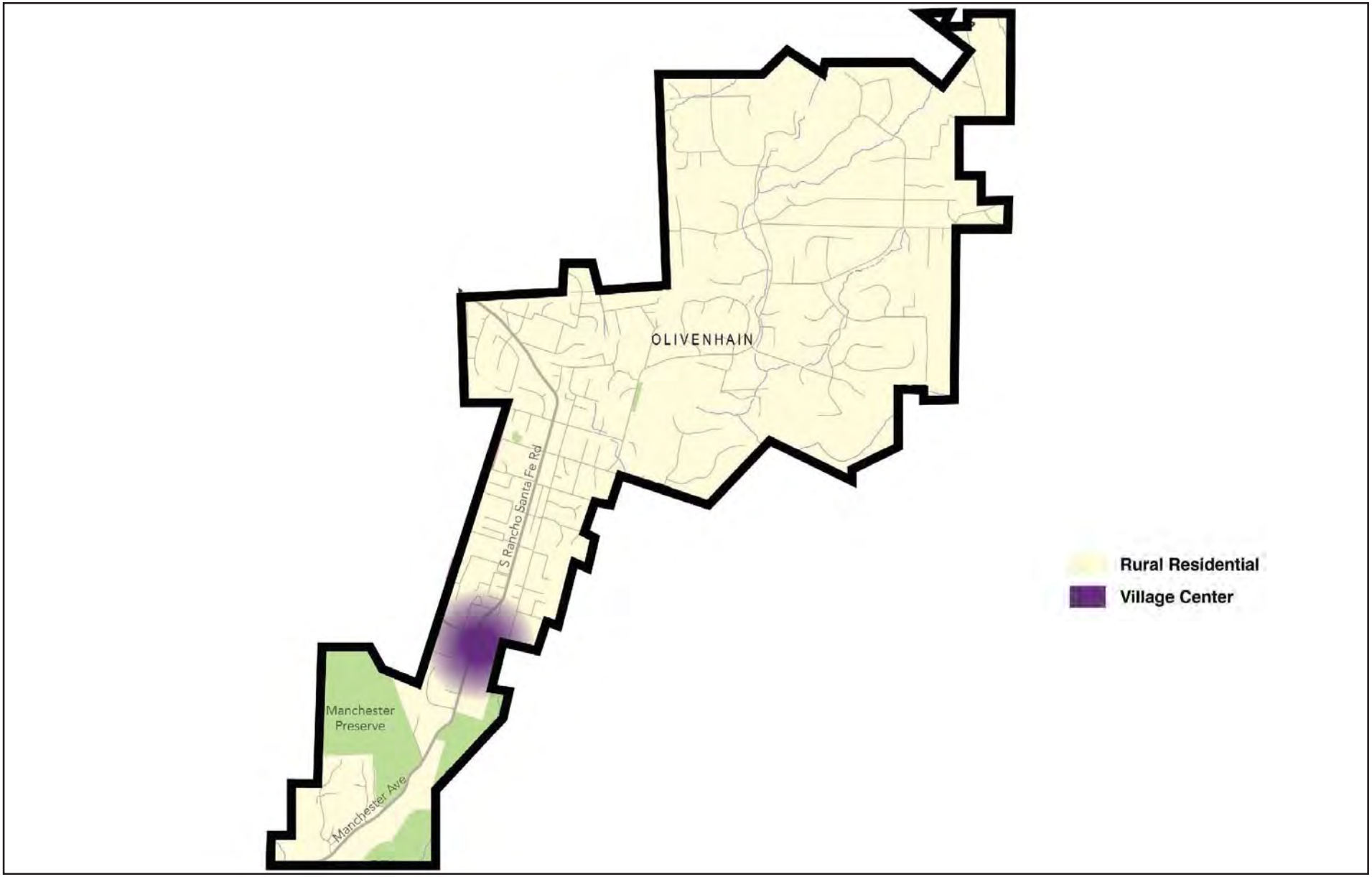


FIGURE 2-7
Olivenhain – Community Character Overview Map

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The Olivenhain Municipal Water District (OMWD) provides service to the remainder of the City. The OMWD is an independent public agency addressing the water needs of up to 40 percent of Encinitas residents. OMWD primarily serves the City's eastern half, including all or a part of the communities of Olivenhain, New Encinitas, Leucadia, and Cardiff. OMWD delivers approximately 6.27 million gallons per day to 9,420 water meters in Encinitas. Approximately 6 percent of the District's water is from local sources and the remainder (94 percent) is imported.

New Water Master Plans were recently completed for the SDWD and the OMWD. These plans provide an assessment of the existing water system conditions and demands. The plans conclude that the overall system is adequately sized to accommodate future 2030 growth demands. The Master Plans identify improvements that are included into the future planning horizon capital improvement project (CIP). These CIP upgrades include pipeline system upgrades, valve replacement, meter replacement, and treatment plant upgrades.

2.4.3.2 Storm Drain

The City Public Works Department is responsible for maintaining the storm drain infrastructure within the City. The Stormwater Management Division (Clean Water Program) of the Engineering Department is responsible for enforcing regulatory mandates related to surface water.

The Clean Water Program has two goals: maintain water quality and protect beaches, lagoons, and creeks from illicit discharges, sewage spills, and other pollutants. In order to maintain high storm water quality (and reduce/eliminate non-storm water discharge to the storm drain system) and to implement controls to reduce pollutants, the City implements several activities, such as public education, Ultra Violet Treatment at Moonlight Beach, storm drain maintenance, restoration of local waterways, and sewer spill prevention.

The City has an extensive storm drainage system that consists of 100 miles of storm drain pipe, over 2,500 catch basin boxes, and over 90 miles of channels. These facilities intercept storm water runoff and convey it from the eastern part of the City to the west where it discharges into either the San Elijo Lagoon, south of the City, or Batiquitos Lagoon, north of the City. The coastal area of the City discharges through several outfalls to the ocean.

2.4.3.3 Sewer/Waste Water Treatment

The City's wastewater collection division is responsible for maintaining the existing sewer infrastructure within the City. The City sewer maintenance includes cleaning sewer lines, clearing blockages, repairing breaks, and responding to emergencies. Sewage is conveyed through pipes to either the Encina Wastewater Authority (EWA) in Carlsbad, north of Encinitas, or to the San Elijo Water Reclamation Facility in Cardiff, south of Encinitas. The EWA plant currently treats approximately 43.4 million gallons of sewage per day. Additionally, the EWA also produces recycled water for use in irrigation. The San Elijo Water Reclamation Facility currently has a capacity to treat 5.25 million gallons of sewage

per day. The facility is also permitted to discharge up to 2.48 million gallons of recycled water to customers per day, distributed to Encinitas and Solana Beach.

2.4.3.4 Schools, Libraries, and Parks and Recreational Facilities

The Encinitas Union School District (EUSD), Cardiff School District (CSD) and San Dieguito Union High School District (SDUHSD) serve residents of the City. The EUSD serves residents living in Encinitas and the La Costa area of Carlsbad in north San Diego County. The EUSD consists of nine elementary schools, six of which serve children in the City. Because the EUSD is a K-6 school district, no schools feed into it; however, the nine elementary schools in the EUSD feed into the secondary schools in the SDUHSD. CSD provides school services to the community of Cardiff in the southwestern portion of the City, comprised of two schools serving students in grades K-6.

The County of San Diego operates 33 library branches, two of which are within the City—the Cardiff branch and the Encinitas Branch. The Cardiff branch was expanded from 5,997 square feet to 6,884 square feet in 2011. The Encinitas Branch Library contains a bookstore and is open everyday with varying hours.

The City Parks and Recreation Department owns, operates, and maintains approximately 421 acres of park land and 48 acres of beaches. The City's park system is composed of a variety of recreational facilities that provide opportunities for both passive and active recreation, including parks, open spaces, playgrounds, sports fields, and community amenities such as the Encinitas Ranch Golf Course and the Encinitas Community and Senior Center. In addition, Encinitas has 40 miles of multi-use hiking, biking, and equestrian trails. Schools, libraries, and parks and recreation are discussed in detail in Section 4.12 (Public Services).

2.4.3.5 Fire Protection Services

The Encinitas Fire Department (EFD) serves residents of Encinitas (New and Old), Olivenhain, Leucadia, and Cardiff. The City is located within the County of San Diego's County Service Area (CSA) 17. Emergency medical services within CSA-17 are provided by the San Diego Medical Services Enterprise (SDMSE). The CSA-17 ambulance provider is required by the County to be at the patient's side within 9 minutes, 90 percent of the time. The ambulance provider reports their compliance with this requirement on a monthly basis to the County.

There are six fire stations in the City, which allow firefighters and paramedics to provide timely responses to emergencies and to efficiently respond to volume demand. Five of the six stations house an engine company consisting of three fire suppression personnel, a fire engine, as well as various other emergency apparatus for specialized responses. Fire Station 6 in Olivenhain consists of two fire suppression personnel rather than three. In 2014, the EFD's average response time for the City as a whole was 4 minutes and 35 seconds. The Department responded to 75 percent of all calls in under 5 minutes, 27

seconds and 90 percent of calls in under 6 minutes, 37 seconds. In addition to fire suppression and prevention, the Encinitas Fire Department provides safety marine and disaster preparedness services. City lifeguards provide beach safety for 4 miles of Encinitas beaches and responds to calls for wild life rescues, cliff rescues and other accidents in local lagoons and rivers.

2.4.3.6 Police Services

The City contracts with the County of San Diego Sheriff's Department (Sheriff's Department) to provide police/law enforcement services to the City. In addition to the City, the Encinitas Sheriff's Station provides a wide range of municipal law enforcement services to the cities of Del Mar, Solana Beach, and the County of San Diego (Rancho Santa Fe). The services include helicopters, a bomb/arson squad, a Special Enforcement Detail team, canine units, modern crime lab facilities, and modern law enforcement radio communications networks.

The Encinitas Station currently staffs 42 police officers and 12 additional personnel. The Encinitas Station has 15 patrol vehicles, 3 traffic enforcement vehicles, 4 detective vehicles, 4 Community Oriented Policing and Problem Solving (COPPS) vehicles, and 5 bicycles.

According to the Sheriff's Department, response time averages for the 2013/2014 fiscal year were as follows: Priority 1 - 6.0 minutes; Priority 2 - 10.9 minutes; Priority 3 - 16.1 minutes; and Priority 4 - 45.8 minutes. Although population has increased in the City over the last 12 years, Sheriff Department staffing has remained the same. There are no current plans to increase staffing levels or construct new facilities within the City.

2.4.3.7 Circulation

Several regionally and locally significant roadways and freeways traverse the City and vicinity. Each of the key transportation facilities, as well as current transit services are discussed in more detail in Section 4.13 (Transportation and Traffic).

The City is primarily served by the major north-south regional facility of I-5, which provides access between the coastal cities of Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar, San Diego, as well as to Orange and Los Angeles counties to the north. In addition, Encinitas is served by the north-south alignment of Highway 101, located near the western portion of the City, extending from La Costa Avenue to the north and the City of Solana Beach boundary to the south.

Locally, Vulcan Street, San Elijo Avenue, Saxony Road, Quail Hollow Drive, Quail Gardens Drive, Gardens Drive, Westlake Drive, Nardo Road, MacKinnon Avenue, Villa Cardiff Drive, Balour Drive, Lake Drive, Garden View Road, Via Cantebria, Forrest Bluff, El Camino Real, Village Park Way, Rancho Santa Fe Road, and Manchester Avenue provide major local routes connecting the City's neighborhoods and commercial areas north-south. Major east-west roadway connections include La Costa Avenue, Leucadia Boulevard, Mountain Vista Drive, Encinitas Boulevard, F Street, Santa Fe Drive, Birmingham Drive, Lone Jack Road, and El Camino Del Norte.

a. Vehicular Service Conditions

Local roadways within the City range in classification from major arterials to local streets. Most roadways within the City operate at an acceptable level of service (LOS) (LOS D or greater). However, 19 roadway segments within the project study area currently operate at substandard LOS E or F, with 16 located in Encinitas, 2 located in Carlsbad, and 1 located in the unincorporated County of San Diego. Vehicular service conditions are discussed in detail in Section 4.13 (Transportation and Traffic).

b. Multi Modal Facilities

Public transit in the City is provided by the North County Transit District (NCTD) with both commuter train (Coaster) and bus services. Three bus routes provide service for the City with headways that vary between 15, 30, and 60 minutes. These bus routes run through main corridors within the City, such as Highway 101, Leucadia Boulevard, Encinitas Boulevard, and El Camino Real. On Highway 101, sidewalks are present intermittently along Highway 101 and bicycle facilities vary between Class II and Class III. The Highway 101 corridor is one of the most heavily used bicycle corridors in the county. The availability of pedestrian sidewalks and bicycle facilities vary intermittently throughout remaining City roadways.

The COASTER commuter train runs north-south connecting eight stations along the San Diego coast between Oceanside and Downtown San Diego. The COASTER stops at the Encinitas Transit Station, located at East D Street. The COASTER operates with approximately 90-minute headways weekdays and approximately 3-hour headways weekends and holidays. Multi-modal facilities are discussed in detail in Section 4.13 (Transportation and Traffic).

2.5 Planning Context

Development in the City is generally guided by the City's General Plan and the Local Coastal Program's (LCP) Land Use Plan, which provide citywide and area-specific goals and policies; and more specifically on a site-by-site basis by the regulations of the Encinitas Municipal Code and several adopted Specific Plans. Specifically, the LCP contains the City's land use plans for the coastal zone, zoning ordinances, zoning maps, and other implementing actions such as special zone overlays for sensitive resource areas. The land use plan portion of the LCP is the heart of that program and consists of the "relevant portions of a local government's general plan . . . which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies, and, where necessary, a listing of implementing actions." The General Plan and LCP for the City are included in a single document. The introduction to the Encinitas General Plan indicates those portions of the General Plan that serve as the City's LCP.

In addition, the SANDAG San Diego Forward Regional Plan provides regional planning and development guidance. A detailed evaluation of the proposed Housing Element's

consistency with relevant plans and ordinances is additionally provided in Section 4.9, Land Use and Planning, of this EIR. In addition, Chapter 3.0, Project Description, describes how applicable elements of these plans, policies, and regulations have been incorporated into the development of the Housing Element.

2.6 Site Constraints

Table 2-2 contains a description about each housing site, along with existing land use and zoning designations and site constraints. The locations of the housing sites are shown on Figure 2-2[1].

[1]Please note that the 33 housing sites represent all potential sites in an inventory that in various combinations could be used to satisfy the City's housing deficit. Not all housing sites are proposed to be rezoned together.

Table 2.2 Housing Site Existing Condition Summary						
Housing Site	APN and Location	Site Description/ Existing Land Uses	Size	Year	Existing Zoning	Known Constraints
Alt-2	Various APNs, 510 to 1900 N. Coast Hwy 101	Main street specialty retail. Located along a major, 4-lane roadway (being processed for potential streetscape design). Generally flat.	53.6 gross acres	1950s-1970s	Mixed Use NCRM-1/NCM-1	Archaeological and historical resources, parks/open space, and hazardous materials sites
Alt-3	APN (259-550-20, 21 and 28) 141-215 S. El Camino Real	Varied commercial services and activities, including the 99 cent Store and LA Fitness. Mostly provides a flat buildable pad with high (>40%) slopes along the north property line.	3 parcels (14.6 gross acres)	Most improvements were made In the mid-1980s with more recent improvements	GC	Some steep slopes
Alt-4	APNs (259-231-28 and -30 to -32). 2220-2230 Encinitas Blvd.	Predominately vacant with three homes, located along a local collector, two-lane roadway. One home serves as a care facility with six or fewer persons. Some 10-25% slopes in sections of the property with 25% to 40% in others.	4 parcels (6.49 gross acres)	1950s and mid 1970s	RR-2	Archaeological resources and some steep slopes
Alt-5	APNs (258-130-80, -82, -86, -91, -93, and -94; and 257-020-36 and -37). 185-225 Quail Gardens Drive	Predominately vacant with two homes, located along a two-lane roadway. Some 10-25% slopes in sections of the property with 25% to 40% in others.	8 parcels (11.6 gross acres)	1950s and mid 1970s	R-3 and R-5	Agricultural preserves, sensitive biological resources (vegetation), archaeological resources, parks/open space, some steep slopes, and hydrology (streams) and water quality (303d)
Alt-6	APNs (258-190-23 and -26). Adjacent to 315-587 S. Coast Hwy 101	Surface parking to support the Downtown Encinitas Transit Center for rail and bus. Generally flat topography.	2 parcels (6.03 gross acres)	N/A	TC	None
Alt-7	Various APNs. 315-1205 S. Coast Hwy 101	The study area, also known as Main Street, comprises of convenience stores, restaurants, specialty retailers, etc. Generally flat.	35.6 gross acres	Mostly in the 1950s-80s; some structures were built prior to then	D-CM1	Historical resources, parks/open space, and hazardous materials sites
C-1	411-481 Santa Fe Drive	Flat, neighborhood commercial area with a grocery store, convenience store, gym, restaurants, etc. Located along a local, two-lane roadway and is adjacent to I-5.	7 parcels (9.3 gross acres)	Late 1960s with recent cosmetic improvements	GC	Agricultural preserves, archaeological resources, Farmland Mapping and Monitoring Program (FMMP) lands, and hazardous materials sites

Table 2.2 Housing Site Existing Condition Summary						
Housing Site	APN and Location	Site Description/ Existing Land Uses	Size	Year	Existing Zoning	Known Constraints
C-2	735-875 Santa Fe Dr.	The study area consists of a church, tennis club, vacant lot and one, single-family residence. Located along a local, 2-lane roadway. Flat topography.	8 parcels (10.1 gross acres)	The home was built in the 1930s and remodeled. Other improvements in the site were during the 1960s, 1970s, and 1980s	R-8	None
C-3	102-154 Aberdeen Drive & 2011-2121 San Elijo Avenue	Cardiff Town Center, comprises of a neighborhood village center with retail, restaurants, and shopping. Located along local, two-lane roadway. Generally flat with minor slope on the edges.	5 parcels (4.8 gross acres)	Mid 1980s and remodeled since	GC	Sensitive biological resources (vegetation)
C-6	3305 Manchester Avenue	One parcel is vacant and the other is partially improved with a church facility; however, the study area only includes the portion of the site that does not have any improvements. The study area is located on a prime arterial roadway. flat.	2 parcels (4.6 gross acres)	N/A	RR-1	Coastal California gnatcatcher (*Polioptila californica californica*) critical habitat, archaeological resources, potential flooding (dam), sensitive biological resources (vegetation), water quality (303d), and fire hazards.
C-7	2211 San Elijo Avenue	Relatively flat study area consists of a gas station. Located along a local, 2-lane roadway	1 parcel (0.54 gross acres)	Mid-1980s	GC	Hazardous material sites
L-1	1444-1578 N. Coast Highway 101	Specialty retail, motel, vacant land, and six single-family homes and is located along a major, four-lane roadway (being processed for potential streetscape redesign). Flat topography.	9 parcels (5.19 gross acres)	Mid 1940s, 1950s, and early 1990s	NCRM-1	Hazardous materials sites
L-2	1034-1160 N. Coast Highway 101	The study area comprises of main street specialties retail. The study area is located along a major 4-lane roadway (being processed for potential streetscape redesign). Flat topography.	6 parcels (2.1 gross acres)	Early 1950s and late 1970s	NCRM-1	Hazardous materials sites

Table 2.2 Housing Site Existing Condition Summary						
Housing Site	APN and Location	Site Description/ Existing Land Uses	Size	Year	Existing Zoning	Known Constraints
L-4	825-837 Orpheus Avenue	Flat, vacant, and located along a local, 2-lane roadway (adjacent to the I-5 freeway). Flat topography.	4 parcels (1.8 gross acres)	N/A	R-3	None
L-5	912-938 Leucadia Blvd.	The study area consists of one, single-family residence and greenhouses. Flat buildable pads with light slope. The study area is located along a major 4-lane roadway.	4 parcels (1.5 gross acres)	Home was built in the 1940s and has since been remodeled	R-3	Agricultural preserves, Farmland Mapping and Monitoring Program (FMMP) lands, and prior agricultural use
L-6	917 Urania Avenue & 750-842 Leucadia Blvd.	Four, single-family homes and greenhouses. Located on a local 2-lane roadway. Generally flat with some minor slopes.	9 parcels (5.2 gross acres)	1940s, 1950s, and 1960s	R-3	Agricultural preserves, archaeological resources, Farmland Mapping and Monitoring Program (FMMP) lands, parks/open space, and prior agricultural use
L-7	N/A, near 519 Quail Gardens Drive	Vacant and located on a local, two-lane roadway. Generally flat with some 10-25% slopes in sections of the property.	1 parcel (7.6 gross acres)	N/A	RR-1	Farmland Mapping and Monitoring Program (FMMP) lands,, parks/open space, trails, some steep slopes, and water quality (303d)
NE-1	1060-1092 N. El Camino Real	The study area, located on the north end of El Camino Real commercial corridor, comprises of the Encinitas Ranch Town Center and includes restaurants, fast food drive-through, gas stations, etc. The study area is adjacent to a creek and located along a prime arterial roadway, but is accessed by a local, two-lane roadway. Generally flat with mild slopes throughout.	9 parcels (9.8 gross acres)	Mid-1990s	GC	Archaeological resources, trails, sensitive biological resources (vegetation)

Table 2.2 Housing Site Existing Condition Summary						
Housing Site	APN and Location	Site Description/ Existing Land Uses	Size	Year	Existing Zoning	Known Constraints
NE-3	137 N. El Camino Real	The study area is used for overflow dealership parking and a recycling center. The rest of the study area is vacant and located along a prime arterial roadway. It is accessed by a local, two-lane roadway. Generally flat in most areas with some small slopes throughout and moderate (25-40%) slopes on the north, south, and east property lines.	1 parcel (10.14 gross feet)	N/A	Public/Semi-Public	Archaeological resources and steep slopes (25-40% slope)
NE-4	105-131 N. El Camino Real	The study area is a neighborhood commercial area and comprises of banks, grocery stores, offices, convenience store and restaurants. Site has a flat buildable pad with minor slopes on edges of property. The study area is located along a prime arterial roadway.	1 parcel (17.6 gross acres)	Early 1980s	GC	None
NE-7	1271-1355 Encinitas Blvd.	The study area consists of restaurants, fast food drive-through, offices, grocery store, gas station, etc. located along two, prime arterial roadways. Flat on developed pads with moderate (25-40%) slopes on west and south property lines.	6 parcels (9.4 gross acres)	Mid- to late 1970s	GC	Steep slopes (25-40% slope) and hazardous materials sites
O-2	N/A, near 101 Rancho Santa Fe Road	Vacant and located along a local collector, two-lane roadway. Generally flat with some minor slope (10-20%) on the north property line.	1 parcel (4.8 gross acres)	N/A	RR-2	Archaeological resources, potential flooding (dam), and some minor slopes
O-3	2122-2236 Encinitas Blvd.	The study area consists of a preschool, offices, and retailers. The study area is located along a prime arterial roadway and a local collector, two-lane roadway. Generally flat with some slopes on the north property line.	6 parcels (4.9 gross acres)	Early to late 1980s	Limited Commercial (LC) on 5 lots, Office Professional (OP) on 1 lot	Archaeological resources and some slopes

Table 2.2 Housing Site Existing Condition Summary						
Housing Site	APN and Location	Site Description/ Existing Land Uses	Size	Year	Existing Zoning	Known Constraints
O-4	N/A, near 3636 Manchester Avenue	The study area is vacant with a creek stream along the east side of the property. The site is located on a prime arterial roadway and a local collector, 2-lane roadway. Minor slope (10-25%) slope near the creek on the east side of the property.	1 parcel (4 gross acres)	N/A	RR	Coastal California gnatcatcher (*Polioptila californica californica*) critical habitat, archaeological resources, potential flooding (dam), minor slopes, hydrology (streams), water quality (303d), sensitive biological resources (vegetation), and fire hazards
O-5	3614 Manchester Avenue	One single-family residence and is located on a prime arterial roadway. It also fronts a local collector, 2-lane roadway. Relatively flat.	1 parcel (2.2 gross acres)	1905 with substantial improvements made since	RR-3	Coastal California gnatcatcher (*Polioptila californica californica*) critical habitat, archaeological resources, hydrology (streams), sensitive biological resources (vegetation), and fire hazards
O-6	N/A, near 2240 Encinitas Blvd.	Vacant and located along a local collector, 2-lane roadway. Rolling 10-25% slope throughout.	1 parcel (1.7 gross acres)	N/A	RR-2	Archaeological resources and some steep slopes
OE-1	345-369 Third Street and 364-371 C Street	The study area, located on the north end of downtown, comprises of some light industrial uses and five homes. Located along a major 4-lane roadway and also accessed by local, 2-lane roads. Generally flat with some minor slope on the north property line.	7 parcels (2.3 gross acres)	Most improvements in the 1970s, with homes in the 1930s and 1940s, which have been remodeled or developed	Visitor serving commercial (D-VSC)	Historical resources, sensitive biological resources (vegetation)
OE-2	102-154 Encinitas Blvd.	The study area comprises of a gas station, service retailers, restaurants, wholesaling, and service activities. Generally flat with some minor slopes on the north property line.	2 parcels (7.3 gross acres)	Early 1980s	GC	Archaeological resources, sensitive biological resources (vegetation), and minor slopes

Table 2.2 Housing Site Existing Condition Summary						
Housing Site	APN and Location	Site Description/ Existing Land Uses	Size	Year	Existing Zoning	Known Constraints
OE-4	505 S. Vulcan Avenue	Encinitas Civic Center, comprises of City Hall. Located along a local 2-lane roadway adjacent to the bus transfer facility. Flat buildable pad with substantial slopes on the west and east.	1 parcel (4.38 gross feet)	1970s and substantially rehabbed in early 90s	Civic Center	Parks/open space and steep slopes (substantial*)
OE-5	701-1205 S. Coast Highway 101	Main Street, comprises of convenience stores, restaurants, specialty retailers, etc. Flat.	27 parcels (11.15 gross acres)	Mostly in the 50s-80s	D-CM1	Historical resources and hazardous materials sites
OE-7	696 Encinitas Blvd.	Comprises one single-family residence and level pad where a former coffee kiosk operated. The rest of the study area is vacant. The study area is located along a prime arterial roadway. Some flat areas with light slope (10-25%) and moderate (25-40%) slope on the south property line.	4 parcels (4.88 gross acres)	Mid-1950s	OP	Archaeological resources, parks/open space, steep slopes (25-40% slope), sensitive biological resources (vegetation), and water quality (303d)
OE-8	515-539 Encinitas Blvd	North Coast Business Park, comprises of offices, businesses, and school/instructional sues. Located along a prime arterial roadway. Generally flat with some slopes (25-40%) throughout.	7 parcels (12.1 gross acres)	Late 1970s	BP	Historical resources sensitive biological resources (vegetation), and steep slopes
CBHMG-1	APN (2601211500) 601 Santa Fe Drive	Storage area for various agencies. Flat topography.	1 parcel (0.77 gross acres)	N/A	Public/Semi-Public (P/SP)	None

3

Chapter 3
Project Description

3.1 Project Background and History

California State law requires each city and county to adopt a general plan for its physical development. A general plan is a key tool that addresses a variety of subject areas and expresses the community's development goals related to future land uses in the jurisdiction. In addition, the California State Legislature has identified the attainment of decent and suitable living as a major housing goal. Recognizing the important role of local planning and housing programs in the pursuit of this goal, the Legislature has mandated that all cities and counties prepare a housing element as part of the general plan.

Housing element law—first enacted in 1969 and significantly strengthened since—mandates that local governments adequately plan to meet the existing and projected housing needs of everyone in the community. The Housing Element for the City of Encinitas has not been updated since the 1990s, and a lot has changed since then. During the 1980s, Encinitas was one of the fastest growing communities in San Diego County. The 1980 population of 36,318 increased to 51,341 in 1987, representing a 41 percent increase in the seven-year period. The City incorporated in 1986. In the years that followed, Encinitas' population grew to 55,823 in 1990, 58,014 in 2000, and 59,518 in 2010. This represents a 16 percent total increase in a 23-year period. Population growth in Encinitas, and the region as a whole, is projected to continue to increase into the foreseeable future. According to the San Diego Association of Governments' (SANDAG's) Regional Growth Forecast, economic and population growth in Encinitas will continue at a steady rate into 2050 (refer to Section 4.11). Thus, Encinitas is faced with a changing population and demographics, which affect the types of housing that will be needed in the future.

In early 2013, the City Council worked together to create the Encinitas Strategic Plan, a document that identifies major needs and opportunities to help focus the City in effectively aligning resources with specific objectives. One of the eight identified Focus Areas in the Strategic Plan is Community Planning, which seeks to maintain safe and livable communities through well-maintained infrastructure and facilities, strong public safety, and significant environmental standards, while achieving diverse and affordable housing for present and future generations. One of the Council-identified goals within this Focus Area is for the City to secure a certified housing element. Based on this direction, the City

embarked on a process to update its Housing Element. The idea is that an update process will provide housing and land use strategies that closely reflect changing needs, resources, and conditions.

Encinitas is required to accommodate more housing to address existing and future housing needs in the community. Like the rest of the San Diego region, most new housing will be attached and multi-family types. This housing will predominately be sold or rented at market rates and will be built by the private sector, rather than the City. As is the case today, a small amount of the housing may be subsidized to assist a portion of those in need of assistance. The Housing Element must consider additional ways to promote new housing at attainable, market-rate costs beyond density alone.

3.2 Regional Housing Needs Assessment

The State Department of Housing and Community Development (HCD) is required to prepare a Regional Housing Needs Assessment (RHNA) for each Council of Governments in the State that identifies projected housing units needed for all economic segments based on Department of Finance population estimates. After a region receives a housing needs determination, a methodology is developed to accommodate that anticipated regional growth in each city and county. The RHNA allocates housing needs in four income categories (very low, low, moderate, and above moderate income household categories) for each jurisdiction that will be used in local housing elements. Housing element law requires local governments to adequately plan to meet their existing and projected housing needs, including their share of the regional housing need.

This population forecast used to develop the RHNA determination and RHNA plans is also used for regional transportation planning purposes. Recent legislation, Senate Bill (SB) 375, integrates RHNA with the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). In the past, the RHNA was undertaken independently from the RTP. The Legislature passed SB 375 in 2008 as the land use and transportation planning component of the State's effort reduce vehicle miles travelled to achieve the greenhouse gas (GHG) emission reduction goals of the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). The law recognizes the importance of planning for housing and land use in creating sustainable communities where residents of all income levels have access to jobs, services, and housing using transit, or by walking and bicycling.

SANDAG is the Council of Governments for the San Diego region and allocates to the 18 cities and the unincorporated area of San Diego County their fair share of the total RHNA housing needed for each income category. Each local government must demonstrate that it has planned to accommodate all of its regional housing need allocation in its Housing Element. The intent of the process is to promote a mix of unit types, tenure, and affordability in all cities and counties; and to help achieve GHG emissions reductions from cars and light trucks. State Housing Element law also states that the RHNA process shall be consistent with the following four objectives:

- Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in all jurisdictions receiving an allocation of units for low and very low income households.

- Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns.

- Promoting an improved intraregional relationship between jobs and housing.

- Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category.

The SANDAG Board of Directors adopted the final RHNA Plan by resolution for the fifth housing element cycle (January 1, 2013 – December 31, 2021) on October 28, 2011. The RHNA allocates housing needs in four income categories (very low, low, moderate, and above moderate) for each jurisdiction that will be used in local housing elements.

State law requires that housing elements in the San Diego region be completed by April 27, 2013, 18 months after the adoption of the 2050 RTP/SCS. The City of Encinitas has been assigned a RHNA of 2,353 new units for the January 1, 2010 to December 31, 2021 period. This allocation is distributed into various income categories: 1,033 extremely low/very low income units; 413 moderate income units; and 907 above moderate income units.

AB 1233 was signed into law on October 5, 2005, and applies to housing elements due on or after January 1, 2006. Specifically, the law states that if a jurisdiction fails to provide adequate sites in the prior planning period, within one year of the new cycle, the jurisdiction must rezone/upzone adequate sites to accommodate the shortfall. This requirement is in addition to rezoning/upzoning that may be needed to address the RHNA for the new cycle. This law affects the City of Encinitas' 2013–2021 Housing Element, requiring the City to address its deficit in sites for the previous housing element cycle (2005–2010). The RHNA penalty is 253 lower income units from the previous Housing Element cycle. Therefore in summary, the RHNA identified a housing need of 1,283 low and very low income housing units in the City of Encinitas, which includes the AB 1233 carryover.

In accordance with State Housing Element law, the RHNA-Plan process requires local governments to be accountable for ensuring that projected housing needs can be fully accommodated. It also provides a benchmark for evaluating the adequacy of local zoning and regulatory actions to ensure each local government is providing sufficient appropriately designated land for the duration of the planning period. Through the City's HEU effort, a major focus has been placed on building a more complete residential lands inventory to accommodate the City's full share of RHNA. However, a jurisdiction can also take RHNA credit for new units approved, permitted, and/or built since the start date of the RHNA projection period to help reduce remaining RHNA obligations. Since the RHNA for the San

Diego region uses January 1, 2010 as the baseline for growth projections for the Housing Element planning period of 2013–2021, the City may count toward the RHNA any new units built or issued certificates of occupancy since January 1, 2010. In addition to units constructed, several residential development projects have been approved by the City and can also be credited toward satisfying the City's RHNA. Through this and other efforts to increase accessory unit production for lower income households, overall, the City has an unmet RHNA of 1,093 in the lower income category.

Because a housing element must identify and analyze a city's housing needs and establish reasonable goals, objectives, and policies based on those needs, the City must find ways to accommodate more attached and multi-family housing units to meet this unmet need. In accordance with State law, a density of 30 units per acre is deemed appropriate to accommodate housing for lower income households. This density is deemed appropriate for the following reasons:

- Higher densities promote lower per unit construction costs. Smaller lots or more units in a development mean that certain fixed development costs can be more spread out or absorbed more efficiently. For example, land costs can be lowered on a per unit basis. Density also provides potential reductions in municipal infrastructure and other costs through economies of scale.

- Higher densities enable housing grant opportunities. Some of the larger grant programs, such as the Strategic Growth Council's Affordable Housing and Sustainable Communities Program, provide funding to projects with a density of 30 units per acre. The State's Low Income Tax Credit Allocation Program provides program funding incentives for projects that exceed 25 units per acre.

- Higher densities help projects meet investor criteria. Non-profit and affordable housing developers demonstrate in pro-formas that higher density helps projects earn slightly higher return on equity that it would have otherwise. Builders depend on the higher density numbers for a couple of reasons, but without the density, the affordable component would lower return on equity below what the investors would accept.

- Higher densities provide more attainable housing. Detached homes cost much more than most apartments and condominiums. The size of a unit or number of bedrooms is also a predictor of a rent or sale amount.

- Higher densities reduce occupant housing costs. Because more units are in a development, infrastructure installation and maintenance costs are spread out over a larger number of units. The cost savings can be passed on to new residents.

3.2.1 Sites Inventory

State law requires that housing elements demonstrate that the agency has enough land adequately zoned to accommodate its share of the regional growth. For this reason, local

agencies prepare land inventories to identify specific sites suitable for residential development and compare it to the local government's RHNA with its residential development capacity.

Under the Land Use Element of the City's adopted General Plan, and by a review of data from SANDAG and the County Assessor's Office, the City has been able to identify an adequate number of properties zoned to accommodate future housing needs within the moderate and above moderate income levels. However, the City does not have enough sites to meet its RHNA housing obligations for the very low and low income levels. As such, in order to comply with State Housing Element law, the City compiled an inventory of sites that could accommodate additional lower-income housing units. Therefore, the City's residential lands inventory include sites that are in the process of being made available (i.e., planned) for residential uses via rezones.

Land suitable for residential development includes all of the following:

- Vacant residentially zoned sites;
- Vacant non-residentially zoned sites that allow residential development;
- Underutilized residentially zoned sites capable of being developed at a higher density or with greater intensity; and
- Non-residentially zoned sites that can be redeveloped for, and/or rezoned for, residential use (via program actions).

Details regarding the complete residential sites inventory are included in the Housing Element. This residential lands inventory includes a parcel specific listing of sites that are available to accommodate the City's full share of the regional housing need, by income level, during the planning period.

3.2.2 Approach to Addressing RHNA

On July 17, 2013, the City Council determined that the City's share of future housing needs should not be concentrated in any single community or single area of the City. Rather, a general dispersed approach is the appropriate methodology for housing distribution in the City. The City Council on September 25, 2013, confirmed the approach that identified specific potential sites that could be considered for rezoning in order to accommodate the City's future housing needs. Potential multi-family housing sites were identified based on generalized community preferences and by using community design and planning principles. Factors considered when identifying sites to accommodate housing attainable for everyone in the community included:

- **Livability:** A mixture of land uses in close proximity such as schools, retail, public amenities and civic uses.
- **Jobs/Housing:** Housing close to available jobs so people can avoid long commutes.

- **Transit Access:** Improved access to transit to reduce transportation costs and reduce negative impacts on the environment and the economy.

- **Location Efficiency:** Take advantage of existing public services and infrastructure to reduce costs.

- **Cost Effectiveness:** Minimal site improvements and few constraints to reduce overall construction costs.

- **Sustainable Places:** Preserve environmentally sensitive areas and minimize impacts to other valued lands.

- **Cohesive Communities:** Well-integrated projects that fit within an existing neighborhood and built environment.

- **Key Activity Centers:** Some of these activity centers are successful, mixed use, pedestrian-friendly, and vibrant places. Others are commercial areas that serve surrounding residential neighborhoods, but are auto-oriented and do not create a unique sense of "place." These areas could benefit from the synergy of multi-family housing commercial uses that make them more pedestrian-friendly and help to create special places. The following eight key activity centers were identified as a framework for considering future housing sites at community dialogue sessions. The centers are illustrated on Figure 3-1.

  1. **Highway 101 Corridor North**
     - Older commercial strip emerging as mixed use area
     - Potential for increased density along west side of Highway 101 near Leucadia Boulevard
     - Established residential neighborhoods to the west

  2. **Downtown Encinitas**
     - Thriving mixed use center with infill opportunities
     - Close to transportation and cultural facilities
     - High concentration of amenities

  3. **Santa Fe Drive Activity Center**
     - Underdeveloped area with opportunity to evolve to mixed use center
     - Accessible by bike and bus routes
     - Close to Interstate 5

  4. **Cardiff Village Center**
     - Established mixed use town center, at a relatively low scale with a unique character
     - Opportunities for multi-family housing in a "village" setting, sensitive to existing character

Map Source: City of Encinitas

KEY ACTIVITY CENTERS:

1 HIGHWAY 101 CORRIDOR NORTH
- Older commercial strip emerging as mixed-use area
- Potential for increased density along west side of Hwy 101 near Leucadia Blvd
- Established residential neighborhoods to the west

2 DOWNTOWN ENCINITAS
- Thriving mixed-use center with infill opportunities
- Close to transportation and cultural facilities
- High concentration of amenities

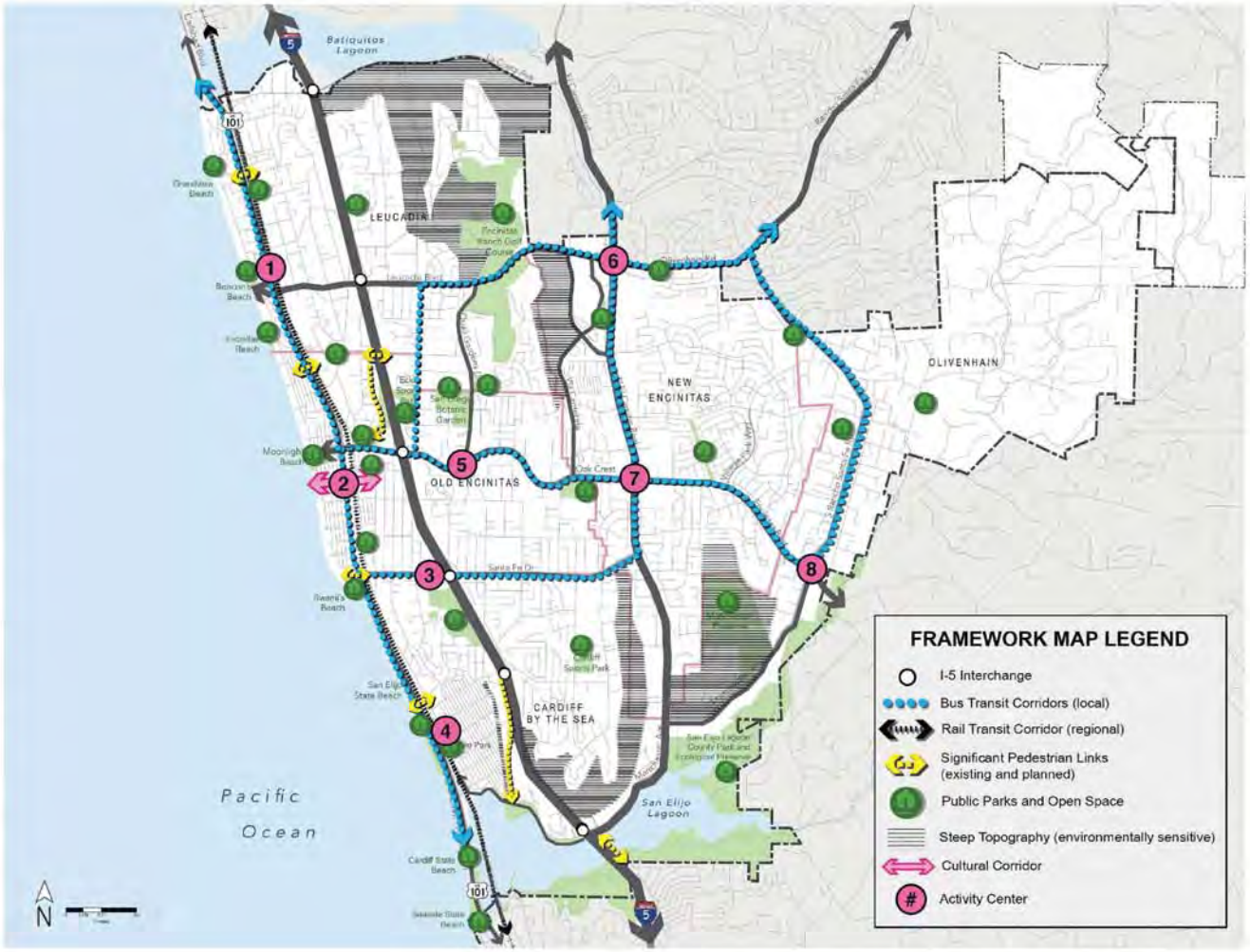
3 SANTA FE DRIVE ACTIVITY CENTER
- Underdeveloped area with opportunity to evolve to mixed-use center
- Accessible by bike and bus routes
- Close to I-5

4 CARDIFF VILLAGE CENTER
- Established mixed-use town center, at a relatively low scale with a unique character
- Opportunities for multifamily housing in a "village" setting, sensitive to existing character

5 INLAND OLD ENCINITAS ACTIVITY CENTER
- Along Encinitas Boulevard near Quail Gardens Drive
- Potential for multifamily housing that is sensitive to established single-family
- Accessible by bike and bus routes
- Close to cultural attractions: Encinitas Ranch Golf Course, Heritage Museum, Leichtag Foundation, Public School, and Botanic Gardens

6 7 INLAND NEW ENCINITAS ACTIVITY CENTER
- Concentrated around Olivenhain Road and Encinitas Boulevard
- Auto-oriented commercial areas that have potential to be higher density, mixed use areas due to regional focus and draw
- Larger parcels- suitable for mixed-use development
- Other opportunities along the El Camino Real corridor

8 OLIVENHAIN VILLAGE CENTER
- Potential for mixed-use "village," with more rural design character
- Could provide enhanced services to nearby neighborhoods



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FIGURE 3-1
Key Activity Centers

5. **Inland Old Encinitas Activity Center**
   - Along Encinitas Boulevard near Quail Gardens Drive
   - Potential for multi-family housing that is sensitive to established single-family
   - Accessible by bike and bus routes
   - Close to cultural attractions: Encinitas Ranch Golf Course, Heritage Museum, Leichtag Foundation, Public School, and Botanic Gardens

6-7. **Inland New Encinitas Activity Center**
   - Concentrated around Olivenhain Road and Encinitas Boulevard
   - Auto-oriented commercial areas that have potential to be higher density, mixed use areas due to regional focus and draw
   - Larger parcels suitable for mixed use development
   - Other opportunities along the El Camino Real corridor

8. **Olivenhain Village Center**
   - Potential for mixed use "village," with more rural design character
   - Could provide enhanced services to nearby neighborhoods

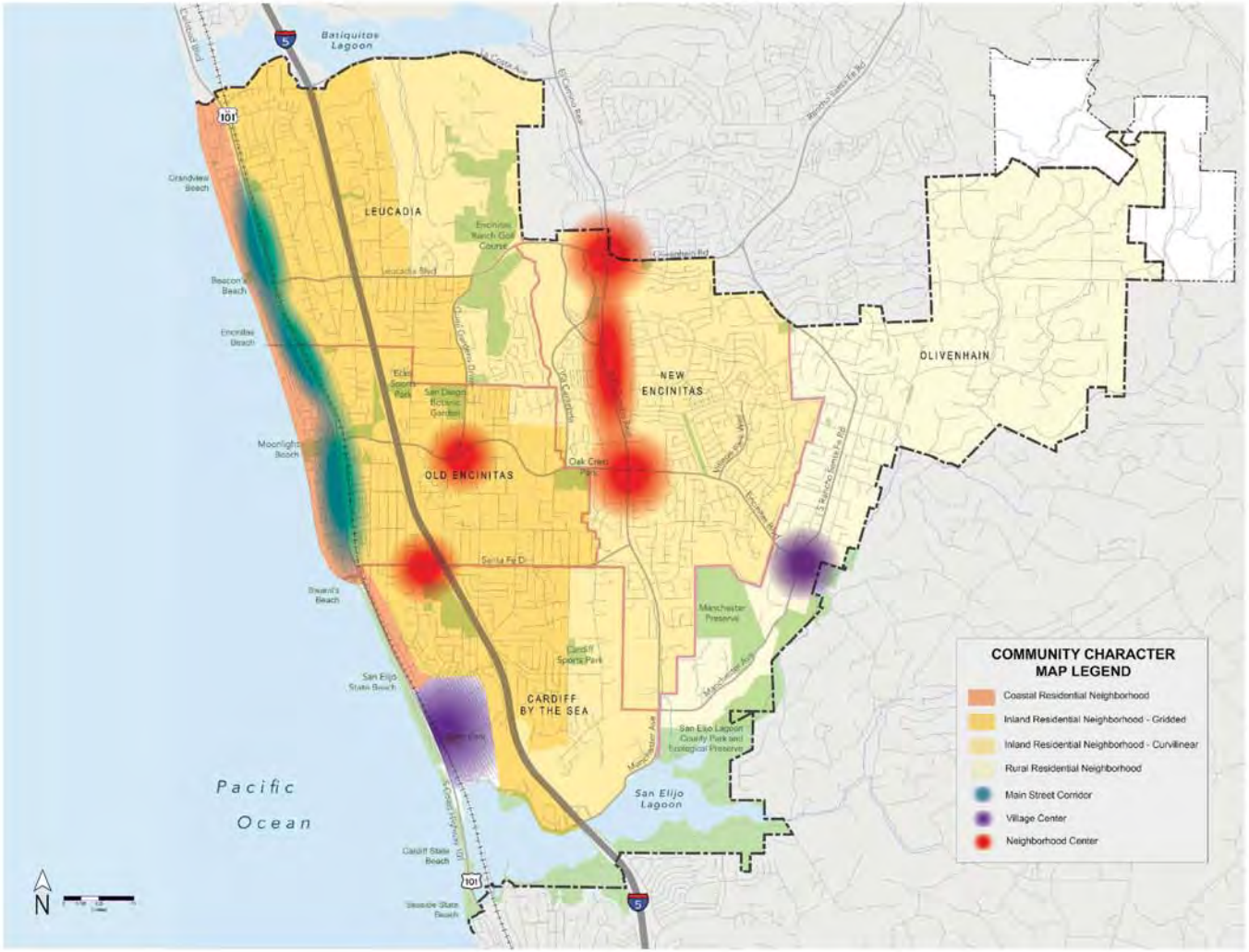
3.2.2.1 Community Character Mapping

In conjunction with the community dialogue sessions, a community character map was composed, which seeks to describe the various types of "community character" that exist in Encinitas (Figure 3-2). Areas are described to recognize differences in their physical characteristics, including street layout, lot size, and building form and scale. Some of these character areas are ones in which the potential exists for introducing multi-family housing. Other character areas may not have much potential for multi-family housing, but any new development along those boundaries should be designed to create a positive transition to them. The boundaries illustrated between community character areas should be taken as general identifiers where changes in character occur; they should not be interpreted as fixed, hard lines. The intent is to describe the general location of areas with shared characteristics. The various community character areas are described in detail in the Environmental Setting section of this Program Environmental Impacts Report (PEIR) (Section 2.4.2).

3.2.2.2 Neighborhood Prototypes

To plan for future growth in a sustainable manner, the City conducted an extensive visioning and mapping exercise with the community with the objective to preserve the character of most existing neighborhoods while channeling growth to targeted areas. Five neighborhood prototypes were developed to help the public better visualize how additional housing could be accommodated within the fabric of the five distinct communities within the City (Figures 3-3a through 3-3e). The five prototypes included:

Map Source: City of Encinitas



This map seeks to describe "community character" that exists in Encinitas. These areas are described to recognize differences in their physical characteristics, including street layout, lot size, and building form and scale.

Some of these character areas are ones in which the potential exists for introducing multifamily housing. Other character areas may not have much potential for multifamily housing, but any new development along those boundaries should be designed to create a positive transition to them.

Note that the boundaries illustrated between community character areas should be taken as general identifiers where changes in character occur; they should not be interpreted as fixed, hard lines. The intent is to describe the general location of areas with shared characteristics.

	COASTAL RESIDENTIAL	INLAND RESIDENTIAL - GRIDDED	INLAND RESIDENTIAL - CURVILINEAR	RURAL RESIDENTIAL	MAIN STREET CORRIDOR	VILLAGE CENTER	NEIGHBORHOOD CENTER
LEUCADIA	•	•	•		•		
OLD ENCINITAS	•	•	•		•		•
CARDIFF	•	•	•			•	•
NEW ENCINITAS			•				•
OLIVENHAIN				•		•	

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FIGURE 3-2
Community Character

Map Source: City of Encinitas



FIGURE 3-3a

Neighborhood Prototypes: Neighborhood Center/ Mixed Use – Large Site

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Map Source: City of Encinitas

OVERVIEW: This scenario incorporates multifamily prototypes of larger scale with single family attached prototypes as the site transitions into the existing single family context. This scenario pays homage to the agricultural heritage of Encinitas by providing community gardens or "steward farms" integrated into the housing development. Community gardens could serve this development as well as the surrounding neighborhoods. Each scenario includes reintroduction of the street grid to improve connectivity and to allow for more walkable blocks. A variety of housing prototypes allow for diversity in unit size and income.

OPTION 1: 2-3 STORY DEVELOPMENT





PROGRAM
230 Dwelling Units
0.75 Acres Gardens

DESCRIPTION
- 3-story apartment buildings define the edge of the site along an arterial street.
- Two and three-story story flats are located along new neighborhood streets that connect into the existing neighborhood.
- Two-story townhomes face an existing residential street with surrounding single family homes.
- Apartments are site-parked in surface lots internal to the blocks while flats and townhomes each include integrated "tuck-under" or enclosed garages.
- Gardens are included along the backs of the apartment buildings and behind the flats, adjacent to the single family context.



Gardens integrated with housing



Two-story townhomes



Garden entrance

OPTION 2: 3 STORY DEVELOPMENT





PROGRAM
255 Dwelling Units
1.5 Acres Gardens

DESCRIPTION
- 3-story apartment buildings define the edge of the site along an arterial street.
- Three-story story flats are located along new neighborhood streets that connect into the existing neighborhood.
- Three-story townhomes face an existing residential street and surround a new community garden.
- Apartments are site-parked or podium-parked while flats and townhomes each include integrated "tuck-under" or enclosed garages.
- Gardens are integrated into the development, creating community gathering spaces that also serve as gardens.



3-story apartments facing gardens



Apartments facing street



Courtyard gardens

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FIGURE 3-3b

Neighborhood Prototypes: Residential Infill – Medium to Large Site

Map Source: City of Encinitas

OVERVIEW: This scenario could occur in an area that already includes a mix of uses, but could benefit from including more housing to help activate the area. The redevelopment of this prototype would incorporate smaller blocks, making the area more pedestrian friendly. It would also complement the surrounding context with similar architectural styles and massing.

OPTION 1: 2-3 STORY DEVELOPMENT





PROGRAM
11,000 SF Commercial
175 Dwelling Units

DESCRIPTION
- 2-story mixed use "liner" buildings frame the main intersection into the "center" and help support the larger existing commercial development behind them.
- 3-story flats along the main street complement the area with new residential types.
- A 3-story apartment cluster with underground parking is located at the edge of the "center."
- 2-story residential prototypes such as flats, townhomes and carriage houses are used as transitions into the existing "center" and surrounding neighborhood.

OPTION 2: 3 STORY DEVELOPMENT





PROGRAM
11,000 SF Commercial
255 Dwelling Units

DESCRIPTION
- 3-story mixed use "liner" buildings frame the main intersection into the "center" and help support the larger existing commercial development behind them.
- 3-story flats along the main street complement the area with new residential types.
- A 3-story apartment cluster with underground parking is located at the edge of the "center."
- 3-story residential prototypes such as flats, townhomes and carriage houses are used as transitions into the existing "center" and surrounding neighborhood.

FIGURE 3-3c
Neighborhood Prototypes: Village Center/ Mixed Use – Medium Site

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Map Source: City of Encinitas

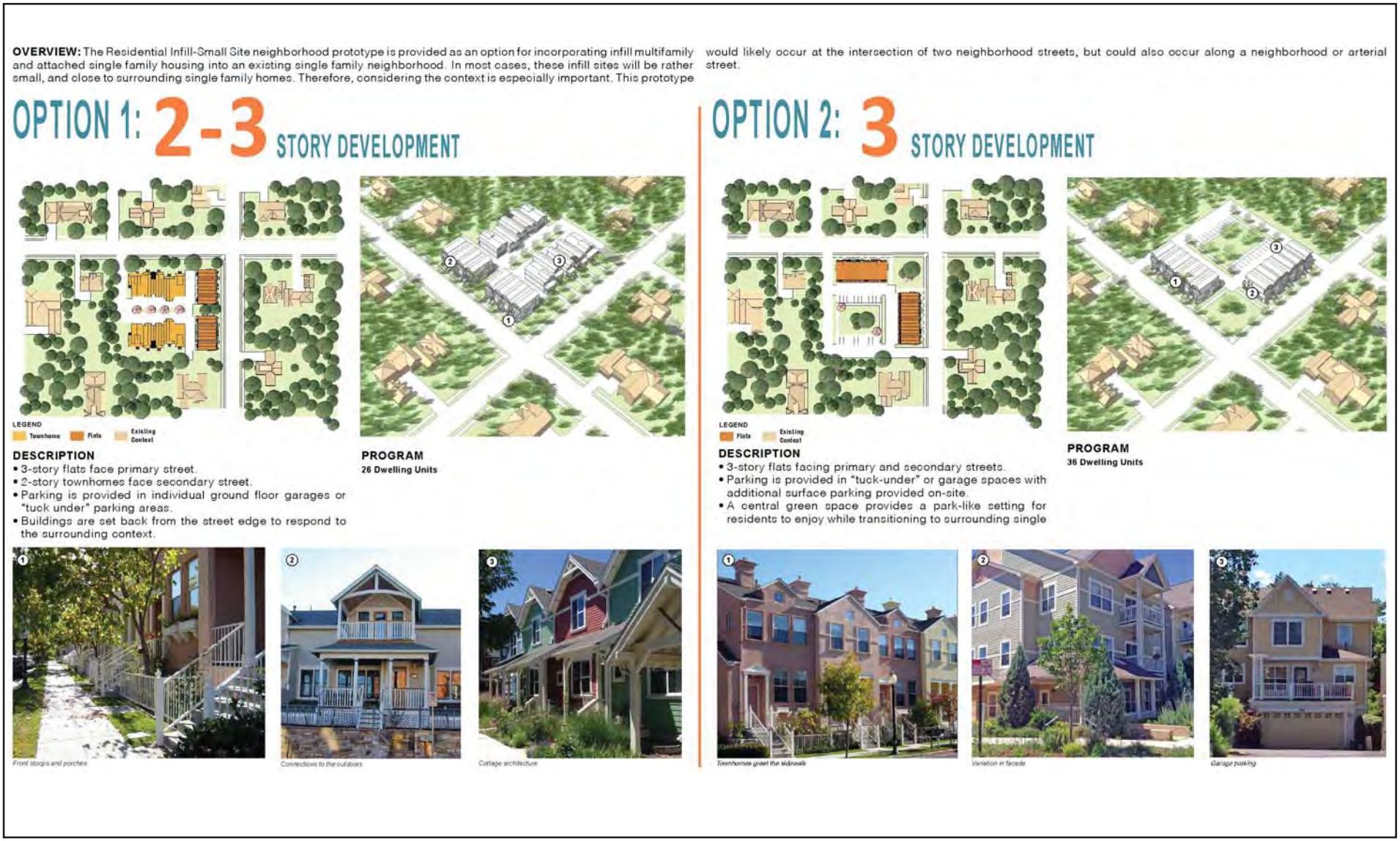


FIGURE 3-3d

Neighborhood Prototypes: Residential Infill – Small Site

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Map Source: City of Encinitas

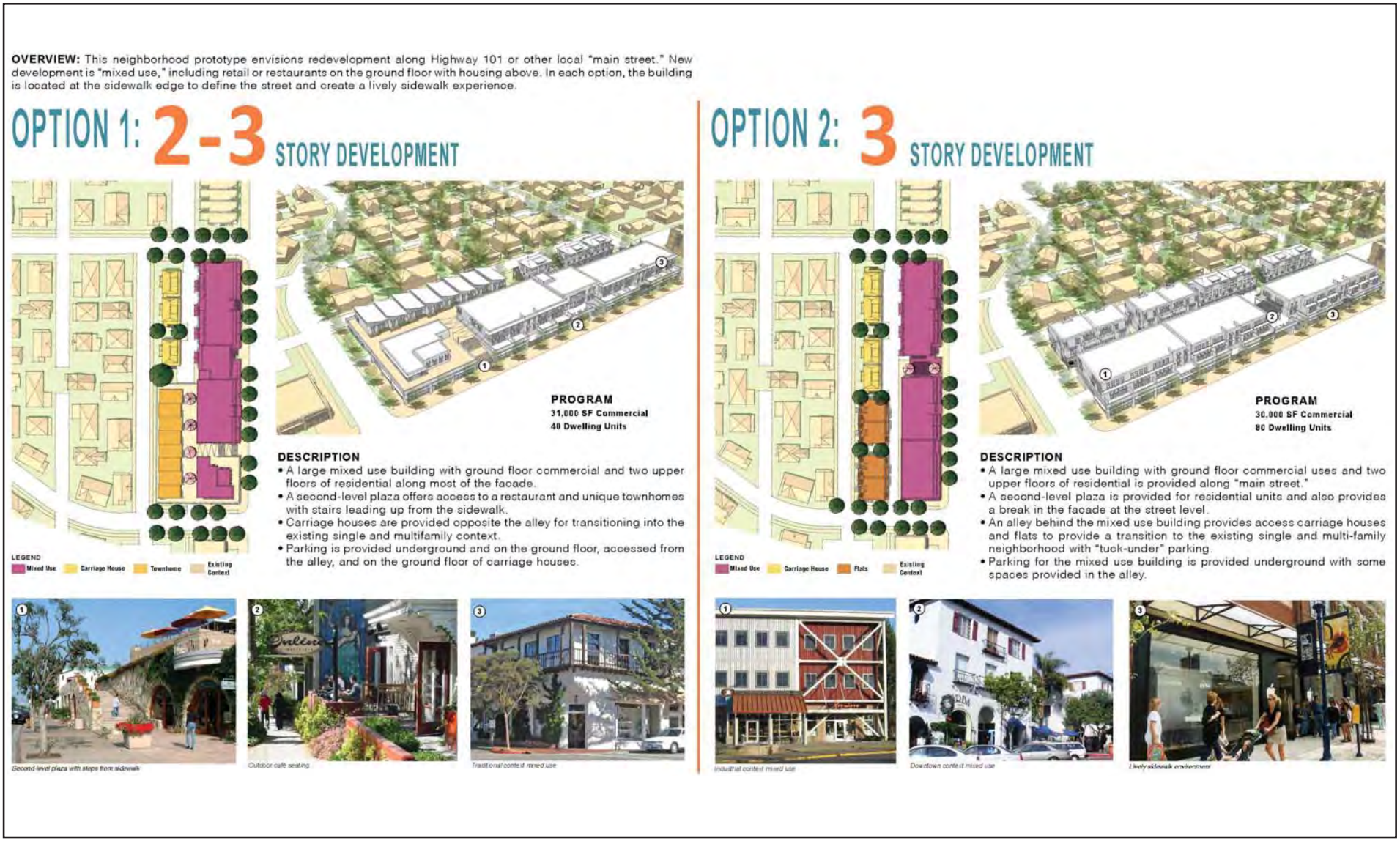


FIGURE 3-3e

Neighborhood Prototypes: Main Street/ Mixed Use – Small Site

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a. Main Street/Mixed Use (small sites[1])

This neighborhood prototype envisions redevelopment along Highway 101 or other local "main street" designations. New development is "mixed use," including retail or restaurants on the ground floor with housing above, or a closely integrated mix of single-use buildings.

In each option, the building is located at the sidewalk edge to define the street and create a lively sidewalk experience. Examples of associated features bulleted listed below:

- A large mixed use building with ground floor commercial and two upper floors of residential along most of the façade.
- A second-level plaza offers access to a restaurant and unique townhomes with stairs leading up from the sidewalk.
- Carriage houses are provided opposite the alley for transitioning into the existing single- and multi-family context.
- Parking is provided underground and on the ground floor, accessed from the alley, and on the ground floor of carriage houses.

b. Neighborhood Center/Mixed Use (large sites[2])

The Neighborhood Center prototype envisions an older strip shopping center redeveloping into smaller blocks, which creates a more walkable, human scale and provides more parking on the street. A new, central street running east-west to the arterial, is designed as a "main street," with buildings located at the sidewalk edge. Ground floor uses along "main street" would include neighborhood serving commercial retail and restaurant space. In each scenario, this street leads to a park, which serves this new development as well as the abutting neighborhood. Sites generally would include features similar to these:

- Vertical and horizontal mix of uses.
- One- and two-story commercial buildings located on arterials, with new "main street" including two-story stacked uses.
- Parking is mainly provided via internal surface parking lots, except for a couple apartment blocks adjacent to the mixed use "main street" and park which incorporate underground parking.

---

[1] "Small sites" is a qualitative reference to scale of the site area relative to the surrounding context. Lot features, building form, and placement is typically characterized by a smaller built environment and parcelization that is similar.

[2] "Large sites" is a qualitative reference to scale of the site area relative to the surrounding context. Lot features, building form, and placement is typically characterized by a larger built environment and parcelization that is similar.

- Two-story townhomes and twin homes provide a transition to existing single family neighborhoods.

c. Village Center Mixed Use (medium sites[3])

This prototype could occur in an area that already includes a mix of uses, but could benefit from including more housing to help activate the area. The redevelopment of this prototype would incorporate smaller blocks, making the area more pedestrian friendly. It would also complement the surrounding context with similar architectural styles and massing. Sites generally would include features similar to these:

- Two-story mixed use "liner" buildings frame the main intersection into the "center" and help support the larger existing commercial development behind them.

- Three-story flats along the main street complement the area with new residential types.

- A three-story apartment cluster with underground parking is located at the edge of the "center."

- Two-story residential housing types such as flats, townhomes and carriage houses are used as transitions into the existing "center" and surrounding neighborhood.

d. Residential Infill (medium to large sites)

This prototype incorporates multi-family of larger scale with single-family attached as the site transitions into the existing single-family context. This prototype pays homage to the agricultural heritage of Encinitas by providing community gardens or "steward farms" integrated into the housing development. Community gardens could serve this development as well as the surrounding neighborhoods. Each prototype includes reintroduction of the street grid to improve connectivity and to allow for more walkable blocks. A variety of housing prototypes allow for diversity in unit size and income. Sites generally would include features similar to these:

- Three-story apartment buildings define the edge of the site along an arterial street.

- Two- and three-story story flats are located along new neighborhood streets that connect into the existing neighborhood.

- Two-story townhomes face an existing residential street with surrounding single-family homes.

---

[3] "Medium sites" is a qualitative reference to scale of the site area relative to the surrounding context. Lot features, building form, and placement is typically characterized by a medium/large built environment and parcelization that is similar.

- Apartments are site-parked in surface lots internal to the blocks while flats and townhomes each include integrated "tuck-under" or enclosed garages.

- Gardens are included along the backs of the apartment buildings and behind the flats, adjacent to the single family context.

e. Residential Infill (small site)

The Residential Infill-Small Site neighborhood prototype is provided as an option for incorporating infill multi-family and attached single-family housing into an existing single-family neighborhood. In most cases, these infill sites will be rather small, and close to surrounding single-family homes. Therefore, considering the context is especially important. This prototype would likely occur at the intersection of two neighborhood streets, but could also occur along a neighborhood or arterial street. Sites generally would include features similar to these:

- Three-story flats face primary street.

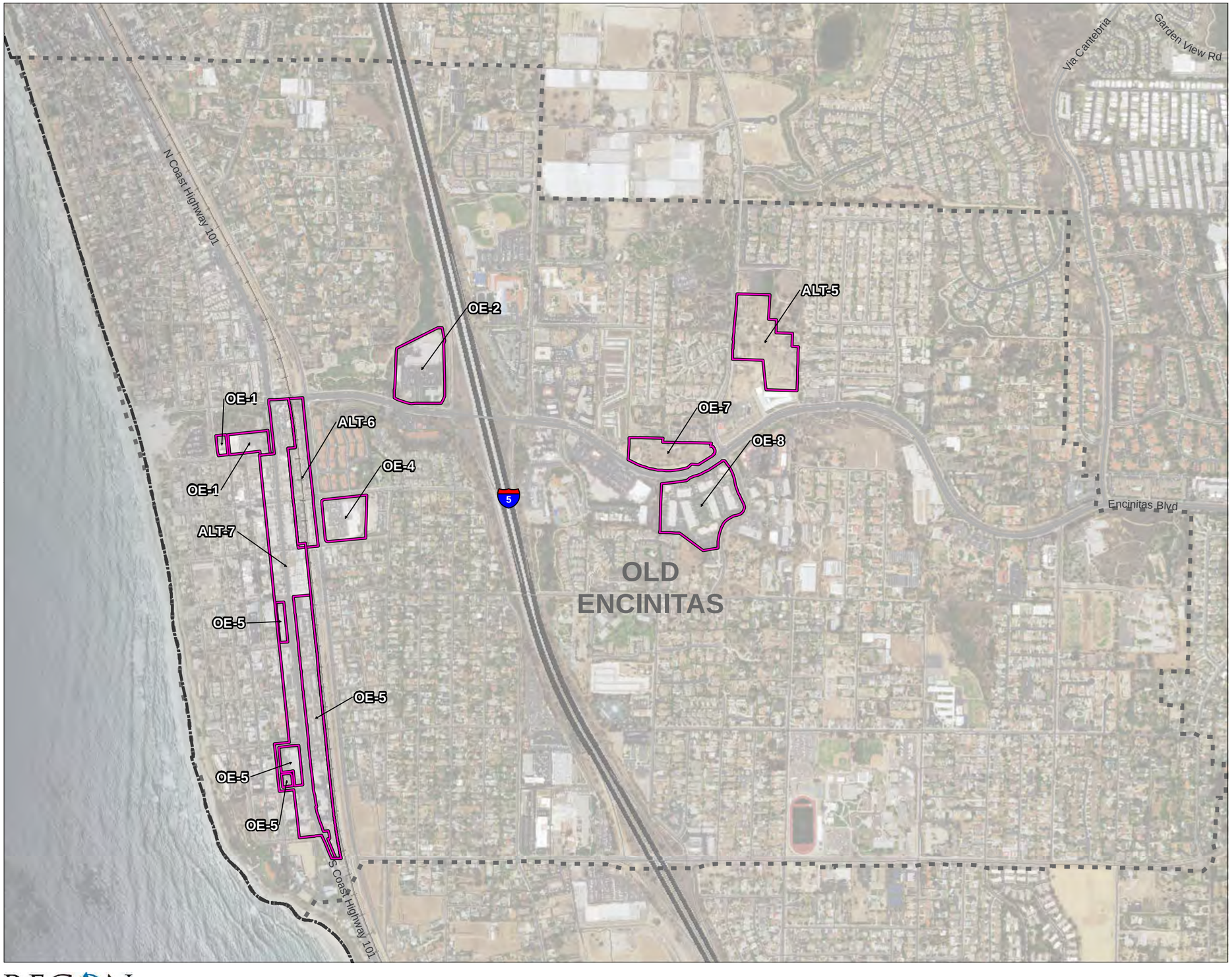
- Two-story townhomes face secondary street.

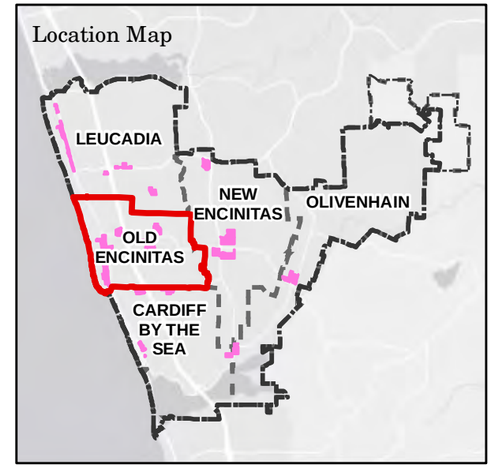
- Parking is provided in individual ground floor garages or "tuck under" parking areas.

- Buildings are set back from the street edge to respond to the surrounding context.

3.2.2.3 Site Selection

Using the siting principles and neighborhood prototypes described above, the City Council with contribution from the Planning Commission and with consideration of public input identified a total of 32 viable housing opportunity sites from the inventory that in various combinations could be used to satisfy the City's housing deficit (Refer to Appendix B – Housing Site Summaries). A 33rd viable site was added in response to input from the community (refer to the Community-based Housing Map Group (CBHMG), below; refer to Appendix C, Project History). These viable housing opportunity sites (hereafter "housing sites") are dispersed throughout the five communities of the City as described below (refer to Figure 3-4a through 3-4e: Housing Sites). A detailed description of each community is discussed in Chapter 2.0 (Environmental Setting).





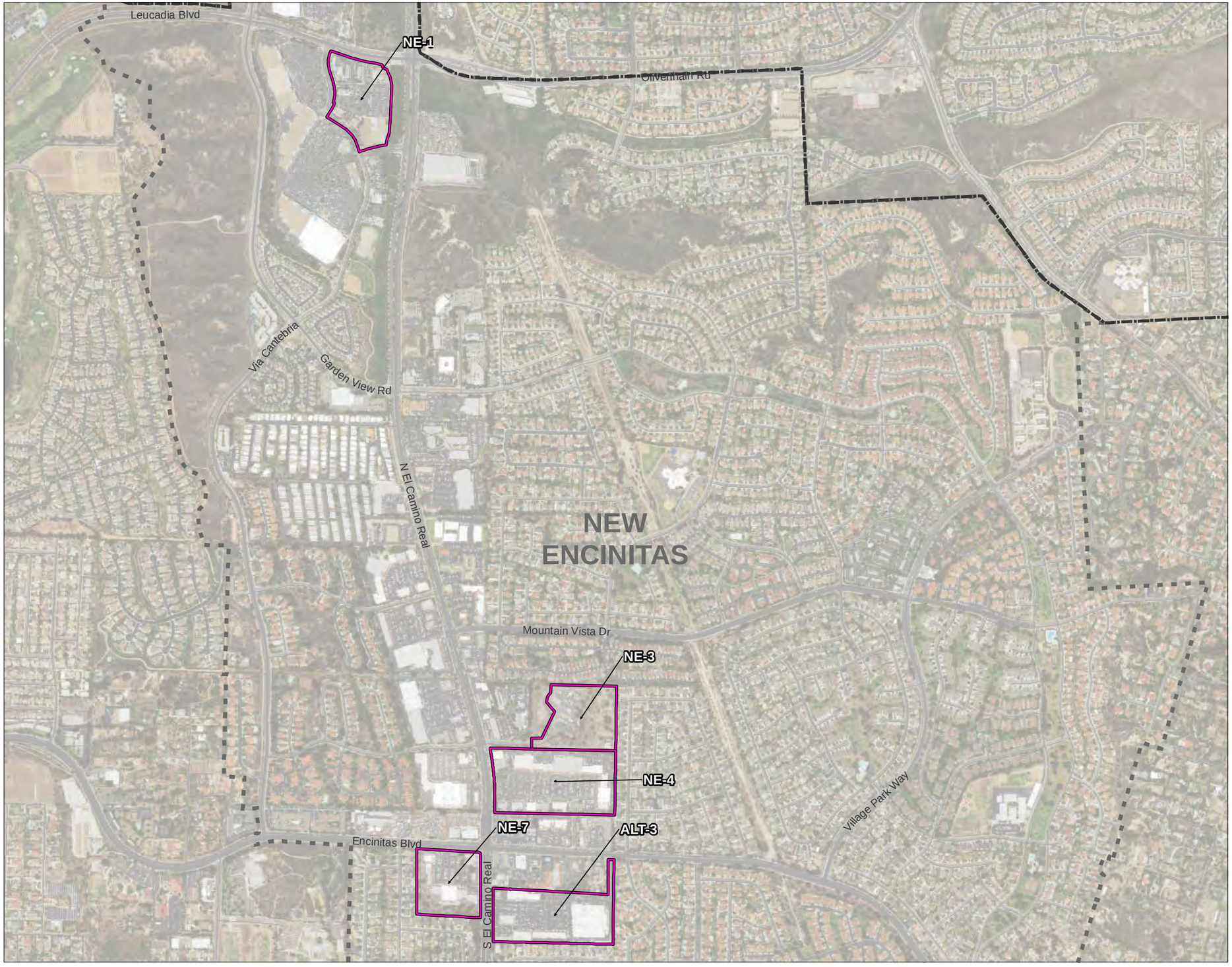
City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

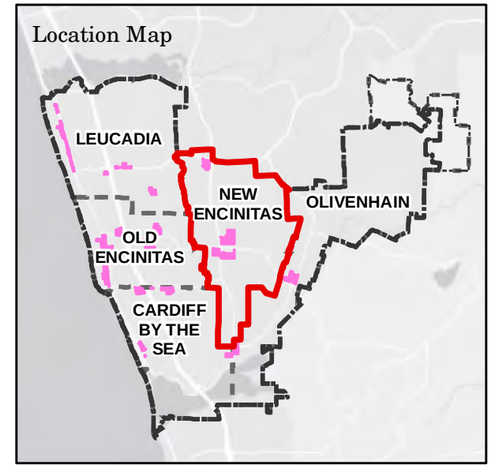
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FIGURE 3-4a
Housing Sites – Old Encinitas





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

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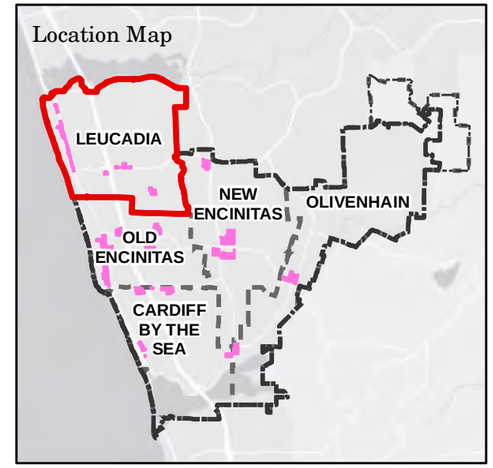
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FIGURE 3-4b

Housing Sites – New Encinitas





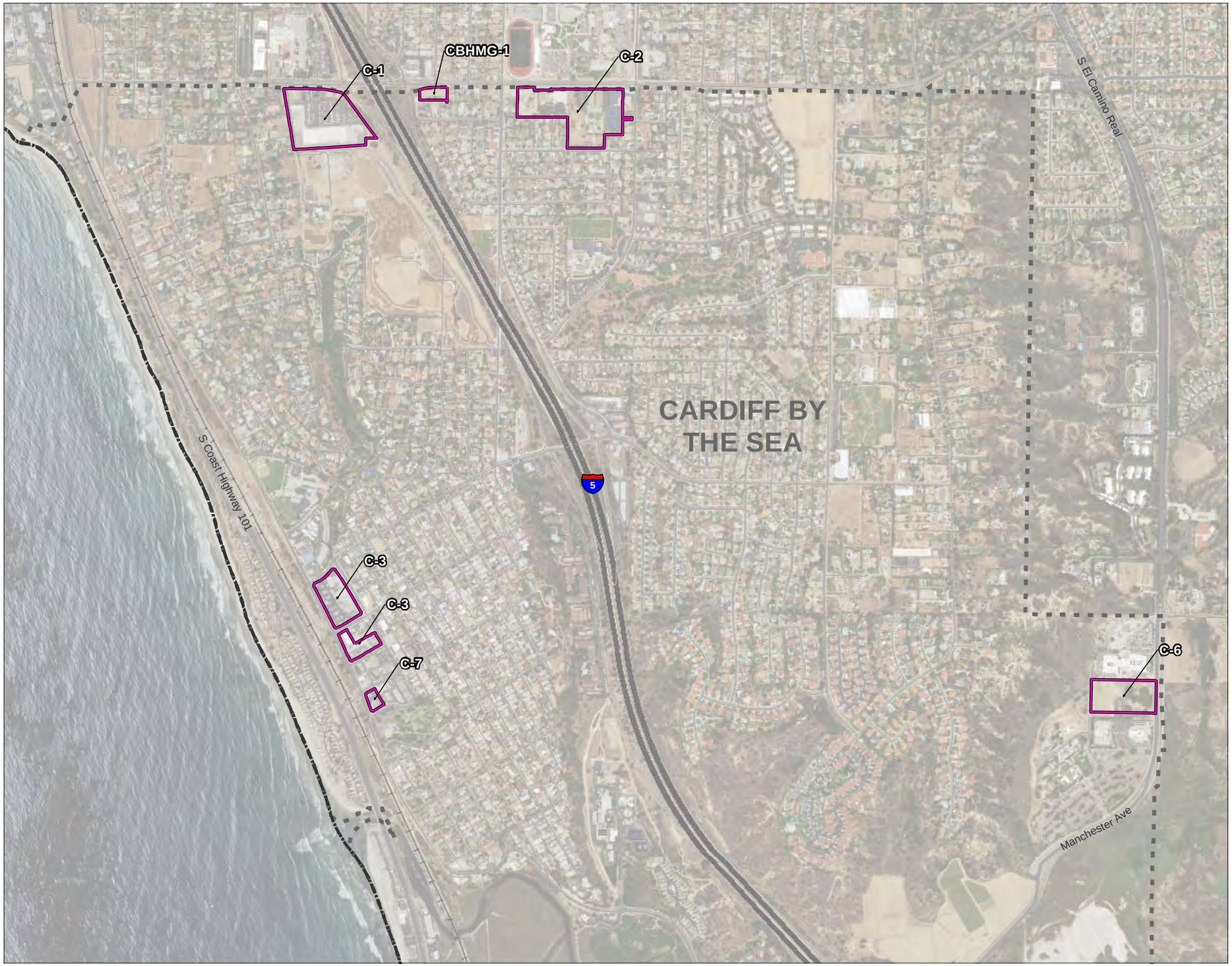
City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

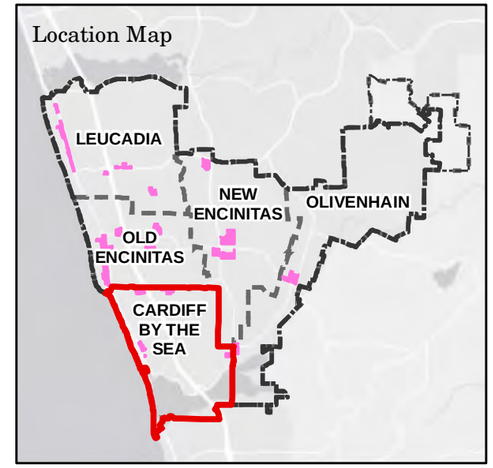
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FIGURE 3-4c
Housing Sites – Leucadia





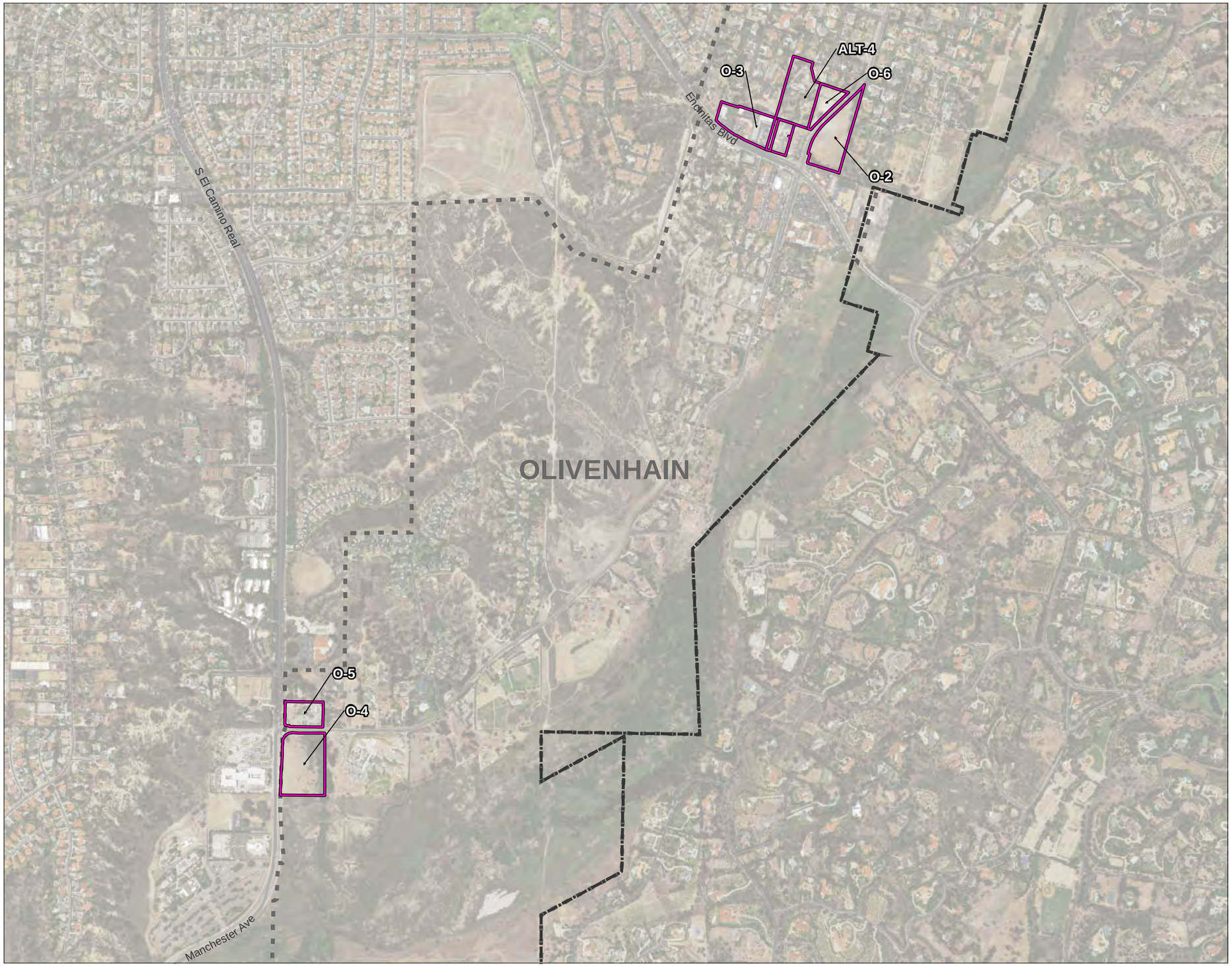
City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

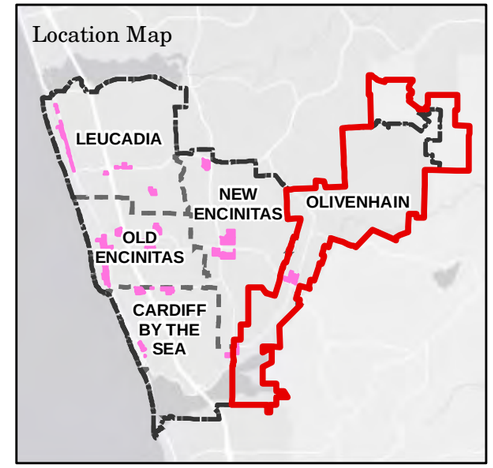
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FIGURE 3-4d
Housing Sites – Cardiff





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

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RECON

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FIGURE 3-4e

Housing Sites – Olivenhain

a. Cardiff (6 sites)

Housing Sites – Cardiff	
Site	Description
C-1	Cardiff Site 1 is located at 411–481 Santa Fe Drive and contains 7 parcels with 9.3 gross acres (9.2 net).The site is zoned as General Commercial (GC). The site consists of a neighborhood commercial center with a grocery store, convenience store, gym, restaurants, etc. Planning principles/selection criteria for this site include the following: • More than ¼ mile to the nearest public school • On the same site as commercial goods and services • Adjacent to Encinitas Community Park • Adjacent to transit (bus service route 304 to San Marcos)
C-2	Cardiff Site 2 is located at 735–875 Santa Fe Drive and contains 8 parcels with 10.1 gross acres. The site is zoned as Residential-8 (R-8), which allows up to 8 units per acre. The site consists of a church, tennis club, vacant lot and one, single-family residence. Planning principles/selection criteria for this site include the following: • Adjacent to the nearest public school • Two blocks away from commercial goods and services • About ¼ mile to the Encinitas Community Park • Adjacent to transit (bus service route 304 to San Marcos)
C-3	Cardiff Site 3 is located at 102–154 Aberdeen Drive and 2011–2121 San Elijo Avenue and contains 5 parcels with 4.8 gross acres. The site is zoned as General Commercial (GC). The site, also known as Cardiff Town Center, consists of a neighborhood village center with retail, restaurants and shopping. Planning principles/selection criteria for this site include the following: • More than ¼ mile to the nearest public school • On the same site as commercial goods and services • Three blocks to the nearest park (Glen Park) • Three blocks away from transit (bus service route 101 to Oceanside)
C-6	Cardiff Site 6 is located at 3305 Manchester Avenue and contains 2 parcels with 4.6 gross acres. The site is zoned as Rural Residential-1 (RR-1), allowing one unit per acre. The site consists of one vacant parcel and another partially improved parcel with a church facility; however, the study area only includes the portion of the site that does not have any improvements. Planning principles/selection criteria for this site include the following: • Over 1¾ miles to the nearest public school • Over 1½ miles to commercial goods and services • Adjacent to the San Elijo Lagoon Ecological Reserve and supporting trail system • Over 1½ miles to nearest transit
C-7	Cardiff Site 7 is located at 2211 San Elijo Avenue and contains 1 parcel with 0.54 gross acre. The site is zoned as General Commercial (GC). The site consists of a gas station. Planning principles/selection criteria for this site include the following: • About ¼ mile to the nearest public school • Adjacent to commercial goods and services • Adjacent to the nearest park (Glen Park) • Two blocks to transit (bus service route 101 to Oceanside)
CBHMG-1[4]	Community-based Housing Map Group (CBHMG) Site 1 is located at 601 Santa Fe Drive and contains 1 main parcel with 0.77 net acre. The site is zoned as Public/Semi-public (P/SP), which allows a wide range of community service related uses as well as medical complexes. Planning principles/selection criteria for this site include the following: • About one block to the nearest public school • Adjacent to commercial goods and services • Less than ¼ mile to nearest park • Adjacent to transit (bus service route 304 to San Marcos)

[4] This site was added in response to a presentation of the CBHMG on March 11, 2015.

b. Leucadia (7 Sites)

Housing Sites – Leucadia	
Site	Description
Alt-2	Leucadia - Alternative Site 2 is located at 510–1900 North Coast Highway 101 and contains various parcels with 53.6 gross acres. The site is zoned as Mixed Use (NCRM-1 and NCM-1), which allows a wide range of commercial retailing, office and service activities, and residential uses (25 dwelling units per acre). The site consists of main street special retail. Planning principles/selection criteria for this site include the following: • Ranges from over ¾ mile to three blocks to the nearest public school • On the same site as commercial goods and services • Three blocks to the beach and some areas adjacent to Leucadia Roadside Park • Adjacent to transit (bus service route 101 to Oceanside
L-1	Leucadia Site 1 is located at 1444–1578 North Coast Highway 101 and contains 9 parcels with 5.19 gross acres. The site is zoned as Mixed Use (NCRM-1), which allows a wide range of commercial retailing, office and service activities and residential uses (up to 25 dwelling units per acre). The site consists of specialty retail, motel, vacant land, and six, single-family homes. Planning principles/selection criteria for this site include the following: • About 1¼ miles to the nearest public school • On the same site as commercial goods and services • Three blocks to the beach and about a ½ mile to Leucadia Roadside Park. Leucadia Oaks Park is technically one block away, but has no direct legal access • Adjacent to transit (bus service route 101 to Oceanside)
L-2	Leucadia Site 2 is located at 1034–1160 North Coast Highway 101 and contains 6 parcels with 2.1 gross acres. The site is zoned as Mixed Use (NCRM-1), which allows a wide range of commercial retailing, office and service activities and residential uses (up to 25 dwelling units per acre). The site consists of main street specialty retail. Planning principles/selection criteria for this site include the following: • Just over ¾ mile to the nearest public school • On the same site as commercial goods and services • Three blocks to the beach and three blocks to Leucadia Roadside Park • Adjacent to transit (bus service route 101 to Oceanside)
L-4	Leucadia Site 4 is located at 825–837 Orpheus Avenue and contains 4 parcels with 1.8 gross acres (1.7 net). The site is zoned as Residential-3 (R-3), which allows three units per acre. The site is vacant. Planning principles/selection criteria for this site include the following: • More than ¼ mile to the nearest public school • One block to commercial goods and services • Just over ¼ mile to Orpheus Park • More than ½ mile to transit (bus service route 304 to San Marcos)
L-5	Leucadia Site 5 is located at 912–938 Leucadia Boulevard and contains 4 parcels with 1.5 gross acres. The site is zoned as Residential-3 (R-3). The site consists of one, single-family residence and greenhouses. Planning principles/selection criteria for this site include the following: • More than ¾ mile to the nearest public school • About three blocks to commercial goods and service; • Just under 1 mile to the nearest park (YMCA and Paul Ecke Sports Park • About ¼ mile to transit (bus service route 309 to Oceanside)
L-6	Leucadia Site 6 is located at 917 Urania Avenue and 750–842 Leucadia Boulevard and contains 9 parcels with 5.2 gross acres. The site is zoned as Residential-3 (R-3). The site consists of four, single family homes and greenhouses. Planning principles/selection criteria for this site include the following: • Just over ¾ mile to the nearest public school • Under ½ mile to commercial goods and services • Just over ¾ mile to the nearest park (YMCA and Paul Ecke Sports Park • Under a ¼ to transit (bus service route 309 to Oceanside)

Housing Sites – Leucadia	
Site	Description
L-7	Leucadia Site 7 is located near 519 Quail Gardens Drive and contains 1 parcel with 7.6 gross acres (7.5 net). The site is zoned as Rural Residential-1 (RR-1). The site is vacant. Planning principles/selection criteria for this site include the following: • Two blocks to the nearest public school • Over ¾ mile to commercial goods and services • Over ¼ mile to the nearest park (Botanic Gardens) • Over ¾ mile to transit (bus service route 309 to Oceanside)

c. New Encinitas (5 Sites)

Housing Sites – New Encinitas	
Site	Description
Alt-3	New Encinitas – Alternative Site 3 is located at 141–215 South Camino Real and contains 3 parcels with 14.6 gross acres (14.4 net). The site is zoned as General Commercial (GC), which allows a wide range of retailing, shopping and service activities. The site consists of varied commercial services and activities. Planning principles/selection criteria for this site include the following: • About ¾ mile to the nearest public school • On the same sites as commercial goods and services • More than ¼ mile to Oakcrest Park • Adjacent to transit (bus service route 309 to Oceanside and 304 to San Marcos)
NE-1	New Encinitas Site 1 is located at 1060–1092 North El Camino Real and contains 9 parcels with 9.8 gross acres (8.5 net when adjusted for and not counting the theater pad). The site is zoned as General Commercial (GC-Encinitas Ranch) which allows a wide range of retailing and service activities as well as restaurants. The site consists of the Encinitas Ranch Town Center and includes restaurants, fast food drive-thru, gas station, etc. Planning principles/selection criteria for this site include the following: • Less than 1¼ miles to the nearest public school • On the same site as commercial goods and services • About two blocks to Leo Mullen Sports Park • Adjacent to transit (bus service route 304 to San Marcos and 309 to Oceanside)
NE-3	New Encinitas Site 3 is located at 137 North El Camino Real and contains 1 parcel with 10.14 gross acres (10 net). The site is zoned as Public/Semi-Public, which allows a wide range of community service related uses, as well as medical complexes. Part of the site is used for overflow dealership parking and a recycling center, and the remaining portion is vacant. Planning principles/selection criteria for this site include the following: • Over ¾ mile to the nearest public school • Adjacent to commercial goods and services • About ½ mile to Oakcrest Park • One block away from transit (bus service route 304 to San Marcos and 309 to Oceanside)
NE-4	New Encinitas Site 4 is located at 105–131 North El Camino Real and contains 1 parcel with 17.6 gross acres. The site is zoned as General Commercial (GC). The site is a neighborhood commercial center and consists of banks, grocery stores, offices, convenience stores and restaurants. Planning principles/selection criteria for this site include the following: • About ¾ mile to the nearest public school • On the same site as commercial goods and services • Less than ½ mile to Oakcrest Park • Adjacent to transit (bus service route 304 to San Marcos and 309 to Oceanside)
NE-7	New Encinitas Site 7 is located at 1271–1355 Encinitas Boulevard and contains 6 parcels with 9.4 gross acres (9.2 net). The site is zoned as General Commercial (GC). The site consists of restaurants, fast food drive-thru, offices, grocery store, gas station, etc. Planning principles/selection criteria for this site include the following: • Less than ¾ mile to the nearest public school • On the same site as commercial goods and services • Less than ¼ mile to Oakcrest Park • Adjacent to transit (bus service route 309 to Oceanside and route 304 to San Marcos)

d. Old Encinitas (9 sites)

Housing Sites – Old Encinitas	
Site	Description
Alt-5	Old Encinitas – Alternative Site 5 is located at 185–225 Quail Gardens Drive and contains 8 parcels with 11.6 gross acres (11.3 net). The site is zoned as Residential-3 (R-3) and Residential-5 (R-5), which allows three to five units per acre. The site is predominately vacant with two homes. Planning principles/selection criteria for this site include the following: • Less than ½ mile to the nearest public school • One block to commercial goods and services • About a block to the nearest park (Botanic Gardens) and some ½ mile to YMCA and Paul Ecke Sports Parks • Adjacent to limited transit (bus service route 309 to Oceanside)
Alt-6	Old Encinitas – Alternative Site 6 is located adjacent to 315–587 South Coast Highway 101 and contains 2 parcels with 6.03 gross acres (3.1 net). The site is zoned as Transportation Corridor (TC), which allows transportation related facilities and improvements. The site consists of surface parking to support the Downtown Encinitas Transit Center for rail and bus. Planning principles/selection criteria for this site include the following: • Just over ¾ mile to the nearest public school • Adjacent to commercial goods and services • One block to the nearest park (Viewpoint Park) and less than ¼ mile from Moonlight Beach • Adjacent to transit (bus transfer facility and rail station)
Alt-7	Old Encinitas – Alternative Site 7 is located at 315–1205 South Coast Highway 101 and contains various parcels with 35.6 gross acres (including Alt-5). The site is zoned as General Commercial Mixed Use (D-CM1), which allows a wide range of retail and service activities, as well as residential uses (no density or dwelling units per acre minimum). The site, also known as Main Street, consists of convenience stores, restaurants, specialty retailers, etc. Planning principles/selection criteria for this site include the following: • About 1 mile to the nearest public school • On the same site as commercial goods and services • About four blocks to Moonlight Beach and four blocks to Viewpoint Park • Adjacent to transit (bus transfer facility and rail service)
OE-1	New Encinitas Site 4 is located at 105–131 North El Camino Real and contains 1 parcel with 17.6 gross acres. The site is zoned as General Commercial (GC). The site is a neighborhood commercial center and consists of banks, grocery stores, offices, convenience stores and restaurants. Planning principles/selection criteria for this site include the following: • About ¾ mile to the nearest public school • On the same site as commercial goods and services • Less than ½ mile to Oakcrest Park • Adjacent to transit (bus service route 304 to San Marcos and 309 to Oceanside)
OE-2	Old Encinitas Site 2 is located at 102–154 Encinitas Boulevard and contains 2 parcels with 7.3 gross acres (7.25 net). The site is zoned as General Commercial (GC). The site consists of a gas station, service retailers, restaurants and other commercial uses. Planning principles/selection criteria for this site include the following: • Just over ¾ mile to the nearest public school • On the same site as commercial goods and services • Adjacent to Cottonwood Creek and about a ¼ mile from the YMCA and Paul Ecke Sports Park • Adjacent to transit (bus service route 309 to Oceanside and 304 to San Marcos)
OE-4	Old Encinitas Site 4 is located at 505 South Vulcan Avenue and contains 1 parcel with 4.38 gross acres (4 net). The site is zoned as Civic Center, which allows activities performed by public agencies. The site, also known as the Encinitas Civic Center, consists of City Hall. Planning principles/selection criteria for this site include the following: • Just over ¾ mile to the nearest public school • Adjacent to commercial goods and services • Adjacent to Viewpoint Park and about a 1/4 mile from Moonlight Beach • Adjacent to transit (bus transfer facility and rail station)

Housing Sites – Old Encinitas	
Site	Description
OE-5	Old Encinitas Site 5 is located at 701–1205 South Coast Highway 101 and contains 26 parcels with 11.15 gross acres. The site is zoned as General Commercial Mixed Use (D-CM1), which allows a wide range of retail and service activities, as well as residential uses (no density or dwelling units per acre maximum). The site, also known as Main Street, consists of a convenience stores, restaurants, specialty retailers, etc. Planning principles/selection criteria for this site include the following: • About 1 mile to the nearest public school • On the same site as commercial goods and services • About four blocks to Moonlight Beach and four blocks to Viewpoint Park • Adjacent to transit (bus transfer facility and rail service)
OE-7	Old Encinitas Site 7 is located at 696 Encinitas Boulevard and contains 4 parcels with 4.88 gross acres (4.5 net). The site is zoned as Office Professional (OP), which allows a wide range of office based activities. The site consists of one, single-family residence and level pad where a former coffee kiosk operated. Planning principles/selection criteria for this site include the following: • Less than ½ mile to the nearest public school • Adjacent to commercial goods and services • Less than ½ mile from the YMCA and Paul Ecke Sports Park • Adjacent to transit (bus service route 309 to Oceanside)
OE-8	Old Encinitas Site 8 is located at 515–539 Encinitas Boulevard and contains 7 main parcels with 12.1 gross acres (11.5 net). The site is zoned as Business Park (BP), which allows a wide range of office uses, wholesaling, manufacturing and business service activities. The site, also known as the North Coast Business Park, consists of offices, businesses and school/instructional uses. Planning principles/selection criteria for this site include the following: • Less than ½ mile to the nearest public school • Adjacent to commercial goods and services • About ¼ mile from the YMCA and Paul Ecke Sports Park • Adjacent to transit (bus service route 309 to Oceanside)

e. Olivenhain (6 Sites)

Housing Sites – Olivenhain	
Site	Description
Alt-4	Olivenhain – Alternative Site 4 is located at 2220–2230 Encinitas Boulevard and contains 4 parcels with 6.49 gross acres (6.3 net; including Viable Housing Site O-4). The site is zoned as Rural Residential-2 (RR-2) allowing two units per acre. The site is predominately vacant with three homes. Planning principles/selection criteria for this site include the following: • More than ¾ mile to the nearest public school • One block to commercial goods and services • Just over ¾ mile to Wiro Park • Adjacent to limited transit (bus service route 304 to San Marcos)
O-2	Olivenhain Site 2 is located near 101 Rancho Santa Fe Road and contains 1 parcel with 4.8 gross acres (4.7 net). The site is zoned as Rural Residential-2 (RR-2). The site is vacant. Planning principles/selection criteria for this site include the following: • Over ¾ mile to the nearest public school • Adjacent to commercial goods and services • Over ¾ mile to nearest park (Wiro Park) • Adjacent to limited transit (bus service route 304. to San Marcos)

Housing Sites – Olivenhain	
Site	Description
O-3	Olivenhain Site 3 is located at 2122–2236 Encinitas Boulevard and contains 6 parcels with 4.9 gross acres (4.8 net). The site is zoned as Limited Commercial (LC) on five lots and Office Professional (OP) on one lot, which allows a wide range of limited commercial uses and activities, as well as office and business related uses. The site consists of a preschool, offices and retailers. Planning principles/selection criteria for this site include the following: • About ¾ mile to the nearest public school • On the same site as commercial goods and services • Over ¾ mile to nearest park (Wiro Park) • Adjacent to limited transit (bus service route 304 to San Marcos)
O-4	Olivenhain Site 4 is located near 3636 Manchester Avenue and contains 1 parcel with 4 gross acres. The site is zoned as Rural Residential (RR), allowing 0.125 to 0.5 units per acre depending on slopes or presence of a flood plain. The site is vacant with a creek stream along the east side of the property. Planning principles/selection criteria for this site include the following: • Over 1¾ miles to the nearest public school • Over 1½ miles to commercial goods and services • Adjacent to the San Elijo Lagoon Ecological Reserve and supporting trail system • Over ½ mile to nearest transit
O-5	Olivenhain Site 5 is located at 3615 Manchester Avenue and contains one parcel with 2.2 gross acres (2.1 net). The site is relatively flat. The parcel is zoned Rural Residential-3 (RR-3) allowing up to three units per acre. The study area consists of one single-family residence and is located on a prime arterial roadway. It also fronts a local collector, two-lane roadway. The existing residence was constructed in 1905 with substantial improvements made since. Planning principles/selection criteria for this site include the following: • Over 1¾ miles to the nearest public school; • Over 1½ miles to commercial goods and services; • Two blocks to the San Elijo Lagoon Ecological Reserve and supporting trail system • About 1½ miles to nearest transit
O-6	Olivenhain Site 6 is located near 2240 Encinitas Boulevard and contains 1 parcel with 1.7 gross acres (1.5 net). The site is zoned as Rural Residential-2 (RR-2). The site is vacant. Planning principles/selection criteria for this site include the following: • Over ¾ mile to the nearest public school • Adjacent to commercial goods and services • Over ¾ mile to nearest park (Wiro Park) • Adjacent to limited transit (bus service route 304 to San Marcos)

3.2.2.4 Housing Strategy Maps

Using the housing sites identified above, as part of the process to collect input on where to put future housing, the City compiled three preliminary "ready-made" housing strategy maps that would adequately accommodate the City's housing deficit with some margin of buffer: "mixed use places," "major corridors," and "highly concentrated." These preliminary "ready-made" strategies were developed to offer different pre-made solutions for providing a range of housing choices on different combinations of viable housing sites. With a different focus and mix of sites, each strategy finds a different way to accommodate a community's future housing needs.

The "mixed use places" strategy included the benefits of mixing housing with retail and employment land uses. It introduced new mixed use allowances into existing mixed use places or existing commercial areas and allowed new housing development within other places where it would be most compatible with existing community character. The "major corridors" strategy focused housing primarily in medium to large underutilized sites along

major transportation corridors. These sites would be built as a mix of two- and three-stories. Some sites would include a mix of housing and commercial uses. The "highly concentrated" strategy accommodated necessary housing in the simplest manner to comply with State law in a manner that seeks to rezone the least amount of land by allowing greater vertical intensity. Housing projects under this strategy would primarily be three-story condo flats and apartments. These various strategies were presented to the public through numerous community dialogue sessions and via the City's e-Town Hall website (online forum). (The three original strategies, presented during the community dialogue sessions and e-Town Hall website, are detailed in Appendix D.)

Build Your Own (BYO) strategies also were available to participants on the City's e-Town Hall, an online civic engagement tool. This approach allowed a participant to individually select a viable housing site and assign housing types to it, resulting in a specific amount of future housing capacity. The participant would continue doing this until they met the targeted number of housing units for that community.

Through intensive outreach efforts clear themes emerged to guide preparation of the Housing Element Update (HEU), along with insights into other issues and aspirations beyond housing to further strengthen the quality of life in Encinitas. When looking at the results, three distinct preferred land use and design character Housing Strategy Maps emerged. The various land use mapping strategies were presented and considered by City Council in February 2015. In response to public input, City Council selected three alternative land use maps (housing strategies) to be analyzed in this PEIR. Two of these reflect the results of the online participation process (with slight modifications by the City Council) and a third includes new sites that were suggested during the public participation process and removes certain highly objectionable sites based on public input received. Each map identifies potential locations of housing in different development types and contexts.

- Housing Strategy 1 - "Ready Made" (RM)

  The "Mixed Use Places" housing strategy was the overwhelming preference of the three "Ready Made" strategies presented during the public engagement process. It identifies future housing sites focused along the 101 Highway corridor and at key activity centers on Encinitas Boulevard. This housing strategy mixes new housing with retail and employment land uses, creating vibrant communities that are pedestrian and bicycle friendly. Housing strategy 1 – Ready Made (RM) is illustrated on Figure 3-5a.

- Housing Strategy 2 - "Build Your Own" (BYO)

  The "Build Your Own" housing strategy compiles input received from all participants that opted to "build their own" strategy (instead of selecting one of the three "Ready Made" strategies). Participants who "built their own" housing strategy identified two- and three-story mixed use housing on larger sites located along Encinitas Boulevard near Quail Gardens, off El Camino Real, along Coast Highway 101 in Leucadia, Santa Fe Avenue in Cardiff, and Manchester Avenue in

Olivenhain. Housing strategy 2 – Build-Your-Own (BYO) is illustrated on Figure 3-5b.

- Housing Strategy 3 - "Modified Mixed Use Places" (MMUP)

  A third housing strategy was generated by the City Council, with contribution from the Planning Commission and with consideration of public input. This strategy is a modification of the Mixed Use Places housing strategy – it includes new sites that were suggested during the public participation process and removes certain highly objectionable sites based on public input received. In this strategy, more emphasis is placed on locating housing in areas served by transit and where the additional housing is complimented by existing pedestrian-oriented amenities. Housing strategy 3 – Modified Mixed Use Places (MMUP) is illustrated on Figure 3-5c.

Specific land use changes are proposed for each map. Each housing strategy is unique. As noted previously, a major goal of this HEU process was to determine which sites and which associated housing types would be analyzed in the PEIR. The exceptionally broad engagement process demonstrated that three preferred land use and design character maps (housing strategies) emerged. Because there is a need to learn more about the three housing strategies, this PEIR analyzes and discusses the potentially significant effects of the three housing strategies for the specific environmental topic areas. All three housing strategies are analyzed at an equal level of detail in this PEIR[5]. A matrix identifying housing sites within each housing strategy is provided as Table 3-1. (The implementation program for each housing strategy is described in greater detail below.)

[5]Relative to site-specific issues. Certain traffic impacts were analyzed for only the worst-case scenario (most intense housing strategy, the MMUP).

Map Source: City of Encinitas

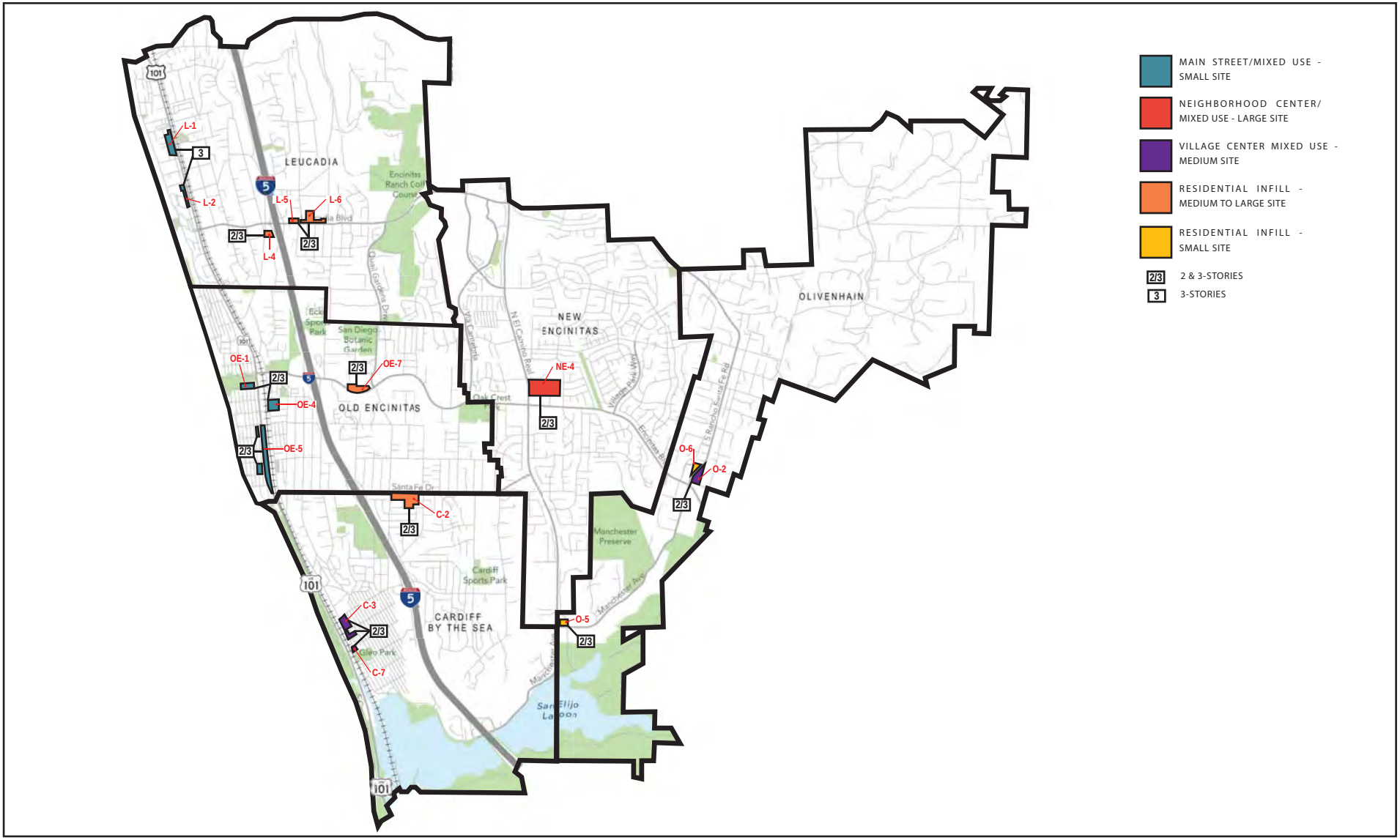


FIGURE 3-5a
Housing Strategy 1 – Ready Made (RM)

RECON

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Map Source: City of Encinitas

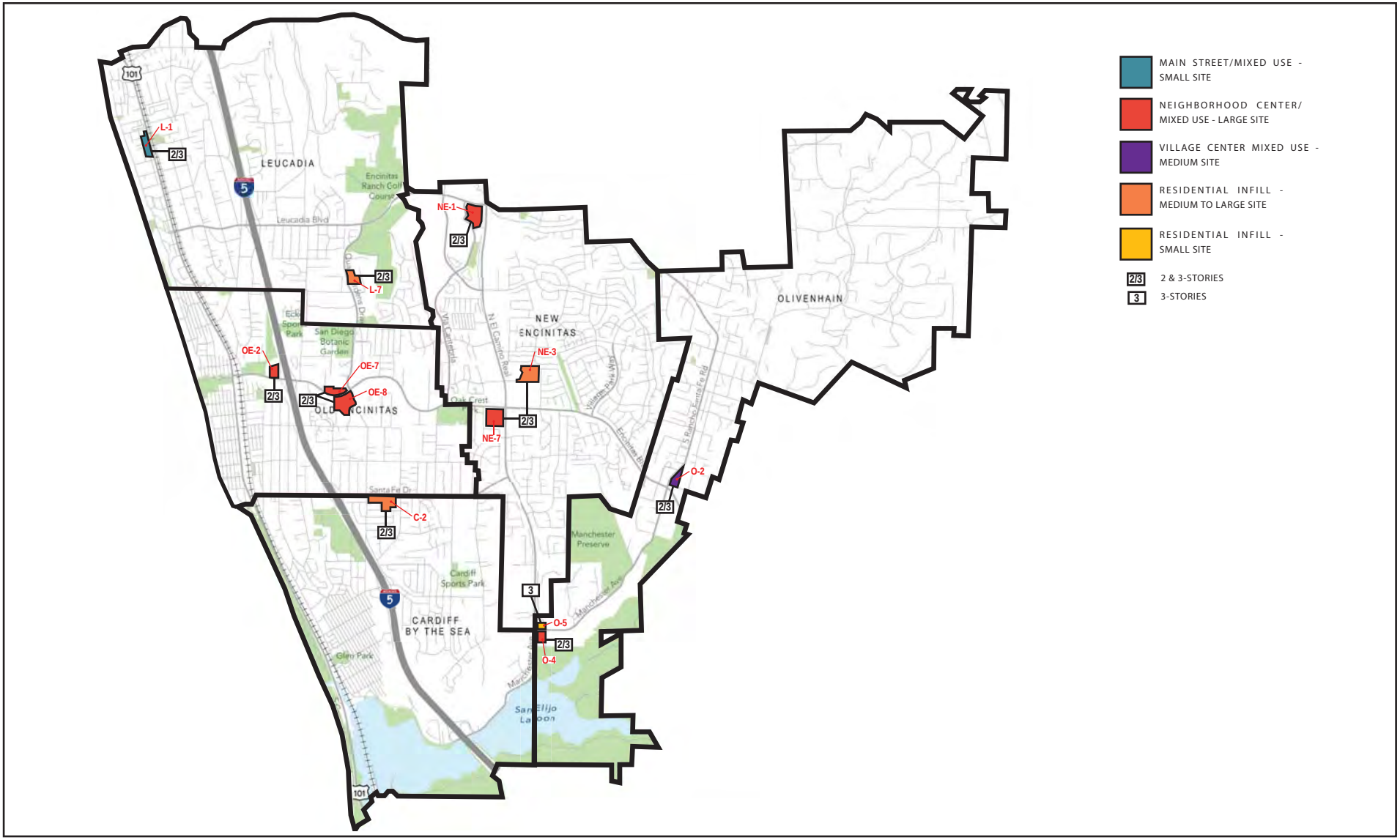


FIGURE 3-5b

Housing Strategy 2 – Build-Your-Own (BYO)

RECON

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Map Source: City of Encinitas

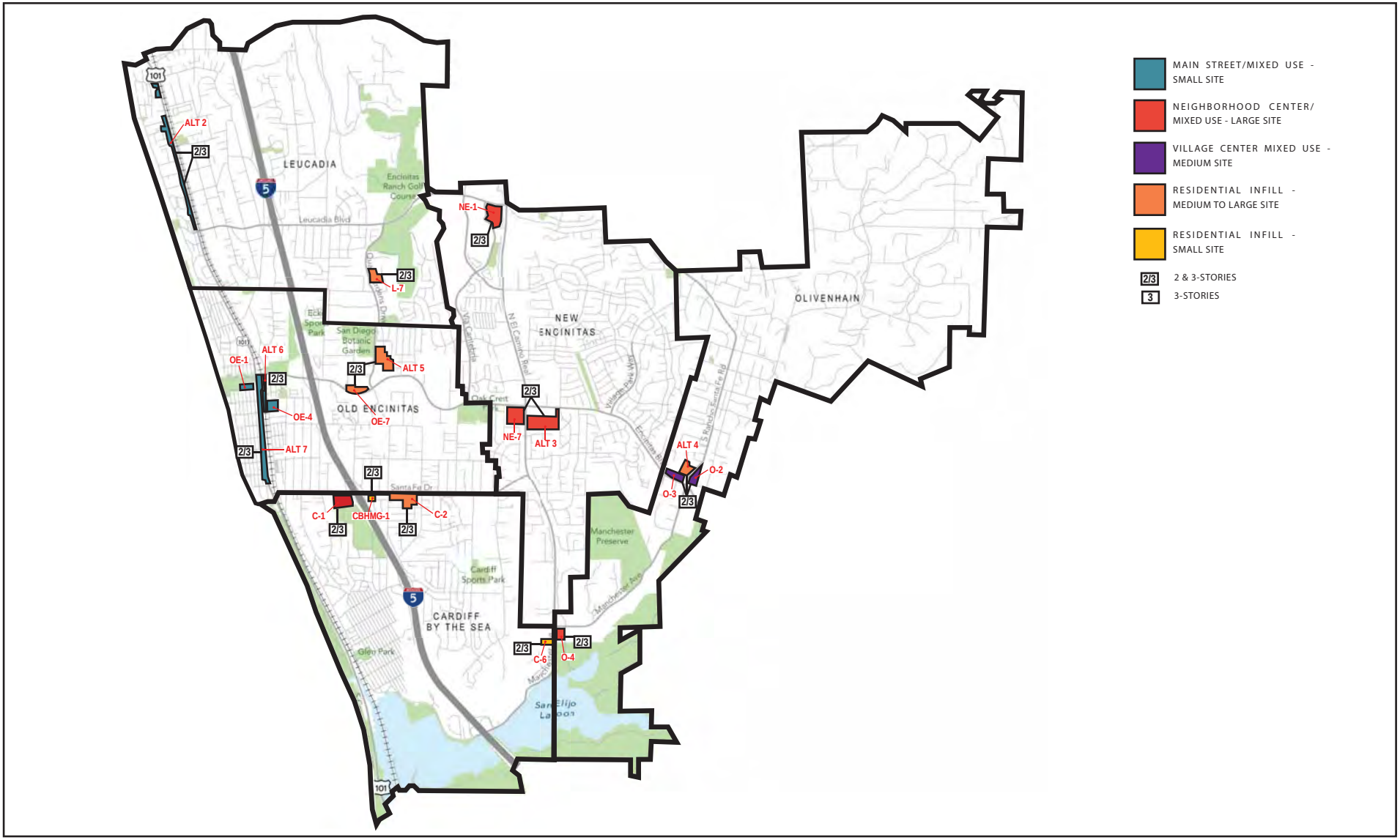


FIGURE 3-5c
Housing Strategy 3 – Modified Mixed Use Places (MMUP)

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Table 3-1 Housing Strategies and Housing Sites			
Housing Site	Housing Strategy 1: Ready Made (RM)	Housing Strategy 2: Build Your Own (BYO)	Housing Strategy 3: Modified Mixed Use Places (MMUP)
Alt-2			X
Alt-3			X
Alt-4			X
Alt-5			X
Alt-6			X
Alt-7			X
C-1			X
C-2	X	X	X
C-3	X		
C-6			X
C-7	X		
L-1	X	X	
L-2	X		
L-4	X		
L-5	X		
L-6	X		
L-7		X	X
NE-1		X	X
NE-3		X	
NE-4	X		
NE-7		X	X
O-2	X	X	X
O-3			X
O-4		X	X
O-5	X	X	
O-6	X		
OE-1	X		X
OE-2		X	
OE-4	X		X
OE-5	X		
OE-7	X	X	X
OE-8		X	
CBHMG-1			X

3.3 Project Objectives

In accordance with CEQA Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the Lead Agency in developing a reasonable range of alternatives to be evaluated in this PEIR, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The purpose of the project is to address the housing needs and objectives of the City and to meet the requirements of State law. The project has the following objectives:

3.3.1 Housing Element Update

1. **Housing Choice.** Accommodate a variety of housing types to meet the needs of all Encinitas residents, creating opportunities for attainably-priced housing for all income groups.

2. **Adequate Supply.** Provide adequate sites with corresponding density to meet the City's RHNA allocation, inclusive of prior planning cycle carryover housing units.

3. **Effective Implementation.** Deliver State-mandated and locally desired programs to implement the City's Housing Element.

3.3.2 Housing Strategies

1. **Maintain Community Character.** Integrate future development using a blend of two- and three-story buildings or building elements into the City's seven community character contexts through appropriately located sites and project design, and embrace the unique cultural identities expressed in each of the five communities.

2. **Emphasize Mixed Use.** Accommodate mixed use, walkable places in key activity centers of every Encinitas community, while allowing for some standalone housing.

3. **Achieve a Variety of Neighborhood Types.** Provide a mix of building types and varied site designs that incorporate existing community character contexts to achieve a variety of neighborhood types in which to develop new housing and mixed use.

4. **Consider Infrastructure Conditions.** Ensure adequate infrastructure to support new housing by locating future development in areas that have existing or potential capacity for infrastructure and public services to accommodate it.

5. **Address Mobility Needs.** Maintain or enhance community access and mobility networks.

6. **Strive for a Sustainable Encinitas.** Coordinate planning for land use, transportation and housing to reduce environmental impacts and preserve a natural, healthy environment.

7. **Strengthen the Local Economy.** Locate housing in the right places to grow the economy organically by supporting local businesses and making the City more fiscally sustainable.

8. **Equitably Distribute Multi-family Housing.** Distribute attached and multi-family housing to the City's five communities.

3.4 Project Components

3.4.1 Housing Element

The Housing Element, which is one of the seven mandated elements of a jurisdiction's General Plan, is a plan required by the State that outlines how a city will meet its housing needs of existing and future residents. The Housing Element consists of housing goals and policies for the five communities that compose the City. Specific housing programs that would implement the goals and policies are also identified. Appendix A of the Housing Element includes a summary of public participation and outreach activities; Appendix B is the Housing Plan (technical details), and Appendix C includes a description of the neighborhood prototypes. The narrative below summarizes the purpose of each section and outlines the recommended revisions to each respective section of the previously adopted Housing Element. (The draft Housing Element is included as Appendix E to this PEIR).

Introduction

The purpose of the introduction section is to set the format and organization of the Housing Element. The section includes the following components: a purpose statement; an overview of the scope and content of the Element; a summary of public participation and engagement and background on the Housing Element planning period. This Housing Element would update much of the existing text in the adopted Housing Element to reflect current data and/or circumstances. However, some of the existing text would be retained as it still provides a relevant backdrop to today's housing challenges and needs.

Goals, Policies, and Implementation Programs

This section contains the goals and policies the City intends to implement to address a number of important housing-related issues. (These are detailed in Section 3.4.1.1 below). This section sets the direction for how the City proposes to address its current and future housing needs. The revisions proposed to this section of the Housing Element are largely intended to reflect changes in State law and circumstances. Additionally as required by the State, a list of implementation programs is included in this section, which are being proposed to show how the City intends to implement the established goals and policies over the planning period.

Housing Plan

As required by State Housing Element law, the Housing Element Update includes a Housing Plan to facilitate and encourage the provision of housing consistent with the RHNA allocation. This section of the Housing Element assesses the factors that affect future housing such as population projections, employment market, household characteristics, and special needs groups. The Housing Plan also lists the constraints to housing such as market constraints (i.e., economic factors, land and construction costs, financing availability), governmental constraints (i.e., land use controls, permit fees) and

environmental constraints (seismic safety, flooding, storm water management, school and education, fire and emergency services).

The City's adopted Housing Plan requires substantial updating for two main reasons: first, the factors and challenges impacting housing today are very different from the factors and challenges experienced in the early 1990s, when the previous Housing Element was adopted; and second, HCD requires substantially more detail in the preparation the Housing Plan than in previous years. When the City adopted and certified the Housing Element in 1992, the Housing Plan did not require State certification. In fact, many of the factors listed in the paragraph above were not required, and therefore, are not found in the current plan. Today, however, the process has evolved considerably and the State requires a lot more detail and explanation before HCD will consider certification of a Housing Element.

3.4.1.1 Goals and Policies

a. Housing Opportunities

The City wants to encourage the construction of new housing units that offer a wide range of housing types to ensure that an adequate supply is available to meet existing and future needs. The maintenance of a balanced inventory of housing in terms of unit type (e.g., single-family, multi-family), cost, and style will ensure that the existing variety is maintained. Each of the five communities has a distinct character due in large part to the nature of their existing residential neighborhoods. New housing constructed in the City should reflect the character of the surrounding neighborhood in particular and the community in general.

GOAL 1: The City will encourage a wide range of housing by location, type of unit, and price to meet the existing and future housing needs in the region and city.

POLICY 1.1: Strive to maintain a balance of housing types in the City.

POLICY 1.2: Strive to provide a wide variety of housing types so that a range of housing needs and tastes will be made available to existing and future residents.

POLICY 1.3: When existing residential units are replaced, they should be replaced with units that are compatible in design with the surrounding residential neighborhood as planned by the City.

POLICY 1.4: Require that housing constructed expressly for low and moderate income households should not be concentrated in any single community or single area of the City and that such housing should be high quality in terms of design and construction without sacrificing affordability.

POLICY 1.5: If a diminishing inventory of rental housing creates an imbalance, the City should make every effort to preserve the existing stock of quality rental housing by discouraging apartment conversions to condominiums.

POLICY 1.6: Encourage retention of all existing, viable mobile home parks through use of a mobile home/trailer park overlay zone, a permanent mobile home park zone, and the application of incentives.

POLICY 1.7: Coordinate with local social service providers to address the needs of the City's homeless population.

b. Quality of Housing

New housing opportunities in the City must be made available to all persons. The diverse makeup of the City with its five distinct communities will continue to attract a wide variety of people. The City has made a strong and firm commitment that fair housing practices will continue in Encinitas.

GOAL 2: Sound housing will be provided for all persons

POLICY 2.1: Make every reasonable effort to ensure that the provisions of the Federal and State laws that prohibit housing discrimination are enforced.

POLICY 2.2: Support ongoing efforts of the State and Federal agencies and local fair housing agencies to enforce "fair-housing" laws, as well as regional efforts in promoting fair housing.

POLICY 2.3: Encourage developers to provide a balance of housing opportunities.

c. Maintenance and Preservation of Housing

Substandard and deteriorating housing units, in addition to the obvious problems of blight, can expose occupants to a wide range of hazards ranging from electrical fire to exposure to toxic substances used in construction. Many factors can determine the "life expectancy" of a dwelling including quality of workmanship, age, type of construction, location, and numerous other factors. A major focus of this Housing Element is to provide goals and policies which underscore the City's commitment to ensure that the existing housing stock in the five communities is maintained.

GOAL 3: The City will encourage the maintenance and preservation of the existing housing stock as well as quality workmanship in new housing.

POLICY 3.1: Where determined to be dangerous to the public health and safety, substandard units in the City shall be repaired so that they will comply with the applicable building, safety and housing codes. When compliance through repair is not or cannot be achieved, abatement of substandard units shall be achieved.

POLICY 3.2: Enforce the building, safety and housing codes through vigorous code enforcement efforts.

POLICY 3.3: Continue to apply and support existing housing programs administered by the County which provide housing assistance. These include assistance to property owners that can demonstrate financial need in the upgrading of their substandard units. Aggressively pursue the application of existing County programs for housing rehabilitation, and investigate and apply available additional funding.

POLICY 3.4: Continue to assess development fees on new residential units adequate to pay for all related local and regional impacts on public facilities.

POLICY 3.5: Allow for some cluster-type housing and other innovative housing design that provides adequate open areas around and within these developments.

POLICY 3.6: Coordinate the provision of open areas in adjoining residential developments to maximize the benefit of the open space.

POLICY 3.7: Adapt residential development to the terrain.

POLICY 3.8: Encourage street planting, landscaping, and undergrounding of utilities.

POLICY 3.9: Encourage high standards of design, materials, and workmanship in all construction and developments.

POLICY 3.10: Discourage residential development of steep slopes, canyons, and floodplains.

POLICY 3.11: Develop and implement design review criteria which will also include the issue of view blockage.

POLICY 3.12: Cost effective energy-efficient housing, including the use of passive systems, will be encouraged within the City to decrease energy use.

d. Housing Conservation

The City's existing housing stock includes units which are affordable to very low, low, and moderate income households. A significant part of the City housing focus is on these existing affordable units, and how to ensure or encourage their continued affordability. Of particular concern are projects which were government-subsidized when built, in return for units being rent-restricted to be affordable. With passage of time, many such guaranteed-affordable units are subject to being converted to market-rate rental units by the expiration of pre-payment of the government subsidy arrangement. Responding to this, in 1991 State law required that local housing elements address the status of these “units at risk.” The City is committed to doing what it can so that guaranteed-affordable units remain affordable to target-income households.

GOAL 4: The City will encourage the continued affordability of guaranteed-affordable units.

POLICY 4.1: The City will undertake a program to pursue the renewed affordability of affordable "units at risk" of conversion to market rate units due to expiration of use restrictions, affordable covenants and funding subsidies.

e. Related Goals and Policies

The Land Use Element sets forth the amount and type of residential development permitted under the General Plan, thereby affecting housing opportunity in Encinitas. In addition, the Land Use Element contains policies directed at maintaining the existing housing stock, as well as ensuring the quality of new residential development. The Circulation Element contains policies to minimize roadway traffic into residential neighborhoods, and the Noise Element sets forth policies to minimize the level of noise in neighborhoods. The Resource Management Element establishes development standards to minimize the impact of residential development on sensitive resources, such as hillside areas, ecological habitat, and scenic viewsheds. Finally, the Public Safety Element sets forth policies to ensure the safety of the City's housing stock through such measures as code enforcement, and mitigation of environmental hazard as a condition to development.

f. Housing Element Implementation Programs

Under State Housing Element Law, the Housing Element must include programs that address six housing related categories, which are summarized below. A full detailed description of the programs, with associated implementation timeline, can be found in the draft Housing Element under Implementation Programs. A total of 23 programs (three are existing programs requiring no change, seven are existing programs requiring updating, and 13 are new programs) are proposed in the Implementation Program. State law requires that the following be addressed in the implementation program:

1. Adequate Sites Inventory [GC 65583(a)3 & 65583(c)1]

A jurisdiction must identify actions/programs that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services/facilities to accommodate the City's share of regional housing need for each income level.

- *Program 1A: Accommodate RHNA allocation*
- *Program 1 B: Create new design standards and guidelines as part of adoption of new zoning districts*
- *Program 1C: Promote the development of accessory housing units*
- *Program 1D: Ensure that adequate sites remain available throughout the planning period*

- *Program 1E: Promote and streamline lot consolidation*
- *Program 1F: Energy conservation and energy efficiency opportunities*

2. Affordable Housing [GC 65583(a)7 & 65583(c)2]

A jurisdiction must show how it intends to assist in the development of adequate housing to meet the needs of extremely low, very low, low, and moderate income households.

- *Program 2A: Continue and broaden inclusionary housing policies*
- *Program 2B: Facilitate affordable housing*
- *Program 2C: Utilize Section 8 housing choice vouchers*
- *Program 2D: Maximize housing affordability through market-based approaches*
- *Program 2E: Establish infrastructure and public amenities financing tools*

3. Mitigation of Constraints [GC 65583(a)5 & 65583(c)3]

A jurisdiction must address, and where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities.

- *Program 3A: Update the density bonus ordinance*
- *Program 3B: Establish parking standards appropriate for different kinds of housing*
- *Program 3C: Modify regulations that constrain the development of housing*
- *Program 3D: Accommodate specialized housing types*
- *Program 3E: Right to Vote Amendment monitoring*
- *Program EF: Growth Management*

4. Conservation [GC 65583(c)4]

A jurisdiction must conserve and improve the condition of the existing affordable housing stock.

- *Program 4A: Pursue opportunities to create safe and healthy housing*
- *Program 4B: Assist in rehabilitating rental housing*

5. Equal Housing Opportunities [GC 65583(c)5]

A jurisdiction must promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, family status, or disability.

- *Program 5A: Provide flexibility in reasonably accommodating housing for the disabled*
- *Program 5B: Promote fair housing*

6. At-Risk Housing [GC 65583(a)9]

A jurisdiction must preserve for lower income households the assisted housing developments that are at risk of becoming homeless.

- *Program 6A: Monitor publicly assisted housing projects*
- *Program 6B: Extend term of affordability with in-lieu programs*

3.4.2 Housing Element Implementation

3.4.2.1 General Plan Land Use Map Amendment

The City of Encinitas has been assigned a total RHNA of 2,606 for the 2013–2021 Housing Element, along with carryover RHNA allocations from prior planning periods. In order to meet State housing requirements identified in the City's Housing Element, the City is proposing to redesignate an adequate number of sites to ensure that the City can accommodate, at a minimum, the full share of its RHNA allocation throughout the entire Housing Element planning period, with a sufficient buffer to accommodate specific site conditions and development trends. To accomplish this, a General Plan Land Use Map Amendment (and an adequate buffer of rezoned sites for units necessary to meet the RHNA for the duration of the planning cycle) are required for the City to stay in compliance with the State's no net loss requirement to ensure adequate sites are available throughout the housing cycle, pursuant to Government Code Section 65863. The City is committed to providing adequate sites with appropriate zoning to accommodate the remaining RHNA allocation and accommodate the need for groups of all income levels pursuant to Section 65584 of the Government Code. Densities within the housing sites would range from a minimum of 20 dwelling units per acre to a maximum of 30 dwelling units per acre as a permitted use, by right. Permitted by right means that the City must allow a developer to build anywhere within the density range and its development standards must allow the density to be achieved. Other permits may be required unrelated to the allowable density (e.g., design review and subdivisions).

All housing sites require a General Plan Map Amendment to change the designation to implement the land uses necessary to accommodate the adequate sites in the HEU. A new land use designation, called *At Home in Encinitas*, is proposed to designate sites on the General Plan land use map where it will be implemented by one of three floating zones, each with three possible design contexts (refer to Section 3.4.2.2 for more about the floating

zones). Table 3-2, General Plan Land Use Designations, shows the existing and proposed General Plan designation for each site and the proposed allowable density for each site. (Also refer to Appendix F-1)

Table 3-2
General Plan Land Use Designation

Site	Adopted General Plan Designation	Adopted Maximum Density	Proposed General Plan Designation	Proposed Maximum Density
Alt-2	GC	25 units per acre	At Home in Encinitas	30 units per acre
Alt-3	GC	N/A	At Home in Encinitas	30 units per acre
Alt-4	RR-2	2 units per acre	At Home in Encinitas	30 units per acre
Alt-5	R-5	3 to 5 units per acre	At Home in Encinitas	30 units per acre
Alt-6	TC	N/A	At Home in Encinitas	30 units per acre
Alt-7	GC	No maximum density specified	At Home in Encinitas	30 units per acre
C-1	GC	0	At Home in Encinitas	30 units per acre
C-2	R-8	8 units per acre	At Home in Encinitas	30 units per acre
C-3	GC	N/A	At Home in Encinitas	30 units per acre
C-6	RR-1	1 unit per acre	At Home in Encinitas	30 units per acre
C-7	GC	N/A	At Home in Encinitas	30 units per acre
L-1	GC	25 units per acre	At Home in Encinitas	30 units per acre
L-2	GC	25 units per acre	At Home in Encinitas	30 units per acre
L-4	R-3	3 units per acre	At Home in Encinitas	30 units per acre
L-5	R-3	3 units per acre	At Home in Encinitas	30 units per acre
L-6	R-3	3 units per acre	At Home in Encinitas	30 units per acre
L-7	RR-1	1 unit per acre	At Home in Encinitas	30 units per acre
NE-1	GC	N/A	At Home in Encinitas	30 units per acre
NE-3	P/SP	N/A	At Home in Encinitas	30 units per acre
NE-4	GC	N/A	At Home in Encinitas	30 units per acre
NE-7	GC	N/A	At Home in Encinitas	30 units per acre
O-2	RR-2	2 units per acre	At Home in Encinitas	30 units per acre
O-3	LC and OP	N/A	At Home in Encinitas	30 units per acre
O-4	RR	0.26 to 0.5 unit per acre depending on slope	At Home in Encinitas	30 units per acre
O-5	RR-3	3 units per acre	At Home in Encinitas	30 units per acre
O-6	RR-2	2 units per acre	At Home in Encinitas	30 units per acre
OE-1	GC	18 units per acre	At Home in Encinitas	30 units per acre
OE-2	GC	N/A	At Home in Encinitas	30 units per acre
OE-4	P/SP	N/A	At Home in Encinitas	30 units per acre
OE-5	GC	No maximum density specified	At Home in Encinitas	30 units per acre
OE-7	OP	N/A	At Home in Encinitas	30 units per acre
OE-8	GC	N/A	At Home in Encinitas	30 units per acre
CBHMG-1	P/SP	N/A	At Home in Encinitas	30 units per acre

GC = General Commercial
LC = Local Commercial
OP = Office Professional
P/SP = Public /Semi-Public
RR-X = Rural Residential
R-X = Single-Family Residential (Units/Acre)
TC = Transportation Corridor

3.4.2.2 Rezone Program

As part of the HEU implementation, the City is proposing a rezoning program for the sites necessary to accommodate the remaining housing need for all lower income categories during the planning period. The rezoning program would ensure that the sites are zoned to allow residential uses "by-right" and to permit development of a minimum of 20 and a maximum of 30 units per acre. State law also requires that a local jurisdiction's rezoning program ensure at least 50 percent of the lower income regional needs are accommodated on sites designated for exclusively residential uses, at appropriate densities, or that all of the housing units may be accommodated on sites allowing mixed use where 50 percent of the floor area must be used for housing. To meet State housing requirements, a moderate increase in allowable density is required to accommodate at a minimum the full share of the City's RHNA allocation throughout the entire Housing Element planning period, with a sufficient buffer to accommodate specific site conditions and development trends.

The HEU proposes to implement rezoning through the Zoning Map Amendment process to rezone sufficient acreage to higher density residential and/or mixed use to accommodate the City's low and very low income RHNA requirements. The City proposes to implement the rezoning program through the creation of a "floating zone" (Refer to Appendix F-2 for the proposed Zoning Code). The floating zone concept is not currently employed within the City. A floating zone would be applied to properties selected to accommodate future housing development through this housing element update process. (Refer to Table 3-3 below for the floating zone designation assigned to each housing site within each housing strategy.) The provisions of a floating zone would apply to parcels comprising the housing sites, but the zones would not be effective until a property owner elects to implement the floating zone. Floating zones are therefore, a set of pre-approved zone changes that "float" above the existing base zoning of designated properties/sites, until they are activated when and if the property owner decides to do so. The floating zones allow for an intensification of land use, height, and density.

The adoption of the new floating zones would occur concurrently with the approval of other components of the HEU and would be ultimately determined by the registered voters.

a. Development Standards

Floating zones are necessary to allow for development and land use standards that accommodate needed new housing. These floating zones would also allow the City to more effectively guide quality development and design, which is compatible with existing community character. The new floating zones would provide development standards for various contexts that appear throughout the City in order for new development to "fit in" depending on where the site is located and the surrounding context and uses. Three contexts are addressed through the floating zones: Neighborhood Center, Main Street, and Village Center. These were derived through the HEU public outreach process.

The new floating zones would implement the five neighborhood prototypes described above in Section 3.2.2.2, and the development standards would focus on the form of building and

parking placement, while the design guidelines, detailed in Section 3.4.2.3, would help ensure that the additional height and density of proposed projects are compatible with the community. The new floating zones would implement the following development standards: open space, parking, building height, build-to range, transitions, density, and street orientation, as detailed below.

Open space. The floating zones would require a certain amount of private open space (for individual units) as well as common open space for multiple units in a development to share.

Parking. The floating zone addresses parking standards and transportation demand management. Through updated residential parking ratios, parking reductions, and bicycle parking provisions, the floating zone intends to consider the impact of community development strategies on environmental factors, such as climate change and coordinated planning of land use, transportation and housing, pursuant to Senate Bill 375 (Steinberg 2008). The floating zones would establish minimum and maximum parking requirements that must be provided on a development site, based on the uses within the building and the distance to transit.

Building height. Building heights presently are limited to two stories and 30 feet throughout the City. The floating zones would provide for an increase in height to three stories for some portions of each housing site, so that each site contains a combination of two and three stories or building elements. It is necessary to permit an increase in building heights for future development to provide adequate opportunities for future housing to meet the maximum permitted density of 30 units per acre on rezoned sites. Anything less would unduly constrain housing development and make it infeasible. Under the scope of the HEU, building at three stories would be permitted only when a project includes multi-family residential at a density that meets the objectives in the City's Housing Element.

The City's current limit of 30 feet provides an overall height limit that adequately accommodates two-story development; therefore, additional building height is necessary to permit three-story development. For housing sites that would permit a mix of residential and non-residential components, the maximum building height would be 38 feet. For housing sites that would permit residential only, the maximum building height would be 35 feet. Building heights would be limited to two stories and 26 feet in the transition zone, which is generally more restrictive than the current height limit. Pursuant to the proposed floating zone regulations, all buildings and structures must be located at or below the required height limit, except for architectural elements or other accessory appurtenances not intended for human occupancy, which may exceed the maximum building height but by no more than 10 feet and generally with a lesser footprint than the overall building.

Build to range. Establish a dimension range, starting at the property line parallel to the street, where a certain percentage of the building facade must be located. The "build-to range" varies based on context and street type.

Transitions. A primary objective of the floating zone is to preserve existing single family neighborhoods that are located adjacent to housing sites subject to the new floating zone regulations. Future development would be required to respect and sensitively transition in use and character when abutting single family residential zone districts. A variety of transition solutions would be accepted, depending on the overall context and lot size. Where redevelopment lots are constricted in lot size, landscaping or fencing would be acceptable options. On larger, less constrained sites, increased setbacks and lower building height restrictions would apply to the higher intensity zone district.

The floating zone would therefore, establish a variety of "transition standards" based on the context of the individual project. Solutions include:

- Landscape buffering or appropriate fencing
- Lower height restrictions close to a single-family zone
- Low-scale residential building types adjacent to single-family.

Density. The floating zone would establish a minimum density to ensure that each project meets affordability requirements as well as a maximum density to ensure that Encinitas remains a community of modestly scaled development.

Street orientation. The floating zone would establish requirements for windows and entrances facing the street as well as variation in massing to promote a sense of human scale.

b. Permitted Uses

The new floating zone districts include a letter to specify the permitted uses. If a site is determined to be purely residential (no commercial), then the letter "R" is associated with those parcels. If a mixture of uses is permitted (mixed use), then the letter "X" is associated with that site. If a shopfront is required, then the letter "S" is associated with that site. The shopfront zoning category ("S") is distinguishable from other sites that permit mixed use ("X") in that there is a need to regulate ground-floor, non-residential uses to maintain economic activity and/or enhance the pedestrian-scale experience in key areas. When retail shopfronts are arranged in close proximity with other similar types of uses, it can facilitate and/or maintain economic activity. Because pedestrian nodes vary in size in shape, some sites may be zoned "S" in some areas and "X" in another. This occurs in one instance, where there is a commercial corridor. This split zoning is to acknowledge and reinforce that ground-floor limitations are applied only to specific area of the housing site, or where nodes of activity are emphasized more so than others. Also, certain sites are designated for the preparation of a Master Design Review Permit (MDP). The purposes of the MDP are to designate the location and extent of shopfront zoning to ensure that an appropriate amount of ground floor nonresidential is included in a large collection of sites and establish a phasing plan for development.

For the purposes of the new floating zones, a maximum density of 30 dwelling units per acre is permitted[6]. Therefore, each new zone district includes "30" after the permitted use category. The floating zone established a minimum density of 20 dwelling units per acre to ensure that each project meets the State's affordability requirements, as well as a maximum density to ensure that Encinitas remains a community of modestly scaled development.

There are three primary contextual considerations, based on a site's location and surrounding character. These letters correspond to the primary "community character" contexts established in the Community Dialogue Sessions and correlate to the Neighborhood Prototypes described above and shown in Table 3-3:

- M for Main Street
- N for Neighborhood Center
- V for Village Center

The zoning standards document[7] would be user-friendly and encourage a more efficient process. The code would be highly graphic, use 3D models, tables and charts to provide information in a concise and easy-to-understand format. Housing prototypes would be identified as appropriate building forms in the S30, X30, and R30 zones, and a matrix show where each prototype is permitted. A new use chart would condense allowed uses into an easy-to-read chart. The chart is proposed to break down the classification of uses, uses not listed, and supplemental use standards. Furthermore, definitions and explanations of particular terms would be provided in the "Measurements and Exceptions" chapter.

[6] Although 30 du/acre is the maximum permitted density in each floating zone, the realistic buildout projections assumed 20 du/acre for mixed use housing sites (refer to Section 3.5, below).

[7] Herein "zoning standards" are the same as "development standards" and may be used interchangeable throughout the PEIR.

Table 3-3
Proposed Floating Zones

Housing Site	Housing Strategy[1]			Design Context[2] (M, N, V)	Zone[3] (X, R, S)	Requires MDP?[4]	Split Zoned Sites
	RM	BYO	MMUP				
Old Encinitas							
ALT-5			X	N	R	---	---
ALT-6			X	M	X	---	---
ALT-7			X	M	S	---	---
OE-1	X		X	M	X	---	---
OE-2		X		N	X	---	---
OE-4	X		X	M	X	---	---
OE-5	X			M	S	---	---
OE-7	X		X	N	R	---	---
OE-7		X		N	X	---	---
OE-8		X		N	X	---	---
New Encinitas							
ALT-3			X	N	X & S	Yes	---
NE-1		X	X	N	X & S	Yes	---
NE-3		X		N	R		---
NE-4	X		X	N	X & S	Yes	---
NE-7		X	X	N	X & S	Yes	---
Leucadia							
ALT-2			X	M	S	---	Area south of Diana
ALT-2			X	M	X	---	Area north of Diana
L-1	X	X		M	X	---	---
L-2	X			M	X	---	---
L-4	X			N	R	---	---
L-5	X			N	R	---	---
L-6	X			N	R	---	---
L-7		X	X	N	R	---	---
Cardiff							
C-1			X	N	X&S	Yes	---
C-2	X	X	X	N	R	---	---
C-3	X			V	S	---	---
C-6			X	N	R	---	---
C-7	X			V	S	---	---
CBHMG-1			X	N	R	---	---
Olivenhain							
ALT-4			X	V	R	---	---
O-2	X	X	X	V	X	---	---

Table 3-3
Proposed Floating Zones

Housing Site	Housing Strategy[1]			Design Context[2] (M, N, V)	Zone[3] (X, R, S)	Requires MDP?[4]	Split Zoned Sites
	RM	BYO	MMUP				
O-3			X	V	X	---	---
O-4		X	X	N	X	---	---
O-5	X	X		N	R	---	---
O-6	X			V	R	---	---

[1] Housing Strategy
RM = Ready Made
BYO = Build Your Own
MMUP = Modified Mixed Use Places

[2]Design Context:
M = Main Street
N = Neighborhood Center
V = Village Center

[3]Zone:
X = Mixed Use
R = Residential
S = Shopfront

[4]MDP = Master Design Review Permit to designate exact location of S30-(design context) zoning

3.4.2.3 Design Guidelines

Through the course of developing the framework of the HEU, there has been an expressed desire to address unique characteristics inherent within the individual communities and contexts of Encinitas. That is, future residential development will appear different in various settings, and there is no one specific development model that can be applied throughout the City. Therefore, a major goal of the HEU is to ensure that new development matches building scales to the street type and to the land uses that surround it.

For this reason, concise design guidelines have been developed based on the results of the community feedback process. The design guidelines illustrate principles for compatible new construction and have been tailored to the unique characteristics of each of the City's five distinct communities. The design guidelines relate to the new zone concepts, with a focus on compatibility with existing adjacent development and quality urban design.

The new floating zones and design guidelines were created in tandem and are designed to work together. Each document references the other so the correlation is apparent. While satisfying the development standards in the new zone districts is mandatory and should be considered first and foremost when developing a property under the new floating zones, the design guidelines should also be referenced early-on in a project in order to recognize site and/or building design implications. All projects will be evaluated on their adherence and to the degree to which substantial compliance with the intent with the guideline framework

can be measured. Both documents would provide a context-sensitive approach to new housing infill design within the City and take into consideration multiple comments and concerns from the community. The proposed design guidelines are included in this PEIR as Appendix G. The design guidelines seek to promote high quality design within the floating zoning districts. They establish clear goals and expectations for compatible design and for respecting community character. Whereas the development standards set forth in the floating zone districts are quantitative and measurable and address the basic form and location of improvements, design guidelines are more qualitative, and address more detailed aspects.. All projects are evaluated and analyzed on their adherence to the design guidelines through a "design review findings" process, administered by staff to show substantial compliance with the intent of the design guidelines:

- Each project in the R30, X30 and S30 floating zone districts follow several overarching design principles. Overarching design principles express citywide design objectives. They apply to every project.

- Each project should reinforce the design traditions of the community in which it is located. These community character perspectives are particularly critical in making sure new development generally fits in within the existing neighborhood and is complementary to what exists today.

- Three distinct "Design Contexts" exist in those parts of Encinitas where the R30, X30, and S30 floating zones may be used. Some of these design contexts appear in each of the five communities, while others appear only in a few. In each case, these aspects should be considered in each project.

- Specific site and building design guidelines are provided, which encourage high quality in public and semi-public spaces.

The design guidelines address neighborhood transitions, street edge, architectural character and site design. The design guidelines would inform the following aspects of development: open space, parking, building height, building placement, transitions, mass and scale, street level interest, and access and connectivity:

- **Open space:** Provide guidance on locating open space to be a positive asset and encourage physical activity, as well as for using landscaping to reduce the perceived mass of buildings and respond to the Encinitas climate.

- **Parking design:** Include solutions for minimizing visual impact of parking using buffers, enhancing connectivity to encourage walking, designing to be human-scaled and encouraging parking areas to minimize onsite storm water runoff.

- **Building height:** Provide criteria for varying building height along a street, maintaining similar floor-to-floor heights as other traditional buildings, and also varying heights by stepping back upper stories to minimize scale at the sidewalk level.

- **Building placement:** Establish direction for locating buildings to minimize visibility of parking, maximize access to light and air, and respond to traditional development patterns in each design context.

- **Transitions:** Encourage compatible uses, lower-scale building, and encourage the transition area to be designed to be an asset, as experienced by single family neighbors nearby.

- **Mass and scale:** Provide solutions for establishing a sense of scale and reducing perceived mass through horizontal and vertical articulation and treatment of materials.

- **Street-level interest:** Provide options for creating visual interest and maintaining a sense of human scale andoffer solutions for engaging the street with building entries and uses that provide "eyes on the street" for enhanced safety.

- **Access and connectivity:** Provide solutions for minimizing automobile and pedestrian conflicts, enhancing connectivity, and designing such spaces to encourage active use.

There are five levels to the design guidelines: design principles, community character, design context, site design, and building design.

Overarching design principles express citywide design objectives. They apply to every project:

- Design with Consistency and Integrity
- Respond to Neighborhood Context
- Design with Individuality
- Design for Views
- Respond to the Street
- Provide a Sense of Scale
- Balance Indoor and Outdoor Activity
- Provide a Progression of Space

Community character objectives ensure that future projects reinforce the design traditions of the community in which it is located.

Design Context: Each project should respond to its unique design context. They are:

- Main Street Design Context
- Village Center Design Context
- Neighborhood Center

Specific guidelines are provided for site design, which encourage high quality in public and semi-public spaces. Objectives include:

- Creating a sense of place within each development
- Maximizing connectivity
- Designing the “edges” of a site to be assets to surrounding neighborhoods
- Making the best use of natural resources

Finally, guidelines for building design encourage high quality design of individual buildings. Objectives include:

- Promoting a sense of human scale to building proportions
- Providing a consistent street edge
- Encouraging high quality materials and design
- Promoting variation in massing and building form

Accommodating moderate increase in density while maintaining compatibility with established neighborhoods

3.4.3 Conforming and Ancillary Amendments

State general plan law requires that all elements and all parts of a general plan be integrated, internally consistent and compatible (Government Code Section 65300.5). While each of the general plan elements is independent, the elements are also interrelated. Certain goals and policies of each element may also address subjects of other elements. Since the Housing Element portion of the General Plan is proposed to be amended under this project, other elements were also reviewed and modified as necessary to ensure continued consistency and/or to support the implementation of the HEU. Other planning documents, such as the Municipal and Zoning Codes, were also reviewed to make sure that they are also entirely consistent with the policies and proposals set forth by the updated Housing Element.

3.4.3.1 Conforming Amendments

The more substantial amendments occur in the Land Use Element portion of the General Plan. Changes are necessary to define and otherwise permit by-right development in the floating zone district, as provided by Chapter 30.36. Also, as the growth management plan long ago ceased to be of value since it was no longer restricting building permits, the City is eliminating the annual building permit limitation requirement as a constraint to housing development under State law. Other amendments are proposed to make clarifications and to change the authority to make land use change approvals.

The proposed amendments are provided in Appendix H and are summarized below.

- Amend the General Plan Land Use Element for conformance and add language that supports the floating zone program.
- Amend Land Use Element Goals 2 and 4 for growth management program modification.
- Amend the Community Character and Voters' Rights Initiative portion of the Land Use Element and Zoning Code Chapter 30.00 to modify building height limitations and authority to grant land use change approvals in very specific circumstances.
- Amend Zoning Code Chapter 23.08 to allow additional authority to grant permit.
- Amend Zoning Code Section 30.04.10 to add a Floating Zone definition.
- Amend Zoning Code Section 30.34.30 to allow additional authority to grant permit.
- Amend Zoning Code Chapter 30.72 to allow additional authority to grant permit.
- Add Zoning Code Chapter 30.36 for the Floating Zone, which also adopts the Design Guidelines as a part of this new chapter by reference.
- Amend the North 101 Corridor Specific Plan, Encinitas Ranch Specific Plan, Downtown Encinitas Specific Plan, and Cardiff Specific Plan to establish a foundation for Floating Zone implementation.

3.4.3.2 Ancillary Amendments

When reviewing various planning documents for conformity, it was determined that additional supporting amendments are necessary as follows:

a. Proposition A

The Community Character and Voter Rights' Initiative (Chapter 30.00) was passed by Encinitas voters in 2013. The ballot measure repealed several provisions in the General Plan Land Use Element. This amendment effectuates these changes to promote internal consistency within the General Plan. In areas of conflict with the HEU, the project proposes amendments as aforementioned.

b. Program 3C – Removal of Constraints

Program 3C of the HEU identifies a need to remove specific regulations that constrain housing development. Portions of the North 101 Corridor Specific Plan and Downtown Encinitas Specific Plan require ground floor uses to be commercial or retail-serving. Residential uses are permitted only above or behind. As discussed in the HEU, mixed use thrives when it is focused in compact areas, not over lengthy corridors, as is currently

mandated. This amendment identifies key locations in the North 101 Corridor Specific Plan where standalone residential development could occur. No changes are proposed in the Downtown Encinitas Specific Plan.

Program 3C also identifies separate lots or airspace ownership requirements as a constraint to housing development. Some zones within the North 101 Corridor Specific Plan require that "all new residential detached and attached dwelling units in residential only-developments must be constructed on a legally subdivided lot or must be subdivided to permit ownership of airspace in the form of a dwelling unit with an undivided share in common elements." While this requirement is appropriate for single-family developments, it may pose a disincentive to the provision of multi-family housing. This amendment eliminates the airspace requirement for multi-family housing.

c. Noise Element

California State Government Code Section 65302 mandates that noise elements be included as a part of general plans and that cities adopt comprehensive noise ordinances. The City's 1989 Noise Plan and ordinance achieved compliance with State law. The project amends the City's 1989 noise plan and more accurately identifies noise management approaches and analysis for new projects. The Noise Element amendment would:

1. Revise policies to allow for the application of smart growth through the promotion of mixed use development and provide better definitions of the types of noise-sensitive land uses, including new mixed-use development;

2. Resolve internal inconsistencies in the adopted Noise Element, specifically between policies and the noise land use compatibility matrix; and

3. Update the City's policies to be consistent with contemporary noise standards and account for changes that have occurred since original adoption including enhancements in noise attenuation through standard construction practices.

The Noise Element applies to the City as a whole. All proposed amendments are consistent with specific plans and City ordinances that contain noise management issues or programs.

3.5 Buildout Projections for Future Site Development

A "project" as defined by CEQA Guidelines Section 15378(a) "means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." The proposed project does not include any site development or construction plans on the 33 sites evaluated in this PEIR. Future development would occur on these sites as market conditions allow at the discretion of the individual property owners.

3.5.1 Buildout Yield Methodology

In accordance with State law, the floating zones propose a minimum and maximum residential density. In general, the "maximum realistic yield" of each housing strategy is used in this PEIR as the approach to evaluating the potential environmental impacts associated with future development. "Maximum realistic yield" is defined as the development potential for each housing site at the greatest intensity permitted by zoning over the site's "net" acreage (net of known constraints). Under this "maximum realistic yield" methodology, land use absorption assumption rates for non-residential sites balance the residential yields with non-residential yields (commercial and retail development), as described in greater detail below. Future growth assumed is guided by land uses identified in the three land use housing strategy maps, referred to as "Ready Made," "Build Your Own," and "Modified Mixed Use Places."

"Buildout" for purposes of this PEIR, generally refers to the total maximum realistic yield of the housing sites on each of the housing strategy maps. The buildout projections for commercial and residential development reflect what could realistically be achieved under the rezoning program described above. As a practical matter and with a 25-year development track record, under the current General Plan, actual development in the City is typically less than the theoretical limit or maximum holding capacity, as permitted by zoning. This is a result of market forces, as well as building constraints and development standards when applied to specific sites, which often dictate the construction of less than the maximum allowable development.

The "net" lot area was utilized to calculate a potential buildout yield on each viable housing site. The City's General Plan and Zoning Code require that certain constrained lands be excluded from the gross lot area. For purposes of density, the gross lot area was reduced by the presence of constrained areas. Constrained areas include steep slopes, floodplains, beaches, permanent bodies of water, significant wetlands, major utility easements, railroad track beds or rights-of-way, and easements for streets and roads. The following discusses the typical constraints observed on some of the viable housing sites and then provides an approximate reduction in projected site density.

Steep Slopes:

The density for properties containing slopes is calculated based on the following:

- Zero to 25 percent slope – no deduction (100 percent density);
- 25-40 percent slopes – half of constrained area deducted (50 percent density); and
- Slopes greater than 40 percent, plus or minus area completely excluded (no density allowance).

Roadways/Easements:

The density for properties containing easements for streets, roads, and anticipated right-of-way dedications is calculated based on the developable area of the properties exclusive of the estimated area of roadway/easement.

***Floodplains and Wetlands*:**

The density for properties containing wetlands is calculated based on the developable area of the properties exclusive of the estimated area of wetlands required. The City controls the use and development in surrounding areas of influence to wetlands with the application of buffer zones. All wetlands and buffers identified and resulting from development use approval shall be permanently conserved or protected through the application of an open space easement.

3.5.2 Residential Buildout Assumptions

Due to regulatory constraints, physical constraints, and foreseeable market conditions, realization of a "full theoretical buildout" scenario is highly unlikely. (Full theoretical buildout would employ the maximum permitted density over the gross site acreage).

The analysis of impacts under the 2035 planning horizon is detailed and patterned after a "full buildout" to provide maximum CEQA coverage for future projects. For 2035, the analysis is quantitative where appropriate and possible. The buildout in this PEIR assumes the maximum realistic yield (i.e., residential development capacity of the land net of known constraints). The proposed residential yield identified in the housing strategy residential buildout tables below (Tables 3-4a through 3-4c) calculates the residential yield at parcel level for a potential density of 30 units per acre on residential-only sites and 20 units per acre on sites that also allow for non-residential development (mixed use development).[8]

[8]The yields in the tables below are prepared for CEQA purposes and are higher than the yields that the State Department of Housing and Community Development will credit the City in providing an adequate sites inventory due to differing sets of governing regulations.

Table 3-4a Housing Strategy 1: Ready Made (RM) Maximum Realistic Yield: Residential				
Site	Parcel Area (Net)	Existing Residential Units	Adopted Zoning Yield	Proposed Residential Yield
C-2	10.57	1	89	317
C-3	4.87	0	0	97
C-7	0.55	0	0	11
L-1	5.21	6	65	126
L-2	2.15	0	27	43
L-4	1.89	0	6	57
L-5	1.69	1	5	51
L-6	5.45	4	16	164
NE-4	18.90	0	0	378
O-2	4.80	0	10	96
O-5	1.60	1	7	48
O-6	1.50	0	4	38
OE-1	2.31	5	43	46
OE-4	4.00	0	0	80
OE-5	12.17	0	183	243
OE-7	4.50	1	0	135
Totals	**82.16**	**19**	**455**	**1,930**

Table 3-4b Housing Strategy 2: Build Your Own (BYO) Maximum Realistic Yield: Residential				
Site	Parcel Area (Net)	Existing Residential Units	Adopted Zoning Yield	Proposed Residential Yield
C-2	10.57	1	89	317
L-1	5.21	6	65	126
L-7	7.50	0	7	60
NE-1	10.20	0	0	188
NE-3	10.00	0	0	300
NE-7	9.05	0	0	181
O-2	4.80	0	10	96
O-4	4.00	0	9	80
O-5	1.60	1	7	48
OE-2	7.25	0	0	145
OE-7	4.50	1	0	90
OE-8	11.09	0	0	222
Totals	**85.77**	**9**	**187**	**1,853**

Table 3-4c Housing Strategy 3: Modified Mixed Use Places (MMUP) Maximum Realistic Yield: Residential				
Site	Parcel Area (Net)	Existing Residential Units	Adopted Zoning Yield	Proposed Residential Yield
C-1	9.35	0	0	187
C-2	10.57	1	89	317
C-6	4.60	0	4	138
L-7	7.50	0	7	60
CBHMG-1	0.77	0	0	23
ALT 2	17.55	17	237	309
NE-1	10.20	0	0	188
NE-7	9.05	0	0	181
ALT 3	14.56	0	0	291
O-2	4.80	0	10	96
O-3	4.87	0	0	97
O-4	4.00	0	9	80
ALT 4	6.19	3	13	186
OE-1	2.31	5	43	46
OE-4	4.00	0	0	80
OE-7	4.50	1	0	135
ALT 5	11.27	3	54	338
ALT 6	3.10	0	0	93
ALT 7	21.02	65	342	416
Totals	**150.21**	**95**	**808**	**3,261**

As shown on Table 3-5, the maximum realistic yield of housing units at buildout would differ among the three land use housing strategy maps.

Table 3-5 Housing Strategy Comparison: Residential Maximum Realistic Yield			
	Housing Strategy 1: Ready Made	Housing Strategy 2: Build Your Own	Housing Strategy 3: Modified Mixed Use Places
Adopted Zoning Yield	455	187	808
Proposed Residential Yield	1,930	1,853	3,261
Increase in Yield	1,475	1,666	2,453

3.5.3 Non-Residential Buildout Assumptions

The level of non-residential development evaluated in this PEIR is based on reasonable assumptions for commercial development activity anticipated to occur over the next 20+ years within the City. There is a limit to the market capacity for additional commercial development, which is far less than the theoretical buildout afforded by the existing zoning. However, assumptions relative to marginal growth were made to account for impacts that would be greater than under the No Project/Adopted Plan scenario. This is referred to as ambient growth under the administration of various forecasting tools.

For housing sites proposed within existing commercial centers, the existing commercial building footprint was preserved with minor adjustments to account for additional impacts. As discussed earlier in this section, and due to regulatory constraints, physical constraints, and foreseeable market conditions, realization of "full theoretical" buildout is highly unlikely. The maximum realistic yield for commercial development on mixed use sites generally identifies commercial development intensities based on the following assumptions:

- Neighborhood Center Prototype: 0.33 floor area ratio (FAR) commercial; larger sites will likely have horizontal mixed use and a large amount of surface parking.
- Village Center Prototype: 0.40 FAR commercial; smaller sites will need more development to be viable.
- Main Street Prototype: Will retain the area coverage specifications used in the Downtown Encinitas Specific Plan or 101 Corridor Specific Plans.

Tables 3-6a through 3-6c show the total building floor area of non-residential development at buildout for each housing strategy.

Table 3-6a
Housing Strategy 1: Ready Made (RM)
Maximum Realistic Yield: Commercial

Site	Parcel Area (Net)	Existing Commercial Building Density (square feet)	Proposed Commercial Density (square feet)
C-2	10.57	45,200	0
C-3	4.87	70,000	85,030
C-7	0.55	4,750	12,004
L-1	5.21	27,650	90,967
L-2	2.15	28,750	37,539
L-4	1.89	0	0
L-5	1.69	0	0
L-6	5.45	0	0
NE-4	18.90	156,000	175,000
O-2	4.80	0	83,808
O-5	1.60	0	0
O-6	1.50	0	0
OE-1	2.31	23,000	40,333
OE-4	4.00	48,000	69,840
OE-5	12.17	137,900	186,300
OE-7	4.50	0	0
Totals	**82.16**	**541,250**	**780,821**

Table 3-6b Housing Strategy 2: Build Your Own (BYO) Maximum Realistic Yield: Commercial			
Site	Parcel Area (Net)	Existing Commercial Building Density (square feet)	Proposed Commercial Density (square feet)
C-2	10.57	45,200	0
L-1	5.21	27,650	90,967
L-7	7.50	0	0
NE-1	10.20	71,400	93,400
NE-3	10.00	6,000	0
NE-7	9.05	67,400	77,400
O-2	4.80	0	83,808
O-4	4.00	0	57,618
O-5	1.60	0	0
OE-2	7.25	68,700	75,700
OE-7	4.50	0	64,820
OE-8	11.09	125,100	152,380
Totals	**85.77**	**411,450**	**696,093**

Table 3-6c Housing Strategy 3: Modified Mixed Use Places (MMUP) Maximum Realistic Yield: Commercial			
Site	Parcel Area (Net)	Existing Commercial Building Density (square feet)	Proposed Commercial Density (square feet)
C-1	9.35	117,300	126,300
C-2	10.57	45,200	0
C-6	4.60	0	0
L-7	7.50	0	0
CBHMG-1	0.77	0	0
ALT 2	17.55	134,600	281,255
NE-1	10.20	71,400	93,400
NE-7	9.05	67,400	77,400
ALT 3	14.56	191,800	209,207
O-2	4.80	0	83,808
O-3	4.87	52,200	70,005
O-4	4.00	0	57,618
ALT 4	6.19	0	0
OE-1	2.31	23,000	40,333
OE-4	4.00	48,000	69,840
OE-7	4.50	0	0
ALT 5	11.27	0	0
ALT 6	3.10	0	50,000
ALT 7	21.02	369,300	450,900
Totals	**150.21**	**1,120,200**	**1,610,066**

As shown on Table 3-7, the total commercial square footage at buildout would differ among the three land use housing strategy maps.

Table 3-7
Housing Strategy Comparison: Commercial Maximum Realistic Yield

	Housing Strategy 1: Ready Made (square feet)	Housing Strategy 2: Build Your Own (square feet)	Housing Strategy 3: Modified Mixed Use Places (square feet)
Existing Commercial Development	541,250	411,450	1,120,200
Proposed Commercial Development)	780,821	696,093	1,610,066
Total difference	239,001	284,643	489,866

3.6 Discretionary Actions

Discretionary actions are those actions taken by an agency that call for the exercise of judgment in deciding whether to approve or how to carry out a project. Floating zone provisions that may conflict with the Encinitas Municipal Code or Specific Plan supersede the conflicting Encinitas Municipal Code or Specific Plan provision.

3.6.1 Housing Element Update Conforming Amendments

The following discretionary actions by the City would be required for approval the Housing Element Update:

- Adopt the Housing Element Update, which amends the General Plan.
- Amend the General Plan Land Use Element for conformance.
- Amend Land Use Element Goals 2 and 4 for growth management program modification.
- Amend the Community Character and Voters' Rights Initiative portion of the Land Use Element and Zoning Code Chapter 30.00 to modify building height limitations and authority to grant land use change approvals in very specific circumstances.
- Amend Zoning Code Chapter 23.08 to allow additional authority to grant permit.
- Amend Zoning Code Section 30.04.10 to add a "floating zone" definition.
- Amend Zoning Code Section 30.34.30 to allow additional authority to grant permit.
- Amend Zoning Code Chapter 30.72 to allow additional authority to grant permit.

- Add Zoning Code Chapter 30.36 for the Floating Zone, which also adopts the Design Guidelines as a part of this new chapter by reference.

- Amend the North 101 Corridor Specific Plan, Encinitas Ranch Specific Plan, Downtown Encinitas Specific Plan, and Cardiff Specific Plan to establish a foundation for Floating Zone implementation.

- Amend the Land Use and Implementation Program portions of the Local Coastal Program (LCP). LCPs are planning tools used by local governments to guide development in the coastal zone, in partnership with the California Coastal Commission. Each LCP includes a land use plan and measures to implement the plan (such as zoning ordinances). In Encinitas, the LCP consists of portions of the General Plan along with the Zoning, Building, Grading and Subdivision ordinances.

- Certify the EIR Adopt the Findings, Statement of Overriding Considerations and Mitigation Monitoring and Reporting Program.

The following actions by the registered voters of Encinitas would be required for approval the HEU:

- Public Vote on the HEU, General Plan Amendments, Amendments to Specific Plans and Zoning Code Amendments as provided by Chapter 30.00. Included in the proposed Zoning Standards is a provision to delegate authority to make major amendments related to maintaining state compliance with the Housing Element back to the City Council with a super majority vote as part of the public vote on the actions necessary for approval of the HEU.

Other project activities or actions required by other agencies:

- California Coastal Commission to certify the LCP, as amended. Once approved by the City Council, change in the regulations of the Zoning Code, or a change in zoning boundaries or designation or property or properties all or in part within the Coastal Zone, constitutes a proposed amendment to the implementing regulations of the City's LCP. Such an amendment shall not become effective until certified by the Coastal Commission pursuant to Public Resources Code Section 30514.

- California Department of HCD to review the Housing Element. All California localities are required by Article 10.6 of the Government Code (section 65580-65590) to adopt housing elements as part of their general plans, and submit draft and adopted elements to HCD for review of compliance with State law.

3.6.2 Ancillary Actions

All of the previously summarized discretionary actions are required to implement the HEU. As described in Section 3.4.3.3, ancillary actions are needed to help implement HEU objectives.

- Amend the Noise Element to resolve internal inconsistencies and address mixed use development standards. The amendment focuses on policies 1.1 through 1.7.

- Amend the Land Use Element to delete policies as specified by Proposition A, the Community Character and Voters' Rights Initiative, except in areas of conflict with the HEU.

- Amend the North 101 Corridor Specific Plan and Downtown Encinitas Specific Plan to modify regulations that constrain housing development.

3.6.3 Future Development

As outlined in the HEU and associated provisions of the floating zone, the HEU would result in the development of a RHNA implementation plan. This plan would include site-specific development standards, along with CEQA mitigation measures identified in the Mitigation Monitoring and Reporting Program for this PEIR to which future projects must adhere in order for the site to develop consistent with the purpose of the rezone and to ensure that the development of the site does not result in a significant environmental impact.

Future development consistent with the floating zone and PEIR could proceed "by right" under the design parameters established by the ordinance. Subsequent projects may tier from the HEU's PEIR or a finding may be made that sufficient environmental clearance occurred with the PEIR for the Housing Element (CEQA Guidelines Sections 15152, 15162 and 15168). This PEIR comprehensively considers a series of related projects with the intent to streamline subsequent review of future development projects consistent with the intent of the floating zone program.

Some future development permitted through the HEU would be subject to subsequent environmental review and other discretionary review and permitting as required by the City's Municipal Code. Specifically, design review and subsequent discretionary review would be required for most subdivision map actions, as detailed below. Subsequent environmental review is required for discretionary actions to entitle future development, including but not limited to Design Review, certain Subdivision actions and Use Permits. Subsequent discretionary actions must be examined in the light of the PEIR to determine whether an additional environmental document needs to be prepared.

Most projects would require subsequent discretionary approvals including:

3.6.3.1 Design Review

All buildings, grading, landscaping, or construction projects in a floating zone (whether they require any other City permit or not) would be subject to design review unless exempted by Chapter 23.08 of the Municipal Code. Such exemptions include walls and fences six feet or less in height, maintenance work, minor exterior alterations, interior remodeling work, replacement landscaping, and other activities described in

Chapter 23.08.030. When in compliance with all other City ordinances and regulations, the Planning and Building Director has the authority to render a final determination unless the discretionary action includes a MDP for which the Planning Commission is the decision maker. For projects including other discretionary actions at a higher level than the Planning and Building Director, the design review permit also would be decided upon at that higher level.

3.6.3.2 Subdivisions

All projects within a floating zone that involve the creation of subdivisions would be subject to Municipal Code Title 24, Subdivisions. Minor subdivisions would be ultimately approved by the Planning and Building Director. The Planning Commission renders decisions on major subdivisions. For projects including other discretionary actions at a higher level, the authorized agency would also render a final determination on the subdivision.

3.6.3.3 Conditional Use Permits

Review of any use in a floating zone requiring a major or minor conditional use permit (pursuant to Municipal Code Section 30.36.070) would occur in accordance with Chapter 30.74, Use Permits. Pursuant to the code, the Director of Planning and Building has authority make determinations for minor use permits and the Planning Commission is authorized to make determinations for major use permits. If a project component contains one or more components which requires a final determination by a higher level, the conditional use permit would also be decided upon at that higher level.

3.6.3.4 Coastal Development Permit

Projects within the Coastal Zone must be additionally processed and entitled pursuant to Municipal Code Chapter 30.80. Pursuant to the code, the Director of Planning and Building has authority to render a final determination for coastal development permits for minor use permits, tentative parcel maps, administrative design review permits, and other administrative applications as required. The Planning Commission is authorized to make a determination on major use permits, tentative maps, design review permits (not under the purview of the Director), variances, and other items referred by the Planning and Building Director. Upon recommendation of the Planning Commission, the City Council is authorized to render a final determination for coastal development permits for general plan, zone code, and specific plan amendments.

4

Chapter 4
Environmental Analysis

The following sections analyze the potential environmental impacts that may occur as a result of project implementation. Buildout of the Housing Element Update (HEU) is anticipated to occur over a 20+ year horizon. Potential impacts are assessed against the current on-the-ground condition; therefore, due to the long-term buildout horizon, circumstances, and in-turn potential impacts, have the potential to change over time. The environmental issues subject to detailed analysis in the following sections include those identified as potentially significant by the City through preliminary review and by commenters during the Community Dialogue Sessions held in each of the five Encinitas communities in November 2014 (as well as "make-up" sessions at City Hall from December 1-5, 2014); 45 public briefings and outreach events; the e-Town Hall online engagement tool; the project email mailbox; written correspondence, and comments received in response to the EIR Notice of Preparation and scoping meetings. Fourteen environmental issues are addressed in the following sections, and in accordance with the CEQA Guidelines and Statutes.

Each issue analysis section is formatted to include a summary of existing conditions, including the regulatory context, the criteria for the determination of impact significance, evaluation of potential project impacts considering General Plan Update goals and policies and existing regulations, a list of required mitigation measures (if any), and conclusion of significance after mitigation for impacts identified as requiring mitigation.

4.1 Aesthetics

This section addresses the Housing Element Update (HEU) in relation to potential impacts associated with plan consistency, public views, community character, and scenic resources. Information presented in this section is based on a review of each housing site in relation to designated vista points and scenic view corridors as defined in the Resource Management Element of the General Plan and site-specific analysis of each neighborhood prototype based on the characteristics of the prototype in relation to the surrounding area. The analysis references a photo survey of the housing sites (Appendix I) and proposed floating zone standards and design guidelines (see Appendices F-2 and G).

4.1.1 Existing Conditions

4.1.1.1 Environmental Setting

a. Topography and Landform

The City of Encinitas (City) is situated along 6 miles of Pacific coastline in northern San Diego County. Topography is characterized by cliffs, coastal beaches, flat topped coastal areas, rolling hills and steep mesa bluffs. The Batiquitos Lagoon is located in the north and the San Elijo Lagoon to the south of the City. The project area is primarily developed, with some natural open spaces.

b. Community Character

Each of Encinitas' communities has its own distinct character, history and land use composition. The coastal communities (Leucadia, Old Encinitas and Cardiff) have an eclectic and unique character and share similar development patterns, with a beachfront orientation and a focus on the Highway 101 corridor. One of the major contributors to the eclectic style of the coastal communities is the variety of architectural styles. The buildings generally take elements from a specific architectural style or period but do not always follow one style consistently. The mixture of styles from lot to lot creates a distinctive style and character.

In contrast, the inland communities (New Encinitas and Olivenhain) vary dramatically in both character and land use composition. New Encinitas includes suburban style residential neighborhoods with architectural style typical of 1980's and 1990's construction New Encinitas includes the City's central commercial corridor along El Camino Real which includes "big box" retail and strip commercial centers.

Olivenhain is characterized by rural, low-density residential uses on large lots, considerably different than the coastal communities to the west. Many parcels include orchards,

horticultural uses, and grazing areas for horses. Architecturally, the homes are largely custom-built homes with varied styles and materials. A typical style element is the incorporation of ranch style features. Section 2.4.2 provides additional description of the community character for each community. Additional discussion of visual character, visual quality and architecture and design applicable to each housing site is provided within the analysis in Section 4.1.7, below.

c. Scenic Resources

Scenic resources in the City are defined in the Resource Management Element of the City's General Plan. The Resource Management Element identifies scenic vista points, defines critical viewsheds, and identifies scenic roads and scenic view corridors. Each of these scenic resources are depicted on Figures 4.1-1 through 4.1-4 and are described in the following sections.

Scenic Vistas and Viewsheds

Scenic vista points are defined by map reference and/or by text reference in the Resource Management Element of the City's General Plan. They include areas that are currently vista points and areas to be acquired and developed as vista points. Some of the vista points listed to be acquired and/or developed have been developed since adoption of the General Plan. Vista points include:

Vista points to be acquired and developed:

- San Elijo and Kilkenny (overlooking lagoon and coast)
- Highway 101, north of La Costa Avenue
- Northeast and northwest corner of Interstate 5 (I-5) and La Costa Avenue
- Encinitas Community Park site

Vista points to be developed and maintained:

- Orpheus Street Park site
- Oak Crest Park site
- West end of "D" Street
- West end of "F" Street
- West end of "H" Street
- West end of "J" Street

Vista points to be maintained and upgraded as necessary:

- Leucadia Beach State Park
- Cardiff Sports Park
- West end of "I" Street
- Moonlight State Beach
- Swami's City Park
- Existing Vista Point on southbound I-5
- Cardiff Beach State Park (south parking lot)
- Self-Realization Fellowship

The Resource Management Element requires the City to designate Scenic/Visual Corridor Overlay areas within which the character of development would be regulated to protect the integrity of the vista points listed above. Critical viewsheds are defined in the Resource Management Element as those areas that extend radially for 2,000 feet from the vista point; and cover areas upon which development could potentially obstruct, limit or degrade the view. Development within these critical viewshed areas would be subject to design review to ensure building height, bulk, roofline, color and scale do not limit or degrade existing views and that landscaping is used to screen undesirable views. Figures 4.1-1 through 4.1-4 depict designated critical viewsheds.

Scenic Roadways and View Corridors

The Resource Management Element designates the following roads as scenic highway/visual corridor viewsheds:

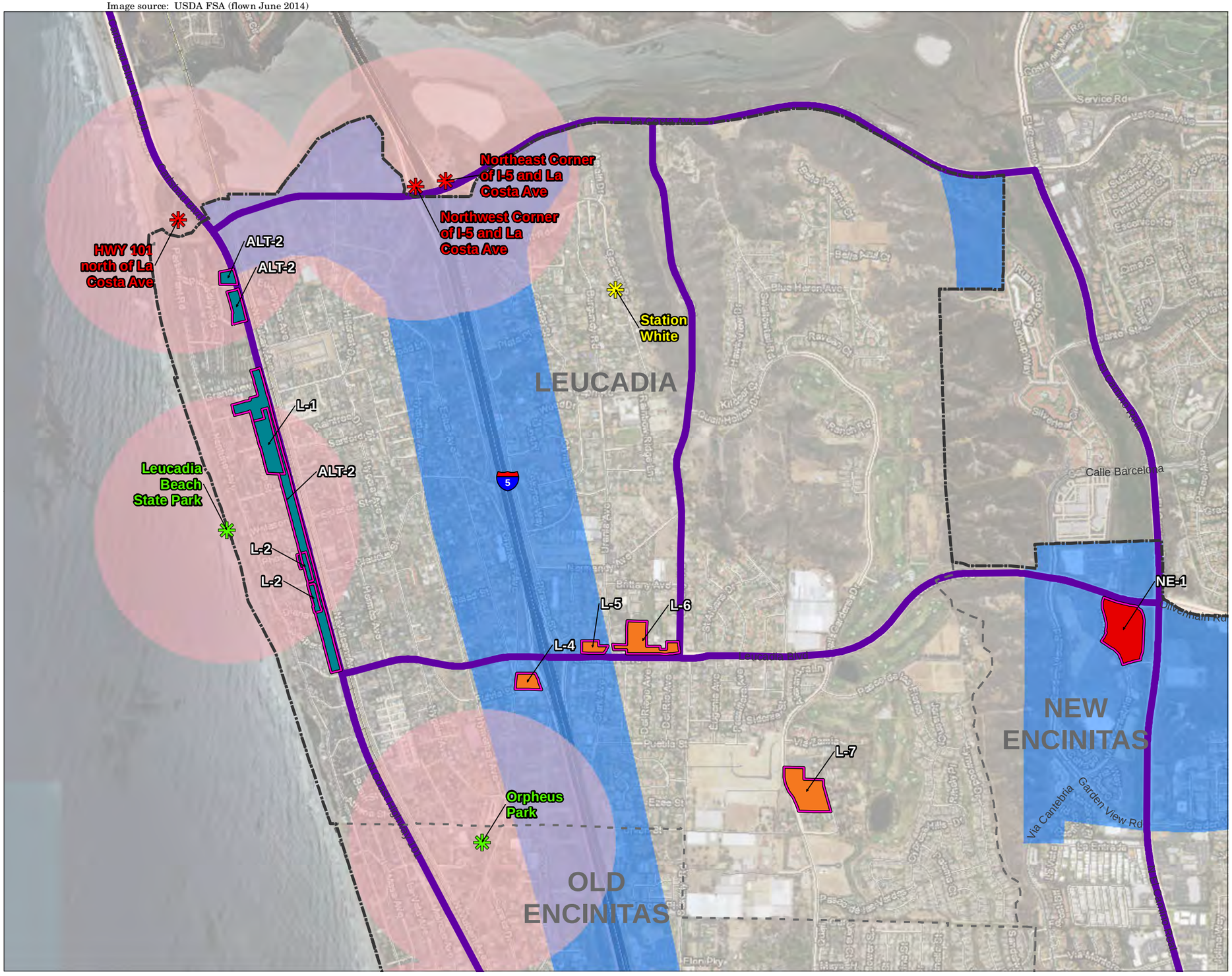
- Saxony Road, from Leucadia Boulevard, north to La Costa Avenue
- Highway 101 from Encinitas Boulevard south to Santa Fe Drive
- El Camino Real from La Costa Boulevard south to Manchester Avenue
- Highway 101, La Costa Avenue, to South Carlsbad Beach
- La Costa Avenue, from just west of I-5 to El Camino Real
- Highway 101, from Encinitas Boulevard to La Costa Avenue
- Leucadia Boulevard, between Highway 101 and El Camino Real
- San Elijo Avenue (and Highway 101) south of Cardiff Beach State Park to Santa Fe Drive
- Manchester Avenue from San Elijo Avenue to Encinitas Boulevard
- I-5, crossing San Elijo Lagoon
- Rancho Santa Fe Road within Olivenhain
- Lone Jack Road from Rancho Santa Fe Road to Lone Hill Lane
- Santa Fe Drive from South Vulcan Avenue to El Camino Real

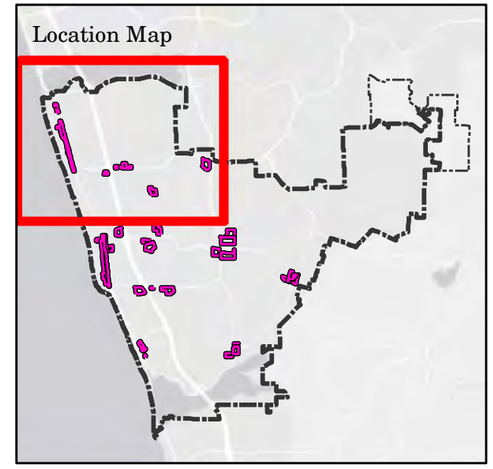
Scenic view corridors are located along I-5, San Elijo Avenue near the lagoon east along Manchester Avenue, west of Rancho Santa Fe Road at Avenida La Posta, east and west of El Camino Real from Garden View Road to the north side of Leucadia Boulevard, and south of La Costa Avenue in the northeast corner of the Leucadia community boundary. Refer to Figures 4.1-1 through 4.1-4 for the location of these scenic roadways and scenic view corridors.

Historic Viewsheds

The Resource Management Element identifies Station White as a historic viewshed. Station White was one of several observation posts established along the West Coast during World War II. Station White is located within a residential area in the community of Leucadia as shown on Figure 4.1-1.

Image source: USDA FSA (flown June 2014)





- City Limits
- Sphere of Influence
- Community Area Boundaries
- Housing Sites
- Vista Point Critical Viewshed
- Scenic View Corridor
- Scenic View Corridor and Vista Point Critical Viewshed Areas
- Scenic Roads

Vista Points

- Historic
- Proposed
- Existing

Neighborhood Prototype

- Neighborhood Center/ Mixed Use - Large Site
- Residential Infill - Medium to Large Site
- Main Street/Mixed Use - Small Site

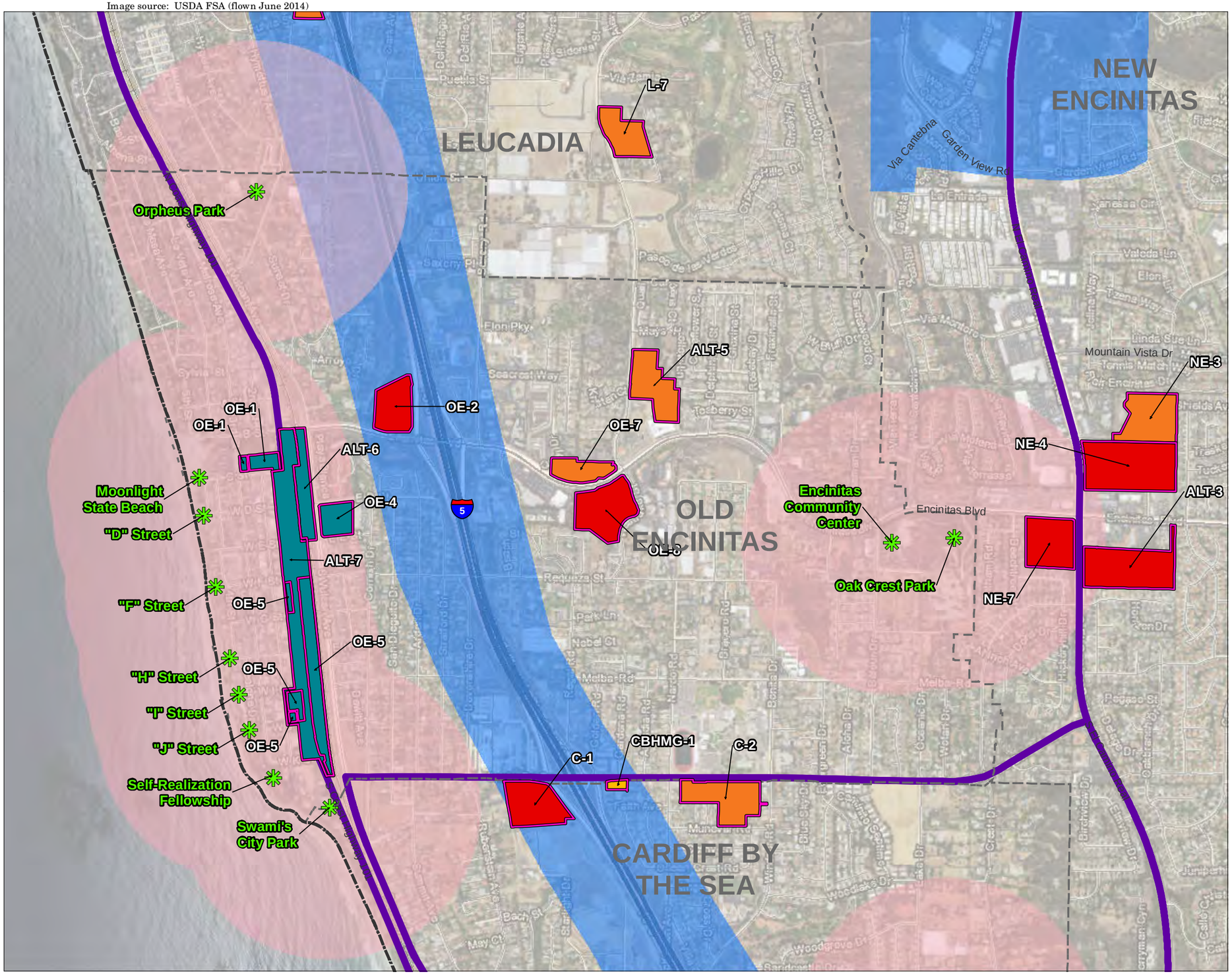
0 Feet 1,500

FIGURE 4.1-1
Scenic Resources - Leucadia

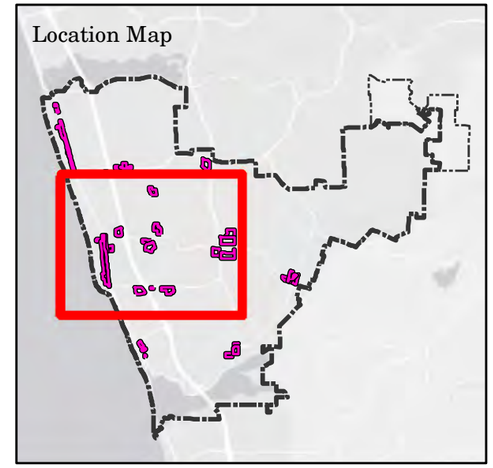
RECON

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Image source: USDA FSA (flown June 2014)



Location Map



- City Limits
- Sphere of Influence
- Community Area Boundaries
- Housing Sites
- Vista Point Critical Viewshed
- Scenic View Corridor
- Scenic View Corridor and Vista Point Critical Viewshed Areas
- Scenic Roads

Vista Points

- Existing

Neighborhood Prototype

- Neighborhood Center/ Mixed Use - Large Site
- Residential Infill - Medium to Large Site
- Residential Infill - Small Site
- Main Street/Mixed Use - Small Site

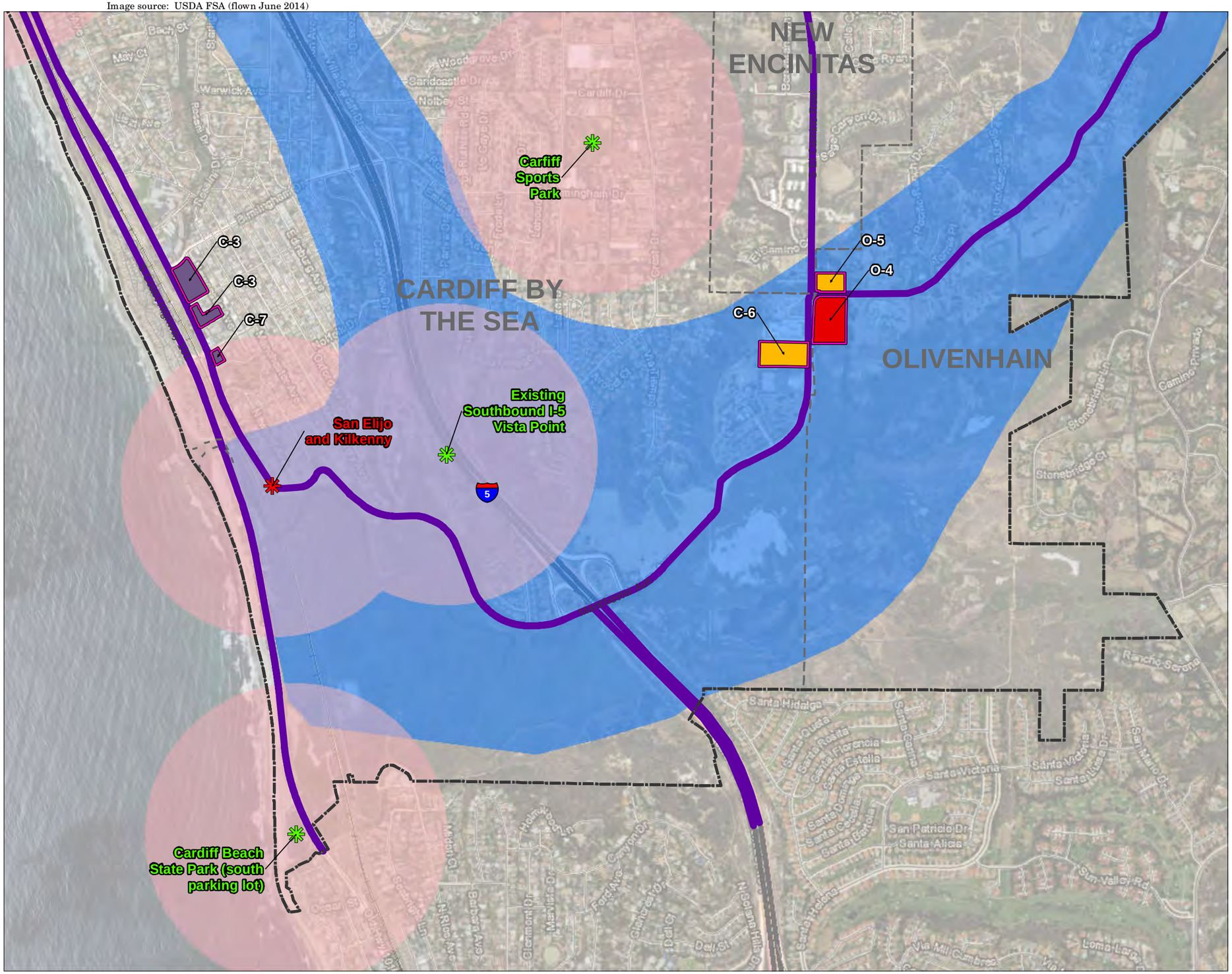
0 Feet 1,500

FIGURE 4.1-2
Scenic Resources - Old Encinitas

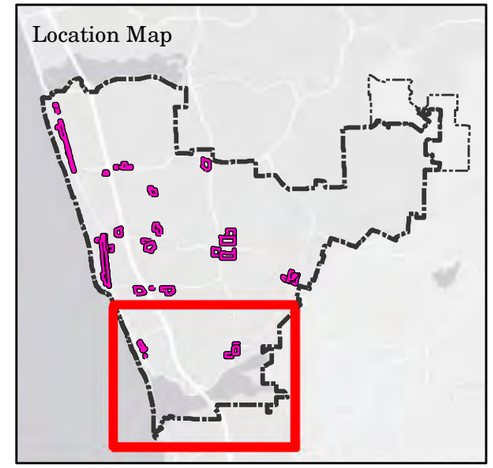
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Image source: USDA FSA (flown June 2014)



Location Map



- City Limits
- Sphere of Influence
- Community Area Boundaries
- Housing Sites
- Vista Point Critical Viewshed
- Scenic View Corridor
- Scenic View Corridor and Vista Point Critical Viewshed Areas
- Scenic Roads

Vista Points

- Proposed
- Existing

Neighborhood Prototype

- Neighborhood Center/ Mixed Use - Large Site
- Village Center Mixed Use - Medium Site
- Residential Infill - Small Site

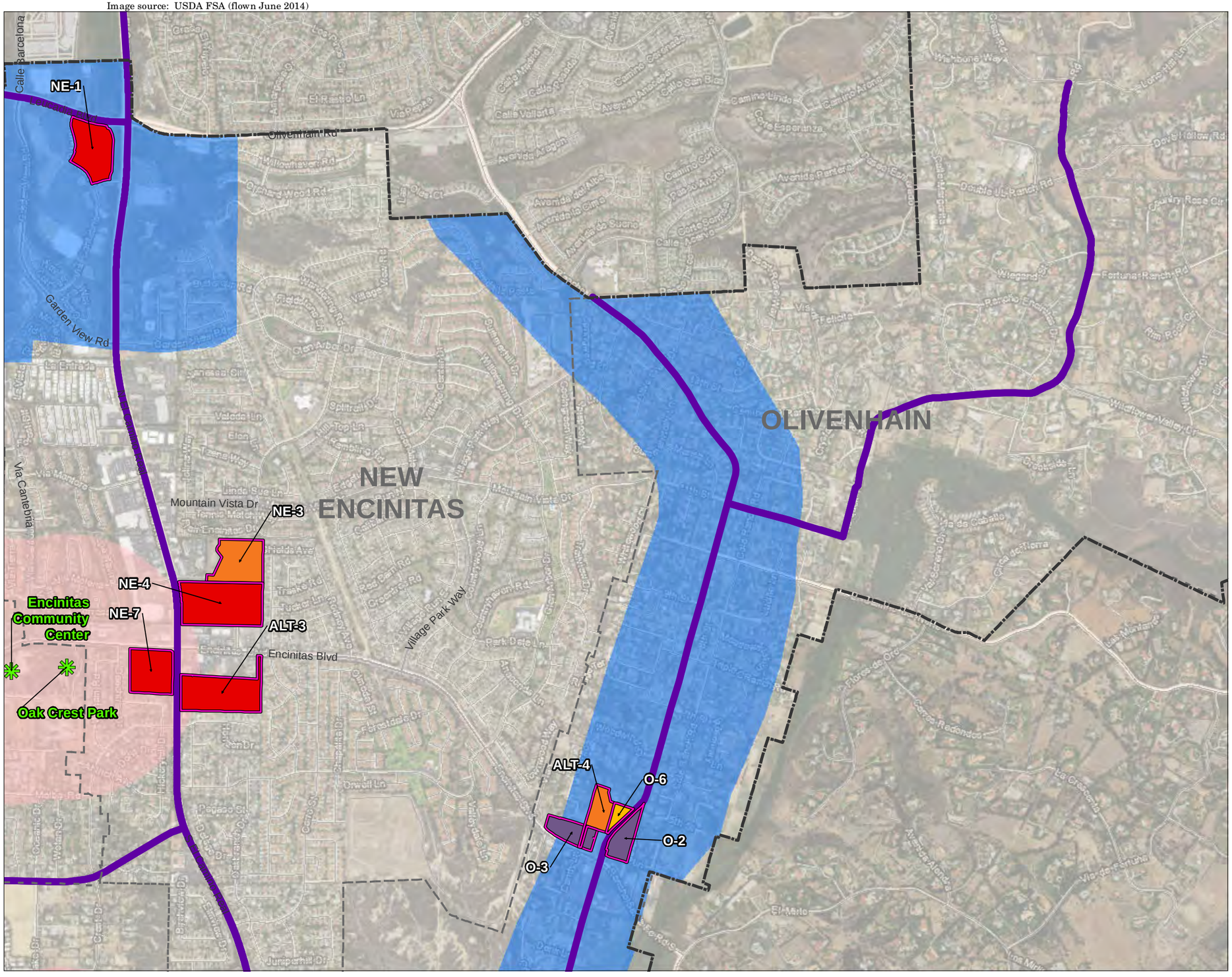
0 Feet 1,500

FIGURE 4.1-3
Scenic Resources - Cardiff and Olivenhain

RECON

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Image source: USDA FSA (flown June 2014)



RECON

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FIGURE 4.1-4
Scenic Resources -
New Encinitas and Olivenhain

4.1.2 Regulatory Framework

4.1.2.1 State

a. State Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change, which would diminish the aesthetic value of lands adjacent to highways. There are no designated or eligible scenic highways in the project area.

b. California Coastal Act

Under the California Coastal Act of 1976, scenic and visual qualities of coastal areas are considered and protected as a visual resource. The Coastal Act requires that permitted development be sited and designed to protect public views to and along the ocean and scenic coastal areas. The act also requires minimizing the alteration of natural landforms to assure that they are visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas.

4.1.2.2 Local

a. Encinitas General Plan

The City of Encinitas General Plan serves as a blueprint for the City's physical, social, and economic development and contains goals and policies that aim to maintain the City's seaside community character, provide a balance of land uses and services, and to preserve environmentally sensitive areas. Goals and policies relative to aesthetics and visual resources are contained within the Resource Management, Land Use, Recreation and Circulation Elements of the City's adopted General Plan. These goals and policies are summarized in Table 4.1-1.

As discussed in the existing conditions section above, the Resource Management Element of the General Plan identifies scenic vistas and viewsheds, scenic roadways and historic viewsheds within the City.

b. Local Coastal Program

Approximately two-thirds of the City is within the City of Encinitas Local Coastal Program (LCP) as required by the California Coastal Act. Under this program, a Coastal Development Permit is required for all new development within the City's Coastal Zone. The LCP is included within the General Plan, and consists of a coastal land use plan and supporting ordinances that are incorporated into each of the General Plan elements. LCP policies applicable to visual resources are identified in Table 4.1-1 where the policy includes a notation indicating the corresponding Coastal Act code citation.

Table 4.1-1 Goals and Policies Related to Visual Aesthetics	
Goal/Policy	Description
City of Encinitas General Plan Resource Management Element	
Goal 3	The City will make every effort possible to preserve significant mature trees, vegetation and wildlife habitat within the Planning Area. (Coastal Act/30240)
3.1	Mature trees of community significance cannot be removed without City authorization.
3.2	Mature trees shall not be removed or disturbed to provide public right-of-way improvements if such improvements can be deferred, redesigned, or eliminated. This policy is not meant to conflict with the establishment of riding/ hiking trails and other natural resource paths for the public good, or with the preservation of views.
3.3	The City will examine ways to aesthetically trim street trees and vegetation within the public right-of-way including the possibility of using contract services or City personnel. (Coastal Act/30240/30251)
3.6	Future development shall maintain significant mature trees to the extent possible and incorporate them into the design of development projects.
Goal 4	The City, with the assistance of the State, Federal and Regional Agencies, shall provide the maximum visual access to coastal and inland views through the acquisition and development of a system of coastal and inland vista points. (Coastal Act/30251)
4.1	The following Vista Points and others will be acquired and developed, as feasible: · San Elijo and Kilkenny (overlooking lagoon and coast) · Highway 101, north of La Costa Avenue · Northeast and northwest corner of I-5 and La Costa Avenue · Encinitas Community Park site (Coastal Act/30251)
4.2	The following Vista Points will be developed and maintained as feasible: · Orpheus Street Park site · Oak Crest Park site · West end of " D" Street · West end of " F" Street · West end of " J" Street (Coastal Act/30251)
4.3	The following Vista Points will be maintained as needed, and upgraded as necessary: · Leucadia Beach State Park · West end of " I" Street · Moonlight State Beach · Swami's City Park · Existing Vista Point on southbound I-5 · Cardiff Beach State Park (south parking lot; Coastal Act/30251)
4.4	The system of Vista Points will provide for the differing needs of automobile, bicycle, and pedestrian users, and will recognize as a recreational resource, the function of Vista Points as facilities for the passive, and occasionally remote enjoyment of the coastal and inland view. (Coastal Act/30251/30212.5/30210)
4.5	The City will designate "Scenic/ Visual Corridor Overlay" areas within which the character of development would be regulated to protect the integrity of the Vista Points according to the following criteria: · Critical viewshed areas should meet the following requirements: o extend radially for 2,000 feet (610M) from the Vista Point and o cover areas upon which development could potentially obstruct, limit, or degrade the view. · Development within the critical viewshed area should be subject to design review based on the following: o building height, bulk, roof line and color and scale should not obstruct,

Table 4.1-1 Goals and Policies Related to Visual Aesthetics	
Goal/Policy	Description
	limit or degrade the existing views; o landscaping should be located to screen adjacent undesirable views (parking lot areas, mechanical equipment, etc.; Coastal Act/30251/30253)
4.6	The City will maintain and enhance the scenic highway/visual corridor viewsheds. (Coastal Act/ 30251)
4.7	The City will designate the following view corridors as scenic highway/visual corridor viewsheds: · Saxony Road, from Leucadia Boulevard north to La Costa Avenue · Highway 101 from Encinitas Boulevard south to Santa Fe Drive · El Camino Real from Encinitas Boulevard north to La Costa Boulevard · Highway 101, La Costa Avenue to South Carlsbad Beach · La Costa Avenue from just west of I-5 to E1 Camino Real · Highway 101, from Encinitas Boulevard to La Costa Avenue · Leucadia Boulevard between Highway 101 and E1 Camino Real · San Elijo Avenue (and Highway 101) south of Cardiff Beach State Park to Santa Fe Drive · Manchester Avenue from San Elijo Avenue to Encinitas Boulevard · I-5, crossing San Elijo Lagoon (Coastal Act/ 30251/30253)
4.10	It is intended that development would be subject to the design review provisions of the Scenic/Visual Corridor Overlay Zone for those locations within Scenic View Corridors, along scenic highways and adjacent to significant viewsheds, historic viewsheds and vista points with the addition of the following design criteria: · Road Design o Type and physical characteristics of roadway should be compatible with natural character of corridor, and with the scenic highway function. · Development Design o Building and vegetation setbacks, scenic easements, and height and bulk restrictions should be used to maintain existing views and vistas from the roadway. o Off-site signage should be prohibited and existing billboards removed o Development should be minimized and regulated along any bluff silhouette line or on adjacent slopes within view of the lagoon areas and Escondido Creek. o Where possible, development should be placed and set back from the bases of bluffs, and similarly, set back from bluff or ridge top silhouette lines; shall leave lagoon areas and floodplains open, and shall be sited to provide unobstructed view corridors from the nearest scenic highway. o Development that is allowed within a viewshed area must respond in scale, roof line, materials, color, massing, and location on site to the topography, existing vegetation, and colors of the native environment. (Coastal Act/30251/30253)
4.11	The City will develop a program to preserve views that also preserves the appropriate vegetation and removes obstacles that impact views. Trees and vegetation which are themselves part of the view quality along the public right-of-way will be retained. (Coastal Act/30251)
Goal 9	The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as

Table 4.1-1 Goals and Policies Related to Visual Aesthetics	
Goal/Policy	Description
	possible, in undeveloped areas. (Coastal Act/30240/30251)
9.1	The City will initiate and pursue the landscaping of appropriate median and parking areas with trees on all new and existing arterial streets. (Coastal Act/30251)
9.5	Encourage and adopt standards for clean-up, landscaping, beautification, utility undergrounding, and additional landscaping in parking facilities where needed in existing commercial areas. (Coastal Act/ 30251/30252)
9.6	Require landscaping in the design of new residential, commercial, and industrial areas and buildings as detailed in the City Zoning Code regulations. (Coastal Act/30251/30253)
9.7	Encourage and adopt standards for landscaping of existing commercial and industrial uses to screen and buffer unsightly and congested commercial/ industrial areas from surrounding land uses. (Coastal Act/30251)
City of Encinitas General Plan Land Use Element	
Goal 7	Development in the community should provide an identity for the City while maintaining the unique identity of the individual communities. (Coastal Act/30253)
City of Encinitas General Plan Circulation Element	
Goal 4	The City should make every effort to develop a circulation system that highlights the environmental and scenic amenities of the area. (Coastal Act/30251)
4.1	Design roads to enhance scenic areas. (Coastal Act/30251)
4.2	Promote and encourage roadside and median landscaping. (Coastal Act/30251)
4.5	Design and construct attractive bike paths and pedestrian ways along existing freeway overpasses and underpasses. Discourage separate pedestrian overpasses. (Coastal Act/30252)
4.9	Prohibit whenever legally possible, or strictly regulate billboards on city streets, roads, freeways, railroad rights-of-way, and lagoons. (Coastal Act/30251/30253)
4.10	Develop street lighting standards, where appropriate, consistent with neighborhood/community character and night sky viewing.
SOURCE: City of Encinitas 1989, amended 2014.	

c. Scenic/Visual Corridor Overlay Zone

The Scenic/Visual Corridor Overlay Zone regulations apply to all properties within the scenic view corridor along scenic highways and adjacent to significant viewsheds and vista points as described in the Visual Resource Sensitivity Map of the Resource Management Element of the General Plan (Figure 4.1-1 through 4.1-4). When development is proposed on any properties triggering design review within the Scenic View Corridor Overlay Zone, consideration is given to the overall visual impact of the proposed project and conditions or limitations on project bulk, mass, height, architectural design, grading, and other visual factors. Municipal Code Section 30.34.080 regulates development in these areas to ensure the visual impact of proposed development is evaluated, the integrity of vista points is maintained and conditions or limitations on project, bulk, mass, height, architectural design, grading and other visual factors are identified and incorporated into project designs.

d. Hillside/Inland Bluff Overlay Zone

The Hillside/Inland Bluff Overlay Zone regulations apply to all areas within the Special Study Overlay Zone where site-specific analysis indicates that 10 percent or more of the area of a parcel of land exceeds 25 percent slope. The Planning Commission is the authorized agency for reviewing and granting discretionary approvals for proposed development within the Hillside/Inland Bluff Overlay Zone. Where development is proposed on slopes of greater than 25 percent grade, the following additional standards apply:

- Slopes of greater than 25 percent grade should be preserved in their natural state.
- A geological reconnaissance report must be submitted.
- Where unstable conditions are indicated, a preliminary engineering geology report is also required.
- No principal structure or improvement or portion thereof shall be placed or erected, and no grading shall be undertaken, within 25 feet of any point along an inland bluff edge.
- All slopes over 25 percent grade which remain undisturbed or which are restored or enhanced as a result of a development approval, shall be conserved as a condition of that approval through a deed restriction, open space easement, or other suitable device that will preclude any future development or grading of such slopes.

e. Design Review

City Municipal Code Chapter 23.08 implements the design review provisions of the Encinitas General Plan and LCP. The design review process is generally applicable to all buildings, grading, landscaping or construction projects whether a City permit is required or not, with certain exceptions.

f. Report Format and Scope-of-Work for Land Use/Community Character/Visual Quality Analyses

The City of Encinitas has developed guidelines for preparation of land use/community character/visual quality analysis. The guidelines provide details of the required content of land use/community character/visual quality analysis and provide guidance for the preparation of impact analysis related to land use, community character, views, and landform alteration.

4.1.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to aesthetics would be significant if the HEU project would:

1. Conflict with any City policy or regulation relative to the protection of visual resources (i.e., General Plan/LCP policies, Hillside/Inland Bluff Overlay Zone, Scenic

Visual Corridor Overlay Zone/Design Review Guidelines) thereby resulting in a negative aesthetic/visual impact.

2. Allow development that is incompatible in shape, form, or intensity, such that public views from designated open space areas, view corridors or scenic highways, or to any significant visual landmarks or scenic vistas would be substantially blocked.

3. Be located in a highly visible area (e.g., on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage, or architectural projections.

4. Result in projects that would introduce features which would conflict with important visual elements or the quality of the community/neighborhood (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, light/glare, etc.) and would thereby negatively and substantially alter the existing character of neighborhoods.

5. Result in the physical loss, isolation, degradation or destruction of a visual resource or community identification symbol or landmark or other features that contribute to the valued visual character or image of the neighborhood, community, or localized area (e.g., a stand of mature trees, coastal bluff, native habitat, historic landmark).

A discussion of cumulative aesthetics impacts is included in Chapter 7.0.

4.1.4 Methodology

4.1.4.1 Approach

The analysis of visual impacts was completed based on a site visit and photo survey of each of the housing sites included as Appendix I. An evaluation of the neighborhood prototype assigned to each housing site is evaluated in terms of consistency with the community character. Neighborhood prototypes are described in the Project Description, Section 3.2.2.1 of this EIR and depicted on Figures 3-3a through 3-3b.

The following six general steps were followed to conduct the visual analysis:

1. Conduct a field survey and photograph the existing condition of each housing site.

2. Define the setting of the housing sites and viewshed.

3. Identify key views, vista points and scenic highways identified in the General Plan relative to each housing site.

4. Identify the presence of scenic resources on or within proximity to each site.

5. Assess whether development of each site under the specified neighborhood prototype would result in a significant visual impact relative to each significance threshold.

6. Propose methods to mitigate adverse or significant visual impacts.

The analysis considers whether implementation of the HEU would represent a potentially significant change in the visual setting of the community and the extent to which proposed land use strategies would be aesthetically compatible with neighboring uses in terms of bulk and scale, architectural style, etc. This section addresses protected views or view corridors and identifies potential view blockages that could result from implementation of the HEU. Compatibility with the existing aesthetic environment relative to light and glare is also addressed.

4.1.4.2 Future Project Implementation

The HEU includes design guidelines for mixed use and multi-family residential developments where the elective floating zones (R30, X30 and S30) would apply. The proposed design guidelines require that each project be designed to respond to a 'tiered' set of concepts relate to community character and the individual setting. These concepts include specified design principles, community character specific to the design traditions of the community, design context (main street, village center or neighborhood design context), and site design (human scale, massing, design, form, materials). Review would occur internally by City staff after compliance with the zoning standards is determined.

The creation of the new floating zone would establish development standards and procedures for multi-family development at a density of 20 to 30 units per acre in the General Plan Land Use Element and Development Code. Subsequent "by right" development would not be subject to further CEQA review to analyze program-level impacts on visual resources, but would be subject to compliance with the floating zone standards and associated design guidelines which are intended to ensure development is compatible with the surrounding context.

4.1.5 Issue 1: Plan Consistency

Would the project conflict with any City policy or regulation relative to the protection of visual resources (i.e., General Plan/LCP policies, Hillside/Inland Bluff Overlay Zone, Scenic Visual Corridor Overlay Zone/Design Review Guidelines) thereby resulting in a negative aesthetic/visual impact?

4.1.5.1 Impacts

a. Housing Sites

The HEU proposes Floating Zones that include three zone districts: Residential (R), Mixed Use (X), and Shopfront (S) and design contexts include Main Street (M), Neighborhood

Center (N), and Village Center (V). Each zone also defines the allowable housing prototypes that may be developed within each zone.

The proposed floating zone would allow for development that would exceed the City's current height limit of 2 stories or 30 feet. For housing sites that would permit a mix of residential and non-residential components, the maximum building height would be 38 feet. For housing sites that would permit residential only, the maximum building height would be 35 feet. Zoning regulations would limit building heights in transition areas adjacent to residentially zoned areas to provide a land use transition and avoid compatibility conflicts between land uses. Thus, although the floating zones would allow structure heights in excess of the current height limits, the application of zoning transition areas and design guidelines would ensure adverse visual impacts from this zoning change would be less than significant.

As discussed in section 4.9 Land Use, the project would not conflict with any applicable land use plan or policy of an agency with jurisdiction over the project. Refer to Table 4.9-13 for detailed discussion of project consistency with the City's General Plan. Development on housing sites would be required to comply with proposed design guidelines which provide a framework for requiring development to be context sensitive, or to be designed to fit into the project setting. These requirements would ensure that future development on housing sites would not conflict with any visual compatibility goals or policies set by the City. The floating zone requirements and design guidelines incorporate requirements that address visual character and visual compatibility with the surrounding community context. Thus, the HEU would result in a less than significant impact related to conflicts with any City policy or regulation relative to the protection of visual resources.

b. Housing Strategy Summaries

Housing strategies 1 – Ready Made (RM), 2 – Build Your Own (BYO), and 3 – Modified Mixed Use Places (MMUP) would not conflict with any City policy or regulation protecting visual resources, including General Plan/LCP policies, Hillside/Inland Bluff Overlay Zone, or Scenic Visual Corridor Overlay Zone/Design Review Guidelines. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.1.5.2 Significance of Impacts

The HEU would not conflict with any City policy or regulation relative to the protection of visual resources; thus, impacts would be less than significant.

4.1.6 Issue 2: Public Views

Would the project result in development that:

a. is incompatible in shape, form, or intensity, such that public views from designated open space areas, view corridors or scenic highways, or to any significant visual landmarks or scenic vistas would be substantially blocked?

b. is located in a highly visible area (e.g., on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage, or architectural projections?

4.1.6.1 Impacts

a. Housing Sites

A number of housing sites are located along major transportation corridors that have a scenic visual corridor overlay designation or are located within view of designated scenic roadways. Housing sites are also proposed within critical viewshed areas and in highly visible locations. Refer to Figures 4.1-1 through 4.1-4 for the location of those housing sites in relation to scenic resources. The following is an analysis of housing sites grouped by community. Five sites including ALT-5, L-7, NE-3, OE-8, and OE-7 would not have the potential to impact public views due to a lack of proximity to public view corridors, scenic roadways, or other locations with potential public views. Thus, these sites are not addressed further in this section.

Leucadia Housing Sites

Housing Site L-1

Site L-1 occupies approximately 5.19 acres on the west side of Highway 101 in Leucadia. This site is part of the larger site ALT-2. The site is adjacent to scenic Highway 101 and is within the critical viewshed of Leucadia Beach State Park as shown on Figure 4.1-1. This site includes a vacant lot, specialty retail, a motel, and six single-family homes. Surface parking dominates the view along the frontage at commercial areas of the site. Refer to Appendix I, Photographs 15 through 22 for existing site conditions at site L-1.

Under the HEU floating zone provisions, Site L-1 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype, which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. Views of site L-1 along Highway 101 would be altered by future development of two to three story mixed use structures; however, future development must comply with the zoning, development standards and design guidelines, which would ensure future development would be appropriately scaled and designed to complement the existing environment. Additionally, future development would not adversely impact views from the Leucadia Beach State Park viewpoint because the scenic resources from that viewpoint are of the Pacific Ocean which is west of the viewpoint. Furthermore, the site would not be

visible from the scenic viewpoint. Thus, implementation of the HEU at housing site L-1 would result in a less than significant impact on scenic views.

Housing Site L-2

Site L-2 occupies approximately 2.1 acres located at 1034-1160 Highway 101 in the Leucadia Community. The site is adjacent to scenic Highway 101 and is within the critical viewshed of Leucadia Beach State Park as shown on Figure 4.1-1. The site currently consists of a range of commercial specialty retail. Refer to Appendix I, Photographs 30 through 34 for existing site conditions at site L-2.

Under the HEU floating zone provisions, Site L-2 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. Development of this site would not adversely affect views from Leucadia Beach State Park because the site would not be visible from the beach and would not have the potential to block any ocean views. Views from Highway 101 would be altered with development of a mixed use development in this location; however with implementation of applicable zoning requirements and design guidelines that would ensure development complements the existing surroundings, there would be no adverse impact to views from Highway 101. Thus, the HEU would result in a less than significant impact on scenic views.

Housing Site L-4

Site L-4 is a vacant site located at 825-837 Orpheus Avenue at the southwest corner of the I-5 and Leucadia Boulevard interchange. The site is located within the scenic view corridor for I-5 as shown in Figure 4.1-1. The site is also located in a highly visible area due to its location adjacent to I-5. Refer to Appendix I, Photographs 38 through 40 for existing site conditions at site L-4.

Under the HEU floating zone provisions, Site L-4 would be developed based on the Residential Infill-Medium to Large Site neighborhood prototype, which would allow two- and three-story multi-family and single-family attached units. Views of the site traveling south on I-5, would be largely shielded by the Leucadia overpass and the vegetated slopes at the edge of the roadway. Traveling north on I-5, the site would likely be somewhat visible, but not for an extended period of time due to the curve of the roadway and the vegetated median. Development of three-story multi-family structures at this location would not adversely impact the scenic view corridor due to minimal visibility of the site from the roadway and due to required compliance with zoning, design guidelines and landscaping requirements that would ensure an appropriately scaled, visually pleasing development. Additionally, while future development of this site would be located in a highly visible area (adjacent to an interstate highway), it would be in contrast to the surrounding development or natural topography because implementation design guidelines would ensure the development does not incorporate excessive height, bulk, signage, or architectural projections. Thus, future development of site L-4 would result in a less than significant impact on scenic views.

Housing Site L-5

Site L-5 is located at 912-938 Leucadia Boulevard, generally at the northeast corner of the I-5 and Leucadia Boulevard interchange. The site is located within the scenic view corridor for I-5 and adjacent to the scenic roadway, Leucadia Boulevard, as shown in Figure 4.1-1. The site is also located in a highly visible area due to its location adjacent to I-5. Site L-5 currently consists of one single-family residence and greenhouses. Refer to Appendix I, Photograph 41 for existing site conditions at site L-5.

Under the HEU floating zone provisions, Site L-5 would be developed based on the Residential Infill-Medium to Large Site neighborhood prototype which would allow two and three-story multi-family and single-family attached units. Future development would not be visible from I-5 due to the fact that the elevation of the project site is lower than surrounding roadways and shielded by the vegetated slopes along I-5. In addition, the site is set back from I-5 with intervening development between I-5 and site L-5. Development of three-story multi-family structures at this location would not adversely impact the scenic view corridor due to the minimal visibility of this site from the roadway and due to required compliance with zoning, design guidelines and landscaping requirements that would ensure an appropriately scaled and visually pleasing development. Similarly, future development would not adversely impact views from Leucadia Boulevard due to its lower elevation relative to Leucadia Boulevard which would minimize project visibility. Thus, future development of site L-5 would result in a less than significant impact on scenic views.

Housing Site L-6

Site L-6 is a 5.2-acre site located north of Leucadia Boulevard between Urania Avenue and Saxony Road, east of I-5. The site is located adjacent to the scenic roads, Leucadia Boulevard and Saxony Road as shown on Figure 4.1-1. Site L-6 consists of four single-family homes and greenhouses Refer to Appendix I, Photographs 42 through 44 for existing site conditions at site L-6.

Under the HEU floating zone provisions, Site L-6 would be developed based on the Residential Infill-Medium to Large Site neighborhood prototype which would allow two- and three-story multi-family and single-family attached units. Scenic views traveling east on Leucadia Boulevard would not change substantially as the site is largely screened from view by mature landscaping in the roadway median. However, the site would be visible for west bound travelers along Leucadia Boulevard and from Saxony Road. While the project would be visible from these scenic roadways, the project would not substantially degrade the quality of the views from these scenic roads because it would not obstruct a scenic view and it would be designed in compliance with proposed zoning and design guidelines which would ensure appropriate scale of development and an aesthetically pleasing architectural character. Thus, future development of site L-6 would result in a less than significant impact on scenic views.

Housing Site ALT-2

The ALT-2 housing site is located within the Leucadia community just west of Highway 101 scenic roadway. The northern portion of the site is located within the Highway 101, north of La Costa Avenue vista point critical viewshed and the entirety of the site is located adjacent to a scenic roadway (Highway 101) as shown in Figure 4.1-1. The site would be visible for travelers along Highway 101, but is not considered a highly visible area because it is not located on a canyon edge, hilltop or adjacent to an interstate highway. The site currently is developed with one and two story specialty retail. Refer to Appendix I, Photographs 1 through 37 for ALT-2 existing conditions.

Under the HEU floating zone provisions, this housing site would be developed with the Main Street/Mixed Use-Small Site neighborhood prototype which would allow two to three stores of mixed use development with ground floor commercial, one or two upper floors of residential and underground parking. Development of the ALT-2 housing site would increase the height and bulk of structures as viewed along the west side of Highway 101 and increase the density of development compared to the existing condition. However, with implementation of the floating zones, required landscaping, design guidelines, and project elements associated with the Main Street/Mixed Use-Small Site neighborhood prototype, the visual effect of development along Highway 101 would not be adverse. For example, the Main Street/Mixed Use-Small Site neighborhood prototype would incorporate a second-level plaza for residential units which would provide a break in the façade at the street level, providing architectural interest and minimizing the apparent bulk of the structure. The effect on public views from Highway 101 views would be less than significant and no scenic views would be blocked.

Public views from the vista point located along Highway 101, north of La Costa Avenue would not be adversely affected by future development of housing site ALT-2 because the vista point is located closer to the ocean than the ALT-2 site and the main public views from that location are of the Batiquitos Lagoon and Pacific Ocean. Traveling north on Highway 101, the view opens up to the Batiquitos Lagoon and Pacific Ocean. These views would not be altered by development of the ALT-2 housing site.

Thus, as the site is not located in a highly visible area, would not result in an adverse impact on public views from the scenic highway or vista point, impacts to public views from future development of site ALT-2 would be less than significant.

Old Encinitas Housing Sites

Housing Site OE-1

The OE-1 housing site is a 2.3 gross acre site located within Old Encinitas, west of Highway 101, east of Third Street and north of West C Street as shown on Figure 4.1-2. Site OE-1 is located adjacent to the scenic road, Highway 101 and is within the Moonlight State Beach and “D” Street vista point viewsheds. The site currently comprises some light industrial uses and five homes. Refer to Appendix I, Photographs 84 and 85 for existing site conditions at site OE-1.

Under the HEU floating zone provisions, housing site OE-1 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. Development of housing site OE-1 would not result in significant impacts to views from the Moonlight State Beach and "D" Street vista points because the site is located east of the viewpoints and would have no impact on ocean views or scenic vistas. Views from Highway 101 would be altered due to higher intensity development; however visibility of the site is currently shielded due to masonry and wood fencing that screens views of the site. While development of a two- to three-story mixed use development would be visible in this location, application of design guidelines would ensure appropriate setbacks and architectural features are incorporated to protect views from the scenic roadways. Additionally, development of housing site OE-1 would not obstruct ocean views or scenic resources as viewed from Highway 101. Thus, future development of site OE-1 would result in a less than significant impact on scenic views.

Housing Site OE-2

The OE-2 housing site is a 7.3-acre housing site located within Old Encinitas at the northwest corner of the I-5 and Encinitas Boulevard freeway exit as shown on Figure 4.1-2. Site OE-2 is located within the I-5 scenic view corridor. The site is currently developed with a gas station, various service retailers, restaurants and other commercial uses. Refer to Appendix I, Photographs 86 to 88 for existing site conditions at site OE-2.

Under the HEU floating zone provisions, housing site OE-2 would be developed with the Neighborhood Center/Mixed Use-Large Site neighborhood prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale. The site currently has limited visibility from I-5 due the fact that it is at a lower elevation from I-5. Development of the site with two to three stories of mixed use development would be visible from I-5, but would not be visually dominant as viewed from the roadway due to the lower elevation of the site in relation to I-5. Development of this site would not substantially block scenic views from the I-5 scenic view corridor and would not be highly visible. Thus, future development of site OE-2 would result in a less than significant impact on scenic views.

Housing Site OE-4

The OE-4 housing site is a 4.38-gross-acre site located within Old Encinitas at the City Hall site at the corner of South Vulcan Avenue and West D Street as shown on Figure 4.1-2. Site OE-4 is located within the Moonlight State Beach, D Street, and F Street vista point viewsheds. The site is currently developed with civic uses including City Hall and other civic offices. Refer to Appendix I, Photographs 89 and 90 for existing site conditions at site OE-4.

Under the HEU floating zone provisions, housing site OE-4 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two- to three-stories of mixed use development including retail or restaurants on the ground floor with housing above. Development of this housing site would not result in a significant

impact to scenic views from the Moonlight State Beach, "D" Street, and "F" Street vista points because the site is located east of these viewpoints and would not obstruct ocean views or any other scenic vistas. Thus, future development of site OE-4 would result in a less than significant impact on scenic views.

Housing Site OE-5

The OE-5 housing site is comprised of 26 parcels over 11.15 gross areas located in Old Encinitas along the west and east side of Highway 101 between West F Street to just south of West K Street as shown on Figure 4.1-2. Site OE-5 is located adjacent to the scenic Highway 101 and within the F Street, H Street, I Street, J Street, and Swami City Park vista point viewsheds. The site is currently developed with a variety of commercial uses including convenience stores, restaurants and specialty retailers. Refer to Appendix I, Photograph 100 for existing site conditions at site OE-5.

Under the HEU floating zone provisions, housing site OE-5 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. Development of site OE-5 would result in a substantial change in views from Highway 101 due to the length of the roadway frontage that would be developed with two- to three-story mixed use development. However, design guidelines would be applied to ensure appropriate setbacks and architectural features are incorporated that provide a scale and character consistent with the existing environment. Additionally, development of this housing site would not block any ocean views or other scenic vistas from Highway 101 or the F Street, H Street, I Street, J Street, and Swami City Park vista point viewsheds. Thus, future development of site OE-5 would result in a less than significant impact on scenic views.

Housing Site ALT-6

The ALT-6 housing site is located within the Old Encinitas community and is the site of the Downtown Encinitas Transit Center adjacent to North Vulcan Avenue. This site is located within the Moonlight State Beach, "D" Street, and "F" Street vista point critical viewsheds and would be visible from Highway 101, a scenic highway (Figure 4.1-2). The site is not considered a highly visible area because it is not located on a canyon edge, hilltop or adjacent to an interstate highway. The site is currently used as surface parking for the transit center that serves rail and bus. Refer to Photographs 91 and 92 for existing site conditions at housing site ALT-6.

Under the HEU floating zone provisions, development of this housing site would be based on the Main Street/Mixed Use-Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. Scenic views from Moonlight State Beach, "D" Street, and "F" Street vista point critical viewsheds would not be adversely affected because the primary view from those locations is of the Pacific Ocean and coastline. The site would not be discernible from these viewpoints due to its distance, intervening development, and due to the higher topography east of the site that provides views of existing multi-family residential

development. Similarly, views from Highway 101 would not be substantially altered because views of the commercial development between Highway 101 and the housing site would provide some screening. In addition, views of existing multi-family development are visible east of the housing site due to topography. Thus, while a two to three story development would likely be visible from Highway 101, it would not degrade existing views from the scenic highway due to its location set back from the highway, screening from intervening development, and existing higher elevation views of multi-family development. In conclusion, the site is not located in a highly visible area, would not impede public views from designated vista points, and would not result in an adverse impact on public views from Highway 101, impacts to public views from future development of ALT-6 would be less than significant.

Housing Site ALT-7

The ALT-7 housing site is located within the Old Encinitas community and is generally located along the west side of Highway 101, south of Encinitas Boulevard to West K Street. The site is located adjacent to a scenic roadway (Highway 101) and the southern end of the site is within the viewshed of Swami's City Park (Figure 4.1-2). The site is not considered a highly visible area because it is not located on a canyon edge, hilltop or adjacent to an interstate highway. The site is comprised of convenience stores, restaurants, specialty retailers and other commercial uses. Refer to Appendix I, Photographs 93 through 101 for ALT-7 existing conditions.

Under the HEU floating zone provisions, the site would be developed based on the Main Street/Mixed Use-Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. Scenic views from Swami's City Park would not be adversely affected because development at the site would not be visible from the park due to intervening development (the Self-Realization Fellowship) and the distance between the park and the housing site. Views along Highway 101 would be altered by construction of two to three story mixed use structures; however implementation of the City's design guidelines, landscaping requirements and architectural features would ensure scenic views along Highway 101 would not be degraded by development. Thus, as the site is not located in a highly visible area, would not impede public views from designated vista points, and would not result in an adverse impact on public views from Highway 101, impacts to public views from future development of ALT-7 would be less than significant.

Cardiff Housing Sites

Housing Site C-1

The C-1 housing site is located in Cardiff, just southwest of the I-5 exit at Santa Fe Drive. This site is located within the scenic view corridor for I-5, adjacent to Santa Fe Drive, a scenic roadway, and is considered highly visible due to its location adjacent to the interstate (Figure 4.1-3). The site is comprised of a grocery store, convenience store, gym, restaurants and other commercial uses. Refer to Appendix I, Photographs 106 through 108 for existing site conditions at site C-1.

Under the HEU floating zone provisions, the site would be developed based on the Neighborhood Center/Mixed Use-Large Site neighborhood prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale compared to existing strip commercial development. Development of this site would increase the height of development which would increase visibility of site structures for travelers along I-5 and Santa Fe Drive; however the development would also provide visual relief from a large surface parking lot by providing smaller structures, enhanced landscaping, and an architectural form subject to the City's design review requirements. Thus, although the site would be visible from the adjacent roadways, it would not have an adverse effect on scenic views and impacts would be less than significant.

Housing Site C-2

Housing site C-2 is located west of I-5, east of Santa Fe Drive, generally between Mackinnon Avenue and Windsor Road. The site is located adjacent to Santa Fe Drive, a scenic roadway as shown on Figure 4.1-3. The site is comprised of a church, tennis club, vacant lot and one single-family residence. Refer to Appendix I, Photograph 111 for existing site conditions at site C-2.

Under the HEU floating zone provisions, future development of the housing site would be with the Residential Infill-Medium to Large Site neighborhood prototype which would allow of multi-family and single-family attached units. Three-story apartments would be located near Santa Fe Drive and two- and three-story flats would be located along new neighborhood streets. Two- or three-story townhomes would face existing residential streets to transition to the single-family areas to the south. Development of this site would not result in an adverse impact to views along the scenic roadway, Santa Fe Drive, because development of the housing site would enhance the visual environment along Santa Fe Drive. For example, the southeast corner of Santa Fe Drive and MacKinnon, which is currently a vacant dirt lot where cars and equipment are often parked, would be improved with sidewalks, landscaping and residential multi-family structures that would be subject to the City's design review requirements. Thus, future development of the site would not have an adverse effect on public views from Santa Fe Drive and impacts would be less than significant.

Housing Site C-3

Housing site C-3 is located in Cardiff along San Elijo Avenue and comprises the site of the Cardiff Town Center and the shopping center just south of that at San Elijo Avenue and Aberdeen Drive. The site is located adjacent to a scenic roadway, San Elijo Avenue, as shown on Figure 4.1-3. Refer to Appendix I, Photographs 103 through 105b for existing site conditions at site C-3.

Under the HEU floating zone provisions, future development of housing site C-3 would be based on the Village Center Mixed Use-Medium Site neighborhood prototype which would include two to three-stories of mixed use development that incorporates smaller blocks of structures to make the area pedestrian friendly. Scenic resources along San Elijo Avenue are primarily the views of the Pacific Ocean to the west. Since the site is located east of San

Elijo Avenue, development of the site would have no effect on scenic ocean views. Additionally, the intent of the Village Center Mixed Use-Medium Site neighborhood prototype is to complement the surrounding context with similar architectural styles and massing. Thus, based on the location of the site east of San Elijo Avenue and architectural elements that would complement the surrounding development as implemented through the City's design review guidelines, future development of the site would result in a less than significant impact on scenic views.

Housing Site C-6

Housing site C-6 is located in Cardiff at 3305 Manchester Avenue. It comprises one vacant parcel and another parcel partially improved with a church facility; however, the study area only includes the portion of the site without any improvements. The site is located adjacent to a scenic roadway, Manchester Avenue, and within a designated scenic view corridor as shown on Figure 4.1-3. Refer to Appendix I, Photographs 118 and 119 for existing site conditions at site C-3.

Under the HEU floating zone provisions, future development of housing site C-6 would be based on the Residential Infill-Small Site neighborhood prototype which would allow two to three-story multi-family residential developments. Scenic resources along this section of Manchester Avenue are primarily of the San Elijo Lagoon areas east of the housing site. Since the housing site is located west of Manchester Avenue, it would have no adverse effect on the scenic views along Manchester Avenue. Additionally, site visibility from the roadway would be limited to a short stretch of the roadway due to curves in the road west of the site and development located immediately north and south of the site. Thus, future development of the site would not result in an adverse impact on scenic resources within the scenic view corridor or as viewed from Manchester Avenue and impacts to scenic views would be less than significant.

Housing Site C-7

Site C-7 is located in Cardiff at 2211 San Elijo Avenue, adjacent to Glen Park and is developed with a gas station. This site is located adjacent to a San Elijo Avenue, a scenic roadway, and within the northern edge of the San Elijo and Kilkenny vista point critical viewshed as shown on Figure 4.1-3. Refer to Appendix I, Photograph 102 for existing site conditions at site C-7.

Under the HEU floating zone provisions, similar to site C-3, future development of housing site C-7 would be based on the Village Center Mixed Use-Medium Site neighborhood prototype which would include two to three-stories of mixed use development that incorporates smaller blocks of structures to make the area pedestrian friendly. Since the scenic resources along San Elijo Avenue are primarily the views of the Pacific Ocean to the west and the site is located east of San Elijo Avenue, development of the site would have no effect on scenic ocean views. Additionally, the intent of Village Center Mixed Use-Medium Site neighborhood prototype development is to complement the surrounding context with similar architectural styles and massing. Finally, while the site is located within the viewshed for the San Elijo and Kilkenny vista point, the housing site would not be visible

from the vista point and development of the site would not degrade scenic vistas a viewed from the vista point. Thus, future development of the site would result in a less than significant impact on scenic views.

Housing Site CBHMG-1

The CBHMG-1 housing site is located in Cardiff, just east of the I-5 exist at Santa Fe Drive. The site is located adjacent to the scenic road, Santa Fe Drive and is within the I-5 viewshed as shown on Figure 4.1-3. Due to its location adjacent to I-5, the site would also have the potential to be highly visible. The existing site is fenced and vacant with some equipment storage. Refer to Appendix I, Photographs 109 and 110 for existing site conditions at site CBHMG-1.

Under the HEU floating zone provisions, housing site CBHMG-1 would be developed with the Residential Infill – Small Site neighborhood prototype which would allow two- to three-story multi-family residential developments. The housing site would be marginally visible for travelers along I-5 due to the lower elevation of the site in relation to the freeway and due to mature vegetation located between the housing site and the freeway. Development of this housing site would be visible from Santa Fe Drive. Existing scenic resources along Santa Fe Drive in this location are limited. Development of a housing site at this location would not result in an adverse impact to scenic views from Santa Fe Drive or I-5 because it would not obstruct any scenic vistas or degrade existing scenic resources. Thus development of site CBHMG-1 would result in a less than significant impact on scenic views.

New Encinitas Housing Sites

Housing Site NE-1

Site NE-1 is located in New Encinitas at the southwest corner of Leucadia Boulevard and North El Camino Real. It is located adjacent to the scenic roadway, Leucadia Boulevard, and within a designated scenic view corridor as shown on Figure 4.1-4. Site NE-1 comprises the Encinitas Ranch Town Center which includes various commercial uses including restaurants, a fast food drive-through, and a gas station. Refer to Appendix I, Photographs 112 and 113 for existing site conditions at site NE-1.

Under the HEU floating zone provisions, site NE-1 would be developed with the Neighborhood Center/Mixed Use-Large Site neighborhood prototype which would allow two to three stories of mixed use development oriented into small “blocks” to create a walkable, human scale compared to existing strip commercial development. Views of the site from El Camino Real would be substantially screened by a strip of vegetated land between the proposed housing site and El Camino Real. Development on the housing site would be visible from Leucadia Boulevard, but would not substantially degrade any scenic views as future development would replace existing commercial development visible from Leucadia Boulevard. Furthermore, future development of a housing site must comply with proposed zoning which would ensure the height and scale of development is appropriate to the site.

Thus, future development of site NE-1 would result in a less than significant impact on scenic views.

Housing Site NE-4

Site NE-4 is a developed commercial center located at 105 to 131 North El Camino Real. The site is located adjacent to the scenic roadway, El Camino Real and a small western portion of the site is located within the critical viewshed for Oak Crest Park as shown on Figure 4.1-4. Refer to Appendix I, Photograph 60 for existing site conditions at site NE-4.

Under the HEU floating zone provisions, the site would be developed with the Neighborhood Center/Mixed Use-Large Site neighborhood prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale compared to existing strip commercial development. The site would not obstruct views from Oak Crest Park due to the distance from the park and the location of the proposed development within an existing developed area. Scenic views from El Camino Real would not be adversely impacted because development of the site would constitute redevelopment of an existing developed site and a majority of the development would be set back from the roadway due to the depth of the site compared to its frontage width. Thus, development of site NE-4 would result in a less than significant impact on scenic views.

Housing Site NE-7

Site NE-7 is located at the southwest corner of Encinitas Boulevard and the South El Camino Real intersection. The site consists of restaurants, fast food drive-through, offices, a grocery store, and a gas station. The site is located adjacent to the scenic roadway, El Camino Real and within the critical viewshed for Oak Crest Park as shown on Figure 4.1-4. Refer to Appendix I, Photographs 67 through 70 for existing site conditions at site NE-7.

Under the HEU floating zone provisions, the site would be developed with the Neighborhood Center/Mixed Use-Large Site neighborhood prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale compared to existing strip commercial development. The site could be visible from Oak Creek Park, but would not obstruct views or detract from scenic views due to its distance from the park and its location within an existing developed area. Development on the housing site would be visible from El Camino Real and would increase the visibility of site structures due to the increased land use intensity and height; however, scenic views from El Camino Real would not be adversely impacted because development of the site would not obstruct any scenic views or degrade the visual environment. Future development of the site must comply with applicable zoning and design guidelines which would ensure the development is appropriately scaled and designed to ensure scenic views are not obstructed or degraded. Thus, future development of site NE-7 would result in a less than significant impact on scenic views.

Housing Site ALT-3

The ALT-3 housing site is located within the New Encinitas Community at 141-215 South El Camino Real. This site is located adjacent to El Camino Real, a scenic roadway and is partially located within the Oak Crest Park vista point critical viewshed (Refer to Figure 4.1-2). Due to the elevation of the housing site in relation to surrounding areas, the site is also considered highly visible. The site is currently developed with surface parking and single story commercial development. Refer to Appendix I, Photographs 61 through 66 for ALT-3 existing conditions.

Under the HEU Floating Zone provisions, this housing site would be developed with the Neighborhood Center/Mixed Use-Large Site, neighborhood prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale compared to existing strip commercial development. Development of this neighborhood prototype would increase the height of development at this site which would increase visibility of site structures for travelers along El Camino Real, a scenic roadway. While the existing views from El Camino Real are predominantly of single-story commercial development, the aesthetic character is one of a largely urban developed nature. Construction of two and three-story mixed use development would not block any existing scenic views or substantially degrade the visual environment as viewed from a scenic roadway or scenic viewpoint. In addition, site visibility from El Camino Real and Encinitas Boulevard would be partially shielded from view by existing development just north of the site adjacent to Encinitas Boulevard and El Camino Real. Thus, future development of site ALT-3 would not result in an adverse impact on public views from a scenic highway or vista point and impacts to public views would be less than significant.

Olivenhain Housing Sites

Housing Site O-2

Site O-2 is a vacant site located within the Olivenhain community, generally at the northeast corner of Encinitas Boulevard and Rancho Santa Fe Road. The site is undeveloped consisting largely of non-native grasslands and trees bordering the southern and eastern boundaries. The O-2 site is located within a designated scenic view corridor and is adjacent to the scenic road, Rancho Santa Fe Road and within a designated scenic view corridor as shown in Figure 4.1-4. Refer to Appendix I, Photograph 71 and 72 for existing site conditions at site O-2.

Under the HEU floating zone provisions, the site would be developed with the Village Center Mixed Use-Medium Site neighborhood prototype which would allow two to three stories of mixed use development incorporating smaller pedestrian friendly blocks of structures. While development of the housing site would alter views from Rancho Santa Fe Road, the site is located adjacent to the developed intersection at Encinitas Boulevard and Rancho Santa Fe Road which is developed with commercial land uses. Thus, while development on the housing site would alter views from the scenic view corridor along Rancho Santa Fe Road, scenic views would not be obstructed or degraded. The site would be developed consistent with proposed zoning and design guidelines which would ensure the

site is appropriately scaled and design to preserve scenic views consistent with the surrounding community. Thus, future development of site O-2 would result in a less than significant impact on scenic views.

Housing Site O-3

Site O-3 is a developed site is located within the Olivenhain community, generally at the northwest corner of the Encinitas Boulevard and Rancho Santa Fe Road intersection (see Figure 4.1-4). The site is developed and consists of a preschool, offices and retailers. Site O-3 is located within a designated scenic view corridor for Rancho Santa Fe Road. Refer to Appendix I, Photographs 73 through 75 for existing site conditions at site O-3.

Under the HEU floating zone provisions, the site would be developed with the Village Center Mixed Use-Medium Site neighborhood prototype which would allow two to three stories of mixed use development incorporating smaller pedestrian friendly structures. Development of this site would not adversely impact scenic views from Rancho Santa Fe Road because site visibility would be limited due to the intervening commercial development located adjacent to Rancho Santa Fe road between the housing site and Rancho Santa Fe Road. Development of this site would not obstruct or degrade scenic views. Thus, future development of site O-3 would result in a less than significant impact on scenic views.

Housing Site O-4

Site O-4 is an undeveloped, vacant site located at the southeast corner of Manchester Avenue and El Camino Real. The site has a riparian area along the eastern side of the property. It is located adjacent to the scenic roadway, Manchester Avenue and within a designed scenic view corridor as shown on Figure 4.1-3. Refer to Appendix I, Photographs 116 and 117 for existing site conditions at site O-4.

Under the HEU floating zone provisions, the site would be developed with the Neighborhood Center/Mixed Use-Large Site neighborhood prototype which would allow two to three stories of mixed use development oriented into small “blocks” to create a walkable, human scale. Scenic resources of this site include expansive views toward the San Elijo Lagoon from Manchester and El Camino Real in addition to mature vegetation on the site. Development of the site with the Neighborhood Center/Mixed Use-Large Site neighborhood prototype would obstruct views, particularly for southbound travelers along South El Camino Real to southbound Manchester where there are expansive views toward San Elijo Lagoon. Although zoning and design guidelines would provide some context to the development by requiring a scale and character consistent with the existing environment, development of two- and three-story structures could substantially obstruct views. Thus, development of this housing site would result in a potentially significant impact on scenic views (Impact VIS-1).

Housing Site O-5

Site O-5 is located in the Olivenhain community at the northeast corner of South El Camino Real and Manchester Avenue. The site is adjacent to the scenic roadway, Manchester Avenue and within a designed scenic view corridor as shown on Figure 4.1-3. The site consists of one single-family residence. Refer to Appendix I, Photographs 114 and 115 for existing site conditions at site O-5.

Under the HEU floating zone provisions, future development of housing site O-5 would be based on the residential infill-small site neighborhood prototype which would allow two- to three-story multi-family residential developments. Scenic resources along this section of South El Camino Real and Manchester Avenue are primarily of the San Elijo Lagoon, south of the housing site. Development of this site would remove some mature vegetation but would not substantially block views of the San Elijo Lagoon from the adjacent roadways because the views open up to the south once you get to the Manchester and South El Camino Real intersection. Future development of the site would not obstruct any scenic views from Manchester Avenue because the site is located north of Manchester Avenue and the scenic views are south of Manchester Avenue. Thus, future development of site O-5 would result in a less than significant impact on scenic views.

Housing Site O-6

The O-6 housing site is located within the Olivenhain community, generally at the northwest corner of Encinitas Boulevard and Rancho Santa Fe Road. The O-6 site is located within a designated scenic view corridor and is adjacent to the scenic road, Rancho Santa Fe Road, as shown on Figure 4.1-4. This site is part of the larger ALT-4 site. Refer to Appendix I, Photograph 77 for existing site conditions at site O-6.

Under the HEU floating zone provisions, future development of housing site O-6 would be based on the residential infill-small site neighborhood prototype which would allow two to three-story multi-family residential developments. Development of this housing site would be visible from Rancho Santa Fe Road and would change the views of the site from vacant lands to developed lands. Although the views from the roadway would be altered, development of the housing site would not result in a significant adverse impact to scenic views from the roadway because the future development would incorporate landscaping and architectural features pursuant to design guidelines that would ensure future development is aesthetically pleasing and incorporates adequate setbacks to preserve views from the roadway. Additionally, the site is adjacent to the intersection at Encinitas Boulevard and Rancho Santa Fe Road which is dominated by commercial development. Thus, as the site is not located in a highly visible area or within the viewshed of a vista point and would not result in an adverse impact on public views from the scenic roadway, impacts to public views from future development of O-6 would be less than significant.

Housing Site ALT-4

The ALT-4 housing site is located within the Olivenhain community, generally at the northwest corner of Encinitas Boulevard and Rancho Santa Fe Road. The ALT-4 site is

located within a designated scenic view corridor and is adjacent to the scenic road, Rancho Santa Fe Road as shown on Figure 4.1-4. The site is not considered a highly visible area because it is not located on a canyon edge, hilltop or adjacent to an interstate highway. The site is predominantly vacant with three existing homes. Refer to Appendix I, Photographs 76 and 77 for ALT-4 existing conditions.

Under the HEU floating zone provisions, future development of the housing site would be with the Residential Infill-Medium to Large Site neighborhood prototype which would allow of multi-family and single-family attached units. Three-story apartments would be located near the street and two- and three- story flats would be located along new neighborhood streets. Two- or three-story townhomes would face existing residential streets to transition to the single-family areas. Gardens would be incorporated into the development.

Development of this housing site would be visible from Rancho Santa Fe Road, however, it would not result in a significant adverse impact to scenic views from the roadway because future development would incorporate landscaping and architectural features pursuant to design guidelines that would ensure development is aesthetically pleasing and blends in with surrounding development. In addition, future development would not significantly alter views because the intersection at Encinitas Boulevard and Rancho Santa Fe Road is dominated by commercial development. Thus, as the site is not located in a highly visible area or within the viewshed of a vista point and would not result in an adverse impact on public views from the scenic roadway, impacts to public views from future development of ALT-4 would be less than significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) would result in less than significant impacts to public views.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to impact scenic views of the San Elijo Lagoon as viewed from the scenic roadways, South El Camino Real and Manchester Avenue, resulting from development of housing site O-4.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to impact scenic views of the San Elijo Lagoon as viewed from the scenic roadways, South El Camino Real and Manchester Avenue, resulting from development of housing site O-4.

4.1.6.2 Significance of Impacts

One housing site, site O-4, would result in a potentially significant impact (Impact VIS-1) on scenic views of the San Elijo Lagoon from the scenic roadways South El Camino Real

and Manchester Avenue particularly for southbound travelers along South El Camino Real to southbound Manchester where expansive views toward San Elijo Lagoon would be substantially blocked by development of a Neighborhood Center/Mixed Use-Large Site housing site neighborhood prototype.

Development of all other housing sites would result in a less than significant impact to public views.

4.1.6.3 Mitigation, Monitoring, and Reporting

As the floating zone standards and design guidelines are intended to maximize consistency with the surrounding land use context, including preserving significant views, the project already incorporates standards to maximize protection of views to the extent feasible. Thus, no further mitigation is available at the program-level to reduce the adverse impact to views resulting from development of site O-4.

4.1.6.4 Significance after Mitigation

As no mitigation is available at the program-level to reduce the adverse impact to views resulting from development of site O-4, impacts would be significant and unavoidable.

4.1.7 Issue 3: Community Character

Would the project introduce features which would conflict with important visual elements or the quality of the community/neighborhood (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, light/glare, etc.) and would thereby negatively and substantially alter the existing character of neighborhoods?

4.1.7.1 Impacts

The intent of the floating zones is to: respond to neighborhood character; be compatible with community specific settings, and promote basic best practices in urban design. The proposed zoning code would achieve this goal by regulating site density, percent building coverage allowance, required usable open space, and building setbacks, height, articulation, and transparency.

Each floating zone identifies allowable housing prototypes, such as mixed use residential, apartment, flat, carriage house, townhome, and duplex. Standards for each housing prototype supplement the standards for each zone in which that housing prototype would be allowed. In addition, only certain housing prototypes would be allowed in designated transition areas, which typically occur between housing sites and adjacent single-family residential areas. The zoning standards and design guidelines work together to also address community character and context sensitivity.

New zoning standards and design guidelines would also support tree plantings on housing sites. In the commercial corridors and residential infill areas, it is anticipated that

sidewalks would reach the full width to the curb, and planter cut-outs at regular intervals would accommodate street trees. Not only would street trees add beauty to a street, but they would also provide shade to street users on hot days, reduce ambient temperatures, create a sense of street enclosure at maturity, and help emphasize sustainable tree canopy in the long term.

Implementation of the proposed design guidelines in addition to the City of Encinitas Municipal Code Development Standards (Section 30.20.010) would ensure lighting is properly integrated into proposed structures and shielded to direct light downward and away from streets or adjoining properties. The design guidelines require street lighting to be pedestrian scaled and to minimize light pollution. With implementation of these lighting standards on future housing sites, adverse impacts to community character from lighting would be less than significant.

The following is an evaluation of the potential for each housing site to conflict with important visual elements or the quality of the community/neighborhood. Where housing sites are located in close proximity to one another and share similar characteristics with regard to surrounding land uses, the analysis of these sites is grouped for brevity.

Each site is evaluated relative to the ability for the implementation of the floating zone development standards and design guidelines to adequately address potential impacts related to community character.

a. Housing Sites

Leucadia Housing Sites

Housing Sites L-1, L-2 and ALT-2

Sites L-1, L-2 and ALT-2 are located on the west side of Highway 101 in the Leucadia community as shown on Figure 4.1-1. Sites L-1 and L-2 are smaller sites within the larger ALT-2 site. These housing sites currently contain a range of commercial uses including specialty retail. Site L-1 and ALT-2 contains six single-family residences. Land uses adjacent to the west of these housing sites are primarily single and multi-family residential land uses. Land uses east of the site are separated by Highway 101, the railroad and associated right-of-way, and North Vulcan Avenue. Refer to Appendix I, Photographs 1 through 37 for existing site conditions at site L-1, L-2 and ALT-2.

The existing character of this area of Leucadia is varied, and no single architectural style dominates. The area supports a variety of specialty retail and “mom and pop” establishments, most of which are older and have been modified to some extent over the years. Development of these housing sites could result in development of a greater scale and density than the existing condition, but the change would not be adverse as all future development must comply with standards of the floating zones and design guidelines, as detailed further below.

Sites L-1, L-2, and ALT-2 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. This neighborhood prototype would include a mixed use building fronting Highway 101 with alley access to parking and other transitional uses such as carriage houses that would add housing diversity and provide a transition to neighboring residential land uses.

Sites L-1, L-2, and ALT-2 north of Diana Street would be designated with the Mixed Use Main Street (X30-M) zone. Any of the six housing prototypes would be allowed in this zone, which would provide design flexibility for a variety of architectural styles. Site ALT-2, south of Diana Street would be designated with the Shopfront Main Street (S30-M) zone which would allow development of the mixed use residential housing prototype. Allowable density at these housing sites would increase from up to 25 dwelling units per acre to a minimum of 20 units per acre to a maximum of 30 units per acre.

Development of these housing sites would increase the height and bulk of structures along the west side of Highway 101 and would increase the intensity of both commercial and residential development compared to the existing condition. Land uses adjacent to these sites to the west are primarily multi-family, with a few scattered single-family land uses. The adjacent multi-family development would be consistent with the scale and nature of future multi-family development. Redevelopment of these sites would increase the scale and intensity of development compared to the existing character of Leucadia; however, it would be consistent with the existing community character due to the diversity of land uses, the multi-family development adjacent to these sites, and implementation of the specific zone requirements and associated design guidelines that would ensure structures are designed with appropriate setbacks, variations in lot size and coverage, building frontage, building articulation requirements, and transparency. Thus, with implementation of floating zone requirements and design guidelines, the effect of development of housing sites on community character would be less than significant.

Housing Site L-4

Site L-4 is a vacant site located at 825-837 Orpheus Avenue at the southwest corner of the I-5 and Leucadia Boulevard interchange (see Figure 4.1-1). Refer to Appendix I, Photographs 38 through 40 for existing site conditions at site L-4.

Site L-4 would be developed based on the Residential Infill-Medium to Large Site prototype which would allow two- and three- story multi-family and single-family attached units. This site would be designated with the Residential Neighborhood (R30-N) zone which would allow 20 to 30 units per acre. Allowed housing prototypes include apartments, flats, carriage homes, townhomes, or duplexes.

The area surrounding the housing site is diverse, with the south bound I-5 onramp located directly adjacent to the east of the site, a gas station on the northerly boundary, a fire station on the southern boundary, and agriculture and residential uses to the west. Development of a residential infill project in this location would not result in an adverse impact to community character because the area is highly diverse and future development

would comply with all zoning requirements and design guidelines that are intended to provide development that would enhance the surrounding community. Thus, impacts to community character associated with this site would be less than significant.

Housing Sites L-5 and L-6

Housing sites L-5 and L-6 are located north of Leucadia Boulevard and east of the I-5 (see Figure 4.1-1). Refer to Appendix I, Photographs 41 through 44 for existing site conditions at sites L-5 and L-6.

These housing sites would be developed based on the Residential Infill-Medium to Large Site prototype which would allow two- and three- story multi-family and single-family attached units. These sites would be designated with the Residential Neighborhood (R30-N) zone which would allow 20 to 30 units per acre. Allowed housing prototypes include apartments, flats, carriage homes, townhomes, or duplexes.

The surrounding area is diverse with agricultural uses interspersed with single-family homes. Development of a residential infill project in this location would not be inconsistent with the diverse community character in the area. While there are single-family residential land uses in the vicinity, the housing sites are adjacent to Leucadia Boulevard, a major road. The area is not dominated by single-family neighborhoods, rather is a transition area where agricultural land uses are intermixed with single and multi-family residential land uses. Future development must comply with all zoning requirements and design guidelines that would ensure development enhances the surrounding community character. Additionally, the sites are adjacent to R-3 and RR-2 zones which would trigger applicability of the neighborhood transition standards of the Municipal Code Section 30.36.060. Specifically, a 10-foot landscaped buffer area would be incorporated adjacent to the off-site residential areas and a 30-foot compatible massing area would limit structure heights to two stories or 26-foot maximum to transition to single-family areas. Thus, with compliance with zoning standards and design guidelines, impacts to community character associated with these sites would be less than significant.

Housing Site L-7

Housing site L-7 is a 7.6 gross acre site located in the Leucadia community (see Figure 4.1-1). The site is vacant and accessed from the two-lane road, Quail Gardens Drive. The dominant land uses in the surrounding area are low-density residential uses and agriculture and surrounding zoning is RR-2. Sidewalks along Quail Gardens Drive are surfaced with decomposed granite and the area is home to a variety of rural uses such as equestrian and agricultural land uses. Refer to Appendix I, Photographs 45 through 47 for existing site conditions.

This housing site would be development based on the Residential Infill-Medium to Large Site prototype which would allow two- and three- story multi-family and single-family attached units. The site would be designated with the Residential Neighborhood (R30-N) zone which would allow a minimum of 20 units per acre to a maximum of 30 units per acre.

Allowed housing prototypes include apartments, flats, carriage homes, townhomes, or duplexes.

Development of the housing site would add multi-family development in an area dominated by low-density residential, vacant lands, and agricultural land uses. The site would have direct access from Quail Gardens Drive. The neighborhood transition standards of the Municipal Code Section 30.36.060 would apply to this site due to the surrounding residential zoning. These requirements would ensure future development incorporates appropriate transitions to single-family area including landscaped buffer areas. A 30-foot compatible massing transition area would also apply, where proposed structure massing would have to be consistent with massing of adjacent structures. However, even with implementation of these transition standards and other zoning and design guidelines that emphasize context sensitive design, future development of this site at the density required to meeting HEU goals, may result in inconsistencies with the low density, rural character of this area because of the large lot, rural nature of surrounding development. Thus, development of this housing site would result in a potentially significant impact due to potential inconsistencies with the surrounding setting (Impact VIS-2).

Old Encinitas Housing Sites

Housing Site OE-1

The OE-1 housing site is a 2.3 gross acre site located within Old Encinitas, west of Highway 101, east of Third Street and north of West C Street. North of the site is undeveloped open space with the exception of a public tennis court (see Figure 4.1-2). West of the site is the parking lot for Moonlight Beach. Lands to the east and south of the site are developed with commercial and residential uses. The site currently comprises some light industrial uses and five homes. Refer to Appendix I, Photographs 84 and 85 for existing site conditions at site OE-1.

Housing site OE-1 would be developed based on the Main Street/Mixed Use–Small Site prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. The site would be designated with the Mixed Use Main Street (X30-M) zone. Any of the six housing prototypes would be allowed in this zone which would provide design flexibility for a variety of architectural styles.

Development of a mixed use development in this location would be compatible with the surrounding environment due to the location of the site in the core commercial area of downtown Encinitas, with direct frontage to Highway 101 and access to public transit across Highway 101. Multi-family development would be compatible with the open space to the north and the parking lot to the west. Although the scale of development would be larger than the existing commercial developments in the surrounding area, application of the design guidelines and zoning standards would ensure future development is designed and sited with sensitivity to the surrounding land use context. Zoning and design guidelines would regulate appropriate setbacks, massing, height, and would require landscaping and architectural design elements that would enhance the character of the

development. Thus, with implementation of zoning standards and design guidelines, adverse impacts to community character would be less than significant.

Housing Site OE-2

The OE-2 housing site is a 7.3-acre housing site located within Old Encinitas at the northwest corner of the I-5 and Encinitas Boulevard freeway exit (see Figure 4.1-2). The site is currently developed with a gas station, various service retailers, restaurants and other commercial uses. Immediately east of the site is Interstate 5. To the north and west of the site are open space lands that are part of Cottonwood Creek Park. The site is accessed from Encinitas Boulevard on the south side of the site. Land uses across Encinitas Boulevard to the south include a hotel and restaurant use. Refer to Appendix I, Photographs 86 through 88 for existing site conditions at site OE-2.

Housing site OE-2 would be developed with the Neighborhood Center/Mixed Use-Large Site prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale. The site would be designated with the Mixed Use Neighborhood (X30-N) zone. Any of the six housing prototypes would be allowed in this zone which would provide design flexibility for a variety of architectural styles.

Due to the location of this site adjacent to I-5 and City owned park/open space, with frontage to Encinitas Boulevard; future development would not adversely impact community character. The nearest single-family residential areas are to the northwest of the project site and separated by a canyon. Development of this housing site would incorporate landscaping and architectural design features that would enhance the visual character of the area. Thus, adverse impacts to community character would be less than significant.

Housing Site OE-4

The OE-4 housing site is a 4.38 gross acre site located within Old Encinitas at the City Hall site at the corner of South Vulcan Avenue and West D Street (see Figure 4.1-2). The site is currently developed with civic uses including City Hall and other civic offices. Refer to Appendix I, Photograph 90 for existing site conditions at site OE-4.

Housing site OE-4 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two- to three-stories of mixed use development including retail or restaurants on the ground floor with housing above. The site would be designated with the Mixed Use Main Street (X30-M) zone which would allow development of 20 to 30 units per acre. Any of the six housing prototypes would be allowed in this zone which would provide design flexibility for a variety of architectural styles.

Development of the Main Street/Mixed Use–Small Site neighborhood prototype would be consistent with surrounding land uses and neighborhood character because the area is occupied by a variety of residential, commercial and civic uses that would be complemented by a mixed use project designed with sensitivity to the surrounding land use context. Multi-family development is located north of the site, the public library to the east, and South

Vulcan Avenue and a transit center is located to the west. South of the housing site is multi-family and single-family residential development. Single-family areas south of the housing site zoned R-11 would trigger applicability of the neighborhood transition requirements in the zoning code. The neighborhood transition requirements for this zone require a 5-foot landscaped buffer area between the residential areas and a 20-foot compatible massing area where a two story or 26-foot maximum height limit would be applied. Implementation of zoning standards regulating setbacks, transparency usable open space, and height and building articulation, together with the application of the design guidelines to enhance the character of the surrounding area would ensure impacts to community character would be less than significant.

Housing Sites OE-5 and ALT-7

Housing site OE-5 is a smaller site within the larger ALT-7 housing site. These sites are located in Old Encinitas along the west and east sides of Highway 101 as depicted on Figure 4.1-2. Site OE-5 is currently developed with a variety of commercial uses including convenience stores, restaurants and specialty retailers. Site ALT-7 is comprised of convenience stores, restaurants, specialty retailers and other commercial uses. Land uses adjacent to these housing sites to the east include the railroad, parking areas, and South Vulcan Avenue. To the west of the housing sites is 2nd Street which is dominated by commercial/office uses with a few single and multi-family residential land uses. Refer to Appendix I, Photographs 93 through 101 for existing site conditions at sites OE-5 and ALT-7.

Housing site OE-5 and ALT-7 would be developed based on the Main Street/Mixed Use–Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. These sites would be zoned Shopfront Mainstreet (S30-M) which would allow 20 to 30 residential units per acre with the mixed use residential housing prototype. Development up to three stories and a 38-foot maximum would be allowed.

Development would be generally be of a larger scale than existing development in the area. However, the dominant land uses around these housing sites are commercial. Implementation of design guidelines and zoning standards would ensure development is sensitive to the character of Highway 101 as the Old Encinitas main commercial corridor. Zoning standards would require a strong orientation to and interaction with the street by providing a welcoming ground floor with shopfronts and outdoor seating and displays. Zoning would require 60 percent of the ground floor to provide transparency (e.g.. windows) and 20 percent transparency for upper floors. Housing would be provided on upper floors, with balconies or outdoor terraces overlooking the street to activate the street environment. Design guidelines would be implemented to ensure the architectural character, access, connectivity, and open space areas enhance the character of the existing community. Thus, the development of these housing sites would result in less than significant adverse impacts to community character.

Housing Sites OE-7 and OE-8

Housing sites OE-7 and OE-8 are located on the north and south side of Encinitas Boulevard west of Westlake Street, as shown on Figure 4.1-2. Site OE-7 is vacant with the exception of one single-family residence and a pad where a former coffee kiosk operated. Site OE-8 is developed with the North Coast Business Park which is comprised of offices, businesses, and school/instructional uses. Site OE-7 is accessed from Encinitas Boulevard and site OE-8 is accessed from Encinitas Boulevard and Westlake Street.

Land uses adjacent to the site OE-7 include multi-family residential and one single-family residence to the north of the site, a veterinarian hospital immediately adjacent to the west. The site borders Encinitas Boulevard to the south. Land uses surrounding site OE-8 include commercial/office uses, multi-family residential and vacant lands. Refer to Appendix I, Photographs 80 through 83 for existing site conditions at site OE-7 and OE-8.

Development of site OE-7 would be with the Residential Infill-Medium to Large Site prototype or Neighborhood Center/Mixed Use-Large Site prototype, depending on the housing strategy. The site is included in all three housing strategies, and would allow mixed use development and multi-family and single-family attached units depending on the neighborhood prototype assignment. This prototype would provide three-story apartments near the street and two- and three-story flats would be located along new neighborhood streets. Two- or three-story townhomes would face existing residential streets to transition to the single-family areas. Gardens would be incorporated into the development. Similar development prototypes could also occur if the site was designated as a Neighborhood Center/Mixed Use Large Site. However, context sensitive commercial development could occur when mixed development. Housing site OE-8 would be developed with the Neighborhood Center/Mixed Use-Large Site prototype which would allow two to three stories of mixed use development oriented into small “blocks” to create a walkable, human scale. Both housing sites OE-7 and OE-8 would be zoned Mixed Use Neighborhood (X30-N) which would allow any of the six housing prototypes.

Development of these housing sites would increase the massing of structures over the existing condition; however, the area is dominated by commercial uses along the major road, Encinitas Boulevard. Single-family residential areas are set back from Encinitas Boulevard and future development would incorporate transitions to provide buffering and appropriate scale of development adjacent to the applicable residential zones. Specifically, housing site OE-7 borders residentially zoned properties to the north and site OE-8 borders residentially zoned properties to the south. Development adjacent to these areas would trigger the application of the neighborhood transition requirements of the zoning code. These requirements include a 10-foot landscaped buffer area between development and single-family zoned areas, implementation of a 25-foot compatible use area where only certain uses and housing prototypes would be allowed to provide a compatible transition area, and a 30-foot compatible massing area where a two-story, 26-foot maximum height limit would be applied. With implementation of these zoning standards, in combination with design guidelines that would ensure context sensitive design, adverse impacts to community character would be less than significant.

Housing Site ALT-5

Housing Site ALT-5 is a 11.6 gross acre site located east of Quail Gardens Drive and north of Encinitas Boulevard as shown in Figure 4.1-2. Site ALT-5 is accessed from the two lane road, Quail Gardens Drive and predominantly vacant with two single-family residences. The site is adjacent to single-family residential development to the west, east and north. South of the site are office uses that front Encinitas Boulevard. Refer to Appendix I, Photographs 78 and 79 for existing site conditions at site ALT-5.

Development of site ALT-5 would be with the Residential Infill-Medium to Large Site prototype which would allow of multi-family and single-family attached units. This prototype would provide three-story apartments near the street and two- and three-story flats would be located along new neighborhood streets. Two- or three-story townhomes would face existing residential streets to transition to the single-family areas. Gardens would be incorporated into the development. This site would be zoned Residential Neighborhood (R30-N) which would allow 20 to 30 units per acre. Transition area requirements would apply to this site due to the surrounding residential zoning. These requirements would require a 10-foot landscaped buffer area and a 30-foot compatible massing area where height limits would be reduced to provide a transition between single-family areas and the higher density housing site.

While development of this site would increase the massing in comparison to the surrounding land uses and would provide a higher density development compared to the single-family residential in the area, zoning requirements and design guidelines would implement development regulations that would maximize compatibility of the development in relation to the surrounding land uses and character. Transition areas would maximize compatibility between land uses and would minimize adverse impacts to community character. Thus, adverse impacts to community character would be less than significant.

Housing Site ALT-6

The ALT-6 housing site is located within the Old Encinitas community and is the site of the Downtown Encinitas Transit Center adjacent to North Vulcan Avenue as shown on Figure 4.1-2. The site is currently used as surface parking for the transit center that serves rail and bus. The site is bordered by South Vulcan Avenue to the east and commercial uses to the west that front Highway 101. Multi-family residential uses are located east of the site across South Vulcan Avenue.

Development of this housing site would be based on the Main Street/Mixed Use-Small Site neighborhood prototype which would allow two to three stories of mixed use development including retail or restaurants on the ground floor with housing above. The site would be zoned Mixed Use Main Street (X30-M) which would allow development with any of the six housing prototypes at a density of 20 to 30 units per acres.

Development of this housing site would result in a higher residential density compared to the surrounding area and development would be larger scale in relation to surrounding structures. However, the housing site is located in an area dominated by commercial uses

and adjacent to multi-family development to the east across South Vulcan Avenue. A mixed use project in this location would complement existing commercial land uses and would provide housing in proximity to transit, services, and commercial uses. Additionally, development of this housing site must comply with the zoning standards and design guidelines that would require appropriate landscaping, setbacks, height, transparency, building articulation, and other design features that would ensure future development enhances community character. Thus, with implementation of applicable zoning and design guidelines, adverse impacts to community character would be less than significant.

Cardiff Housing Sites

Housing Site C-1

The C-1 housing site is located in Cardiff, just southwest of the I-5 exit at Santa Fe Drive as shown on Figure 4.1-3. The site is developed with a grocery store, convenience store, gym, restaurants and other commercial uses. Land uses surrounding the site include a City park south of the site, I-5 east of the site, a hospital north of the site, across Santa Fe Drive, and medical offices and single-family residential to the west of the site. Refer to Appendix I, Photographs 106 through 108 for existing site conditions at site C-1.

The site would be developed based on the Neighborhood Center/Mixed Use-Large Site Neighborhood prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale compared to existing strip commercial development. The site would be zoned Mixed Use Neighborhood (X30-N) with a Master Design Review Permit (MDP) designation to require specifying the S30-N zoning as part of a development proposal. An MDP is a discretionary action subject to Planning Commission approval. The purposes of the MDP are to designate the location and extent of S30-zoning to ensure that an appropriate amount of ground floor nonresidential is included in a large collection of sites and establish a phasing plan for development. This designation would allow a density of 20 to 30 units per acre and would include requirements for building articulation, building transparency, height, pedestrian access, open space, lot coverage, and setbacks.

Development of this site with the Neighborhood Center/Mixed Use-Large Site Neighborhood prototype would not adversely impact community character due to the nature and diversity of the surrounding land uses that includes I-5 to the east, a park to the south, commercial uses and Santa Fe Drive to the north, and commercial and residential uses to the west. R-3 zoned lands to the west would trigger application of Neighborhood Transition Standards (Municipal Code Section 30.35.060) along the western portion of the property to ensure appropriate transitions are incorporated to maximize compatibility between development on the housing site and off-site residential uses. Specifically, the transition area would require a 10-foot landscaped buffer area, a 25-foot compatible use area where allowed uses and housing prototypes are defined, and a 30-foot compatible massing area where the height of structures would be limited to two stories or a maximum of 26 feet. Thus, with implementation of the design guidelines and zoning standards, adverse impacts to community character would be less than significant.

Housing Site C-2

Housing site C-2 is located west of I-5, east of Santa Fe Drive, generally between Mackinnon Avenue and Windsor Road as shown on Figure 4.1-3. The site is comprised of a church, tennis club, vacant lot and one single-family residence. Land uses surrounding this site include a high school to the north across Santa Fe Drive and single-family residential land uses to the west, east and south. Refer to Appendix I, Photograph 111 for existing site conditions at site C-2.

Development of this housing site would be with the Residential Infill-Medium to Large Site Neighborhood Prototype which would allow multi-family and single-family attached units. This site would be zoned Residential Neighborhood (R30-N) which would allow development of 20 to 30 units per acre in any of the housing prototypes (except mixed use residential), up to three stores or a 35-foot maximum height. The requirements of neighborhood transition areas would apply to the areas of the site bordering residentially zoned (R-8) areas. These transition areas would require a 10-foot landscaped buffer area and a 30-foot compatible massing area where the height of structures would be limited to two stories or 26-feet to provide a transition between single-family and multi-family areas.

Compliance with applicable design guidelines and zoning requirements would ensure development of the Residential Infill-Medium to Large Site Neighborhood Prototype would not result in an adverse impact to community character. Additionally, a multi-family development would complement the diverse character of the area which includes San Dieguito High School to the north and multi-family developments less than one-quarter mile east of the site. Thus, the project would result in a less than significant impact associated with community character.

Housing Site C-3

Housing site C-3 is located in Cardiff along San Elijo Avenue and comprises the site of the Cardiff Town Center and the shopping center just south of that at San Elijo Avenue and Aberdeen Drive, as shown on Figure 4.1-3. The site is developed with retail, restaurants, and shopping. Land uses to the surrounding the site include San Elijo Avenue, the railroad, and Cardiff State Beach to the west. To the east is the Cardiff library, post office, various commercial uses, and some multi-family residential. North and south of the site are commercial land uses. Refer to Appendix I, Photographs 103 through 105b for existing site conditions at site C-3.

Development of housing site C-3 would be based on the Village Center Mixed Use-Medium Site neighborhood prototype which would include two to three stories of mixed use development that incorporates smaller blocks of structures for a pedestrian scale. The intent of the prototype is to complement the surrounding context with similar architectural styles and massing. The site would be zoned Shopfront Village (S30-V) which would allow development of 20 to 30 units per acre with the mixed use residential housing prototype.

Redevelopment of this housing site would replace existing commercial uses with mixed use development up to 38-feet or three stories tall. While development of this housing site

would increase the massing in relation to the existing commercial developments and surrounding area, zoning standards would regulate building articulation, pedestrian access, and transparency to ensure architectural interest to complement the surrounding character. Zoning and design requirements would focus on enhancing the pedestrian environment and reinforcing the traditional character of the Cardiff Village Center. Newcastle Avenue and lower profile commercial uses to the east of the housing site would also provide a buffer between single-family residential areas and the housing site. Thus, future development of the housing site would result in a less than significant adverse impact associated with community character.

Housing Site C-6

Housing site C-6 is located in Cardiff at 3305 Manchester Avenue as shown on Figure 4.1-3. The site is partially vacant and partially developed with a church facility, although the housing site would only include the vacant portion of the site. North of the site is a retirement home and south of the site is a church. West of the site is open space and Mira Costa college. The site would be accessed from Manchester Avenue, located on the east side of the housing site. Refer to Appendix I, 99 through 101b for existing site conditions at site C-3.

Development of housing site C-6 would be based on the residential infill-small site prototype which would allow two- to three-story multi-family residential developments. This site would be designated with the Residential Neighborhood (R30-N) zone which would allow 20 to 30 units per acre. Allowed housing prototypes include apartments, flats, carriage homes, townhomes, or duplexes.

Development of this housing site would be consistent with the massing of the surrounding developments which includes a retirement home and a church. Furthermore, zoning standards and design guidelines would require appropriate landscaping, setbacks, height, transparency, building articulation, and other design features that would ensure future development enhances community character. Thus, impacts to community character associated with housing site C-6 would be less than significant.

Housing Site C-7

Site C-7 is located in Cardiff at 2211 San Elijo Avenue, adjacent to Glen Park as shown on Figure 4.1-3. The site currently consists of a gas station. Surrounding land uses include San Elijo Avenue and the railroad to the west, Glen Park to the south, multi-family residential and commercial uses to the east, and commercial use to the north, across Chesterfield Drive. Refer to Appendix I, Photograph 102 for existing site conditions at site C-7.

Similar to site C-3, development of housing site C-7 would be based on the Village Center Mixed Use-Medium Site prototype which would include two to three stories of mixed use development that incorporates smaller blocks of structures to make the area pedestrian friendly. Site C-3 would be zoned Shopfront Village Center (S30-V) which would allow development of 20 to 30 units per acre with the mixed use residential housing prototype.

Development of this housing site would replace existing commercial development with a larger scale mixed use development. Future development on the housing site would be designed consistent with zoning requirements and design guidelines that include requirements to enhance the Village Center design context. Additionally, a mixed use project would contribute to the diversity of the existing land uses which includes a neighboring park, multi-family residential development and commercial land uses adjacent to the major road, San Elijo Avenue. Thus, development of this housing site would result in a less than significant adverse impact related to community character.

Housing Site CBHMG-1

The CBHMG-1 housing site is located in Cardiff; just east of the I-5 exist at Santa Fe Drive as shown on Figure 4.1-3. The site is fenced and vacant with some equipment storage. Land uses surrounding the site include single-family residential directly adjacent to the south and east of the site. Commercial and single-family residential uses are located north of the site across Santa Fe Drive, and I-5 is west of the site. Refer to Appendix I, Photographs 109 and 110 for existing site conditions at site CBHMG-1.

Housing site CBHMG-1 would be developed with the Residential Infill – Small Site prototype which would allow two to three-story multi-family residential developments. This site would be zoned Residential Neighborhood (R30-N) which would allow 20 to 30 units per acre and would allow development of housing prototypes including apartments, flats, carriage homes, townhomes, or duplexes. The zoning requirements for neighborhood transition areas would apply to this site based on the adjacent residentially zoned land. These transition areas would require a 10-foot landscaped buffer area and a 30-foot compatible massing area where the height of structures would be limited to two stories or 26-feet to provide a transition between single-family and multi-family areas.

Compliance with applicable design guidelines and zoning requirements would ensure development of the Residential Infill – Small Site Neighborhood Prototype would not result in an adverse impact to community character. Additionally, a multi-family project would complement the diverse character of the area which includes I-5 to the west and commercial development across Santa Fe Avenue to the north. Thus, future development of the site would result in a less than significant impact associated with community character.

New Encinitas Housing Sites

Housing Site NE-1

Site NE-1 is located in New Encinitas at the southwest corner of Leucadia Boulevard and North El Camino Real (see Figure 4.1-4). Site NE-1 comprises the Encinitas Ranch Town Center which includes various commercial uses including restaurants, a fast food drive-through, and a gas station. Refer to Appendix I, Photographs 112 and 1013 for existing site conditions at site NE-1.

The site would be developed with the Neighborhood Center/Mixed Use-Large Site prototype which would allow two to three stories of mixed use development oriented into small

"blocks" to create a walkable, human scale compared to existing strip commercial development. This housing site would be zoned Mixed Use Neighborhood (X30-N) with a MDP designation to require specifying the S30-N zoning as part of a development proposal. An MDP is a discretionary action subject to Planning Commission Approval. The purposes of the MDP are to designate the location and extent of S30-zoning to ensure that an appropriate amount of ground floor nonresidential is included in a large collection of sites and establish a phasing plan for development. Zoning would regulate building articulation, building transparency, height, pedestrian access, open space, lot coverage, and setbacks. Design guidelines would further ensure that the development is design with sensitivity to the community context.

Development of this housing site would be consistent with the character of this area which is dominated by large scale commercial developments. Furthermore, development of this housing site would enhance the character of this area by providing a pedestrian oriented development, enhanced landscaping, and structures with architectural interest. Thus, development of site NE-1 would result in a less than significant impact related to community character.

Housing Site NE-3

Housing site NE-3 is a 10.14 gross acre site located adjacent to housing site NE-4 to the north (see Figure 4.1-4). The site is partially vacant and partially developed with a parking area for overflow car dealership vehicles and a recycling center. It is bounded on the north and east sides by single-family residential development. To the south and west, the site is bordered by commercial land use.

This site would be developed with the Residential Infill-Medium to Large Site prototype which would allow two- and three-story multi-family and single-family attached units. The site would be zoned Residential Neighborhood (R30-N) zone which would allow 20 to 30 units per acre. Allowed housing prototypes include apartments, flats, carriage homes, townhomes, or duplexes.

The neighborhood transition standards of the Municipal Code Section 30.36.060 would apply to this site due to the surrounding residential zoning. These requirements would ensure future development incorporates appropriate transitions to single-family area including landscaped buffer areas. A 30-foot compatible massing transition area would limit structure heights to two stories or 26-foot maximum to transition to single-family areas. Furthermore, application of the design guidelines provides additional guidance for ensuring appropriate transitions to residential areas. For example, adjacent to single-family residential areas, lower scale multi-family residential building types such as townhomes, rowhomes, duplexes or carriage homes would be used. Thus, with implementation of zoning standards and design guidelines, adverse impacts to community character would be less than significant.

Housing Sites NE-4, ALT-3, and NE-7

Housing sites NE-4, ALT-3 and NE-7 are all located within the vicinity of the Encinitas Boulevard and El Camino Real intersection as shown on Figure 4.1-4. All three housing sites are developed with commercial uses including grocery stores, restaurants, and other commercial uses. Land uses surrounding each of these housing sites include commercial use and single-family residential. Refer to Appendix I, Photographs 60 through 70 for existing site conditions at sites NE-4, ALT-3, and NE-7.

These housing sites would be developed with the Neighborhood Center/Mixed Use-Large Site prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale compared to existing strip commercial development. These sites would be zoned Mixed Use Neighborhood (X30-N) with a MDP designation to require specifying the S30-N zoning as part of a development proposal. As stated above, an MDP is a discretionary action subject to Planning Commission approval. The purposes of the MDP are to designate the location and extent of S30- zoning to ensure that an appropriate amount of ground floor nonresidential is included in a large collection of sites and establish a phasing plan for development. It would include requirements for building articulation, building transparency, height, pedestrian access, open space, lot coverage, and setbacks.

Residential zoned lands adjacent to these sites would trigger application of Neighborhood Transition Standards (Municipal Code Section 30.35.060) which would ensure appropriate transitions are incorporated to maximize compatibility between development on the housing site and off-site residential uses. Specifically, the transition area would require a 10-foot landscaped buffer area, a 25-foot compatible use area where allowed uses and housing prototypes are defined, and a 30-foot compatible massing area where the height of structures would be limited to two stories or a maximum of 26-feet. Development of these sites would be complement and add diversity to the existing large-scale commercial developments along El Camino Real. The sites would incorporate usable open space and a pedestrian focus which would enhance the character of the commercial corridor. Thus, with implementation of the design guidelines and zoning standards, adverse impacts to community character associated with development of housing sites NE-4, ALT-3, and NE-7 would be less than significant.

Olivenhain Housing Sites

Housing Sites O-2 and O-3

Housing sites O-2 and O-3 are located within the Olivenhain community, generally at the Encinitas Boulevard and Rancho Santa Fe Road intersection (see Figure 4.1-4). Site O-2 is vacant and fronts Rancho Santa Fe Road. Site O-3 consists of a preschool, offices and various commercial/ retail uses and fronts Encinitas Boulevard. Refer to Appendix I, Photographs 71 through 75.

These sites would be developed with the Village Center Mixed Use-Medium Site prototype which would allow two to three stories of mixed use development incorporating smaller

pedestrian-friendly blocks of structures. The sites would be designated mixed use village (X30-V) which would allow 20 to 30 dwelling units per acre with any of the six housing prototypes. These housing sites would trigger application of Neighborhood Transition Standards (Municipal Code Section 30.35.060) where the sites border residential zoned areas to maximize compatibility between development on the housing site and off-site residential uses. Specifically, the transition area would require a 5-foot landscaped buffer area, a 25-foot compatible use area where allowed uses and housing prototypes are defined, and a 30-foot compatible massing area where the height of structures would be limited to two stories or a maximum of 26 feet.

Land uses surrounding site O-2 include commercial/office uses, a school to the south, single-family residential to the east, commercial uses to the west and vacant lands to the west and north. The floating zone transition area requirements would be applied on the eastern end of the property to provide buffering and an appropriate transition of the scale of structures adjacent to the single-family residential areas. Development of this housing site would increase the scale and height of structures particularly in comparison to the larger lot residential land uses further north along Rancho Santa Fe Road; however, this site is located in close proximity to the Encinitas Boulevard and Rancho Santa Fe Road intersection which is developed with commercial land uses and provides access to transit.

Land uses surrounding site O-3 include commercial uses to the east, single-family residential to the north and west, and a school and commercial uses/retail and office uses to the south across Encinitas Boulevard. Similar to site O-2, the floating zone transition area requirements would be applied on the eastern end of the property to provide buffering and an appropriate transition of the scale of structures adjacent to the single-family residential areas. Redevelopment of this site would likely result in a larger scale (massing, height) of development compared to the existing commercial uses; however, development of the housing site would be subject to floating zone requirements and design guidelines which would enhance the character of the site, as detailed below.

Development of these housing sites would focus on enhancing the village character of the area, providing variation in building frontage, outdoor connections, pathways, and courtyards. For both sites, application of zoning standards and design guidelines would respond to the established community by incorporating use of natural materials such as wood, masonry and clay tile roofs, to reinforce the traditional character of the village center context. Thus, with implementation of the design guidelines and zoning standards, adverse impacts to community character at housing sites O-2 and O-3 would be less than significant.

Housing Site O-4

Housing site O-4 is a vacant site located at the southeast corner of Manchester Avenue and El Camino Real as shown on Figure 4.1-3. Land uses surrounding the site include as school to the east of the site, a church and retirement home to the west, single-family residential to the north, and open space lands of the San Elijo Lagoon to the south. This site and the area further east along Manchester Avenue transitions to a largely rural setting. Refer to Appendix I, Photographs 116 and 117 for existing site conditions at site O-4.

The site would be developed with the Neighborhood Center/Mixed Use-Large Site prototype which would allow two to three stories of mixed use development oriented into small "blocks" to create a walkable, human scale. The site would be developed with the Mixed Use Neighborhood (X30-N) zone which would allow development of any of the six housing prototypes at 20 to 30 units per acre.

The existing character of the site is vacant open space and the site marks the edge of the transition to a largely rural setting going east along Manchester Avenue. Although several developments in the immediately surrounding area (a school, church, and retirement home) have massing similar to what would be developed on the site based on the Neighborhood Center/Mixed Use-Large Site prototype, these developments are largely screened from view due to topography variations and mature vegetation that provides screening. Thus, the character of the area is generally more rural and is dominated by expansive open space views toward the San Elijo Lagoon.

While development of this housing site would be required to comply with applicable floating zone requirements and design guidelines which would regulate appropriate setbacks, massing, height, and would require landscaping and architectural design elements to encourage development consistent with the natural aesthetic of Olivenhain, the scale and density of development would be inconsistent with the rural character of the site. Thus, development of housing site O-4 would result in a potentially significant impact to community character (Impact VIS-3).

Housing Site O-5

Housing site O-5 is located at the northeast corner of the of Manchester Avenue and El Camino Real intersection as shown on Figure 4.1-3. Housing site O-5 consists of one single-family residence and is used for seasonal sales (e.g., pumpkin patch and Christmas trees). The site has a rural feel with decomposed granite surfaces and natural elements (landscaping, wood, rocks) throughout the site, lending to a rural feel. Land uses surrounding this site include single-family residential to the east, west, and north, vacant land to the south across Manchester Avenue (site O-4), and a church and a school to the southwest and southeast of the site, respectively. Refer to Appendix I, Photographs 114 and 115 for existing site conditions at site O-5.

The character of the existing site is rural and is at the western edge of the more rural areas further east along Manchester Avenue. Land uses in the surrounding area are diverse, with developed sites such as the Temple Solel at the southwest corner of the Manchester Avenue and El Camino Real intersection and vacant parcels and open areas that provide views to the San Elijo Lagoon and foothills.

Development of housing site O-5 would be based on the Residential Infill-small Site Neighborhood prototype which would allow two to three-story multi-family residential developments. The site would be zoned Residential Neighborhood (R30-N) which would allow 20 to 30 units per acre. Allowed housing prototypes include apartments, flats, carriage homes, townhomes, and duplexes.

Development of this site would trigger applicability of the neighborhood transition standards of the Municipal Code Section 30.36.060 that would require a 10-foot landscaped buffer area adjacent to residentially zoned areas and a 30-foot compatible massing area that would limit structure heights to two stories or 26-foot maximum. Although implementation of zoning standards and design guidelines would ensure development complements the rural character of the area, the scale and density of development would be incompatible with the surrounding rural community character. Thus, impacts to community character associated with future development of housing site O-5 would be potentially significant (Impact VIS-4).

Housing Site O-6

The O-6 housing site is a vacant site located within the Olivenhain community located west of Rancho Santa Fe Road and north of the Encinitas Boulevard and Rancho Santa Fe Road intersection, as shown on Figure 4.1-4. This site is part of the larger ALT-4 site. Land uses surrounding the site include single-family residential and a small in-home retirement community to the north and west, vacant lands across Rancho Santa Fe Road and commercial uses south of the site. The site and surrounding area is rural in character although the area transitions to a rural commercial area to the south. Refer to Appendix I, Photographs 76 and 77 for existing site conditions at site O-6.

Development of housing site O-6 would be based on the Residential Infill-small Site prototype which would allow two- to three-story multi-family residential developments. The site would be zoned Residential Village Center (R30-V) which would allow between 20 to 30 dwellings units per acre and would allow any of the housing prototypes except mixed use residential.

Development of this housing site with higher density residential would require compliance with floating zone requirements, including neighborhood transition standards due to the adjacency of single-family zoned areas. The site would incorporate a transition area to maximize compatibility between the site and single-family residential areas. Specifically, a 5-foot landscaped buffer area would be incorporated adjacent to the off-site residential areas and a 30-foot compatible massing area would limit structure heights to two stories or 26-foot maximum to transition to single-family areas. While development of this site would result in increased density compared to the surrounding single-family residential area, it would provide an appropriate transition between single-family residential areas and the commercial areas to the south of the site and would be appropriately sited with access from a major roadway. Furthermore, compliance with zoning standards and design guidelines would ensure the design, placement, and materials used are sensitive to the surrounding rural context. Thus, impacts to community character associated with site O-6 would be less than significant.

Housing Site ALT-4

The ALT-4 housing site is located within the Olivenhain community, generally at the northwest corner of Encinitas Boulevard and Rancho Santa Fe Road as shown on Figure 4.1-4. The site is predominantly vacant with three single-family homes including one small

in-home retirement facility. Land uses surrounding the site include single-family residential to the north and west, vacant lands to the east across Rancho Santa Fe Road, and commercial uses to the south of the site. Similar to site O-6, the site and surrounding area is rural in character with a transition to a more rural commercial area to the south near the intersection of Encinitas Boulevard and Rancho Santa Fe Road. Refer to Appendix I, Photographs 76 and 77 for ALT-4 existing conditions.

Development of the housing site would be with the Residential Infill-Medium to Large Site prototype which would allow of multi-family and single-family attached units. Three-story apartments would be located near the street and two- and three- story flats would be located along new neighborhood streets. Two- or three-story townhomes would face existing residential streets to transition to the single-family areas. Gardens would be incorporated into the development. The site would be zoned R30-V which would allow between 20 to 30 dwellings units per acre and would allow any of the housing prototypes except mixed use residential.

Development of this housing site would require compliance with floating zone and neighborhood transition standards due to the adjacency of single-family zoned areas. Future development would incorporate a transition area to maximize compatibility between the site and single-family residential areas. Specifically, a 5-foot landscaped buffer area would be incorporated adjacent to the off-site residential areas and a 30-foot compatible massing area would limit structure heights to two stories or 26-foot maximum to transition to single-family areas. While development of this site would result in increased density compared to the surrounding single-family residential area, zoning standards and design guidelines would ensure the scale of development is appropriate adjacent to single-family residential areas. Compliance with zoning standards and design guidelines would ensure the design, placement, and materials used are sensitive to the surrounding rural context. Thus, impacts to community character associated with site ALT-4 would be less than significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made

Development within housing strategy 1 (RM) would result in a potentially significant impact to community character due to future development on housing site O-5.

Housing Strategy 2 – Build Your Own

Development within housing strategy 2 (BYO) would result in a potentially significant impact to community character due to future development on housing site O-4, O-5, and L-7.

Housing Strategy 3 – Modified Mixed Use Places

Development within housing strategy 3 (MMUP) would result in a potentially significant impact to community character due to future development on housing site O-4 and L-7.

4.1.7.2 Significance of Impacts

Implementation of the HEU on housing sites L-7, O-4, and O-5 would result in potentially significant impacts to community character (Impacts VIS-2, VIS-3, and VIS-4 respectively) because even with application of the zoning standards and design guidelines, development of these sites at the intensity required to meet housing elements goals would result in a scale of development inconsistent with the surrounding low-scale, rural environment. Development of all other housing sites would result in less than significant impacts associated with community character.

4.1.7.3 Mitigation, Monitoring, and Reporting

As the floating zone standards and design guidelines are intended to maximize consistency with the surrounding land use context and character of individual neighborhoods, the project already incorporates features to maximize protection of community character to the extent feasible. Thus, no further mitigation is available at the program-level to reduce the adverse impact resulting from development of sites L-7 (Impact VIS-2), O-4 (Impact VIS-3), and O-5 (Impact VIS-4).

4.1.7.4 Significance after Mitigation

As no mitigation is available at the program-level to reduce the adverse impact to community character resulting from development of site L-7, O-4, and O-5, impacts would be significant and unavoidable.

4.1.8 Issue 4: Scenic Resources

Would the project result in the physical loss, isolation, degradation or destruction of a visual resource or community identification symbol or landmark or other features that contribute to the valued visual character or image of the neighborhood, community, or localized area (e.g., a stand of mature trees, coastal bluff, native habitat, historic landmark)?

4.1.8.1 Impacts

Each housing site was reviewed for potential scenic resources. Many housing sites are currently developed and would have the potential to be redeveloped at higher density under the HEU. These developed housing sites do not contain scenic resources such as significant trees or vegetation. Other housing sites are vacant and contain vegetation and/or mature trees; however, most of the vacant sites have been previously disturbed and would not be considered scenic. Undeveloped sites largely consist of non-native grassland and some mature trees, but would not constitute a scenic resource. One exception is housing site O-4 that is considered a scenic resource pursuant to this threshold and is discussed further below.

Development of housing sites would result in removal of mature trees. However, the City has an Urban Forestry Management Program and Heritage Tree Program, which promote

and provide for the regulation of the planting, maintenance, and removal of public trees, within the public right-of-way or on public property. The Urban Forest Management Program and Heritage Tree Program also apply to the protection of trees during construction, which applies during development, redevelopment, razing, or renovating of structures. These regulations would apply during future construction on housing sites and to any street trees in the public right-of-way.

a. Housing Sites

Housing Site O-4

The eastern edge of housing site O-4 contains a large stand of mature vegetation that is a visual extension of the natural open space associated with Escondido Creek and the San Elijo Lagoon to the south. Development of this site at proposed housing densities would require development of the majority of the site, which would eliminate this scenic resource, resulting in a significant impact (Impact VIS-5).

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made

Development within housing strategy 1 (RM) would result in less than significant impacts to scenic resources.

Housing Strategy 2 – Build Your Own

Development within housing strategy 2 (BYO) has potential to impact scenic resources on housing site O-4:

Housing Strategy 3 – Modified Mixed Use Places

Development within housing strategy 2 (MMUP) has potential to impact scenic resources on housing site O-4:

4.1.8.2 Significance of Impacts

Development of housing site O-4 would result in a significant impact to scenic resources (Impact VIS-5) because it would impact views of the mature vegetation that is a visual extension of the natural open space associated with Escondido Creek and the San Elijo Lagoon to the south.

4.1.8.3 Mitigation, Monitoring, and Reporting

Implementation of the floating zone standards and design guidelines would preserve scenic resources to the greatest extent feasible. No additional mitigation at the program-level is available to avoid the adverse impact to scenic resources resulting from development of site O-4.

4.1.8.4 Significance after Mitigation

No mitigation is available at the program-level to avoid the adverse impact to scenic resources resulting from development of site O-4, thus impacts to scenic resources would be significant and unavoidable.

4.2 Air Quality

This section addresses the potential air quality impacts associated with the emission of air pollutants during both construction and post-construction operations of buildout allowed by the Housing Element Update (HEU). Complete air quality modeling data are contained in Appendix J of this EIR, and include criteria pollutant emission data calculated using the California Emissions Estimator Model (CalEEMod) and carbon monoxide (CO) concentrations calculated using CALINE4.

4.2.1 Existing Conditions

4.2.1.1 Environmental Setting

a. Air Basin/Geographic Setting

The State of California is divided geographically into 15 air basins for the purpose of managing the air resources of the State on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. The City of Encinitas is located within the western portion of the San Diego Air Basin (SDAB), which encompasses the entire County of San Diego. The westerly, coastal areas of the SDAB typically experience westerly winds which direct pollutants eastward. The eastern portion of the SDAB is surrounded by mountains to the north, east and south. These mountains tend to restrict airflow and concentrate pollutants in the valleys and low-lying areas below.

Air quality is commonly expressed as the number of days per year in which air pollution levels exceed Federal standards set by the U.S. Environmental Protection Agency (U.S. EPA) or State standards set by the California Air Resources Board (CARB).

b. Climate

The City is in a coastal area adjacent to the Pacific Ocean. The City, like the rest of San Diego County's coastal areas, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The mean annual temperature for the City is 60 degrees Fahrenheit (°F). The average annual precipitation is 11 inches, falling primarily from November to April. Winter low temperatures in the City average about 54°F, and summer high temperatures average about 71°F. The average relative humidity is 69 percent and is based on the yearly average humidity at Lindbergh Field (Western Regional Climate Center [WRCC] 2015).

The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the

coast is generally better than that which occurs at the base of the coastal mountain range. Most of the City consists of coastal plains, which lie adjacent to the Pacific Ocean and extend inland to the base of the interior foothills. The most easterly portions of the City extend approximately 6 miles east of the Pacific Ocean. Because of its locational advantage to the coast, the westerly portion of the City has a mild climate with cool summers on the coast, where fog is common.

Fluctuations in the strength and pattern of winds from the Pacific High Pressure Zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the SDAB. Beneath the inversion layer pollutants become "trapped" as their ability to disperse diminishes. The mixing depth is the area under the inversion layer. Generally, the morning inversion layer is lower than the afternoon inversion layer. The greater the change between the morning and afternoon mixing depths, the greater the ability of the atmosphere to disperse pollutants.

Throughout the year, the height of the temperature inversion in the afternoon varies between approximately 1,500 and 2,500 feet above mean sea level (AMSL). In winter, the morning inversion layer is about 800 feet AMSL. In summer, the morning inversion layer is about 1,100 feet AMSL. Therefore, air quality generally tends to be better in the winter than in the summer.

The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high pressure develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.

Strong Santa Anas tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin (SCAB) to the north are blown out over the ocean, and low pressure over Baja California, Mexico draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and send this cloud of contamination ashore in the SDAB. When this event does occur, the combination of transported and locally produced contaminants produce the worst air quality measurements recorded in the basin.

4.2.1.2 Existing Air Quality

a. National and California Ambient Air Quality Standards

In order to achieve the purposes of the Federal Clean Air Act (CAA) and the California CAA, the U.S. EPA developed primary and secondary national ambient air quality standards (NAAQS) and the State developed California ambient air quality standards (CAAQS). Six criteria pollutants of primary concern have been designated: ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), lead (Pb) and respirable particulate matter (PM_{10} and $PM_{2.5}$). The current NAAQS and CAAQS are presented in Table 4.2-1.

Table 4.2-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m³)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m³)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)	–	
Lead	30 Day Average	1.5 µg/m³	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m³ (for certain areas)	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m³		
Visibility Reducing Particles	8 Hour	Instrumental equivalents: -extinction of 0.23 per kilometer statewide -extinction of 0.07 per kilometer for Lake Tahoe Air Basin	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m³)	Gas Chroma-tography			

[1]SOURCE: State of California 2015a.
ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; – = not applicable.

b. Air Quality Measurements

The San Diego Air Pollution Control District (SDAPCD) maintains 10 air quality monitoring stations throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The Del Mar–Mira Costa College monitoring station, located 3.5 miles south of the City, the Escondido—East Valley Parkway monitoring station, located 8 miles east of the City, and the Camp Pendleton monitoring station, located 10 miles north of the City, are the nearest stations to the City. The Del Mar–Mira Costa College monitoring station measures ozone. The Escondido—East Valley Parkway monitoring station measures ozone, NO_2, CO, PM_{10} and $PM_{2.5}$. The Camp Pendleton monitoring station measures ozone and NO_2. Table 4.2-2 provides a summary of measurements collected at these monitoring stations from 2010 to 2014.

Table 4.2-2
Summary of Air Quality Measurements Recorded at the Del Mar—Mira Costa College, Escondido—East Valley Parkway and Camp Pendleton Monitoring Stations

Pollutant/Standard	2010	2011	2012	2013	2014
DEL MAR—MIRA COSTA COLLEGE					
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	0	0	1
Days State 8-hour Standard Exceeded (0.07 ppm)	2	1	2	0	4
Days Federal 8-hour Standard Exceeded (0.075 ppm)	0	0	2	0	2
Max. 1-hr (ppm)	0.085	0.091	0.088	0.076	0.100
Max 8-hr (ppm)	0.072	0.075	0.079	0.070	0.088
ESCONDIDO—EAST VALLEY PARKWAY					
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	2	1	0	0	1
Days State 8-hour Standard Exceeded (0.07 ppm)	5	2	2	4	8
Days Federal 8-hour Standard Exceeded (0.075 ppm)	3	2	0	0	5
Max. 1-hr (ppm)	0.105	0.098	0.084	0.084	0.099
Max 8-hr (ppm)	0.085	0.089	0.074	0.075	0.080
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0	0	0
Max 1-hr (ppm)	0.064	0.062	0.062	0.061	0.063
Annual Average (ppm)	0.014	Na	0.013	0.013	0.011
Carbon Monoxide					
Days State 8-hour Standard Exceeded (9 ppm)	0	0	0	0	0
Days Federal 8-hour Standard Exceeded (9 ppm)	0	0	0	0	0
Max. 1-hr (ppm)	3.90	3.50	4.40	3.20	Na
Max. 8-hr (ppm)	2.46	2.30	3.70	Na	Na
PM_{10}*					
Measured Days State 24-hour Standard Exceeded (50 $\mu g/m^3$)	0	0	0	1	0
Calculated Days State 24-hour Standard Exceeded (50 $\mu g/m^3$)	0.0	0.0	0.0	6.0	0.0
Measured Days Federal 24-hour Standard Exceeded (150 $\mu g/m^3$)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (150 $\mu g/m^3$)	0.0	0.0	0.0	0.0	0.0
Max. Daily ($\mu g/m^3$)	43.0	40.0	33.0	82.0	44.0
State Annual Average ($\mu g/m^3$)	21.0	18.8	18.1	23.1	21.5
Federal Annual Average ($\mu g/m^3$)	20.9	18.8	18.0	23.2	21.6

Table 4.2-2
Summary of Air Quality Measurements Recorded at the Del Mar—Mira Costa College, Escondido—East Valley Parkway and Camp Pendleton Monitoring Stations

Pollutant/Standard	2010	2011	2012	2013	2014
ESCONDIDO—EAST VALLEY PARKWAY					
$PM_{2.5}$*					
Measured Days Federal 24-hour Standard Exceeded (35 µg/m³)	0	0	1	1	1
Calculated Days Federal 24-hour Standard Exceeded (35 µg/m³)	0.0	0.0	3.1	1.1	1.0
Max. Daily (µg/m³)	52.2	27.4	70.7	56.3	77.5
State Annual Average (µg/m³)	Na	10.4	Na	10.5	9.6
Federal Annual Average (µg/m³)	10.5	10.4	10.5	10.7	10.5
CAMP PENDLETON					
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	0	0	1
Days State 8-hour Standard Exceeded (0.07 ppm)	1	2	1	0	6
Days Federal 8-hour Standard Exceeded (0.075 ppm)	1	0	1	0	1
Max. 1-hr (ppm)	0.092	0.085	0.092	0.078	0.097
Max 8-hr (ppm)	0.079	0.071	0.081	0.066	0.080
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0	0	0
Max 1-hr (ppm)	0.081	0.066	0.061	0.081	0.060
Annual Average (ppm)	0.009	Na	0.008	Na	0.007
$PM_{2.5}$*					
Measured Days Federal 24-hour Standard Exceeded (35 µg/m³)	0	0	0	1	0
Calculated Days Federal 24-hour Standard Exceeded (35 µg/m³)	Na	Na	0.0	1.1	Na
Max. Daily (µg/m³)	27.3	30.7	28.0	42.3	28.0
State Annual Average (µg/m³)	Na	Na	10.8	Na	Na
Federal Annual Average (µg/m³)	Na	Na	10.7	8.5	Na

SOURCE: State of California 2015b.
Na = Not available.
*Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Ozone

Nitrogen oxides and hydrocarbons (reactive organic gases [ROGs]) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. Ozone is the primary air pollution problem in the SDAB. The SDAB is classified as a Federal and State non-attainment area for ozone. Because sunlight plays such an important role in its formation, ozone pollution, or smog, is mainly a concern during the daytime in summer months.

About half of smog-forming emissions come from vehicles. More strict automobile emission controls, including more efficient automobile engines, have played a large role in the steady decrease in ozone levels in the SDAB since the late 1970s. However, not all of the ozone within the SDAB is derived from local sources. Under certain meteorological conditions, such as during Santa Ana wind events, ozone and other pollutants are transported from the Los Angeles Basin and combine with ozone formed from local sources to produce elevated ozone levels in the SDAB.

Local agencies can control neither the source nor the transport of pollutants from outside the air basin. The SDAPCD's policy, therefore, has been to control local sources to reduce locally produced emissions. Through its transportation control measures (TCMs), enhanced motor vehicle inspection and maintenance program overseen by the Bureau of Automotive Repair and the clean-fuel vehicle program overseen by CARB, continued reductions in ozone concentrations are anticipated.

Actions that have been taken in the SDAB to reduce ozone concentrations include:

- **TCMs, if vehicle travel and emissions exceed attainment demonstration levels.** TCMs are strategies that will reduce transportation-related emissions by reducing vehicle use or improving traffic flow.

- **Enhanced motor vehicle inspection and maintenance program.** The smog-check program is overseen by the Bureau of Automotive Repair. The program requires most vehicles to pass a smog test once every two years before registering in the State of California. The smog-check program monitors the amount of pollutants automobiles produce. One focus of the program is identifying "gross polluters," or vehicles that exceed two times the allowable emissions for a particular model. Regular maintenance and tune-ups, changing oil and checking tire inflation can improve gas mileage and lower air pollutant emissions. It can also reduce traffic congestion due to preventable breakdowns, further lowering emissions.

- **Clean-fuel vehicle program.** The clean-fuel vehicle program, overseen by CARB, requires the development of cleaner burning cars and clean alternative fuels by requiring the motor vehicle industry to develop new technologies to meet air quality requirements. Clean-fuel vehicles are those that meet the emissions standards set in the 1990 amendments to the CAA. Cleaner vehicles and fuels will result in continued reductions in vehicle pollutant emissions despite increases in travel.

Carbon Monoxide

The SDAB is classified as a State attainment area and as a Federal maintenance area for CO. Until 2003, no violations of the State standard for CO had been recorded in the SDAB since 1991, and no violations of the national standard had been recorded in the SDAB since 1989. The violations that took place in 2003 were likely the result of massive wildfires that occurred throughout the county. No violations of the State or Federal CO standards have occurred since 2003.

Small-scale, localized concentrations of CO above the State and national standards have the potential to occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as "CO hot spots" and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO.

PM_{10}

PM_{10} is particulate matter with an aerodynamic diameter of 10 microns or less. Ten microns is about one-seventh of the diameter of a human hair. Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot and dust. Sources of PM_{10} emissions in the SDAB consist mainly of urban activities, dust suspended by vehicle traffic and secondary aerosols formed by reactions in the atmosphere.

Under typical conditions (i.e., no wildfires), particles classified under the PM_{10} category are mainly emitted directly from activities that disturb the soil, including travel on roads and construction, mining, or agricultural operations. Other sources include windblown dust, salts, brake dust and tire wear (County of San Diego 1998). For several reasons hinging on the area's dry climate and coastal location, the SDAB has special difficulty in developing adequate tactics to meet present State particulate standards.

The SDAB is designated as Federal unclassified and State non-attainment for PM_{10}. The measured Federal PM_{10} standard was exceeded once in 2007 and once in 2008 in the SDAB. The 2007 exceedance occurred on October 21, 2007, at times when major wildfires were raging throughout the county. Consequently, this exceedance was likely caused by the wildfires and would be beyond the control of the SDAPCD. As such, this event is covered under the U.S. EPA's Natural Events Policy that permits, under certain circumstances, the exclusion of air quality data attributable to uncontrollable natural events (e.g., volcanic activity, wild land fires and high wind events). The 2008 exceedance did not occur during wildfires and are not covered under this policy. No exceedances of the Federal standard have occurred since 2008.

$PM_{2.5}$

Airborne, inhalable particles with aerodynamic diameters of 2.5 microns or less have been recognized as an air quality concern requiring regular monitoring. Federal $PM_{2.5}$ standards include an annual arithmetic mean of 15 $\mu g/m^3$ and a 24-hour concentration of 35 $\mu g/m^3$. State $PM_{2.5}$ standards established in 2002 are an annual arithmetic mean of 12 $\mu g/m^3$.

The SDAB was classified as an attainment area for the previous Federal 24-hour $PM_{2.5}$ standard of 65 $\mu g/m^3$ and has also been classified as an attainment area for the revised Federal 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$ (U.S. EPA 2004, 2009). The SDAB is a non-attainment area for the State $PM_{2.5}$ standard.

Other Criteria Pollutants

The national and State standards for NO_2, SO_x and the previous standard for lead are being met in the SDAB, and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future. The SDAB is also in attainment of the State standards for vinyl chloride, hydrogen sulfides (H_2S), sulfates and visibility reducing particulates.

4.2.2 Regulatory Framework

Motor vehicles are San Diego County's leading source of air pollution (County of San Diego 2013). In addition to these sources, other mobile sources include construction equipment, trains and airplanes. Emission standards for mobile sources are established by State and Federal agencies, such as CARB and the U.S. EPA. Reducing mobile source emissions requires the technological improvement of existing mobile sources and the examination of future mobile sources, such as those associated with new or modification projects (e.g., retrofitting older vehicles with cleaner emission technologies). The State of California has developed programs to encourage cleaner cars and cleaner fuels. The regulatory framework described below details the Federal and State agencies that are in charge of monitoring and controlling mobile source air pollutants and the measures currently being taken to achieve and maintain healthful air quality in the SDAB.

4.2.2.1 Federal

The Federal CAA was enacted in 1970 (and amended several times since) for the purpose of protecting and enhancing the quality of the nation's air resources. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 United States Code 7409], the U.S. EPA developed primary and secondary NAAQS. As discussed in Section 4.2.1.2, six criteria pollutants of primary concern have been designated: O_3, CO, SO_2, NO_2, lead and respirable particulate matter (PM_{10} and $PM_{2.5}$). The current NAAQS are presented in Table 4.2-1 and represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect public health and welfare considering long-term exposure of the most sensitive groups in the general population (i.e., children, senior citizens and people with breathing difficulties). The SDAB is classified as a Federal non-attainment area for ozone.

4.2.2.2 State

a. Criteria Pollutants

The U.S. EPA allowed states the option to develop different (stricter) air quality standards. Through the California CAA signed into law in 1988, the CARB has generally set more stringent limits on the criteria pollutants as shown in Table 4.2-1. The SDAB is classified as a State non-attainment area for ozone, PM_{10} and $PM_{2.5}$.

The California CAA additionally requires that air quality management districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures and:

- Demonstrate the overall effectiveness of the air quality program;
- Reduce non-attainment pollutants at a rate of 5 percent per year, or include all feasible measures and expeditious adoption schedule;
- Implement public education programs;

- Reduce per-capita population exposure to severe non-attainment pollutants according to a prescribed schedule;
- Include any other feasible controls that can be implemented, or for which implementation can begin, within 10 years of adoption of the most recent air quality plan; and
- Rank control measures by cost-effectiveness and implementation priority.

b. State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the State's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, State regulations and Federal controls. The CARB is the lead agency for all purposes related to the SIP under State law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SDAPCD adopts rules, regulations and programs to attain State and Federal air quality standards and appropriates money (including permit fees) to achieve these objectives.

c. Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807). Diesel-exhaust particulate matter emissions have been established as TACs. Diesel exhaust is a complex mixture of gases, vapors and fine particles.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks and to reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act (California Senate Bill 25), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network and develop any additional air toxic control measures needed to protect children's health.

Locally, toxic air pollutants are regulated through the SDAPCD's Regulation XII. Of particular concern statewide are diesel-exhaust particulate matter emissions. Diesel-exhaust particulate matter was established as a TAC in 1998, and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Following the identification of diesel particulate matter (DPM) as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (State of California 2000). In April 2005, CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (State of California 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). It notes that the handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible. It should be noted that the relative risk varies greatly. To determine the actual risk near heavily traveled roadways, a site-specific analysis that takes into account local factors such as total traffic volumes, truck volumes, wind speed and direction, and meteorological conditions. Rather, the handbook recommendations are designed to fill a gap where area-specific information is not available.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of diesel-particulate and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public's exposure to DPM will continue to decline.

4.2.2.3 Local

a. San Diego Air Pollution Control District

The SDAPCD is the agency that regulates air quality in the SDAB. The SDAPCD prepared the Regional Air Quality Strategy (RAQS) in response to the requirements set forth in the CAA AB 2595 (County of San Diego 1992). Attached, as part of the RAQS, are the TCMs for the air quality plan prepared by the San Diego Association of Governments (SANDAG) in accordance with AB 2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The RAQS and TCM set forth the steps needed to accomplish attainment of State AAQS.

b. General Plan/Local Coastal Program

The City of Encinitas General Plan, along with relevant specific plans, contains policies directly and indirectly related to air quality. Pertinent goals and policies related to air quality are listed below in Table 4.2-3.

Table 4.2-3 Goals and Policies Related to Air Quality	
Goal/Policy	Description
City of Encinitas General Plan Land Use Element	
Goal 1	Encinitas will strive to be a unique seaside community providing a balance of housing, commercial light industrial development, recreation, agriculture and open space compatible with the predominant residential character of the community.
1.14	The City will maintain and enhance the Highway 101 commercial corridor by providing appropriate community-serving tourist-related and pedestrian-oriented uses.
1.15	Commercial and industrial uses shall be required to provide easy and safe pedestrian, bicycle and handicapped access.
City of Encinitas General Plan Circulation Element	
1.15	The City will actively support an integrated transportation program that encourages and provides for mass-transit, bicycle transportation, pedestrians, equestrians, and car-pooling.
Goal 3	The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile.
3.2	Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives.
3.3	Create a safe and convenient circulation system for pedestrians.
3.4	Cooperate with San Diego County, SANDAG, and other jurisdictions to help plan and implement a regional multi-modal transportation system that is accessible to residents in the City.
3.5	Encourage development of mass transit and transit access points along the existing I-5 freeway corridor or along the railroad right-of-way.
3.6	The City should provide and encourage efficient links between possible rail transit service and other transportation modes, including rerouting of bus service to interface with transit stops.
3.11	The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following: · All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network. · The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use. · The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.
City of Encinitas General Plan Resource Management Element	
Goal 5	The City will make every effort to participate in programs to improve air and water quality in the San Diego region.
5.1	The City will monitor and cooperate with the ongoing efforts of the U. S. Environmental Protection Agency, the San Diego Air Pollution Control District, and the State of California Air Resources Board in improving air quality in the regional air basin. The City will implement appropriate strategies from the San Diego County SIP which are consistent with the goals and policies of this plan.
Goal 13	Create a desirable, healthful, and comfortable environment for living while preserving Encinitas, unique natural resources by encouraging land use policies that will preserve the environment.

Table 4.2-3
Goals and Policies Related to Air Quality

Goal/Policy	Description
13.1	The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring.
Goal 15	The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.
15.1	The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development.
15.2	The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.
15.3	Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.
SOURCE: City of Encinitas 1989, amended 2014.	

4.2.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to air quality would be significant if the HEU project would:

1. Obstruct the implementation or conflict with the primary goals of the RAQS;

2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors); or

3. Expose sensitive receptors to substantial pollutant concentrations.

4.2.4 Methodology

4.2.4.1 Modeling

Air emissions were calculated using CalEEMod 2013.2.2 (California Air Pollution Control Officers Association [CAPCOA] 2013). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California specific emission factors. The model estimates mass emissions from two basics sources: construction sources and operational sources (i.e., area, energy, and mobile sources).

Inputs to CalEEMod include such items as the air basin containing the project, land uses, trip generation rates, trip lengths, vehicle fleet mix (percentage autos, medium truck, etc.), trip distribution (i.e., percent home to work, etc.), duration of construction phases, construction equipment usage, grading areas, season and ambient temperature, as well as other parameters. Emissions of ROG, NO_x, CO, SO_x, PM_{10} and $PM_{2.5}$ are calculated.

Appendix J contains details of the parameters used to model criteria pollutant emissions and full modeling outputs.

4.2.4.2 Future Project Implementation

Redevelopment of the housing sites may occur with or without implementation of the project. The floating zone program gives a property owner a choice whether to opt into the housing plan, or forgo doing so and retain their existing zoning rights. Depending on the category of the existing zoning, different levels of development or reconstruction activities are permitted on the housing sites.

Implementation of HEU floating zone program would result in an increase in development intensity and traffic generation on the housing sites under any of the three housing strategies. The impact analysis below describes the type and magnitude of the potential environmental impacts associated with future development under the HEU floating zone program. Future development has the potential to impact air quality. The analysis in the following section identifies the significance of impacts and a mitigation framework for future projects.

Subsequent "by right" development within the new zoning district created through this program would not be subject to further CEQA review to analyze project-level impacts on air quality, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework s identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.2.5 Issue 1: Consistency with RAQS

Would the project conflict with the primary goals of the RAQS?

4.2.5.1 Impacts

As described above, the California CAA requires air basins that are designated non-attainment of State AAQS for criteria pollutants prepare and implement plans to attain the standards by the earliest practicable date. The two pollutants addressed in the San Diego RAQS are volatile organic compounds (VOC) and oxides of nitrogen (NO_x), which are precursors to the formation of ozone. The basis for the RAQS relies on information from CARB and SANDAG, including the distribution of population in the region and all other source emissions as projected by SANDAG. The SDAPCD refers to adopted general plans to forecast, inventory and allocate regional emissions from land use and development-related sources. These emissions budgets are used in statewide air quality attainment planning efforts. As such, projects that propose development that is equal to or less than population growth projections/adopted general plan assumptions and land use intensity are inherently consistent. Projects that propose development that is greater than anticipated in the growth projections warrant further analysis to determine consistency with RAQS and the SIP.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law.

Emissions associated with the future operations of each housing strategy and the Adopted Plan were calculated using the methodology discussed in Section 4.2.4.2. The results are summarized in Table 4.2-4.

Table 4.2-4
Total Operational Emissions
(pounds per day)

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Adopted Plan						
Area Sources	86	1	92	0	2	2
Energy Sources	0	2	1	0	0	0
Mobile Sources	96	112	729	2	140	39
Total	182	116	**823**	2	**143**	41
Housing Strategy 1 (RM)						
Area Sources	88	2	159	0	3	3
Energy Sources	0	3	1	0	0	0
Mobile Sources	125	149	966	3	190	53
Total	213	154	**1,126**	3	**194**	57
Housing Strategy 2 (BYO)						
Area Sources	83	2	153	0	3	3
Energy Sources	0	3	1	0	0	0
Mobile Sources	140	167	1,080	3	214	60
Total	223	172	**1,234**	3	**217**	63
Housing Strategy 3 (MMUP)						
Area Sources	156	3	269	0	6	6
Energy Sources	1	5	3	0	0	0
Mobile Sources	149	176	1,143	3	223	62
Total	**305**	185	**1,415**	3	**229**	68
Project-Level Significance Threshold	*250*	*250*	*550*	*250*	*100*	*100*

NOTES: **Bold** numbers exceed threshold. Totals may vary due to independent rounding.
RM = Ready Made
BYO = Build Your Own
MMUP = Modified Mixed Use Places

As shown, each of the housing strategies would result in greater emissions than buildout of the adopted plan. Additionally, housing strategies 1 (RM) and 2 (BYO) would result in emissions that are greater than the thresholds for CO and PM_{10}, and housing strategy 3 (MMUP) would result in emissions that are greater than the thresholds for ROG, CO, and PM_{10}. Housing strategy 3 (MMUP) would result in the greatest emissions, followed by housing strategy 2 (BYO) and then housing strategy 1 (RM).

All three strategies encourage increased development diversity by increasing commercial and multi-family land uses. Locating different land uses types near one another can decrease vehicle miles travelled (VMT), since trips between land use types are shorter and may be accommodated by alternative modes of transportation (CAPCOA 2010). Each of the housing strategies would increase vehicle trip efficiency. Additionally, as discussed under Issue 2, total emissions due to operation of each of the modeled housing sites would be less than the applicable thresholds for all criteria pollutants (refer to Section 4.2.6.1.a). However, because

the HEU would exceed the growth projections currently accounted for in the land use plan and would result in emissions that are greater than what is currently accounted for in the RAQS, impacts would be significant. Additionally, the significant air quality impacts could contribute to a pollutant for which the area is non-attainment. Therefore, this is considered to be a significant and unavoidable impact (Impact AQ-1).

4.2.5.2 Significance of Impacts

As noted earlier, the CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by cities. As such, projects that propose development that is consistent with the growth anticipated by the general plan (or less dense) would be consistent with the RAQS. If a project proposes development that is greater than what is assumed in SANDAG's growth projections upon which the RAQS is based, then the project would be in conflict with the RAQS and SIP. However, the current population and housing in the County are lower than what was projected for the region, and therefore it is unlikely that the additional units from the HEU would interfere with the SDAPCD's goals for improving air quality in the SDAB.

However, from a long-term planning standpoint, implementation of any of the housing strategies would not comply with the existing assumptions of density and land use utilized to develop the RAQS and applicable SIP. Therefore, a revised housing forecast will need to be provided to SANDAG to ensure that the next revisions to the RAQS and the SIP accurately reflect the anticipated growth. SANDAG housing forecasts are updated every four years. The next forecast is scheduled for revision in 2019.

Because the HEU would result in emissions that are greater than what is currently accounted for in the RAQS. The significant air quality impacts would contribute to a pollutant for which the area is non-attainment. Therefore, this is considered to be a significant impact (Impact AQ-1).

4.2.5.3 Mitigation Framework

The following mitigation measure will address the project's inconsistency.

AQ-1: Prior to the next update of the regional housing needs assessment within six months of the certification of the final EIR, the City shall provide a revised housing forecast to SANDAG to ensure that any revisions to the population and employment projections used by SDAPCD in updating the RAQS and the SIP will accurately reflect anticipated growth due to the HEU.

4.2.5.4 Significance After Mitigation

The provision of this information would assist SANDAG in revising the housing forecasts; however, until the anticipated growth is included in the emission estimates of the RAQS and the SIP, direct and cumulative impacts relative to conformance with the RAQS would remain significant and unavoidable. It should be noted that the SDAPCD may revise an emission

reduction strategy if the district demonstrates to CARB, and CARB finds, that the modified strategy is at least as effective in improving air quality as the strategy being replaced. The last RAQS was adopted in 2009 and only accounts for the transportation and land use plans that were in place at the time of its adoption. (Refer to Chapter 7.0 for a discussion of cumulative impacts.)

4.2.6 Issue 2: Criteria Pollutants

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors)?

4.2.6.1 Impacts

a. Housing Sites

Air quality impacts can result from the construction and operation activities. Construction impacts are temporary and result from fugitive dust, equipment exhaust and indirect effects associated with construction workers and deliveries. Operational impacts can occur on two levels: regional impacts resulting from development or local effects stemming from sensitive receivers being placed close to roadways or stationary sources. In the case of the project, operational impacts are primarily due to emissions from mobile sources associated with the vehicular travel along the roadways.

Construction Emissions

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. To determine the potential air quality impacts associated with future construction of housing sites, emissions due to construction of the housing sites with the most development potential under the HEU were modeled using CalEEMod. Housing site ALT-7 is the largest (21.02 acres) and proposes the greatest amount of commercial and residential development. As such, housing site ALT-7 would result in the greatest amount of construction-related emissions. Ten of the other largest housing sites were selected for modeling based on size of the housing site and amount of proposed development (ALT-2, NE-4, ALT-3, OE-5, ALT-5, OE-8, C-2, NE-3, C-1 and NE-1). In order to evaluate the range of emissions from all of the housing sites, emissions due to construction of the two smallest housing sites, both in acreage and development, were also modeled (CBHMG-1 and C-7). Emissions were modeled using the parameters and assumptions discussion in Appendix J. The results are summarized in Table 4.2-5.

Table 4.2-5
Summary of Worst-case Construction Emissions
(pounds per day)

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
ALT-7						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	6	42	55	0	7	3
Paving	2	20	15	0	1	1
Architectural Coatings	705	3	5	0	1	0
Maximum Daily Emissions	**705**	75	55	0	21	13
ALT-2						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	6	38	44	0	5	3
Paving	2	20	15	0	1	1
Architectural Coatings	486	2	4	0	1	0
Maximum Daily Emissions	**486**	75	50	0	21	13
NE-4						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	37	43	0	5	3
Paving	2	20	15	0	1	1
Architectural Coatings	477	2	4	0	1	0
Maximum Daily Emissions	**477**	75	50	0	21	13
ALT-3						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	36	40	0	5	3
Paving	2	20	15	0	1	1
Architectural Coatings	419	2	4	0	1	0
Maximum Daily Emissions	**419**	75	50	0	21	13
OE-5						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	35	37	0	4	3
Paving	2	20	15	0	1	1
Architectural Coatings	358	2	4	0	0	0
Maximum Daily Emissions	**358**	75	50	0	21	13
ALT-5						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	33	34	0	4	3
Paving	2	20	15	0	1	1
Architectural Coatings	318	2	4	0	1	0
Maximum Daily Emissions	**318**	75	50	0	21	13
OE-8						
Site Preparation	5	1	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	34	35	0	4	2
Paving	2	20	15	0	1	1
Architectural Coatings	315	2	4	0	1	0
Maximum Daily Emissions	**315**	75	50	0	21	13

Table 4.2-5
Summary of Worst-case Construction Emissions
(pounds per day)

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
C-2						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	33	34	0	4	2
Paving	2	20	15	0	1	1
Architectural Coatings	298	2	4	0	1	0
Maximum Daily Emissions	**298**	75	50	0	21	13
NE-3						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	5	33	33	0	4	2
Paving	2	22	15	0	1	1
Architectural Coatings	282	2	4	0	1	0
Maximum Daily Emissions	**282**	75	50	0	21	13
C-1						
Site Preparation	5	55	42	0	21	13
Grading	4	39	27	0	9	5
Building Construction	5	33	32	0	4	2
Paving	2	22	15	0	1	1
Architectural Coatings	264	2	2	0	0	0
Maximum Daily Emissions	**264**	55	42	0	21	13
NE-1						
Site Preparation	5	55	42	0	21	13
Grading	7	75	50	0	12	7
Building Construction	4	33	31	0	4	2
Paving	2	20	15	0	1	1
Architectural Coatings	242	2	3	0	0	0
Maximum Daily Emissions	242	75	50	0	21	13
CBHMG-1						
Site Preparation	1	14	8	0	1	1
Grading	1	11	9	0	2	1
Building Construction	1	14	9	0	1	1
Paving	1	11	8	0	1	1
Architectural Coatings	87	2	2	0	0	0
Maximum Daily Emissions	87	14	9	0	2	1
C-7						
Site Preparation	1	14	8	0	1	1
Grading	1	11	9	0	2	1
Building Construction	1	14	9	0	1	1
Paving	1	11	8	0	1	1
Architectural Coatings	75	2	2	0	0	0
Maximum Daily Emissions	75	14	9	0	2	1
Significance Threshold	*250*	*250*	*550*	*250*	*100*	*100*

NOTES: Modeled housing sites are shown in this table in order of greatest emissions to least emissions.
Bold numbers exceed threshold.

As shown, emissions of ROG would exceed the significance threshold of 250 pounds per day for the following ten housing sites: ALT-7, ALT-2, NE-4, ALT-3, OE-5, ALT-5, OE-8, C2, NE-3 and C-1 (Impact AQ-2). These emissions would be due to the VOC content of the architectural coatings. The modeled VOC content of 150 grams per liter was used in accordance with SDAPCD Rule 67.0. Therefore, emissions of VOC could be reduced by extending the length of the architectural coatings phase of construction and/or by requiring the use of low-VOC coatings. Since there are unknowns at this plan level with regard to phasing, length of construction and VOC content of the coatings (Impact AQ-2), emissions of ROG would be potentially significant for the ten identified housing sites. Emissions of all other criteria pollutants would be less than significant.

As also shown, for construction of housing site NE-1, emissions of all criteria pollutants including ROG would be less than the applicable thresholds. With the exception of the ten large housing sites identified above, all other housing sites are smaller, both in acreage and development intensity, than housing site NE-1. It can therefore be concluded that emissions due to construction of all other housing sites would be less than the emissions due to construction of housing site NE-1. Thus, construction emissions for the remaining housing sites would be less than significant.

Operational Emissions

To determine the potential air quality impacts associated with operation, emissions due to future operation of the housing sites that propose the greatest amount of development and would result in the greatest amount of average daily traffic were modeled using CalEEMod. As identified, housing site ALT-7 proposes the greatest amount of commercial and residential development and would generate the most traffic. As such, housing site ALT-7 would result in the greatest amount of operational-related emissions. Emissions due to operation of the ten previously identified largest housing sites were also modeled (ALT-2, NE-4, ALT-3, OE-5, ALT-5, OE-8, C-2, NE-3, C-1 and NE-1). Additionally, in order to evaluate the range of emissions from all of the housing sites, emissions due to operation of the two smallest housing sites, both in trip generation and development, were also modeled (CBHMG-1 and C-7). Emissions were modeled using the parameters and assumptions discussion in Appendix J. The results are summarized in Table 4.2-6.

Table 4.2-6
Summary of Project Operational Emissions
(pounds per day)

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
ALT-7						
Area Sources	27	0	35	0	1	1
Energy Sources	0	1	0	0	0	0
Mobile Sources	58	77	437	1	57	16
Total	85	78	472	1	58	17
NE-4						
Area Sources	16	0	31	0	1	1
Energy Sources	0	1	0	0	0	0
Mobile Sources	41	55	311	1	42	12
Total	57	56	343	1	42	12

Table 4.2-6
Summary of Project Operational Emissions
(pounds per day)

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
OE-8						
Area Sources	11	0	18	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	43	57	322	1	43	12
Total	53	57	340	1	43	12
OE-5						
Area Sources	12	0	20	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	42	55	314	1	42	12
Total	54	56	334	1	42	12
ALT-2						
Area Sources	18	0	26	0	1	1
Energy Sources	0	1	0	0	0	0
Mobile Sources	37	48	276	1	36	10
Total	55	49	302	1	37	11
ALT-3						
Area Sources	16	0	24	0	1	1
Energy Sources	0	1	0	0	0	0
Mobile Sources	28	37	209	0	28	8
Total	43	38	234	0	28	8
NE-1						
Area Sources	8	0	16	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	27	36	204	0	27	8
Total	35	37	220	0	28	8
C-1						
Area Sources	9	0	16	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	17	22	127	0	17	5
Total	26	23	143	0	17	5
C-2						
Area Sources	10	0	26	0	1	1
Energy Sources	0	0	0	0	0	0
Mobile Sources	5	8	42	0	7	2
Total	15	9	69	0	8	3
NE-3						
Area Sources	9	0	25	0	1	1
Energy Sources	0	0	0	0	0	0
Mobile Sources	5	8	40	0	7	2
Total	14	8	65	0	7	2
ALT-5						
Area Sources	10	0	28	0	1	1
Energy Sources	0	0	0	0	0	0
Mobile Sources	2	4	21	0	3	1
Total	13	5	50	0	4	2

Table 4.2-6
Summary of Project Operational Emissions
(pounds per day)

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
C-7						
Area Sources	1	0	1	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	3	3	20	0	3	1
Total	3	3	21	0	3	1
CBHMG-1						
Area Sources	1	0	2	0	0	0
Energy Sources	0	0	0	0	0	0
Mobile Sources	0	0	1	0	0	0
Total	1	0	3	0	0	0
Significance Threshold	*250*	*250*	*550*	*250*	*100*	*100*

NOTES: Totals may vary due to independent rounding.
Modeled housing sites are shown in this table in order of greatest emissions to least emissions.

As shown, total emissions due to operation of each of the modeled housing sites would be less than the applicable thresholds for all criteria pollutants. The housing sites that were not modeled proposed less development and would generate less traffic than the largest modeled housing sites shown in Table 4.2-6. As such, emissions due to operation of the remaining housing sites would also be less than the applicable thresholds for all criteria pollutants. Thus, operational emissions would be less than significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Under housing strategy 1 (RM), housing site NE-4 would generate the most construction- and operation-related emissions. Operational emissions associated with all housing sites would be less than significant.

As shown in Table 4.2-5, construction of housing site NE-4 would result in emissions of ROG that exceed the significance threshold of 250 pounds per day, and construction emissions would be potentially significant. Housing sites OE-5 and C-2 would also result in potentially significant construction emissions (Impact AQ-2). For all other housing sites under housing strategy 1, construction emissions would be less than significant.

Housing Strategy 2 – Build Your Own (BYO)

Under housing strategy 2 (BYO), housing site OE-8 would generate the most construction- and operation-related emissions. Operational emissions associated with all housing sites would be less than significant.

As shown in Table 4.2-5, construction of housing site OE-8 would result in emissions of ROG that exceed the significance threshold of 250 pounds per day, and construction emissions would

be potentially significant. Housing sites C-2 and NE-3 would also result in potentially significant construction emissions (Impact AQ-2). For all other housing sites under housing strategy 2 (BYO), construction emissions would be less than significant.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Under housing strategy 3 (MMUP), housing site ALT-7 would generate the most construction- and operation-related emissions. Operational emissions associated with all housing sites would be less than significant.

As shown in Table 4.2-5, construction of housing site ALT-7 would result in emissions of ROG that exceed the significance threshold of 250 pounds per day, and construction emissions would be potentially significant. Housing sites ALT-2, ALT-3, ALT-5, C-2, C-1 and NE-1 would also result in potentially significant construction emissions (Impact **AQ-2**). For all other housing sites under housing strategy 3 (MMUP), construction emissions would be less than significant.

4.2.6.2 Significance of Impacts

Operational emissions associated with all housing sites would be less than significant.

As shown in Table 4.2-5, construction of the following 11 housing sites would result in emissions of ROG that exceed the significance threshold of 250 pounds per day: ALT-7, ALT-2, NE-4, ALT-3, OE-5, ALT-5, OE-8, C-2, NE-3, C-1 and NE-1 (Impact AQ-2). For all other housing sites, construction emissions would be less than significant.

4.2.6.3 Mitigation Framework

AQ-2: For future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for ROG emissions impacts could occur, the Planning and Building Department shall require that the construction contractor be limited to the use of architectural coating (paint and primer) products that have a low- to no-VOC rating.

4.2.6.4 Significance After Mitigation

Impacts related to criteria pollutants within housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) (Impact AQ-2) would be mitigated through the application of measure AQ-2**.**

4.2.7 Issue 3: Sensitive Receptors

Would the project expose sensitive receptors to substantial pollutant concentrations?

4.2.7.1 Impacts

a. Housing Sites

Diesel Particulate Matter

Diesel-fired particulate matter has been identified as a TAC. The health risks associated with diesel particulate matter are those related to long-term exposures (i.e., cancer and chronic effects). Long-term health risk effects are generally evaluated for an exposure period of 70 years (i.e., lifetime exposure). Studies indicate that residing near sources of traffic pollution is associated with adverse health effects such as exacerbation of asthma, onset childhood asthma, non-asthma respiratory symptoms, impaired lung function, reduced lung development, and cardiovascular mortality. Because of the association between traffic pollution and health, caution should be taken when siting sensitive land uses near unhealthy traffic emissions.

CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible. Based on this guidance, Interstate 5 (I-5) is a roadway of concern. As noted earlier, actual air emissions, concentration levels, and relative risk are more nuanced and varied. To determine the actual risk near heavily traveled roadways, a site-specific analysis that takes into account local factors such as total traffic volumes, truck volumes, wind speed and direction, and meteorological conditions. At the program-level, the 500-foot buffer distance is used as guidance for determining where a site-specific analysis would be required and project design measures that reduce risk be implemented. The distance of buildings from a highway is the most readily identifiable and understandable approach for preventing the residual health risk from traffic pollution exposures for those living closest to the roadways, because as distance increases from the highway, pollution concentrations decrease (CARB 2012).

Where maintaining the recommended distance is infeasible, project design measures would be necessary to reduce and minimize health impacts on sensitive receptors. However, further analysis would need to occur to determine feasible design measures should the sites be located within 500 feet of I-5. Consideration should be given to extending this minimum buffer zone based on site-specific conditions, given the fact that unhealthy traffic emissions are often at greater distances. CARB recommended measures include high-efficiency filtration with mechanical ventilation, high-efficiency portable air cleaning devices and reducing indoor-generated pollutants. For sensitive receptors placed within 500 feet of I-5, impacts associated with diesel particulate matter exposure would be potentially significant.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. A majority of the housing sites are located more than 500 feet from I-5, and impacts associated with exposure to diesel particulate matter would be less than significant. However, the

following five housing sites are located within 500 feet from I-5: C-1, CBHMG-1, OE-2, L-4 and L-5. Impacts associated with diesel particulate matter exposure would be potentially significant (Impact AQ-3).

Carbon Monoxide Hot Spots

Any source that burns fuels such as combustion engines, cars, trucks, construction, farming equipment, and residential heaters and stoves is a source of CO. Because CO is a temporary atmospheric pollutant, screening level sizes for risk and hazard impacts are best studied where there are expected concentrations. As it relates to the HEU, the greatest potential risk or concern for CO violations are from vehicles that are idling at congested intersections. Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. CO hot spots were assessed under buildout of housing strategy 3 (MMUP) because it would generate the greatest amount of traffic. If the inputs for traffic volumes for each roadway segment and operational conditions for the intersections in other housing strategies would have exceeded these thresholds, then they would have been utilized for the study. As detailed in subsection (b), maximum CO concentrations are not anticipated to exceed Federal and State standards for all three housing strategies. Thus, impacts associated with CO hot spots would be less than significant for all housing sites.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made

Diesel Particulate Matter

As discussed above, a majority of the housing sites are located more than 500 feet from I-5, and impacts associated with exposure to diesel particulate matter would be less than significant. However, the following two housing sites associated with housing strategy 1 (RM) are located within 500 feet from I-5: L-4 and L-5. Impacts associated with diesel particulate matter exposure would be potentially significant (Impact AQ-3).

Carbon Monoxide Hot Spots

Housing strategy 1 (RM) would generate less traffic than housing strategy 3 (MMUP). CO hot spots associated with housing strategy 3 (MMUP) are discussed below. As shown, maximum CO concentrations are not anticipated to exceed Federal and State standards. Thus, impacts associated with CO hot spots would be less than significant.

Housing Strategy 2 – Build Your Own

Diesel Particulate Matter

A majority of the housing sites are located more than 500 feet from I-5, and impacts associated with exposure to diesel particulate matter would be less than significant. However, the following housing site associated with housing strategy 2 (BYO) is located within 500 feet from

I-5: OE-2. Impacts associated with diesel particulate matter exposure would be potentially significant (Impact AQ-3).

Carbon Monoxide Hot Spots

Housing strategy 2 (BYO) would generate less traffic than housing strategy 3 (MMUP). CO hot spots associated with housing strategy 3 (MMUP) are discussed below. As shown, maximum CO concentrations are not anticipated to exceed Federal and State standards. Thus, impacts associated with CO hot spots would be less than significant.

Housing Strategy 3 – Modified Mixed Use Places

Diesel Particulate Matter

A majority of the housing sites are located more than 500 feet from I-5, and impacts associated with exposure to diesel particulate matter would be less than significant. However, the following two housing sites associated with housing strategy 3 (MMUP) are located within 500 feet from I-5: C-1 and CBHMG-1. Impacts associated with diesel particulate matter exposure would be potentially significant (Impact AQ-3).

Carbon Monoxide Hot Spots

The SDAB is a CO maintenance area under the federal CAA. This means that SDAB was previously a non-attainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. As a result, ambient CO levels have declined significantly. According to the CO Protocol, in maintenance areas, only projects that are likely to worsen air quality necessitate further analysis. The CO Protocol indicates projects may worsen air quality if they worsen traffic flow, defined as increasing average delay at signalized intersections operating at level of service (LOS) E or F or causing an intersection that would operate at LOS D or better without the project, to operate at LOS E or F. Further, according to the County of San Diego, hot spots have been found to occur only at signalized intersections that operate at or below LOS E with peak-hour trips for that intersection exceeding 3,000 trips.

Given the association between traffic pollution and health, screening level sizes for risk and hazard impacts are best be studied where traffic is greatest. The traffic study that was completed for this project concluded that 14 intersections in the City would operate at LOS E or worse under the worst-case scenario – housing strategy 3 (MMUP). Eight of the 14 intersections are unsignalized and were not considered in this analysis.

Unsignalized intersections are not evaluated as they are typically signalized as volumes increase and delays increase, and traffic volumes at unsignalized intersections are typically much lower than at signalized intersections. Based on the CO Protocol, the three worst signalized intersections were selected for a detailed CO hot spot analysis. The worst-case intersections associated with this section's analysis are based on traffic volumes for each roadway segment and other operational conditions. These intersections provide adequate screening criteria for risk and hazard impacts since they are locations where expected concentrations of CO are highest. These intersections are listed in Table 4.2-7. CALINE4, a

computer air emission dispersion model, was used to calculate CO concentrations at receivers located at each intersection.

Table 4.2-7
Maximum Buildout CO Concentrations

Intersection	1-Hour CO ppm	1-Hour CO Standard CAAQS/NAAQS	8-Hour CO ppm[1]	8-Hour CO Standard CAAQS/ NAAQS
El Camino Real and La Costa Avenue[2]	6.6	20/35	4.6	9.0/9
El Camino Real and Leucadia Boulevard	6.4		4.5	
El Camino Real and Encinitas Boulevard	6.4		4.5	

[1]8-hour concentrations developed based on a 0.7 persistence factor.
[2]This intersection is located outside the City. The traffic study includes a study area that extends just beyond City boundaries to assess potential impacts associated with the HEU.

As shown, the maximum 1-hour concentration would be 6.6 ppm. This concentration is below the Federal and State 1-hour standards. In order to determine the 8-hour concentration, the 1-hour value was multiplied by a persistence factor of 0.7, as recommended in the CO Protocol. Based on this calculation, the maximum 8-hour concentration would be 4.6 ppm. Thus, increases of CO due to the project would be below the Federal and State 8-hour standards. Therefore, there would be no harmful concentrations of CO within the project area, and localized air quality emissions would be less than significant.

4.2.7.2 Significance of Impacts

a. Diesel Particulate Matter

A majority of the housing sites are located more than 500 feet from I-5, and impacts associated with exposure to diesel particulate matter would be less than significant. However, the following five housing sites are located within 500 feet from I-5: C-1, CBHMG-1, OE-2, L-4 and L-5. Impacts associated with diesel particulate matter exposure would be potentially significant (Impact AQ-3).

b. Carbon Monoxide Hot Spots

The CO hot spot analysis only evaluated three intersections because of the propensity of these intersections to represent the worst-case scenario for hazards and impacts. The hot spot analysis indicated that the increases of CO due to the implementation of any of the three housing strategies would be below the Federal and State 1-hour and 8-hour standards. For conducting the analysis, the land use buildout assumptions for housing strategy 3 (MMUP) was utilized because it contributes the highest level of new growth to these intersections. Housing strategy 3 (MMUP) was below the Federal and State standards. Housing strategies 1 (RM) and 2 (BYO) would generate less traffic than housing strategy 3 (MMUP), thus CO concentrations at intersections would be less than those evaluated. Therefore, the adoption and

implementation of the HEU would not result in the exposure of people working or residing in the area to harmful concentrations of CO and impact to localized air quality from CO, emissions would be less than significant.

4.2.7.3 Mitigation Framework

AQ-3: In order to reduce impacts associated with exposure to diesel particulate matter, the following mitigation is recommended.

- Future development under with the HEU floating zone program shall be designed to minimize exposure to roadway-related pollutants and exposure shall be mitigated to the maximum extent feasible. Design features may include but are not be limited to: maximizing the distance between the roadway and sensitive receptors; locating air intake at the non-roadway facing sides of buildings, and ensuring that windows nearest to the roadway do not open. The orientation and placement of outdoor facilities designed for moderate physical activity shall be placed as far from the emission source as possible. Mitigation may also include installing mechanical ventilation systems with fresh air filtration and constructing a physical barrier between the roadway source and receptors of pollutants (e.g., sound wall or vegetative planting).

- New parks with athletic fields, courts, and other outdoor facilities designed for moderate to vigorous activity under the HEU floating zone program should be sited at least 500 feet from the freeway. Exceptions to this recommended practice should be made only upon a written finding from a decision-making body that the benefits of such development outweigh the public health risks or that a site-specific analysis demonstrates a less than significant risk.

- Ventilation Systems: Ventilation systems that are rated at Minimum Efficiency Reporting Value of “MERV13” or better for enhanced particulate removal efficiency shall be provided on all residential units within the HEU floating zone, located within 500 feet of I-5.

- City staff shall ensure that the aforementioned requirements are included on plans associated with any permit for future development consistent with the HEU floating zone program and submitted for approval. The City shall verify compliance on-site prior to occupancy clearance. Staff shall also review the future Covenants, Conditions and Restrictions for inclusion of guidelines pertaining to the proper maintenance/replacement of filters.

4.2.7.4 Significance After Mitigation

Diesel Particulate Matter

Impacts associated with exposure to diesel particulate within housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) (Impact AQ-3) would be mitigated below a level of significance through the application of measure AQ-3.

4.3 Biological Resources

This section describes existing biological resources on and adjacent to the housing sites in terms of vegetation communities and sensitive species. Information presented in this section was obtained from existing aerial maps, the Final Existing Conditions Report (City of Encinitas 2010a), the California Natural Diversity Data Base (CNDDB), the San Diego County Multiple Habitat Conservation Program (MHCP)[1], and additional secondary source documentation, as available (City of Encinitas 2010b, State of California 2015a; San Diego Association of Governments [SANDAG] 2003; City of Encinitas 2015a).

4.3.1 Existing Conditions

4.3.1.1 Botanical Resources

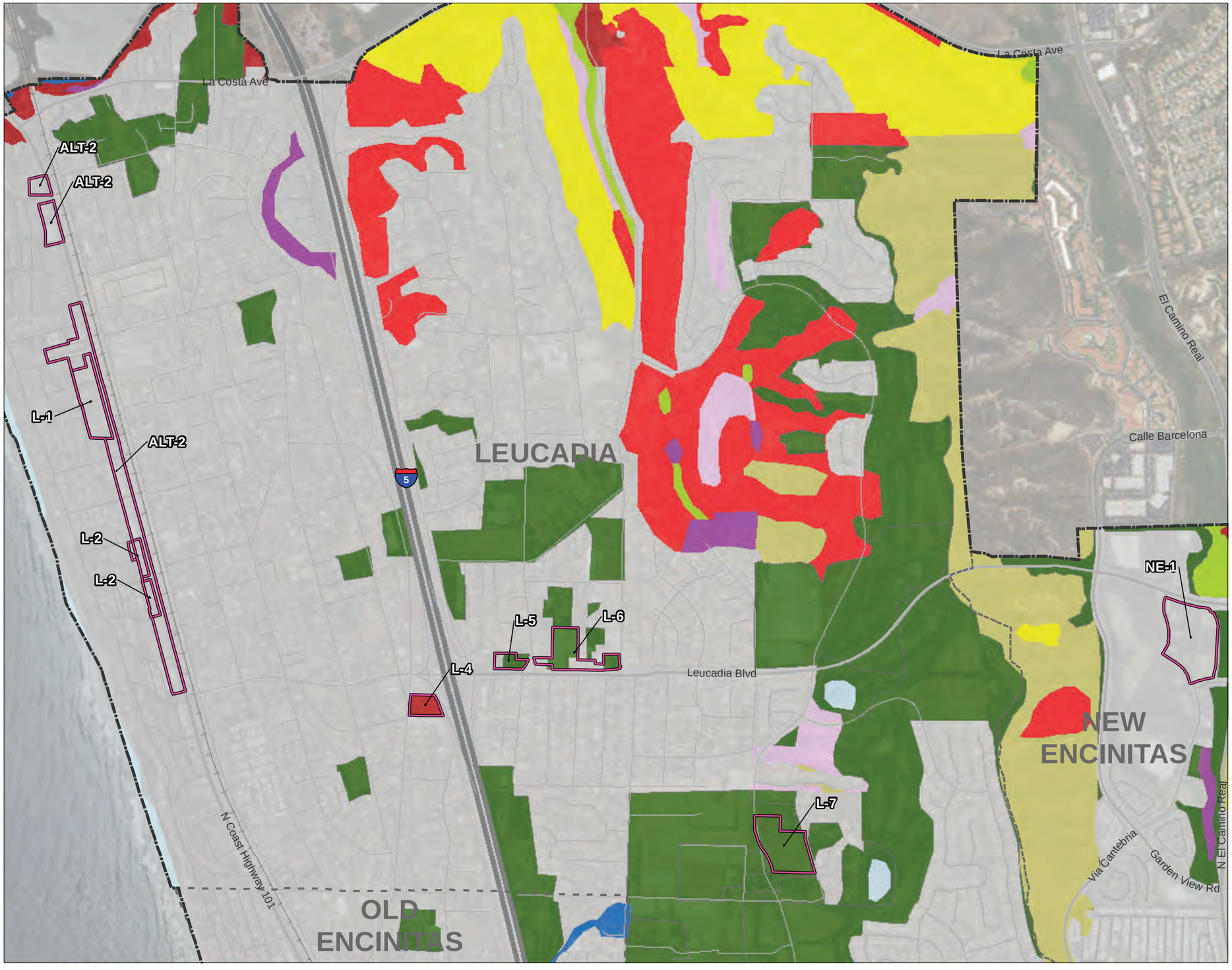
Vegetation community descriptions are based on the San Diego County terrestrial vegetation community descriptions. For ease of discussion, vegetation communities are combined into habitat groups as specified in the MHCP (SANDAG 2003). Figure 4.3-1a-d illustrates the vegetation communities and land cover types mapped within the housing sites. The vegetation mapping is based on regional, large-scale mapping efforts conducted by SanGIS in 1995 for the Multiple Species Conservation Program. This mapping was subsequently updated to account for new development based on aerial photography by Technology Associates International Corporation (TAIC) in 2010 and in 2015 by RECON based on aerial imagery, field verification, and subsequent surveys (REC Consultants 2015; Dudek 2005). However, the vegetation data contained herein is only intended for use as a tool, as site-specific surveys were not conducted in conjunction with this PEIR.

a. Coastal Sage Scrub

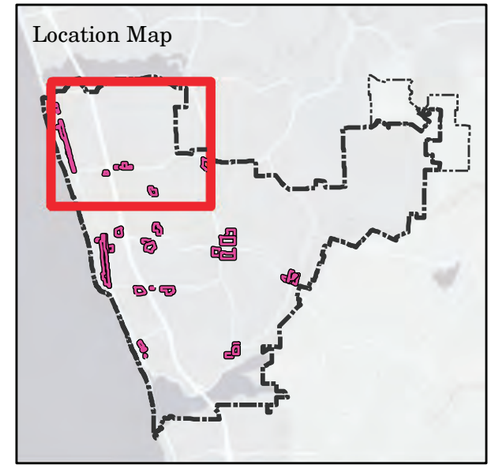
Coastal sage scrub is composed of low-growing, drought-deciduous shrubs. The Diegan form of this community is typically found on low moisture-availability sites with steep, xeric slopes or clay rich soils that are slow to release stored water and is dominated by California sagebrush, coastal California buckwheat, laurel sumac, and white sage. This vegetation community is identified within sites O-4.

[1]The City is not part of any Natural Community Conservation Planning (NCCP) program and did not adopt the regional San Diego County MHCP. The Draft Encinitas Subarea Plan (2001) was prepared in affiliation with the MHCP and has not been adopted; however, applicable provisions of this plan are implemented, to the extent practical, when conducting environmental review for development projects in Encinitas and this PEIR.

Image source: USDA FSA (flown June 2014)



Location Map



City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Vegetation Communities and Land Cover Types

Agricultural Land

Chaparral

Coastal Sage Scrub

Disturbed Land

Eucalyptus Woodland

Annual Grasslands

Riparian

Southern Maritime Chaparral

Developed

Water

Wetland

0 Feet 1,000

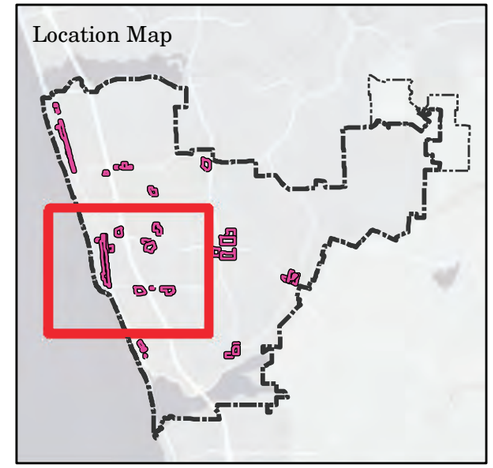
FIGURE 4.3-1a
Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites

RECON

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Image source: USDA FSA (flown June 2014)





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Vegetation Communities and Land Cover Types

- Agricultural Land
- Chaparral
- Coastal Sage Scrub
- Disturbed Land
- Eucalyptus Woodland
- Annual Grasslands
- Riparian
- Southern Maritime Chaparral
- Developed
- Water
- Wetland

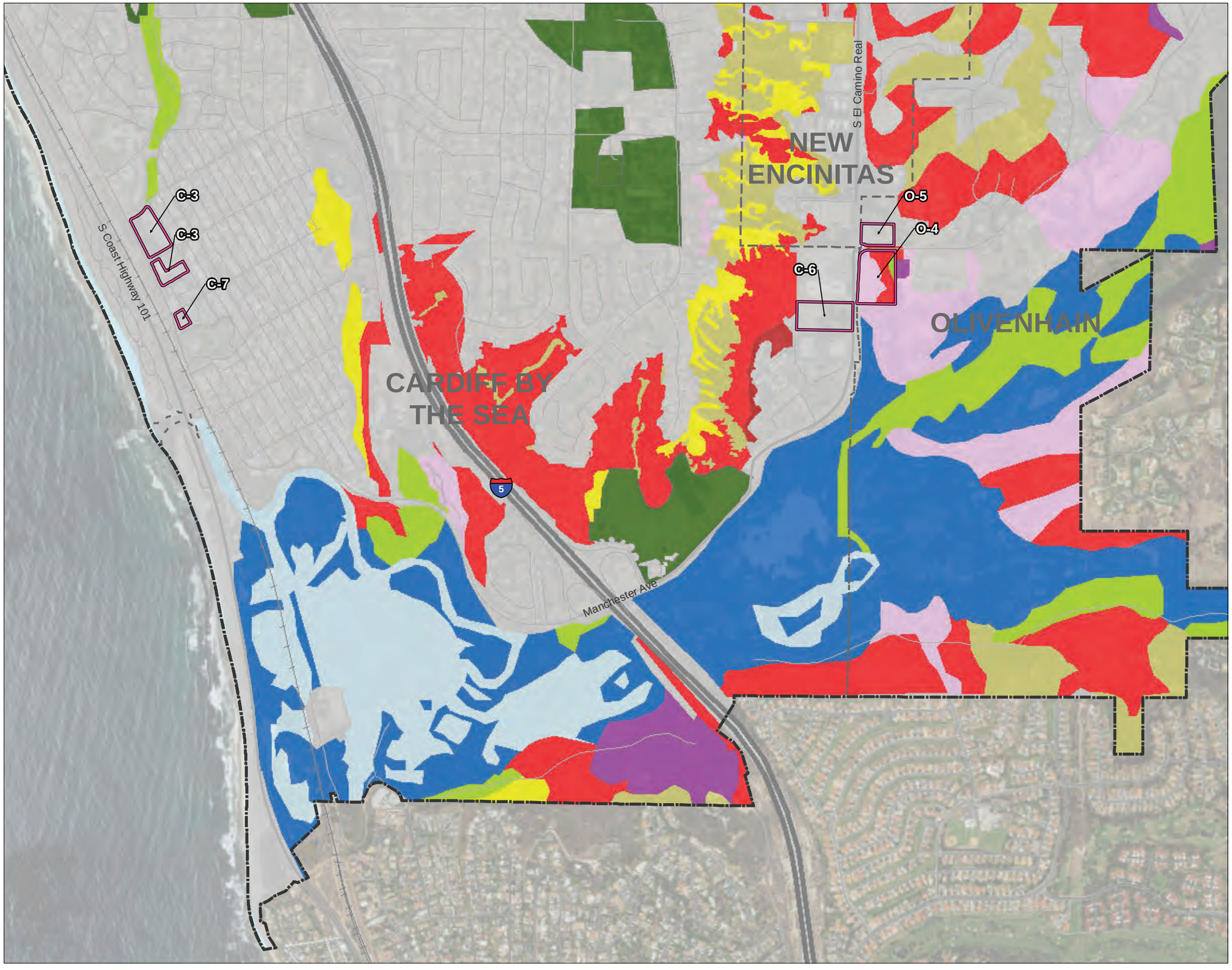
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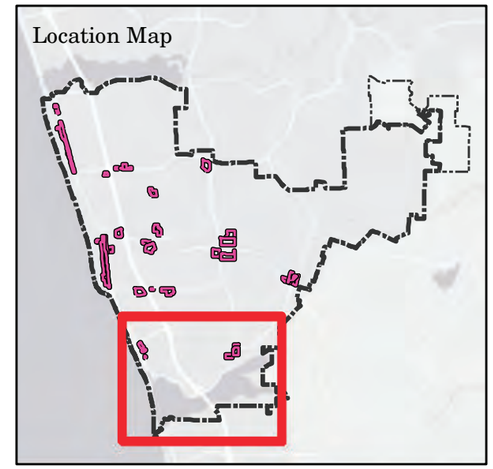
FIGURE 4.3-1b
Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites

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Image source: USDA FSA (flown June 2014)





City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

Vegetation Communities and Land Cover Types

Agricultural Land
Chaparral
Coastal Sage Scrub
Disturbed Land
Eucalyptus Woodland
Annual Grasslands
Riparian
Southern Maritime Chaparral
Developed
Water
Wetland

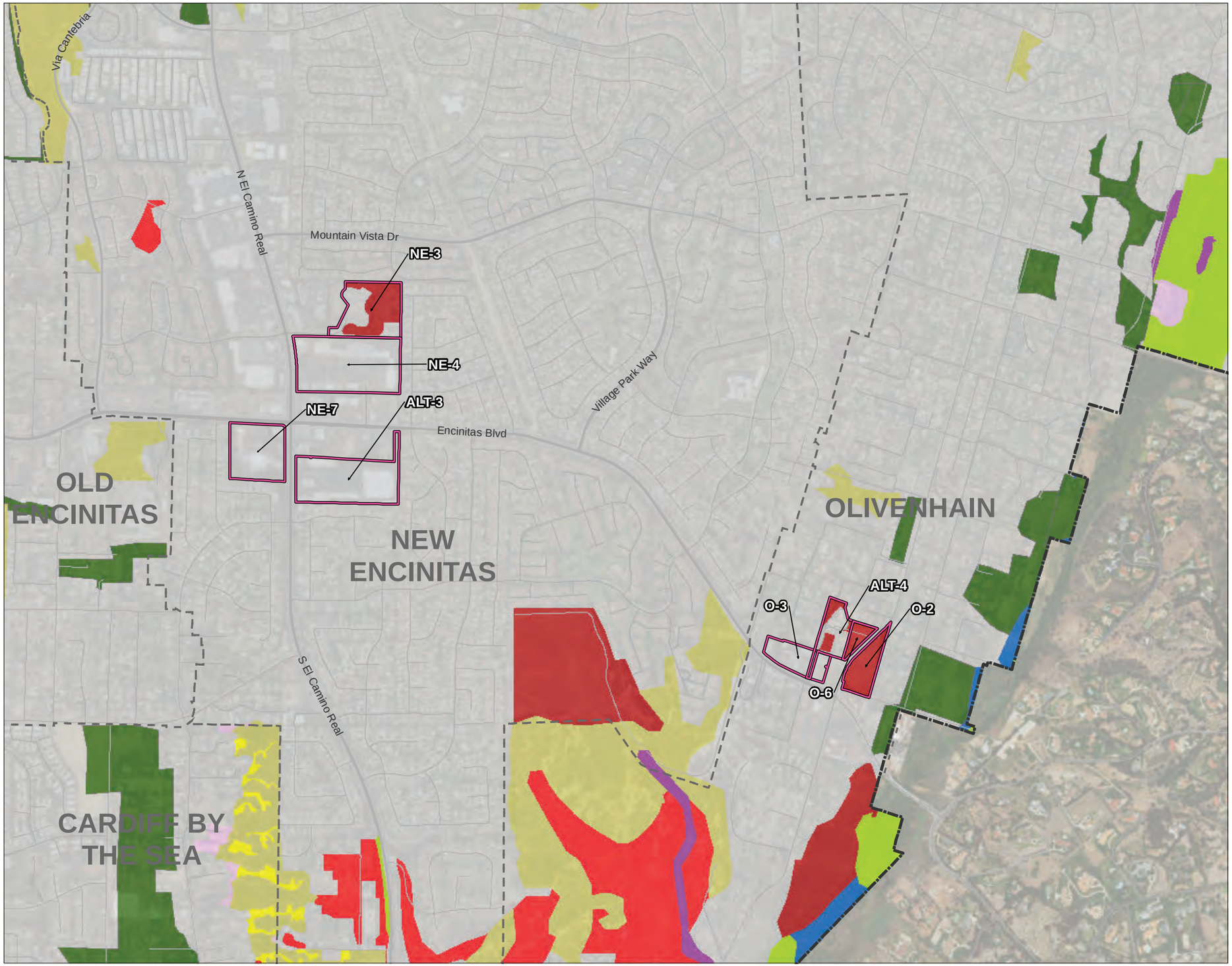
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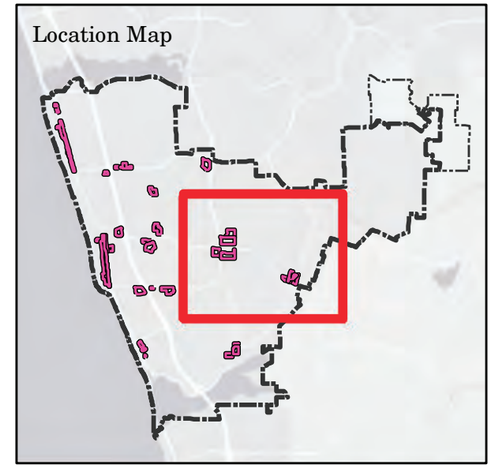
FIGURE 4.3-1c
Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites

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Image source: USDA FSA (flown June 2014)





City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

Vegetation Communities and Land Cover Types

- Agricultural Land
- Chaparral
- Coastal Sage Scrub
- Disturbed Land
- Eucalyptus Woodland
- Annual Grasslands
- Riparian
- Southern Maritime Chaparral
- Developed
- Wetland

0 Feet 1,000

FIGURE 4.3-1d
Existing Vegetation Communities and Land Cover Types in the HEU Housing Sites

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b. Southern Maritime Chaparral

Southern maritime chaparral is a low-growing, open shrub-dominated community found on sandy soils within areas influenced by coastal fog. This community is typically dominated by wart-stemmed ceanothus and Del Mar manzanita. This vegetation community is identified within housing site OE-7.

c. Annual Grasslands

Annual grassland may consist of native and/or non-native grassland. Native grasslands often have a large component of non-native grasses, but are typically distinguished as native grasslands if the percent cover by native grass species is 20 percent or greater (City of San Diego 2012). Native grassland typically contains tussocks formed from native perennial bunchgrasses, such as needlegrass. Native and non-native annuals may occur within the interspaces of the native bunchgrasses, exceeding the bunchgrasses in cover. Non-native grassland is characterized by a dense to sparse cover of annual grasses reaching to three feet high, although other native and non-native plant species may be intermixed. Typically, annual non-native grasses make up a minimum of 50 percent cover of the entire herbaceous layer (City of San Diego 2012). Non-native grasses may include, but are not limited to, bromes, wild oats, and ryegrass. Grassland is identified within site O-4.

d. Wetland/Riparian

Wetland

Wetland vegetation communities may be composed of the following vegetation communities identified in the MHCP: southern coastal salt marsh, alkali marsh, freshwater marsh, and/or disturbed wetland. Wetlands occur in areas that receive permanent or periodic inundation, and are typically dominated by hydrophytic plant species. They may also contain soils that contain morphological characteristics that indicate saturation. Wetlands may occur in channels, floodplains, seeps, springs, and along the margins of open bodies of freshwater (e.g., ponds, lakes). Wetlands are identified within the northern portion of housing site OE-1.

Riparian

Riparian vegetation communities may be composed of the following vegetation communities identified in the MHCP: riparian forest, riparian woodland, and/or riparian scrub. Riparian communities are typically associated with ephemeral and perennial streams and drainages. Riparian forests are typically densely vegetated by riparian tree species, with dense shrubs or herbaceous vegetation in the understory. Riparian woodland is characterized by a more open canopy of riparian trees and shrubs. Characteristic tree species of riparian woodland and forests include sycamores, cottonwoods, oaks, and willows. Riparian scrub is characterized by dense thickets of small riparian trees and shrubs, and typically lack taller riparian trees. Characteristic riparian scrub species include willows and mule fat. Riparian vegetation communities are identified within sites O-4, O-5, and OE-2.

e. Other Lands

Agricultural Land

Agricultural land may be defined broadly as land used primarily for production of food and fiber. This may include intensive agriculture uses such as nurseries and greenhouses or extensive agriculture such as pastures. A more detailed description of agricultural land occurring within the City is discussed in Section 4.9, Land Use. Agricultural land is identified within sites L-5, L-6, and L-7.

Disturbed Land

Disturbed land consists of areas that have been previously disturbed and no longer function as a native or naturalized vegetation community. Vegetation, if present, is dominated by opportunistic non-native forb species. Vegetation may also include ornamental species. A limited amount of non-native grass species may also occur, but do not dominate vegetative cover. Disturbed land is identified within sites ALT-4, ALT-5, L-4, NE-3, O-2, and O-6.

f. Developed

Developed land includes areas that contain buildings, paved roads, parking lots, and/or landscaping. This land cover type comprises a majority of the housing sites, as the City is highly developed. Developed land is identified within sites ALT-2, ALT-3, ALT-4, ALT-6, ALT-7, C-1, C-2, C-3, C-6, C-7, L-1, L-2, L-5, L-6, NE-1, NE-3, NE-4, NE-7, O-3, O-5, OE-1, OE-2, OE-4, OE-5, OE-8, and CBHMG-1.

4.3.1.2 Sensitive Vegetation Communities

Sensitive vegetation communities are communities that are of highly limited distribution, and are those identified by the MHCP and/or those considered sensitive by resource agencies (i.e., California Department of Fish and Wildlife [CDFW] and the United States Fish and Wildlife Service [USFWS]) (SANDAG 2003). Reasons for the sensitive status of vegetation communities include restricted range, cumulative losses throughout the region, and a high number of endemic sensitive plant and wildlife species that occur in the vegetation communities. These communities are considered sensitive whether or not they have been disturbed. Sensitive vegetation communities identified within the housing sites are described below. Housing sites with previously mapped sensitive vegetation communities or with the potential to contain sensitive vegetation communities are shown in Table 4.3-1.

Table 4.3-1
Housing Sites Identified as Containing or with Potential to Contain Sensitive Vegetation Communities

Housing Site	Previously Recorded Sensitive Vegetation[1]	Potential for Sensitive Vegetation Communities?[2]
ALT-2	-	-
ALT-3	-	-
ALT-4	-	Yes
ALT-5	-	Yes
ALT-6	-	-
ALT-7	-	-
C-1	-	-
C-2	-	-
C-3	-	-
C-6	-	Yes
C-7	-	-
L-1	-	-
L-2	-	-
L-4	-	Yes
L-5	-	-
L-6	-	-
L-7	-	Yes
NE-1	-	-
NE-3	-	Yes
NE-4	-	-
NE-7	-	-
O-2	-	Yes
O-3	-	-
O-4	Coastal sage scrub, annual grassland, and riparian	Yes
O-5	Riparian	Yes
O-6	-	Yes
OE-1	Wetland	Yes
OE-2	Riparian	Yes
OE-4	-	-
OE-5	-	-
OE-7	Southern maritime chaparral	Yes
OE-8	-	-
CBHMG-1	-	-

[1]Based on SanGIS mapping (SanGIS 1995) as modified by TAIC and RECON.
[2]Based on field observations conducted by RECON on June 25, 2015.

a. Coastal Sage Scrub

Coastal sage scrub, in pristine or disturbed condition, is considered sensitive by Federal and State resource agencies due to the scarcity of this vegetation community and the number of sensitive species associated with it. Due to the importance of this vegetation community to MHCP species, including the coastal California gnatcatcher, impacts to habitat located on housing sites should be minimized as much as possible. The State Natural Community Conservation Plan (NCCP) guidelines and the Section 4(d) Special

Rule of the Endangered Species Act (ESA) pertaining to the coastal California gnatcatcher apply to Diegan coastal sage scrub.

b. Annual Grasslands

Directly and indirectly, grasslands are key to conservation of a large number of MHCP species, including a variety of narrow endemic species. They provide foraging habitat for raptors and provide movement corridors and habitat linkages that are critical to the MHCP preserve configuration. Non-native grassland is considered less valuable than native grassland, but still provides foraging habitat for raptors and may support a variety of rare plant and animal species.

c. Wetlands/Riparian

All wetland/riparian vegetation communities are considered sensitive by Federal and State resource agencies. These communities are regulated by U.S. Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), California Coastal Commission (CCC), and/or USFWS, depending upon the location and characteristics of the vegetation, soils, and hydrology present. Site-specific analysis would be required for future development to determine what agencies would have regulatory authority.

4.3.1.3 Sensitive Species

For purposes of this PEIR, a species is considered sensitive if it is: (1) a narrow endemic or covered species under the MHCP; (2) listed by State or Federal agencies as threatened or endangered or are proposed for listing (State of California 2015b, 2015c, 2015d); or (3) on California Rare Plant Rank 1B (considered endangered throughout its range) or California Rare Plant Rank 2 (considered endangered in California but more common elsewhere) of the CNPS Inventory of Rare and Endangered Vascular Plants of California ([Inventory]; 2014). Noteworthy plant species are considered to be those that are on California Rare Plant Rank 3 (more information about the plant's distribution and rarity needed) and California Rare Plant Rank 4 (plants of limited distribution) of the CNPS Inventory (2014).

The sensitive plant and wildlife species below are known to occur within the vicinity of the undeveloped housing sites based on information obtained from a records search of the California Natural Diversity Database, SanBIOS, and USFWS databases. Housing sites that are comprised completely of developed land and/or intensive agriculture were excluded. Precise locations of sensitive plant and wildlife species are not known at this time and would be identified through on-site reconnaissance and project-level analysis in conjunction with future development.

a. Sensitive Plants

A total of 12 sensitive plant species are known to historically occur within the vicinity of the undeveloped housing sites. These plants and their status are summarized in Appendix K-1, and include the following:

Federal and/or State Listing

1. Encinitas baccharis
2. San Diego thornmint
3. Orcutt's spineflower

CNPS Rare Plant Ranking of 1B, 2, 3, or 4

4. Orcutt's pincushion
5. Decumbent goldenbush
6. Sea-dahlia
7. Nuttall's lotus
8. Short-lobed broom-rape
9. Coast woolly-heads
10. California adolphia
11. Wart-stemmed ceanothus
12. Lewis's evening primrose

Housing sites that are undeveloped or have a substantial portion of the site unimproved may have potential to support sensitive plant species. Therefore, the following housing sites are considered to have potential for sensitive plants to occur on-site: ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7.

b. Sensitive Wildlife

A total of 9 sensitive wildlife species are known to historically occur within the vicinity of the undeveloped housing sites. These wildlife species and their status are summarized in Appendix K-2, and include the following:

Federal and/or State Listing

1. Coastal California gnatcatcher[2]
2. Least Bell's vireo[3]
3. Belding's savannah sparrow
4. Pacific pocket mouse

[2]USFWS Survey guidelines are included as Appendix K-3.

[3]USFWS Survey Guidelines are included as Appendix K-4.

State Species of Special Concern

5. Coastal cactus wren
6. Cooper's hawk
7. Mexican long-tongued bat
8. pocketed free-tailed bat
9. northwestern San Diego pocket mouse

Housing sites that are undeveloped or have a substantial portion of the site unimproved may have potential to support sensitive wildlife species. Therefore, the following housing sites are considered to have potential to contain sensitive wildlife: ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7.

Additionally, riparian habitat, which has potential to support least Bell's vireo, was mapped by SanGIS (1995) or identified by RECON on June 25, 2015, within or adjacent to the following housing sites: ALT-7, NE-1, O-4, O-5, and OE-2. Housing sites ALT-7 and NE-1 are considered developed; however, portions of these housing sites were identified by RECON during a site visit on June 25, 2015, as being located within 300 feet of riparian habitat that may support least Bell's vireo. Housing sites O-4, O-5, and OE-2 are identified as containing riparian habitat by SanGIS (1995) and, thus, have the potential to support least Bell's vireo.

Lastly, the following developed and undeveloped housing sites have the potential to contain nesting or migratory bird species, including raptors, due to the presence of mature trees and/or native vegetation: ALT-2, ALT-4, ALT-5, ALT-7, C-2, C-6, CBHMG-1, L-4, L-5, L-7, NE-1, NE-3, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-1, OE-2, and OE-7.

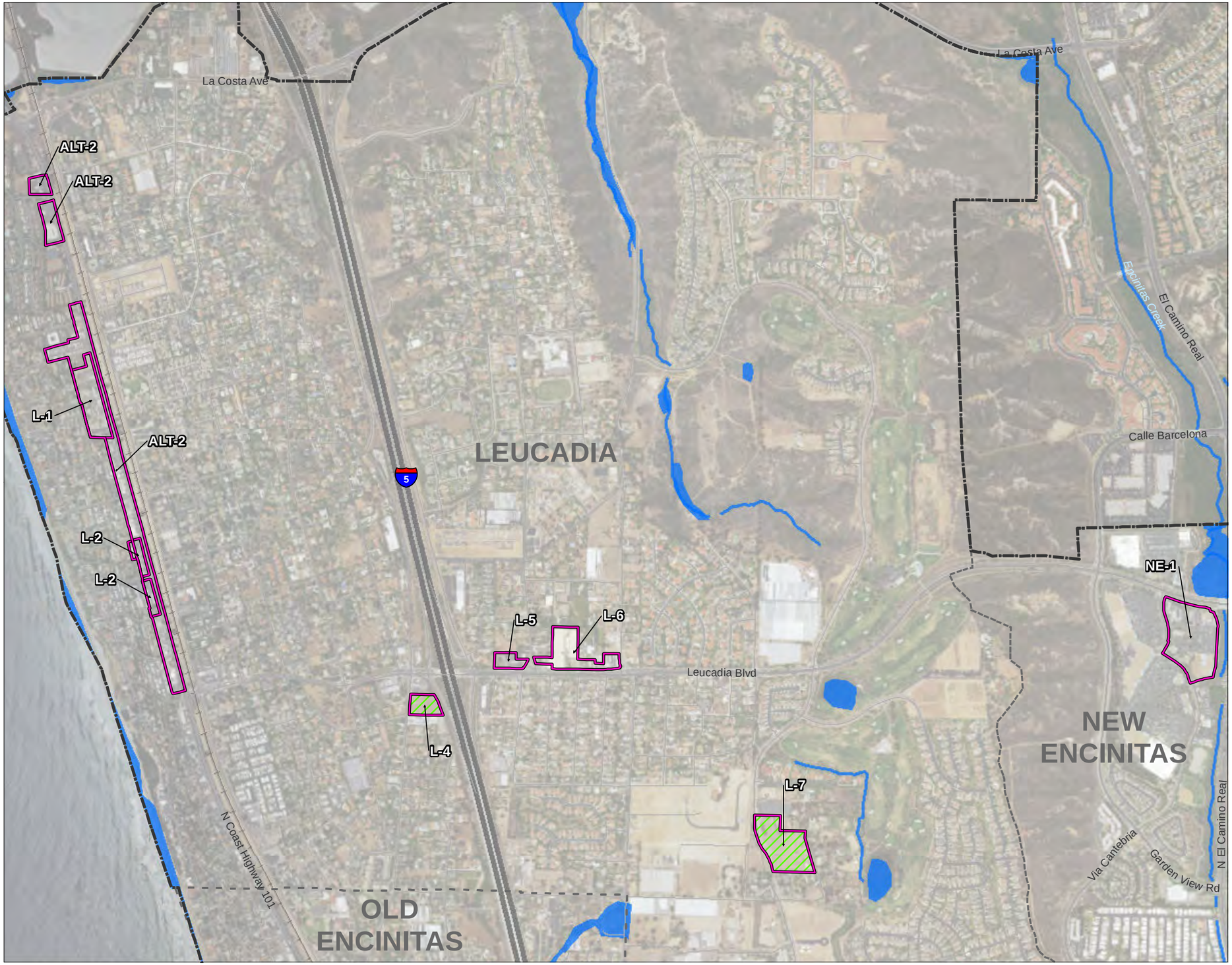
4.3.1.4 Jurisdictional Waters

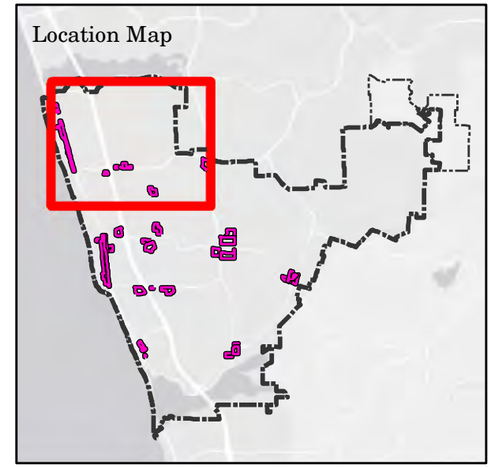
As shown on Figure 4.3-2a-d, housing sites ALT-5, O-4, O-5, OE-1, and OE-2 have been mapped as containing a wetland or water resource (City of Encinitas 2015a). Escondido Creek occurs within the eastern boundary of O-4 and northeastern boundary of O-5. Cottonwood Creek occurs within the northern boundary of OE-1 and northwestern boundary of OE-2. Additionally, housing sites ALT-7 and NE-1 are identified as being located directly adjacent to streams (City of Encinitas 2015a).

Housing sites that are undeveloped or have a substantial portion of the site unimproved may have the potential to contain unmapped jurisdictional wetlands or waters. In addition to the housing sites listed previously, the following housing sites with potential for unmapped jurisdictional wetlands or waters to occur on-site include: ALT-4, C-6, L-4, L-7, NE-3, O-2, O-6, and OE-7. Housing sites identified as containing, or with the potential to contain jurisdictional wetlands or waters are shown in Table 4.3-2.

All wetland areas, wetland buffer areas, and non-wetland waters of the U.S. are considered sensitive. Wetland resources within the City are regulated by USACE, CDFW, RWQCB, the CCC, and the MHCP's Wetlands Protection Program. The respective role each agency plays with respect to wetland resources is described in Section 4.3.2, Regulatory Framework.

Image source: USDA FSA (flown June 2014)





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Potential for Unmapped Wetlands and Waters

Previously Mapped Wetlands and Waters

Previously Mapped Wetlands and Waters

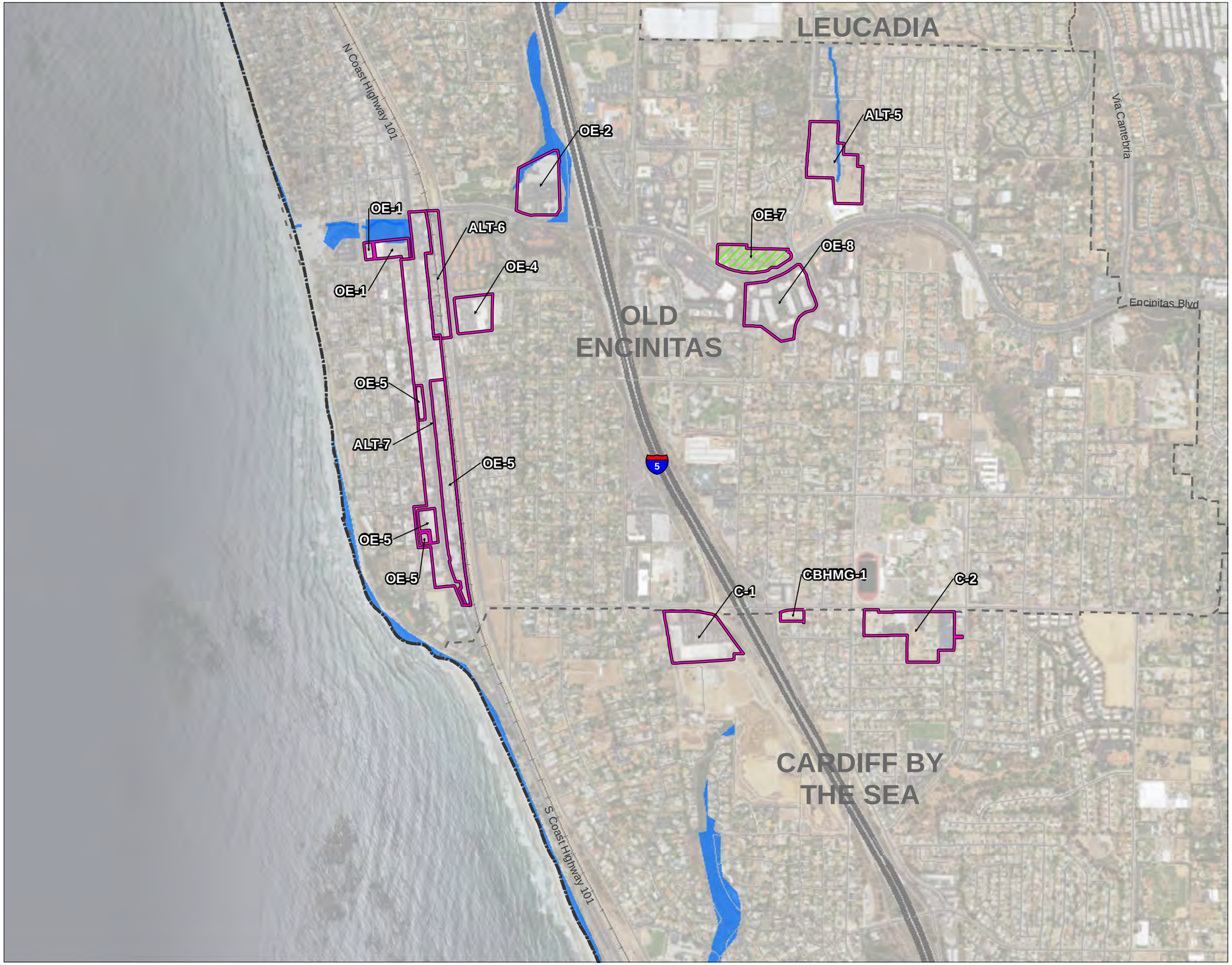
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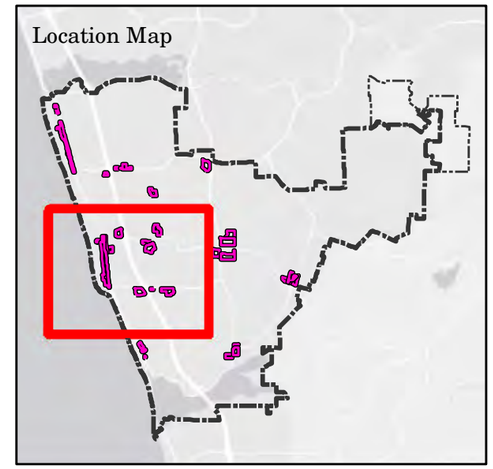
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FIGURE 4.3-2a
Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites

Image source: USDA FSA (flown June 2014)





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Potential for Unmapped Wetlands and Waters

Previously Mapped Wetlands and Waters

Previously Mapped Wetlands and Waters

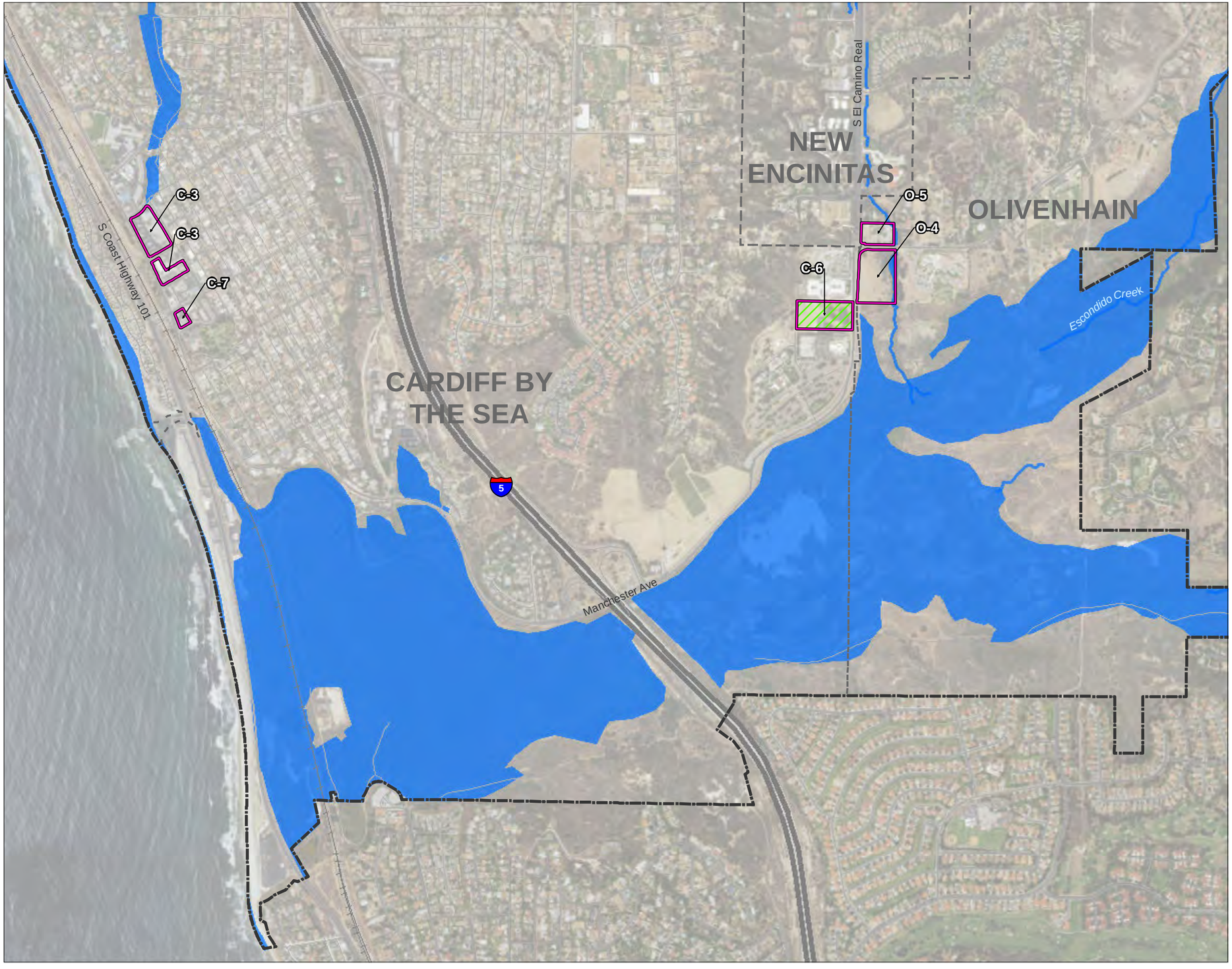
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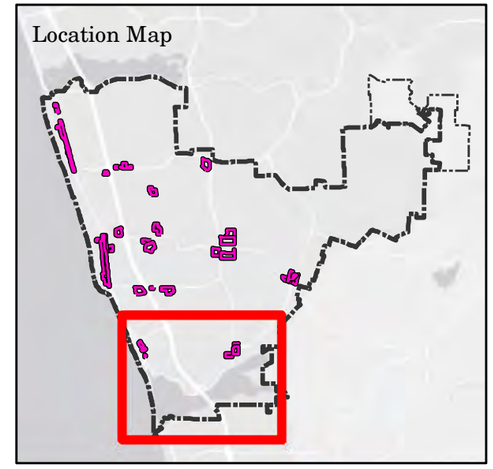
FIGURE 4.3-2b
Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites

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Image source: USDA FSA (flown June 2014)





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Potential for Unmapped Wetlands and Waters

Previously Mapped Wetlands and Waters

Previously Mapped Wetlands and Waters

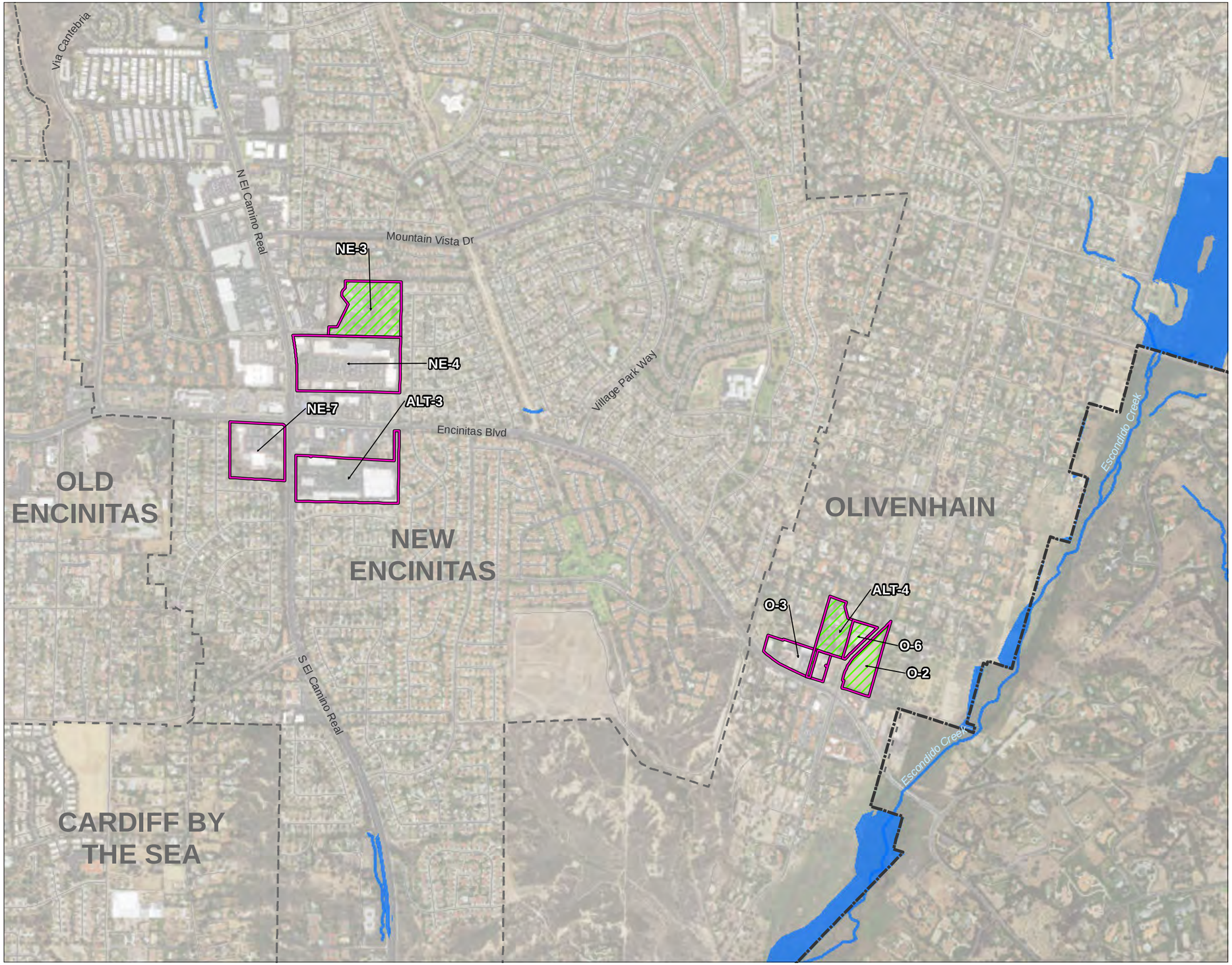
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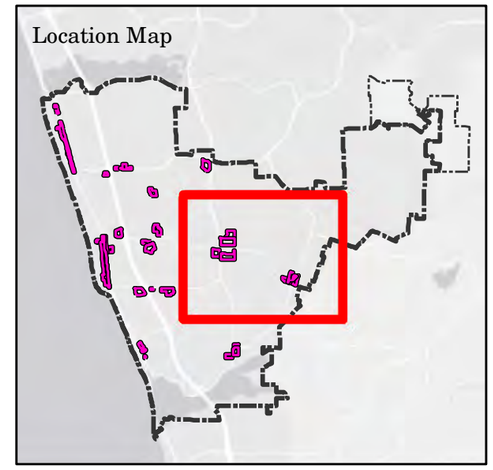
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FIGURE 4.3-2c
Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites

Image source: USDA FSA (flown June 2014)





City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Potential for Unmapped Wetlands and Waters

Previously Mapped Wetlands and Waters

Previously Mapped Wetlands and Waters

0 Feet 1,000

RECON

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FIGURE 4.3-2d
Potential Jurisdictional Wetlands and Waters in the HEU Housing Sites

Table 4.3-2
Housing Sites Identified as Containing or with Potential to Contain Jurisdictional Wetlands or Waters

Housing Site	Previously Recorded Wetlands or Waters[1]	Potential for Unmapped Jurisdictional Wetlands or Waters? [2]
ALT-2	-	-
ALT-3	-	-
ALT-4	-	Yes
ALT-5	Yes	-
ALT-6	-	-
ALT-7	-	-
C-1	-	-
C-2	-	-
C-3	-	-
C-6	-	Yes
C-7	-	-
L-1	-	-
L-2	-	-
L-4	-	Yes
L-5	-	-
L-6	-	-
L-7	-	Yes
NE-1	-	-
NE-3	-	Yes
NE-4	-	-
NE-7	-	-
O-2	-	Yes
O-3	-	-
O-4	Yes	-
O-5	Yes	-
O-6	-	Yes
OE-1	Yes	-
OE-2	Yes	-
OE-4	-	-
OE-5	-	-
OE-7	-	Yes
OE-8	-	-
CBHMG-1	-	-

[1]Based on City mapping (City of Encinitas 2015a).
[2]Based on field observations conducted by RECON on June 25, 2015.

4.3.1.5 Wildlife Movement and Corridors

Habitat linkages and wildlife corridors are defined as areas that connect suitable wildlife habitat in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Habitat linkages and wildlife corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic

traits between populations. Wildlife movement corridors are considered sensitive by resource and conservation agencies.

A majority of the housing sites are of limited value for wildlife movement and corridors due to existing residential and commercial development. The following housing sites are, in part, adjacent to undeveloped land: ALT-4, ALT-5, C-6, C-7, NE-1, O-2, O-4, O-6, and OE-1. However, these sites do not connect suitable wildlife habitat areas as they are fragmented by roads and other development. Although they may provide for local wildlife movement, these housing sites would not constitute a significant wildlife movement corridor.

4.3.2 Regulatory Framework

Several Federal, State, and local regulations govern impacts associated with biological resources. The following is a summary of the regulatory framework that provides the context for preservation of biological resources within the City.

4.3.2.1 Federal

a. Federal Endangered Species Act

The Federal Endangered Species Act of 1973, as amended, 16 United States Code (U.S.C.) 1531 et seq., provides for listing of endangered and threatened species of plants and animals and designation of critical habitat for listed animal species. The ESA also prohibits all persons subject to U.S. jurisdiction from "taking" endangered species, which includes any harm or harassment. Section 7 of the ESA requires that Federal agencies, prior to project approval, consult with USFWS and/or the National Marine Fisheries Service (NMFS) to ensure adequate protection of listed species that may be affected by the project.

b. Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) is a Federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 Code of Federal Regulations (CFR) 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and includes any part, egg or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily sensitive species, such as federally listed endangered or threatened birds under the ESA. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

c. Clean Water Act of 1972

The purpose of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. .In accordance with Section 404 of the Clean Water Act (CWA), USACE regulates the discharge of dredged or fill material into waters of the U.S. Permitting is required for filling waters of the U.S. (including wetlands). Permits may be issued on an individual basis, or may be covered under approved nationwide permits. The term "waters of the United States" is defined as:

- All waters currently used, or used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds; the use, degradation, or destruction of which could affect foreign commerce including any such waters: (1) which could be used by interstate or foreign travelers for recreational or other purposes; or (2) from which fish or shell fish are, or could be taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industries in interstate commerce.
- All other impoundments of waters otherwise as defined as waters of the United States under the definition;
- Tributaries of waters identified above;
- The territorial seas; and
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the paragraphs above.

4.3.2.2 State

a. California Endangered Species Act

Similar to the Federal ESA, the California ESA provides protection to species considered threatened or endangered by the State of California. The California ESA recognizes the importance of threatened and endangered fish, wildlife and plant species and their habitats, and prohibits the taking of any endangered, threatened or rare plant and/or animal species unless specifically permitted for education or management purposes.

b. California Fish and Game Code, Section 1600

Under Section 1602 of the Fish and Game Code, CDFW regulates activities that would divert or obstruct the natural flow of or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats (e.g., southern willow scrub) associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of

streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources.

c. California Coastal Act of 1976 (California Public Resources Code 30000 et seq.)

The California Coastal Act of 1976 (California Public Resources Code 30000 et seq.), defines wetlands as "lands within the coastal zone which may be covered periodically or permanently with shallow water" (California Public Resources Code Division 20, Section 30121). Among other requirements, Section 30233 of the Coastal Act identifies eight situations where coastal zone wetlands may be disturbed. This section also recommends that a proposed project be the least environmentally damaging feasible alternative, and that feasible and appropriate mitigation measures be imposed.

4.3.2.3 Regional

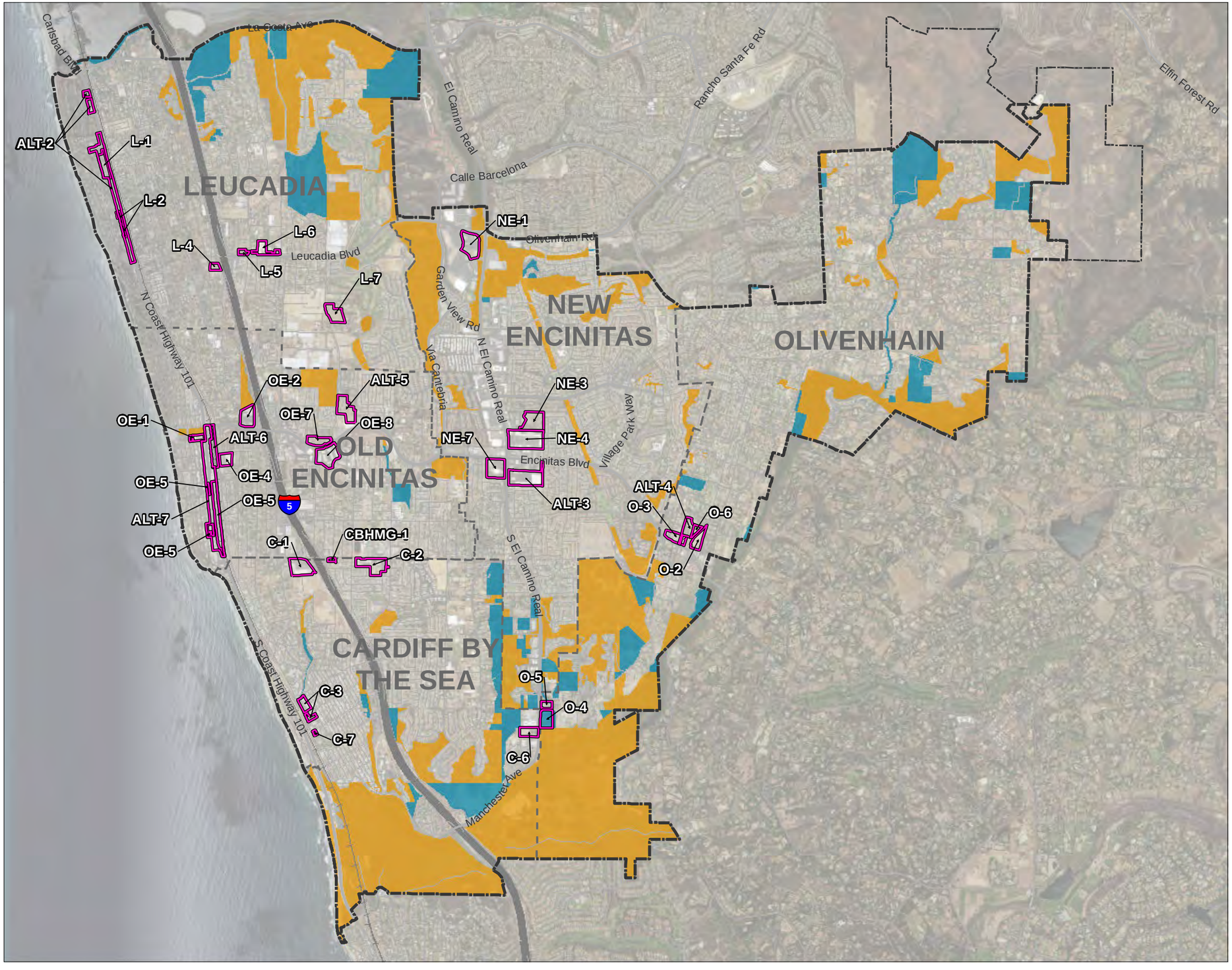
a. North County Multiple Habitat Conservation Program

Coordinated through SANDAG, the MHCP is one of three subregional habitat conservation planning programs in the region that, together, contribute to a coordinated preserve system for the San Diego region. Participating jurisdictions include the cities of Carlsbad, Oceanside, Vista, San Marcos, Escondido, and Solana Beach. The Draft Encinitas Subarea Plan (2001) was prepared in affiliation with the MHCP and has not been adopted; however, applicable provisions of this plan are implemented, to the extent practical, when conducting environmental review for development projects in Encinitas and this PEIR.

The MHCP is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. The goal of the MHCP is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species. Biologically valuable areas within the MHCP area are designated as focused planning areas, from which the preserve system would be assembled and managed for its biological resources. Additionally, the MHCP includes a Wetlands Protection Program, which requires wetlands protection through project entitlement reviews and the CEQA process.

One housing site, O-4, is located within a focused planning area identified by the MHCP (Figure 4.3-3).

Image source: USDA FSA (flown June 2014)



City Limits

Sphere of Influence

Community Area Boundaries

Housing Sites

Focused Planning Areas identified in the MHCP

Hardline

Softline

0 Miles 0.5

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FIGURE 4.3-3

MHCP Focused Planning Areas in the HEU Housing Sites

4.3.2.4 Local

a. General Plan/Local Coastal Program and Specific Plans

The General Plan, along with relevant specific plans, contains policies related to protection and preservation of sensitive biological resources. Pertinent goals and policies related to sensitive biological resources are listed in Table 4.3-3.

Table 4.3-3
Goals and Policies Related to Sensitive Biological Resources

Goal/Policy	Description
City of Encinitas General Plan Resource Management Element	
Goal 3	The City will make every effort possible to preserve significant mature trees, vegetation and wildlife habitat within the Planning Area. (Coastal 30240)
3.1	Mature trees of community significance cannot be removed without City authorization.
Goal 9	The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as possible, in undeveloped areas. (Coastal Act/30240/30251)
9.2	All drainage courses should be maintained in natural or semi-natural vegetation utilizing existing topography as opposed to concrete ditches or pipes. (Coastal Act/30231/30240)
9.3	Where possible, bridges should be used in lieu of pipes, box culverts, or underground channels to preserve the integrity of the natural stream courses, in keeping with community character in the Planning Area. (Coastal Act/30231/30240)
Goal 10	The City will preserve the integrity, function, productivity, and long term viability of environmentally sensitive habitats throughout the City, including kelp-beds, ocean recreational areas, coastal water, beaches, lagoon and their up-lands, riparian areas, coastal strand areas, coastal sage scrub and coastal mixed chaparral habitats. (Coastal Act 30230/30231/30240)
10.1	The City will minimize development impacts on coastal mixed chaparral and coastal sage scrub environmentally sensitive habitats by preserving within the inland bluff and hillside systems, all native vegetation on natural slopes of 25% grade and over other than manufactures slopes. A deviation from this policy may be permitted only upon a finding that strict application thereof would preclude any reasonable use of the property (one dwelling unit per lot). This policy shall not apply to construction of roads of the City's circulation element, except to the extent that adverse impacts on habitat should be minimized to the degree feasible. Encroachments for any purpose, including fire break brush clearance around structures, shall be limited as specified in Public Safety Policy 1.2. Brush clearance, when allowed in an area of sensitive habitat or vegetation, shall be conducted by selective hand clearance.
10.5	The City will control development design on Coastal Mixed Chaparral and Coastal Sage Scrub environmentally sensitive habitats by including all parcels containing concentrations of these habitats within the Special Study Overlay designation. The following guidelines will be used to evaluate projects for approval. - conservation of as much existing contiguous area of Coastal Mixed Chaparral or Coastal Sage Scrub as feasible while protecting the remaining areas from highly impacting uses;

Table 4.3-3 Goals and Policies Related to Sensitive Biological Resources	
Goal/Policy	Description
	- minimize fragmentation or separation of existing contiguous natural areas; - connection of existing natural areas with each other or other open space areas adjacent to maintain local wildlife movement corridors; - maintenance of the broadest possible configuration of natural habitat area to aid dispersal of organisms within the habitat; - where appropriate, based on community character and design, clustering of residential or other uses near the edges of the natural areas rather than dispersing such uses within the natural areas; - where significant, yet isolated habitat areas exist, development shall be designed to preserve and protect them; - conservation of the widest variety of physical and vegetational conditions on site to maintain the highest habitat diversity; - design of development, with adjacent uses given consideration, to maximize conformance to these guidelines; and - preservation of rare and endangered species on site rather than by transplantation off site. In addition, all new development shall be designed to be consistent with multi-species and multi-habitat preservation goals and requirements as established in the statewide Natural Communities Conservation Planning Act. Compliance with these goals and requirements shall be implemented in consultation with the United States Fish and Wildlife Service and California Department of Fish and Game.
10.6	The City shall preserve and protect wetlands within the City's planning area. "Wetlands" shall be defined and delineated consistent with the definitions of the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, the Coastal Act and the Coastal Commission Regulations, as applicable, and shall include, but not be limited to, all lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shall water. There shall be no net loss of wetland acreage or resource value as a result of land use of development, and the City's goal is to realize a net gain in acreage and value whenever possible. Within the Coastal Zone, the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following newly permitted uses and activities: a. Incidental public service projects. b. Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas. c. Restoration purposes. d. Nature study, aquaculture, or other similar resource dependent activities.

Table 4.3-3 Goals and Policies Related to Sensitive Biological Resources	
Goal/Policy	Description
	Identification of wetland acreage and resource value shall precede any consideration of use or development of sites where wetlands are present or suspected. With the exception of development for the primary purpose of the improvement of wetland resource value, all public and private use and development proposals which would intrude into, reduce the area of, or reduce the resource value of wetlands shall be subject to alternatives and mitigation analyses consistent with Federal E.P.A 404(b)(1) findings and procedures under the U.S. Army Corps permit process. Practicable project and site development alternatives which involve no wetland intrusion or impact. Wetland mitigation, replacement or compensation shall not be used to offset impacts or intrusion avoidable through other practicable project or site development alternatives. When wetland intrusion or impact is unavoidable, replacement of the lost wetland shall be required through the creation of new wetland of the same type lost, at a ratio determined by regulatory agencies with authority over wetland resources, but in any case at a ratio of greater than one acre provided for each acre impacted so as to result in a net gain. Replacement of wetland on-site or adjacent, within the same wetland system, shall be given preference over replacement off-site or within a different system. The City shall also control use and development in surrounding areas of influence to wetlands with the application of buffer zones. At a minimum, 100-foot-wide buffers shall be provided upland of salt water wetlands, and 50-foot-wide buffers shall be provided upland of riparian wetlands. Unless otherwise specified in this plan, use and development within buffer areas shall be limited within buffer areas shall be limited to minor passive recreational uses with fencing, desiltation or erosion control facilities, or other improvements deemed necessary to protect the habitat, to be located in the upper (upland) half of the buffer are when feasible. All wetlands and buffers identified and resulting from development and use approval shall be permanently conserved or protected through the application of an open space easement or other suitable device. The City shall not approve subdivisions or boundary line adjustments which would allow increased impacts from development in wetlands or wetland buffers. (Coastal Act/30231 Policy 10.6 amended 1/30/91 and 5/11/95 (Reso. 95-32).
10.9	The City will encourage preservation and the function of San Elijo Lagoon and Batiquitos Lagoon and their adjacent uplands as viable wetland, ecosystems and habitat for resident and migratory, wildlife, by prohibiting actions (subject to the detailed provisions of RM policy 10.6) which: - involve wetland fill or increased sedimentation into wetlands; - adversely decrease stream flow into the wetlands; - reduce tidal interchange; - reduce internal water circulation; or - adversely affect existing wildlife habitats. (Coastal Act/30231)
10.11	In acting to maintain and, where feasible, restore the biological productivity and quality of San Elijo Lagoon, the City will limit alterations and uses to minor public facilities; restorative measures; nature study; passive, non-degrading recreational

Table 4.3-3 Goals and Policies Related to Sensitive Biological Resources	
Goal/Policy	Description
	activities; and facilities necessarily adjunct aquaculture uses. No recreational boating facilities will be permitted in San Elijo Lagoon. Coastal-dependent developments (i.e., utility facilities, boating facilities, etc.) shall not be sited in the wetland area (San Elijo Lagoon and contiguous wetlands). (Coastal Act/30231) contiguous wetlands) (Coastal Act/30231
City of Encinitas General Plan Land Use Element	
Goal 2	The City should manage slow, orderly growth in accordance with a long-term plan which protects and enhances community values.
2.7	Implement mechanisms to ensure the preservation of significant environmental areas of the City. These mechanisms might include establishing development standards encouraging developers to maximize open space, transfers of development rights (TDR's), land banking, purchase, etc. (Coastal Act/30240)
2.8	Development shall not be permitted where it will result in significant degradation of ground, surface, or ocean water quality, or where it will result in significant increased risk of sewage overflows, spills, or similar accidents. (Coastal Act/30231)
Encinitas Ranch Specific Plan	
Goal 1	Identify and develop a plan for preservation and mitigation of valuable natural environments.
1.1	Conduct a survey to identify valuable natural environments including biological, geological, and cultural resources.
1.2	Assess possible impacts to valuable natural environments on-site and develop a management program to preserve the resources or mitigate potential impacts resulting from project development.
1.3	Encourage minimal wildlife contact with inhabited areas by providing water guzzlers within wildlife open space areas.
Goal 2	Establish categories of sensitivities for biological, archaeological, and paleontological resources.
2.1	Require that biological, archaeological, and paleontological resources threatened by development within the project site and which have been identified by qualified professionals as significant or important are documented, preserved, or salvaged for the benefit of future generations.
2.2	Require that the project developer work with the City to establish appropriate categories and methodologies for evaluating the number, type, and quality of sensitive natural resources on-site.
Goal 3	Preserve the areas of steep slope and sensitive natural resources on-site and provide a natural green space linkage throughout the project.
3.1	Minimize intrusion into the area of steep slopes that traverse through the center of the project site from north to south, except for pedestrian and bicycle trails, and, where appropriate, equestrian trails, that provide for interactive use of the open space.
3.2	Preserve and incorporate significant natural features such as bluffs, rock outcroppings, and steep slopes into open space areas and incorporate these open space features into the development plan to encourage passive use or total protection if deemed appropriate. Recreational trails should use existing roads to traverse bluff faces.
Goal 5	Establish landscaping standards to maintain natural vegetation on undeveloped slopes, and natural vegetation on certain manufactured slopes to assure project-wide landscaping compatibility.
5.1	Discourage the removal of natural vegetation on undeveloped slopes and establish a

Table 4.3-3 Goals and Policies Related to Sensitive Biological Resources	
Goal/Policy	Description
	maintenance plan.
5.2	Encourage the planting of indigenous or drought-tolerant materials on existing under-vegetated areas and large manufactured slopes adjacent to natural vegetation areas.
Downtown Encinitas Specific Plan	
Goal 1	The maintenance of the open space resources in the planning area will continue to be emphasized. (Coastal Act/30240)
1.1	Continue to cooperate with property owners, the County of San Diego, and others to preserve and maintain the riparian habitats within the planning area. (Coastal Act/30240)
Goal 8	Environmentally and topographically sensitive and constrained areas within the City should be preserved to the greatest extent possible to minimize the risks associated with development in these areas. (Coastal Act/30240/30253)
8.5	The Special Study Overlay designation shall be applied to lands which, due to their sensitive natures, should only be developed with consideration of specific constraints and features related to drainage courses, bluffs, slopes, geology and soils, biotic habitat, viewsheds and vistas, and cultural resources. Development within the overlay area shall be reviewed and approved in accordance with criteria and standards, which protect coastal and inland resources. (Coastal Act/30240/30253)
8.6	Significant natural features shall be preserved and incorporated into all development, Such features may include bluffs, rock outcroppings, natural drainage courses, wetland and riparian areas, steep topography, trees, and views (Coastal Act/30240/30250/ 30251)
8.7	Non-developable or constrained areas should be evaluated for possible use as open space or recreational use. (Coastal Act/30240)
SOURCE: City of Encinitas 1989, amended 2014; City of Encinitas 2005a; and City of Encinitas 2005b.	

b. Municipal Code

Chapter 15.02 Municipal Tree Ordinance

The Municipal Tree Ordinance requires compliance with the City's Urban Forest Management Program during development, redevelopment, razing, or renovating of structures. General policies include the protection of City trees within the public right-of-way, heritage trees, and trees designated to be preserved by development projects.

Chapter 30.34.040A Floodplain Overlay Zone

The Floodplain Overlay Zone regulations apply to areas within the Special Study Overlay Zone where site-specific analysis indicates the presence of a flood channel, floodplain, or wetland; and to all flood channels and floodplains/floodways mapped by the Federal Emergency Management Agency, City, and/or County. Within the 100-year floodplain, permanent structures, roads and other public improvements will only be allowed if the applicant can demonstrate specific criteria pertaining to flooding, sensitive habitats, and water quality.

The Floodplain Overlay Zone regulations also provide buffers for activities around wetland areas. For coastal lagoon wetland areas, a buffer of 100 feet in width is required. Additionally, a buffer of 100 feet in width is required around all other wetland areas, except riparian wetland areas, which shall require a minimum 50-foot-wide buffer, unless the applicant demonstrates that a buffer of lesser width will protect the resources of the wetland, based on site specific information. All construction and grading activities adjacent to wetlands shall be located so as not to contribute to increased sediment loading of the wetland, cause disturbance to its habitat values, or otherwise impair the functional capacity of the wetland.

Chapter 30.34.040B Cultural/Natural Resources Overlay Zone

Cultural/Natural Resources Overlay Zone regulations apply to areas within the Special Study Overlay Zone where site-specific analysis indicates the presence of sensitive cultural, historic, and biological resources, including sensitive habitats. For parcels containing sensitive habitats, a survey by a qualified biologist is required to determine the significance of the habitats on-site and the need for mitigation.

4.3.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to biological resources would be significant if the Housing Element Update (HEU) project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;

2. Have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW or USFWS;

3. Have a substantial adverse effect on wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), NCCP, or other approved local, regional, or State HCP; or

6. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

4.3.4 Methodology

4.3.4.1 Sources

The biological resources documented in this section were determined through an extensive review of the most current biological literature and Geographical Information Systems (GIS) data available for the City. The base vegetation community mapping was prepared using the regional vegetation map prepared for the Multiple Species Conservation Program (SanGIS 1995). This vegetation mapping was further refined using aerial photography and field verification. Updates to the vegetation map included correcting developed areas that were mapped as native vegetation or agricultural, and vice versa.

The sensitive flora and fauna species are known to occur within the City based on information obtained from the literature review. General flora and fauna species were determined based on the identified vegetation communities and the species that typically occur in these habitats. An in-house search of CNDDB, SanBIOS, and USFWS databases was also performed to identify historical occurrences of sensitive plants and wildlife species within 500 feet of undeveloped housing sites (State of California 2015a; SanGIS 1995; USFWS 2015). Housing sites comprised entirely of developed land or intensive agriculture (e.g., L-5 and L-6) were excluded from the record search.

4.3.4.2 Future Project Implementation

As noted previously in this chapter, for housing sites containing known botanical resources, vegetation communities, or sensitive species, the City of Encinitas Municipal Code requires a site-specific resource survey and impact analysis. In these instances, the City would review project applications for compatibility, applicable requirements for botanical, vegetation, or sensitive species protection, and require specific conditions as part of the approval process. Table 4.3-4 shows the biological constraints of each housing site, which would require future study in accordance with existing regulations and policies. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process.

Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone. The floating zone gives a property owner a choice whether to opt into the housing plan, or forego doing so and retain their existing zoning rights. Depending on the category of the existing zoning, different levels of development or reconstruction activities are permitted on the housing sites.

The impact analysis below describes the type and magnitude of the potential environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential to impact botanical resources, vegetation communities, or sensitive species. The analysis in the following section identifies both direct and indirect impacts, the significance of impacts and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on biological resources, unless otherwise noted. Compliance

Table 4.3-4 Summary of Biological Resource Constraints								
Site	Housing Strategy 1 (RM)	Housing Strategy 2 (BYO)	Housing Strategy 3 (MMUP)	Sensitive Vegetation Communities	Sensitive Plants and Wildlife	Least Bell's Vireo	Nesting Birds	Jurisdictional Wetlands/ Waters
ALT-2			Yes				Yes	
ALT-3			Yes					
ALT-4			Yes	Yes	Yes		Yes	Yes
ALT-5			Yes	Yes	Yes		Yes	Yes
ALT-6			Yes					
ALT-7			Yes			Yes	Yes	Yes
C-1			Yes					
C-2	Yes	Yes	Yes				Yes	
C-3	Yes							
C-6			Yes	Yes	Yes		Yes	Yes
C-7	Yes							
L-1	Yes	Yes						
L-2	Yes							
L-4	Yes			Yes	Yes		Yes	Yes
L-5	Yes						Yes	
L-6	Yes							
L-7		Yes	Yes	Yes	Yes		Yes	Yes
NE-1		Yes	Yes			Yes	Yes	Yes
NE-3		Yes		Yes	Yes		Yes	Yes
NE-4	Yes						Yes	
NE-7		Yes	Yes				Yes	
O-2	Yes	Yes	Yes	Yes	Yes		Yes	Yes
O-3			Yes				Yes	
O-4		Yes	Yes	Yes	Yes	Yes	Yes	Yes
O-5	Yes	Yes		Yes	Yes	Yes	Yes	Yes
O-6	Yes			Yes	Yes		Yes	Yes
OE-1	Yes		Yes	Yes	Yes		Yes	Yes
OE-2		Yes		Yes	Yes	Yes	Yes	Yes
OE-4	Yes		Yes					
OE-5	Yes							
OE-7	Yes	Yes	Yes	Yes	Yes		Yes	Yes
OE-8		Yes						
CBHMG-1							Yes	

with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.3.5 Issue 1: Sensitive Species

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

4.3.5.1 Impacts

a. Housing Sites

While the HEU does not specifically propose activities such as grading or construction that would have the potential to displace sensitive species, it can be assumed that future development of housing sites could have the potential to directly or indirectly impact sensitive species through such activities. Table 4.3-5 contains a matrix of the sensitive resources, specifically plants, wildlife, least Bell's vireo, and nesting and migratory birds that may be impacted by the development of each housing site. This analysis identifies specific housing sites where the potential to impact sensitive species exists. In accordance with the requirements of Chapter 30.34.040B of the City's Municipal Code, the Cultural/Natural Resources Overlay Zone, site-specific surveys must be conducted in conjunction with future project-level review to verify the presence of sensitive plant or wildlife species occurring on individual housing sites and determine the extent of any potential impacts. These potential impacts are described below.

Direct impacts to sensitive plant and wildlife species could potentially result from the removal of occupied habitat within undeveloped housing sites through grading and other land development activities (Impact BIO-1). Additionally, indirect impacts to sensitive plant or wildlife species could also result from excess noise, lighting, or runoff generated during project construction. The following housing sites are considered undeveloped (e.g., have the potential to contain native and/or non-native habitats), and future development of these sites has the potential to impact sensitive plants or wildlife: ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7.

Direct impacts to least Bell's vireo could potentially result from the removal of riparian habitat during the least Bell's vireo breeding season (April 10 to July 31). Additionally, indirect impacts could also result from excess noise or lighting generated during project construction should it occur within 300 feet of riparian habitat during the breeding season (April 10 to July 31) (Impact BIO-2). The following housing sites have been mapped as containing or adjacent to riparian habitat, and future development of these sites has the potential for direct and/or indirect impacts to least Bell's vireo: ALT-7, NE-1, O-4, O-5, and OE-2.

Direct impacts to nesting or migratory birds, including raptors (as protected under the MBTA), could potentially result from the removal of mature trees and/or native vegetation within housing sites during the typical bird breeding season (January 15–September 15) (Impact BIO-3). Due to the potential for mature trees and/or native vegetation to support these nesting birds on-site, future development of the following housing sites has the potential to directly impact nesting or migratory bird species should vegetation clearing and/or project construction occur during the general bird breeding season: ALT-2, ALT-4, ALT-5, ALT-7, C-2, C-6, CBHMG-1, L-4, L-5, L-7, NE-1, NE-3, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-1, OE-2, and OE-7.

Table 4.3-5
Potential Impacts to Sensitive Wildlife Species

Housing Site	Sensitive Plants	Sensitive Wildlife	Least Bell's Vireo	Nesting and Migratory Birds
ALT-2	-	-		Yes
ALT-3				
ALT-4	Yes	Yes		Yes
ALT-5	Yes	Yes		Yes
ALT-6	-	-		-
ALT-7	-	-	Yes	Yes
C-1	-	-		-
C-2	-	-		Yes
C-3	-	-		-
C-6	Yes	Yes		Yes
C-7	-	-		-
L-1	-	-		-
L-2	-	-		-
L-4	Yes	Yes		Yes
L-5	-	-		Yes
L-6				
L-7	Yes	Yes		Yes
NE-1	-	-	Yes	Yes
NE-3	Yes	Yes		Yes
NE-4	-	-		Yes
NE-7	-	-		Yes
O-2	Yes	Yes		Yes
O-3	-	-		Yes
O-4	Yes	Yes	Yes	Yes
O-5	Yes	Yes	Yes	Yes
O-6	Yes	Yes		Yes
OE-1	Yes	Yes		Yes
OE-2	Yes	Yes	Yes	Yes
OE-4	-	-		-
OE-5	-	-		-
OE-7	Yes	Yes		Yes
OE-8	-	-		-
CBHMG-1	-	-		Yes

As shown in Table 4.3-3, the following policies aim to protect sensitive plant and wildlife species: Policy 10.5 of the General Plan Resource Management Element (2011); Policies 1.1, 1.2, 1.3, 2.1, and 2.2 of the Encinitas Ranch Specific Plan (2005a). Section 30.34.050 of the Municipal Code (2015b) also addresses sensitive species. In addition, as detailed in Sections 4.3.6 and 4.3.7 below, the General Plan Resource Management Element, Downtown Encinitas Specific Plan, Encinitas Ranch Specific Plan, and Municipal Code contain numerous provisions for the preservation of natural habitats including wetlands, which would thereby protect sensitive plant and wildlife populations. As future projects are planned they must adhere to these policies and regulations.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) has potential to impact:

- Impact BIO-1 - Sensitive plants and wildlife on L-4, O-2, O-5, O-6, OE-1, OE-2, and OE-7;
- Impact BIO2 - Least Bell's vireo on O-5; and
- Impact BIO-3 - Nesting or migratory birds on C-2, L-4, L-5, NE-4, O-2, O-5, O-6, OE-1, and OE-7.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to impact:

- Impact BIO-1 - Sensitive plants and wildlife on L-7, NE-3, O-2, O-4, O-5, OE-2, and OE-7;
- Impact BIO-2 - Least Bell's vireo on NE-1, O-4, O-5, and OE-2; and
- Impact BIO-3 - Nesting or migratory birds on C-2, L-7, NE-1, NE-3, NE-7, O-2, O-4, O-5, OE-2, and OE-7.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to impact:

- Impact BIO-1 - Sensitive plants and wildlife on C-6, L-7, O-2, O-4, OE-1, and OE-7;
- Impact BIO-2 - Least Bell's vireo on NE-1 and O-4; and
- Impact BIO-3 - Nesting or migratory birds on C-2, C-6, L-7, NE-1, NE-7, O-2, O-3, O-4, OE-1, and OE-7.

4.3.5.2 Significance of Impacts

Direct impacts to sensitive plants and sensitive wildlife (Impact BIO-1) within housing sites ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant. Direct and/or indirect impacts to least Bell's vireo (Impact BIO-2) within housing sites ALT-7, NE-1, O-4, O-5, and OE-2 would be potentially significant.

Direct impacts to migratory or nesting birds within housing sites ALT-2, ALT-4, ALT-5, ALT-7, C-2, C-6, CBHMG-1, L-4, L-5, L-7, NE-1, NE-3, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant (Impact BIO-3).

4.3.5.3 Mitigation Framework

BIO-1: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to sensitive biological resources, shall be required to comply with the following mitigation framework:

a) A site-specific general biological resources survey shall be conducted to identify the presence of any sensitive biological resources, including any sensitive plant or wildlife species. A biological resources report shall be submitted to the City to document the results of the biological resources survey. The report shall include: (1) the methods used to determine the presence of sensitive biological resources; (2) vegetation mapping of all vegetation communities and/or land cover types; (3) the locations of any sensitive plant or wildlife species; (4) an evaluation of the potential for occurrence of any listed, rare, and narrow endemic species; and (5) an evaluation of the significance of any potential direct or indirect impacts from the proposed project. If potentially significant impacts to sensitive biological resources are identified, future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive biological resources to the extent feasible, and the report shall also recommend appropriate mitigation to reduce the impacts to below a level of significance.

b) If suitable habitat for sensitive species is identified within the housing site based on the general biological survey, then focused presence/absence surveys shall be conducted in accordance with applicable resource agency survey protocols.

BIO-2: Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program, wherein the City has determined to the potential for impacts to least Bell's vireo, shall require USFWS protocol surveys for least Bell's vireo should project construction occur within 300 feet of riparian habitat during the breeding season (April 10 to July 31). If least Bell's vireo are identified during the protocol surveys, then noise attenuation measures shall be required to ensure that noise levels from construction do not exceed a 60 A-weighted decibels [dB(A)] hourly average per hour at the edge of the riparian habitat or to the ambient noise level if it exceeds 60 dB(A) prior to construction. Construction noise monitoring shall be required to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average unless an analysis completed by a

qualified acoustician shows that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat.

BIO-3: Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program, wherein the City has determined the presence of mature trees and/or native vegetation suitable for nesting birds in the future, shall require a pre-construction survey to determine the presence of active bird nests if vegetation clearing is proposed during the typical bird breeding season (January 15–September 15). The nesting bird survey shall be performed by a qualified biologist within one week prior to the start of vegetation clearing or construction activities. No direct impacts shall occur to any nesting birds or their eggs, chicks, or nests. If an active nest is located, nest avoidance measures would be required in accordance with the MBTA and CDFW code.

4.3.5.4 Significance After Mitigation

Impacts to sensitive plants and wildlife, including least Bell's vireo and migratory or nesting birds, would be reduced to a level less than significant with implementation of the mitigation framework in measures BIO-1, BIO-2, and BIO-3.

4.3.6 Issue 2: Sensitive Vegetation Communities

Would the project have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW or USFWS?

4.3.6.1 Impacts

a. Housing Sites

While the HEU does not specifically propose vegetation removal, it can be assumed that future development of housing sites could have the potential to directly impact sensitive vegetation communities through such activities. Sensitive vegetation communities which exist or have the potential to exist on undeveloped housing sites include coastal sage scrub, southern maritime chaparral, grasslands and wetlands/riparian. These communities are considered sensitive due to their limited occurrence and ability to support diverse and sensitive species. Thus, removal of these vegetation communities associated with future development on housing sites containing these resources would be significant (Impact BIO-4).

Due to the fact that portions of the biological resource assessment are based on secondary source information rather than site-specific field surveys, the analysis herein identifies specific housing sites with the potential for impacts to sensitive vegetation communities. Site-specific surveys would be required for future project-level review to verify the presence of sensitive vegetation communities occurring on individual housing sites and determine the extent of any potential impacts. The following housing sites are considered undeveloped

(e.g., have the potential to contain native and/or non-native habitats), and future development has the potential to impact sensitive vegetation communities through vegetation removal: ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7.

As shown on Table 4.3-3, policies aimed at protecting sensitive vegetation communities include: Policies 9.2, 9.3, 10.1, 10.5, 10.6, 10.9, and 10.11 of the General Plan Resource Management Element (2011); Policies 1.1, 1.2, 5.1, and 5.2 of the Encinitas Ranch Specific Plan (2005a); Policy 1.1, 8.5, and 8.6 of the Downtown Encinitas Specific Plan (2005b). Sections 30.34.040 and 30.34.050 of the Municipal Code also contain provisions for the protection of sensitive vegetation. As future projects are planned they must adhere to these policies and regulations. However, as the site-specific requirements are unknown at this program-level of analysis, direct impacts to sensitive vegetation communities could potentially result from the implementation of the HEU. Impacts to sensitive vegetation communities would be potentially significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made

Development within housing strategy 1 (RM) has potential to impact:

- Sensitive vegetation communities on L-4, O-2, O-5, O-6, OE-1, and OE-7.

Housing Strategy 2 – Build Your Own

Development within housing strategy 2 (BYO) has potential to impact:

- Sensitive vegetation communities on L-7, NE-3, O-2, O-4, O-5, OE-2, and OE-7.

Housing Strategy 3 – Modified Mixed Use Places

Development within housing strategy 3 (MMUP) has potential to impact:

- Sensitive vegetation communities on ALT-4, ALT-5, C-6, L-7, O-2, O-4, OE-1, and OE-7.

4.3.6.2 Significance of Impacts

Direct impacts to sensitive vegetation communities (Impact BIO-4) within housing sites ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant and, therefore, require mitigation.

4.3.6.3 Mitigation Framework

Mitigation measure **BIO-1** would require site-specific biology surveys, at the time future projects are proposed, as determined by the City based on the conditions at the time of

application. Potentially significant impacts to sensitive vegetation communities shall be identified during the biology survey and project-specific mitigation measures to reduce the impacts to below a level of significance shall be identified in a biological resources report. Future development consistent with the HEU that would impact sensitive vegetation communities shall be required to comply with the following mitigation framework.

BIO-4: Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program resulting in impacts to sensitive vegetation communities shall implement avoidance and minimization measures and provide suitable mitigation in accordance with the MHCP.

Future project-level grading and site plans shall incorporate project design features to minimize direct impacts on sensitive vegetation communities including but not limited to riparian habitats, wetlands, non-native grassland, and coastal sage scrub. Mitigation for impacts to sensitive upland habitats shall occur in accordance with the mitigation ratios identified in Tables 4-6 and 4-7 of the MHCP. Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed.

4.3.6.4 Significance After Mitigation

Impacts to sensitive habitats would be reduced to a level less than significant with implementation of the mitigation framework BIO-4.

4.3.7 Issue 3: Wetlands

Would the project have a have a substantial adverse effect on wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

4.3.7.1 Impacts

a. Housing Sites

While the HEU does not specifically propose alteration of a known or potential jurisdictional water or wetland, it can be assumed that future development of housing sites could have the potential to directly or indirectly impact jurisdictional waters or wetlands through such activities through vegetation removal and grading activities associated with development (Impact BIO-5). Future development of the following housing sites have the potential to impact jurisdictional waters or wetlands: ALT-4, ALT-5, ALT-7, C-6, L-4, L-7, NE-1, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7. Due to the fact that portions of the biological resource assessment are based on secondary source information rather than site-specific field surveys, the impacts would be refined for individual projects. The analysis herein identifies specific housing sites with the potential for future development to impact jurisdictional waters or wetlands on- and off-site. If warranted, a formal delineation would

be required in conjunction with future project applications to identify the precise boundaries of jurisdictional resources and determine the extent of any potential impacts.

As shown in Table 4.3-3, policies aimed at the protection of wetland resources include: Policies 9.3, 10.6, 10.9, and 10.11 of the General Plan Resource Management Element (2011); Policies 1.1, 8.5, and 8.6 of the Downtown Encinitas Specific Plan; and Section 30.34.040 of the Municipal Code contain provisions for the preservation of jurisdictional waters and wetlands. As future projects are planned they must adhere to these policies and regulations. However, as the site-specific requirements are unknown at this program-level of analysis, direct impacts to jurisdictional wetlands could potentially result from buildout of the housing sites. Impacts to jurisdictional wetlands would be potentially significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made

Development within housing strategy 1 (RM) has potential to impact:

- Wetlands and other jurisdictional waters on or immediately adjacent to L-4, O-2, O-5, O-6, OE-1, and OE-7.

Housing Strategy 2 – Build Your Own

Development within housing strategy 2 (BYO) has potential to impact:

- Wetlands and other jurisdictional waters on or immediately adjacent to L-7, NE-1, NE-3, O-2, O-4, O-5, OE-2, and OE-7.

Housing Strategy 3 – Modified Mixed Use Places

Development within housing strategy 3 (MMUP) has potential to impact:

- Wetlands and other jurisdictional waters on or immediately adjacent to ALT-4, ALT-5, ALT-7, C-6, L-7, NE-1, O-2, O-4, OE-1, and OE-7.

4.3.7.2 Significance of Impacts

Impacts to jurisdictional waters and wetlands (Impact BIO-5) within housing sites ALT-4, ALT-5, ALT-7, C-6, L-4, L-7, NE-1, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7 would be potentially significant and, therefore, require mitigation.

4.3.7.3 Mitigation Framework

BIO-5: Prior to issuance of a permit for grading or vegetation removal, future development of housing sites consistent with the HEU floating zone program, wherein the City has determined the potential for impacts to sensitive biological resources, shall be required to prepare a site-specific biological resources survey.

Should any potential jurisdictional waters be identified on-site during the general biological resources survey, then a jurisdictional wetlands delineation of the housing site shall be conducted following the methods outlined in the USACE's 1987 *Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Delineation Manual for the Arid West Region*. The limits of any riparian habitats on-site under the sole jurisdiction of CDFW shall also be delineated, as well as any special aquatic sites (excluding vernal pools) that may not meet Federal jurisdictional criteria but are regulated by CCC and the RWQCB.

Avoidance measures based on project-level grading and site plans shall be incorporated into the project design to minimize direct impacts to jurisdictional waters consistent with Federal, State, and City guidelines. Unavoidable impacts to wetlands shall be minimized to the maximum extent practicable and would be subject to alternatives and mitigation analyses consistent with U.S. Environmental Protection Agency 404(b)(1) findings and procedures under the USACE's permit process. Unavoidable impacts would require the in-kind creation of new wetland of the same type lost, at a ratio determined by the applicable regulatory agencies that would prevent any net loss of wetland functions and values. Wetland creation on-site or within the same wetland system shall be given preference over replacement off-site or within a different system. The City shall also control use and development in surrounding areas of influence to wetlands with the application of buffer zones. At a minimum, 100-foot-wide buffers shall be provided upland of tidal wetlands with the exception of riparian areas which will require 50-foot-wide buffers, unless the applicant demonstrates that a buffer of lesser width would protect the resources of the wetland based on site-specific information. Use and development within buffer areas shall be limited to minor passive recreational uses with fencing, desiltation or erosion control facilities, or other improvements deemed necessary to protect the habitat, to be located in the upper (upland) half of the buffer when feasible. All wetlands and buffers shall be permanently conserved or protected through the application of an open space easement or other suitable device.

4.3.7.4 Significance After Mitigation

Impacts to jurisdictional waters and wetlands would be reduced to a level less than significant with implementation of the mitigation framework. Impacts to wetlands and other jurisdictional waters within housing strategies 1, 2, and 3 (Impact BIO-5) would be mitigated to below a level of significance by mitigation measure BIO-5.

4.3.8 Issue 4: Wildlife Corridors

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

4.3.8.1 Impacts

a. Housing Sites

The housing sites identified within the HEU, as stated above, are primarily restricted by developed land. Although housing sites ALT-4, ALT-5, C-6, C-7, NE-1, O-2, O-4, O-6, and OE-1 are bounded, in part, by undeveloped land, they do not meet the criteria for a wildlife movement corridor as they are restricted by roads and other development. Therefore, implementation of the HEU would not interfere with any wildlife corridor and would not have a significant impact to wildlife movement. Additionally, Policy 10.5 of the General Plan Resource Management Element (2011) contains provisions for the preservation of wildlife movement corridors. Impacts would be less than significant.

b. Housing Strategy Summaries

Housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) would not impact any wildlife movement corridors, as no significant wildlife movement corridors occur in any of the housing sites. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.3.8.2 Significance of Impacts

Potential impacts associated with wildlife movement corridors would be less than significant.

4.3.9 Issue 5: Habitat Conservation Planning

Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State HCP?

4.3.9.1 Impacts

a. Housing Sites

No impacts that would conflict with an adopted HCP, NCCP, or any other approved local, regional, or State HCP are anticipated as a result of implementation of the HEU. As noted above, housing site O-4 is located within a focused planning area identified by the MHCP. Implementation of mitigation measures BIO-1 through BIO-4 would ensure future development within these housing sites is consistent with the MHCP by requiring site-specific surveys to be conducted for future project-level review to verify the presence of

sensitive biological resources occurring on individual housing sites; determine the extent of any potential impacts; and provide mitigation to reduce the impacts to below a level of significance. As future projects would be required to address sensitive species and vegetation communities identified in the MHCP, development in accordance with the HEU would not conflict with an adopted HCP, NCCP, or any other approved local, regional, or State HCP.

The MHCP is intended to protect viable populations of native plant and animal species and their habitats. Avoidance of impacts to biologically sensitive resources, which include wetlands and other sensitive vegetation communities, is emphasized and proposed projects which would directly or indirectly impact sensitive resources are required to minimize or mitigate any impacts that cannot be avoided. Additionally, Policy 10.5 of the City of Encinitas General Resource Plan Management Element (2011) requires project design to be consistent with the preservation goals and requirements of the statewide NCCP act. As future projects are planned they must adhere to these policies and regulations; therefore, impacts would be less than significant.

b. Housing Strategy Summaries

Implementation of mitigation measures BIO-1 through BIO-4 would ensure project compliance with the MHCP. Therefore, there would be no impact to habitat conservation planning, and no inherent differences in impacts among the housing strategies.

4.3.9.2 Significance of Impacts

Potential impacts associated with conflicts with the MHCP or any local, regional, and State HCPs would be less than significant.

4.3.10 Issue 6: Policies and Ordinances Protecting Biological Resources

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

4.3.10.1 Impacts

a. Housing Sites

The HEU does not propose any activities that would conflict with local policies or ordinances protecting biological resources. Mitigation measures BIO-1 through BIO-4 would require site-specific surveys to be conducted for future project-level review to verify the presence of sensitive biological resources occurring on individual housing sites, determine the extent of any potential impacts, and provide mitigation to reduce the impacts to below a level of significance.

Additionally, the City's General Plan Resource Management Element Policy 3.1 and Chapter 15.02 of the City's Municipal Code regulate the planting, maintenance, and removal of public trees within the public right-of-way or on public property. The HEU would not conflict with the City's adopted regulations pertaining to trees. Future projects associated with the HEU would be required to comply with the tree ordinance to avoid significantly impacting protected trees. As future projects are planned they must adhere to these policies and regulations; therefore, impacts would be less than significant.

b. Housing Strategy Summaries

Housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) would not conflict with any local policies or ordinances protecting biological resources, including the City's adopted Tree Ordinance and Urban Forest Management Program. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.3.10.2 Significance of Impacts

Potential impacts associated with tree local policies or ordinances protecting biological resources would be less than significant.

4.4 Cultural Resources

This section addresses the Housing Element Update (HEU) in relation to potential impacts associated with historic structures, archaeological resources, and paleontological resources. Information presented in this section was obtained from the Final Existing Conditions Report, the Encinitas Register of Historic Places, the geological map of the Oceanside 30 feet x 60 feet quadrangle Paleontological Resources - County of San Diego, and additional secondary source documentation, as available (City of Encinitas 2010, 2015a; State of California 2010; and Deméré and Walsh 1994).

4.4.1 Existing Conditions

4.4.1.1 Cultural Setting

a. Prehistoric Period

The prehistoric cultural sequence in San Diego County is generally conceived as comprising three basic periods: the Paleoindian, dated between about 11,500 and 8,500 years ago and manifested by the artifacts of the San Dieguito Complex; the Archaic, lasting from about 8,500 to 1,500 years ago (A.D. 500) and manifested by the cobble and core technology of the La Jollan Complex; and the Late Prehistoric, lasting from about 1,500 years ago to historic contact (i.e., A.D. 500 to 1769) and represented by the Cuyamaca Complex.

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex. The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points. The San Dieguito Complex is thought to represent an early emphasis on hunting.

The Archaic Period brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jollan Complex along the coast and the Pauma Complex inland. Pauma Complex sites lack the shell that dominates many La Jollan sites. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary. The La Jollan assemblage is dominated by rough, cobble-based choppers and scrapers, and slab and basin metates. Large side-notched and Elko series projectile points appeared. Large deposits of marine shell at coastal sites indicate the importance of shellfish gathering to the coastal Archaic economy.

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge which suggest the ethnohistoric Kumeyaay. This period is characterized by higher population densities and elaborations in social, political, and

technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, but effective technological innovations. The late prehistoric archaeology of the San Diego coast and foothills is characterized by the Cuyamaca Complex. It is primarily known from the work of D. L. True at Cuyamaca Rancho State Park (City of Encinitas 2010). The Cuyamaca Complex is characterized by the presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic "Yuman bow pipes," ceramic rattles, miniature pottery various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert side-notched (more common) and Cottonwood Series projectile points. Cremation burial practices can also be traced to this Complex.

b. Ethnohistoric Period

The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. The settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places. Their economic system consisted of hunting and gathering, with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools was made of locally available and imported materials. A simple shoulder-height bow was used for hunting. Numerous other flaked stone tools were made including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars and pestles typically made of locally available, fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets of either coiled or twined construction. The Kumeyaay also made pottery, using the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brownware, but some were decorated.

c. Historic Period

A period of historic contact began in San Diego County in the mid-1700s, beginning with the Spanish (1769–1821) and followed by the Mexican (1822–1848) and American (starting mid-1800s) homestead systems. One of the hallmarks of the Spanish colonial period was the rancho system. In an attempt to encourage settlement and development of the colonies, large land grants were made by the Spanish to meritorious or well-connected individuals. During the Mexican colonial period, which began in 1821 with the overthrow of the Spanish government in Mexico, the mission system was secularized by the Mexican government. These ex-mission lands allowed for the dramatic expansion of the rancho system, and local economy became increasingly based on cattle ranching.

The eastern portion of Encinitas was included in Rancho Las Encinitos, or "little live oaks," granted to Don Andrés Ybarra in 1842 by Governor Juan Bautista Alvarado. Rancho Los

Encinitos comprised approximately 4,431 acres and included parts of the Escondido Creek and Encinitas Creek drainages. Don Ybarra constructed an adobe in the northeast corner of the rancho, just north of Encinitas Creek, and worked the rancho lands for 18 years. The remains of the adobe are now part of Stagecoach Park.

In 1860, Don Ybarra sold the rancho to two merchants, Joseph Mannasse and Marcus Schiller. The rancho adobe was first converted to a trading post to serve the sheepherders in the area, and later to a stage station serving the route between San Diego and Los Angeles. The rancho changed hands several times, until Frank A. and Warren C. Kimball bought the rancho lands in 1880.

The first pioneer settlers to live in the coastal Encinitas area were Nathan Eaton and Hector MacKinnon and his wife, both arriving in 1875. The coming of the California Southern Railroad to Encinitas in 1881 did little to spark growth in Encinitas, Leucadia, or Cardiff. By 1883, there were only 11 people in Encinitas, with a combination grocery store and ticket office by the railroad tracks. The Edward Hammond family arrived that year, effectively doubling the population, and soon established the Hammond Sunset Ranch. The Sunset Ranch eventually became the Paul Ecke Poinsettia Ranch.

In 1884, a flood devastated the area, and the rail line to San Diego was washed out. It was two months before the trestles and tracks were rebuilt. In 1885, the California Southern Railroad sent Thomas Rattan to locate a site for a permanent train station and to lay out a street grid for the community. Rattan was joined a year later by John Pitcher, and both worked to develop Encinitas. The results of this were an increase in growth in Encinitas in the late 1880s, and an entire block of buildings was constructed on the west side of First Street in 1887.

At the same time Encinitas was developing, the community of Olivenhain was founded. Frank and Warren Kimball, developing the rancho lands they bought in 1880, contacted a group of German emigrants in Denver, Colorado, who were looking to establish a colony on the west coast. The group organized a partnership and purchased the entire 4,431 acres, and the first 67 colonists set out in November 1884. The colony was first planned as a commune, and the colonists worked together to build the small houses, or “shanties,” that housed the families until larger houses could be built.

During the late 1870s, the community of Leucadia was also established. In the 1880s, the Leucadia Land and Town Company was established. During this time, Leucadia was also known as Merle, after Merle Scott, son of another early Leucadia pioneer, E. B. Scott.

In 1888, surveyor O. N. Sanford was commissioned to platt Leucadia into five-acre tracts. It was at this time that the practice of using street names from classical mythology originated. A group of English spiritualists arrived in Leucadia and set up an open air temple at what is now Leucadia Boulevard and Highway 101. They planted 18 rows of cypress, eucalyptus, and pine trees, and built a glass observatory overlooking the beach. Although the observatory was demolished, a few of the cypress remain, scattered in the residential area west of Highway 101.

In 1913, the State of California constructed a road through Encinitas, which brought some new revenue with the new traffic. The founding of the San Dieguito Water District in 1923 meant a regular water supply was now available for Encinitas. The availability of water sent land prices up. The successful introduction of avocados was accompanied by the equally successful introduction of the flower industry in the 1920s. One of the first flower growers to establish in Encinitas was Paul Ecke Sr.

The land boom of the 1920s sparked acres of new subdivisions and opportunities for developers and builders. One of the visible reminders of the growth boom in the 1920s is the La Paloma Theater, on the corner of D Street and the South Coast Highway 101. The La Paloma Theater was built in 1928 by Aubrey Austin, and was rumored to be the first talking picture theater in rural America. Another well-known landmark from this era is the two boat houses built by Miles Kellog on Third Avenue, which are still in use today. Kellog also built and owned other commercial buildings on South Coast Highway 101, or what was then called First Street. Growth continued in the coastal towns until the Depression put development on hold in 1929. Growth started gradually after World War II. In the years that followed, development was still centered mainly along Highway 101, gradually spreading east. By 1980, El Camino Real had become a major road, and dense residential development had moved east to Olivenhain. In June 1986, voters in Old Encinitas, New Encinitas, Olivenhain, Leucadia, and Cardiff voted to form the City.

4.4.1.2 Existing Resources

a. Known Historic Resources

No listed national or local landmarks exist within the housing sites (City of Encinitas 2015a). However, a total of 16 structures/sites are identified in the Final Existing Conditions Report (2010) as potentially significant historic resources within the following housing sites: ALT-2, ALT-7, L-1, OE-1, and OE-5 (City of Encinitas 2010). The report identifies 159 structures within the City having historic value potential. The report relies on the Phase II of a Regional Historic Preservation Study for the Comprehensive Planning Organization (completed by RECON in 1980) and the Architectural and Historical Resources Inventory for the North 101 Corridor Specific Plan Area and Downtown Encinitas Specific Plan Area (conducted by DWL Parkinson Architects Preservation Studio in 1992). (These inventories provided a program-level assessment of the historical potential for each evaluated structure; formal site-specific assessments would need to be conducted for these structures to determine their historical significance under CEQA and eligibility for historical listing.) Table 4.4-1 cross-references the housing sites with known historical resources identified in the Final Existing Conditions Report, and includes their listing recommendations from the DWL Parkinson Architects Preservation Studio 1992 report.

Table 4.4-1
Historical Resources Known to Occur within the HEU Housing Sites

Housing Site	Name	Address[1]	Community[1]	National Landmark Eligible[1]	Local Landmark Eligible[1]
ALT-2 & L-1	Gas Station	1508 Highway 101	Encinitas		
ALT-2	Commercial Building	1604 Highway 101	Encinitas		
ALT-2	Commercial Building	1646 Highway 101	Encinitas		
ALT-2	Log Cabin Motel	1660 Highway 101	Encinitas	Yes	
ALT-2	Motel	1784 Highway 101	Encinitas		
ALT-2	Commercial Building	914 N. Highway 101	Encinitas		Yes
ALT-2	Commercial Building	978 N. Highway 101	Encinitas		
ALT-2	Motel	1322 N. Highway 101	Encinitas		Yes
ALT-7	La Paloma Theater Complex	471 First Street	Encinitas	Yes	Yes
ALT-7	The Saloon/Daley Double Station	546 First Street/Coast Highway 101	Encinitas		
ALT-7	Houses (2)	922 First Street	Encinitas		
ALT-7	House	923 First Street	Encinitas		
ALT-7	Spanish Eclectic	1126 First Street	Encinitas		
ALT-7	Encinitas Coast Dispatch Offices	468-470 First Street	Encinitas		Yes
ALT-7	Encinitas Hotel	505-519 First Street / Coast Hwy 101	Encinitas	Yes	Yes
ALT-7	Moderne	528-530 First Street	Encinitas		
ALT-7	Spanish Eclectic	541-543 First Street	Encinitas		
ALT-7	Commercial Building	570-94 First Street	Encinitas		
ALT-7	Moderne	615-33 First Street	Encinitas		
ALT-7	Paloma Court	465-467 First Street	Encinitas		
OE-1	House	363 Third Street	Encinitas		

[1]Based on the DWL Parkinson Architects Preservation Studio report as described by the Existing Conditions Report (City of Encinitas 2010).

b. Potential Historic Resources

As implementation of the HEU has the potential for development over the next 20+ years, most existing buildings or other structures within the housing sites would reach an age of 50 years or older during the buildout horizon of the HEU. Generally, structures 50 years of age or older have the potential to be historic resources, based on National Register of Historic Places (NHRP) guidelines. Structures must have retained their original integrity and context in order to be considered a historic resource. Any housing site that is presently developed has the potential, however, to contain a historical structure(s) during the buildout horizon of the HEU: ALT-2, ALT-3, ALT-4, ALT-5, ALT-6, C-1, C-2, C-3, C-6, C-7, L-1, L-2, L-5, L-6, NE-1, NE-3, NE-4, NE-7, O-3, O-5, OE-2, OE-4, OE-7, OE-8, and CBHMG-1.

c. Archaeological Resources

No known archaeological resources are present on the housing sites. Housing sites ALT-4, ALT-5, C-6, O-2, O-3, O-4, O-5, O-6, and OE-2 were mapped as having 'high sensitivity' for archaeological resources by the General Plan Resource Management Element (Table 4.4-2; City of Encinitas 2011). (However, sites subsequently developed [e.g., housing site O-3] would no longer have a "high sensitivity.") Areas designated as having high sensitivity for archaeological resources by the General Plan include areas that have not been previously surveyed and may have potential for archaeological resources due to the prehistoric settlement pattern for coastal southern California and density of recorded archaeological sites within the City. However, sensitivity as defined by the General Plan alone is not sufficient to determine the potential for cultural resources.

Undeveloped sites have the potential for the presence of unknown archaeological resources as the likelihood of encountering archaeological resources is greatest on sites that have been minimally excavated in the past (e.g., undeveloped parcels, vacant lots, and lots containing undeveloped areas). Previously excavated areas are generally considered to have a low potential for archaeological resources, since the soil containing the archaeological resources has been removed or previously disturbed. Therefore, the undeveloped housing sites, or sites with substantial portions undeveloped, also have potential to contain archaeological resources: L-4, L-7, NE-3, OE-1, OE-2, and OE-7 (see Table 4.4-2). Even though a majority of sites OE-1 and OE-2 have been developed, given the locational advantage of the sites and proximity to resources, there is a potential for archeological resources. Housing sites L-5 and L-6 are not considered undeveloped, as these sites contain a mixture of developed land and intensive agriculture [e.g., greenhouses and nurseries].

The General Plan further designates areas as having moderate or low sensitivity, based on previous grading and development. Developed housing sites that were characterized as having moderate potential for cultural resources (ALT-2, L-6, NE-1, NE-3, O-2, and OE-7) but exhibited previous grading during the site visit conducted on June 25, 2015 by RECON are currently considered to have low potential for cultural resources.

Table 4.4-2
Housing Sites with Potential to Contain Archaeological Resources

Housing Site	Previously Identified as Having High Sensitivity for Archaeological Resources[1]	Potential for Archaeological Resources? [2]
ALT-2	-	-
ALT-3		-
ALT-4	Yes	Yes
ALT-5	Yes	Yes
ALT-6		-
ALT-7		-
C-1	-	-
C-2		-
C-3		-
C-6	Yes	Yes
C-7		-
L-1		-
L-2		-
L-4		Yes
L-5		-
L-6	-	-
L-7		Yes
NE-1	-	-
NE-3	-	Yes
NE-4		-
NE-7		-
O-2	Yes	Yes
O-3	-[3]	-
O-4	Yes	Yes
O-5	Yes	Yes
O-6	Yes	-
OE-1		Yes[4]-
OE-2	Yes	Yes[4]-
OE-4		-
OE-5		-
OE-7	-	Yes
OE-8		-
CBHMG-1		-

[1]Based on Figure 4 of the General Plan Resource Management Element (City of Encinitas 2011).
[2]Based on field observations conducted by RECON on June 25, 2015.
[3]Although housing site O-3 was characterized as having 'high sensitivity' for archaeological resources by the General Plan Resource Management Element; this site is no longer considered to have high sensitivity due to past grading.
[4]Although primarily developed, the portions of housing sites OE-1 and OE-2 is undeveloped.

d. Paleontological Resources

To evaluate paleontological resources within the housing sites, the presence and distribution of geologic formations and the respective potential for paleontological resources were reviewed. A review of the geologic map of the Oceanside 30 feet x 60 feet quadrangle, California, shows two geologic formations mapped that have been shown to contain fossil

deposits in the project area. The formations identified are the Torrey Sandstone and the Del Mar formation. The paleontological resource potential for each formation identified within the housing sites is taken from Deméré and Walsh (1994) and is discussed below.

Torrey Sandstone (Tt)

The Torrey Sandstone has produced important remains of fossil plants and marine invertebrates. This formation dates from the early middle Eocene. The plant remains (mostly leaves) are especially significant because many are from taxa that would suggest that the Eocene climate in this area was warmer and wetter than the modern climate. Invertebrate fossils known from the Torrey Sandstone primarily consist of near-shore marine taxa (e.g., clams, oysters, snails and barnacles). Vertebrate fossil remains are rare and include teeth of crocodiles, sharks and rays.

The coarse-grained nature of the Torrey Sandstone and the generally poor state of preservation of contained fossils support a moderate paleontological resource sensitivity rank. Major exposures of Torrey Sandstone occur on the slopes on the west side of Green Valley, in the Encinitas Creek drainage and on the mesa tops east of Lux Canyon and south of Mountain View Drive. Torrey Sandstone is identified within or in close proximity to the following housing sites: ALT-3, ALT-5, ALT-6, ALT-7, L-7, NE-3, NE-4, NE-7, O-4, O-5, OE-1, OE-2, OE-7, and OE-8.

Del Mar Formation (Td)

The Del Mar Formation dates from the late early to early middle Eocene and underlies the Torrey Sandstone. Fossils occurring in this formation include estuarine invertebrates (e.g., clams, oysters and snails) and vertebrates (e.g., sharks and rays). A very important location is Swami's Point in Encinitas, where small numbers of aquatic reptile and terrestrial mammal remains have also been found.

The Del Mar formation has been assigned a high paleontological resource sensitivity rating because of the presence of terrestrial vertebrate fossils. Exposures of Del Mar formation rocks occur along Encinitas Creek east of Green Valley, on the south- and east-facing slopes overlooking San Elijo Lagoon and Escondido Creek and in a narrow band in the coastal bluffs overlooking the Pacific Ocean from San Elijo Lagoon to Batiquitos Lagoon. Del Mar Formation is identified within or in close proximity to the following housing sites: ALT-4, C-6, O-2, O-3, and O-6.

4.4.2 Regulatory Framework

4.4.2.1 Federal

a. National Register of Historic Places

Federal criteria are those used to determine eligibility for the National Register of Historic Places (NRHP). The NRHP was established by the National Historic Preservation Act

enacted in 1966 and is the official lists of sites, buildings, structures, districts and objects significant in American History, architecture, archaeology, engineering and culture. The NRHP criteria state that the quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

A. Are associated with events that have made a significant contribution to the broad patterns in our history;

B. Are associated with the lives of persons important in our past;

C. Embody the distinctive characteristics of a type, period, region or method of construction, or represent the work of a master, or possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

Certain properties are usually not considered for eligibility for the NRHP. These include ordinary cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved or reconstructed, properties primarily commemorative in nature or properties that have become significant within the last 50 years. These types of properties can qualify if they are an integral part of a district that does meet the criteria, or if they fall within certain specific categories relating to architecture, or association with historically significant people or events. The vast majority of archaeological sites that qualify for listing do so under criterion D, which yields information or research potential.

4.4.2.2 State

a. California Register of Historic Resources (CRHR)

Similar to the NRHP, the CRHR program established in 1992, encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies resources for planning purposes; determines eligibility of state historic grant funding; and provides certain protections under CEQA. State criteria are those listed in CEQA and used to determine whether an historic resource qualifies for the CRHR.

A resource may be listed in the CRHR if it is significant at the federal, state, or local level under one of more of the four criteria listed below.

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the U.S.

2. Is associated with the lives of persons important to the nation or to California's past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

CEQA Sections 15064.5 and 21083.2(g) define the criteria for determining the significance of historical resources. Archaeological resources are considered "historical resources" for the purposes of CEQA.

Since resources that are not listed or determined eligible for the state or local registers may still be historically significant, their significance shall be determined if they are affected by a project. The significance of a historical resource under criterion 4 rests on its ability to address important research questions.

b. California Public Resources Code

Section 5097 of the Public Resources Code specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the California Native American Heritage Commission (NAHC). Section 5097.5 of the Code states the following:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state or any city, county, district, authority or public corporation, or any agency thereof. Consequently, the City is required to comply with Public Resource Code Section 5097.5 for its activities on publicly owned land.

Section 5097.98 further defines the standards for the handling of Native American human remains. Section 5097.993 sets requirements for the unlawful and malicious excavation, removals, destruction, injury, or defacing of a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the CRHR.

c. California State Health and Safety Code

Section 7052 of the California State Health and Safety Code makes the willful mutilation, disinterment, or removal of human remains a felony. Section 7050.5 requires that

construction activities be stopped near discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the NAHC.

d. California Environmental Quality Act

CEQA was amended in 1992 to define "historical resources" as a resource listed in or determined eligible for listing on the California Register, a resource included in a local register of historical resources or identified as significant in a historical resource survey that meets certain requirements, and any object, building, structure, site, area, place, record or manuscript which a lead agency determines to be significant. Some resources that do not meet these criteria may still be historically significant for the purposes of CEQA. According to the CEQA Guidelines Section 15064.5 and Appendix G, adoption and implementation of a proposed project would result in a significant adverse cultural resources impact if a proposed project would:

A. Cause a substantial adverse change in the significance of an historical architectural resource that is listed on, or determined to be eligible for listing on, the NRHP or the CRHR; is listed on, or determined to be eligible for listing on, the San Diego List of Historic Sites; or that meets any of the following criteria:

   - Is associated with events that have made a significant contribution to the broad patterns of history at the local, regional, state or national level;
   - Is associated with the lives of significant persons in the past on a local, regional, state or national level;
   - Embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values; or
   - Has yielded, or may be likely to yield, information important in history or prehistory.

B. Cause a substantial adverse change in the significance of an important archaeological resource or disturb any human remains, including those interred outside of formal cemeteries.

4.4.2.3 Local

a. General Plan/Local Coastal Program and Specific Plans

The General Plan, along with relevant specific plans, contains policies related to protection and preservation of sensitive cultural resources. Additionally, the Municipal Code provides special provisions related to the protection of cultural resources for sites identified as containing archaeological and historic resources. Pertinent goals and policies related to cultural resources are listed in Table 4.4-3.

City of Encinitas General Plan

The Resource Management Element (RME) of the General Plan (adopted in 1989 and amended in 1991, 1993, 1994 and 1995) addresses both archaeological and historical cultural resources. Goal 7 in the Goals and Policies section states that "The City will make every effort to ensure significant scientific and cultural resources in the Planning Area are preserved for future generations" (Coastal Act/30250). Four policies are enumerated to assist in the implementation of the goal. As detailed in Section 4.4.1.2c Archaeological Resources above, the General Plan RME includes maps of the City identifying areas of low, moderate and high cultural resource sensitivity. The RME identifies mitigation procedures for archaeological sites discovered during excavation or construction phases of a new project. The RME also calls for an inventory of all historically significant sites and/or structures that require protection.

Downtown Encinitas Specific Plan

The Downtown Encinitas Specific Plan, adopted in February 1994, addresses historic preservation. A set of Design Recommendations (Chapter 4.0) are included to maintain and preserve the "existing, unique, beachy, small town character of the downtown area" by ensuring that new development is compatible to existing structures in terms of bulk and scale.

Ordinance No. 2009-15 sets up eligibility criteria for a property/structure to qualify as an historical resource within the Downtown Encinitas Specific Plan area. These criteria are similar to those established for the NRHP and the CRHR. A historical survey, conducted by a qualified professional historian, will evaluate the resources' ability to qualify under one or more of the following requirements:

1. The historic resource exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering or architectural history.
2. The historic resource is identified with persons or events significant in local, state, or national history.
3. It embodies distinctive characteristics of a style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship.
4. It is representative of the notable work of a builder, designer, or architect.
5. Its unique location or singular physical characteristic(s) represents an established and familiar visual feature or landmark of a neighborhood, community or the City.

For most cases, the resource shall be 50 years old or older, but a resource less than 50 years old may be considered if it can be demonstrated in the historical survey report that sufficient time has passed to understand its historical importance.

Table 4.4-3 Goals and Policies Related to Sensitive Cultural Resources	
Goal/Policy	Description
City of Encinitas General Plan Resource Management Element	
Goal 7	The City will make every effort to ensure significant scientific and cultural resources in the Planning Area are preserved for future generations. (Coastal Act/ 30250)
7.1	Require that paleontological, historical and archaeological resources in the planning area are documented, preserved or salvaged if threatened by new development. (Coastal Act/30250)
7.2	Conduct a survey to identify historic structures and archaeological/ cultural sites throughout the community and ensure that every action is taken to ensure their preservation. (Coastal Act/30250/30253(5))
Encinitas Ranch Specific Plan	
Goal 2	Establish categories of sensitivities for biological, archaeological, and paleontological resources.
2.1	Require that biological, archaeological, and paleontological resources threatened by development within the project site and which have been identified by qualified professionals as significant or important are documented, preserved, or salvaged for the benefit of future generations.
2.2	Require that the project developer work with the City to establish appropriate categories and methodologies for evaluating the number, type, and quality of sensitive natural resources on-site.
Downtown Encinitas Specific Plan	
Resource Management Goal 1	Preserve significant historic, visual, biological, and cultural resources.
	Identify potential adaptive re- uses or restoration opportunities uses for historic structures that are either vacant or in danger of being demolished.
	Establish additional permitted uses specific to the preservation of historic structures in addition to the uses permitted in the underlying zone provided that the nature and the character of the use are such that it will be compatible with and not adversely impact the neighborhood or the historic resource. (Ord. 2009-15)
	Establish the historic use of a resource (defined as the original resource use or the use for which the resource was designated) as a permitted use if that use is not typically permitted by the underlying zoning district. (Ord. 2009-15)
	Coordinate historic preservation and restoration strategies with the existing Downtown Encinitas Mainstreet Program.
SOURCE: City of Encinitas 1989, amended 2014.	

b. Municipal Code

Chapter 30.34.050A1 Cultural Resources Overlay Zone

Cultural/Natural Resources Overlay Zone regulations apply to areas within the Special Study Overlay Zone where site-specific analysis indicates the presence of sensitive cultural, historic, and biological resources, including sensitive habitats. For parcels containing archaeological or historical sites, the Municipal Code requires a site resource survey and impact analysis to determine the significance of, and possible mitigation for, sensitive resources.

c. Historic Property Preservation Agreement

Under the Mills Act, property owners may enter into a 'Historic Property Preservation Agreement' with the City to preserve, maintain, and, if necessary, restore and/or rehabilitate a qualified historic structure. In return for the preservation and maintenance of the historic structure, the property owner is eligible for property tax relief. The County tax assessor is responsible for administering the valuation terms of the Agreement.

4.4.2.4 Native American Involvement

Native American involvement in the development review process is addressed by several federal and state laws. The most notable of these are the California Native American Graves Protection and Repatriation Act (2001) and the federal Native American Graves Protection and Repatriation Act (1990). These acts ensure that Native American human remains and cultural items be treated with respect and dignity.

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.).

4.4.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to cultural resources would be significant if the HEU project would:

1. Result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic structure, object or site;

2. Result in any impact to existing religious or sacred uses within the potential impact area;

3. Result in the disturbance of any human remains, including those interred outside of formal cemeteries; or

4. Allow development to occur that could significantly impact a unique paleontological resource or a geologic formation possessing a moderate to high fossil bearing potential.

4.4.4 Methodology

4.4.4.1 Sources

A literature review was conducted to determine potential historical, archaeological, and paleontological resources within the housing sites. The literature review included: (1) Final Existing Conditions Report (2010); (2) Encinitas Register of Historic Places (2015a); (3) the geological map of the Oceanside 30 feet x 60 feet quadrangle; and (4) Paleontological Resources - County of San Diego. No site-specific archaeological or historic field surveys were conducted; instead, analysis relied on the use of existing information. In addition, the City completed a consultation with local Native American tribes, consistent with SB 18 requirements. The evaluation of the potential for the HEU to cause a substantial adverse change in the significance of any historical, archaeological, or paleontological resources was based on Appendix G of the CEQA Guidelines.

4.4.4.2 Future Project Implementation

As noted previously in this chapter, for housing sites containing known archeological or historical sites, the City of Encinitas Municipal Code requires a site-specific resource survey and impact analysis. For housing sites within the Cultural Resources Overlay Zone, the City would review project applications for compatibility, applicable requirements for cultural resource protection, and require specific conditions as part of the approval process. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process.

Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone. The floating zone gives a property owner a choice whether to opt into the housing plan, or forgo doing so and retain their existing zoning rights. Depending on the category of the existing zoning, different levels of development or reconstruction activities are permitted on the housing sites.

The impact analysis below describes the type and magnitude of environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential to impact historical, archeological, and paleontological resources. The analysis in the following section identifies both direct and indirect impacts, the significance of impacts, and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on cultural resources, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.4.5 Issue 1: Historical Resources

Would the project result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic structure, object or site?

4.4.5.1 Impacts

a. Housing Sites

While the HEU does not specifically propose alteration of a known historical resource, it can be assumed that future development of housing sites could have the potential to directly or indirectly impact resources through such activities. Impacts to historical resources would be significant if future development would cause a substantial adverse change in the significance of a historical resource, as defined in the CEQA Guidelines Section 15064.5. As defined in the CEQA Guidelines Section 15064.5, "substantial adverse change means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource is materially impaired." CEQA Guidelines Section 15064.5 further defines a historical resource to include a resource listed on, or formally determined eligible for, the following:

1. The NRHP or the CRHR, including contributors to NRHP Historic Districts or California Register Historic Districts; or

2. That meets the CEQA criteria for historical resources.

These criteria are elaborated in Section 4.4.2.2.d above, but generally include any resource that:

- Is associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the U.S.

- Is associated with the lives of persons important to the nation or to California's past.

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

- Has yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

Direct impacts to historical resources could potentially result from the physical demolition, destruction, relocation, or alteration of potential historical resources within the housing sites (Impact CUL-1). The following housing sites are identified as containing potentially significant historical structures and/or sites: ALT-2, ALT-7, L-1, and OE-1. Additionally, as implementation of the HEU has development potential over the next 20+ years, the following housing sites contain buildings or structures that may be 50 years of

age or older at the time of future development and, therefore, may need to be evaluated for historical significance: ALT-2, ALT-3, ALT-4, ALT-5, ALT-6, ALT-7, C-1, C-2, C-3, C-6, C-7, L-1, L-2, L-5, L-6, NE-1, NE-3, NE-4, NE-7, O-3, O-5, OE-1, OE-2, OE-4, OE-5, OE-7, OE-8, and CBHMG-1. Historically significant resources would be identified through on-site reconnaissance in conjunction with future projects, and housing site development would be required to comply with applicable federal and state laws that concern the preservation of historical resources, including the National Historic Preservation Act and CEQA.

As identified in Table 4.4-3 following are aimed at protection of historic resources: Policies 7.1 and 7.2 of the City of Encinitas General Plan RME (2011); Policies 2.1 and 2.2 of the Encinitas Ranch Specific Plan (2005a); Resource Management Goal 1 of the Downtown Encinitas Specific Plan (2005b). Additionally, Section 30.34.050 of the Municipal Code (2015b) regulates the treatment of historic resources. As future projects are planned they must adhere to these policies and regulations. However, as the site-specific requirements are unknown at this program-level of analysis, it is unknown whether direct or indirect impacts to historic resources would be potentially significant.

b. Housing Strategy Summaries

There would be no inherent difference between housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) for potential impacts to known historic structures and/or sites, or buildings/structures greater than 50 years old. As implementation of the HEU has the potential for development over the next 20+ years, most existing buildings or other structures within the housing sites would reach an age of 50 years or older during the buildout horizon of the HEU. Thus, any housing site that is presently developed has the potential to contain a historical structure(s) during the buildout horizon of the HEU. The impacts of each housing strategy are detailed below.

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) has potential to impact:

- Known historic structures and/or sites on L-1 and OE-1; and
- Buildings or structures greater than 50 years old on C-2, C-3, C-7, L-1, L-2, L-5, L-6, NE-4, O-5, OE-4, OE-5 and OE-7.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to impact:

- Known historic housing sites on L-1; and
- Buildings or structures greater than 50 years old on C-2, L-1, NE-1, NE-3, NE-7, O-5, OE-2, OE-7, and OE-8.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to impact:

- Known historic structures and/or sites on ALT-2, ALT-7 and OE-1; and
- Buildings or structures greater than 50 years old on ALT-2, ALT-3, ALT-4, ALT-5, ALT-6, C-1, C-2, C-6, NE-1, NE-7, O-3, OE-4, OE-7, and CBHMG-1.

4.4.5.2 Significance of Impacts

Potential direct impacts to historical resources (Impact CUL-1) within housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) may be considered significant and would require mitigation.

4.4.5.3 Mitigation Framework

CUL-1: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to historical resources, shall be required to comply with the following mitigation framework:

(a) Prior to the issuance of any permit for a future development project, the age and original structural integrity and context of any buildings/structures occurring on the housing sites shall be verified. The project applicant shall submit in conjunction with the development permit application, verification of the age and original structural integrity of all on-site structures.

(b) For any building/structures in excess of 50 years of age having its original structural integrity intact, a qualified professional historian shall determine whether the affected building/structure is historically significant. The evaluation of historic architectural resources shall be based on criteria such as age, location, context, association with an important person or event, uniqueness, or structural integrity, as indicated in CEQA Guidelines Section 15064.5. A historical resource report shall be submitted by the project applicant to the City and shall include the methods used to determine the presence or absence of historical resources, identify potential impacts from the proposed project, and evaluate the significance of any historical resources identified.

4.4.5.4 Significance After Mitigation

Impacts to historical resources within housing strategies 1, 2, and 3 (Impact CUL-1) would be mitigated through the application of measure CUL-1. Although significant impacts to historical resources may be mitigated through future review of project-specific development proposals, specific mitigation at the program-level is not available since specific development projects are not known at this time. Therefore, the impact to historical resources is considered significant and unavoidable.

4.4.6 Issue 2: Archaeological Resources

Would the project result in any impact to existing religious or sacred uses within the potential impact area?

4.4.6.1 Impacts

a. Housing Sites

While the HEU does not specifically propose alteration of a known archaeological resource or ground-disturbing activities such as grading or excavation, it can be assumed that future development of housing sites could have the potential to directly or indirectly impact undiscovered subsurface archaeological resources through such activities. The following housing sites consist, at least in part, of undeveloped land and/or have been mapped as having 'high sensitivity' for archaeological resources by the General Plan Resource Management Element (City of Encinitas 2011). Future development of these sites has the potential to significantly impact archaeological resources (Impact CUL-2): ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7. Housing sites L-5 and L-6 are not considered undeveloped, as these sites contain a mixture of developed land and intensive agriculture (e.g., greenhouses and nurseries).

As identified in Table 4.4-3, the following are aimed at protection of archaeological resources: Policies 7.1 and 7.2 of the General Plan Resource Management Element (2011) and Policies 2.1 and 2.2 of the Encinitas Ranch Specific Plan (2005a) Additionally, Section 30.34.050 of the Municipal Code (2015b) regulates the treatment of archaeological resources. As future projects are planned they must adhere to these policies and regulations. However, as the site-specific archaeological conditions are unknown at this program-level of analysis, it is unknown whether direct or indirect impacts to archaeological resources would be potentially significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) has potential to impact:

- Archaeological resources on L-4, O-2, O-5, O-6, OE-1, and OE-7.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to impact:

- Archaeological resources on L-7, NE-3, O-2, O-4, O-5, OE-2, and OE-7.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to impact:

- Archaeological resources on ALT-4, ALT-5, C-6, L-7, O-2, O-4, OE-1, and OE-7.

4.4.6.2 Significance of Impacts

Potential direct and/or indirect impacts to archaeological resources within housing strategies 1, 2, and 3 (Impact CUL-2) would be considered significant and require mitigation.

4.4.6.3 Mitigation Framework

CUL-2: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to historical resources, shall be required to comply with the following mitigation framework:

Prior to the issuance of any permit for future development consistent with the HEU floating zone program located on a previously undisturbed housing site, an archaeological survey shall be conducted by a qualified archaeologist to evaluate the presence of archaeological resources and the need for project impact mitigation by preservation, relocation, or other methods. An archaeological resource report shall be submitted by the project applicant to the City and shall include the methods used to determine the presence or absence of archaeological resources, identify potential impacts from the proposed project, and evaluate the significance of any archaeological resources identified. If potentially significant impacts to an identified archaeological resource are identified, the report shall also recommend appropriate mitigation to reduce the impacts to below a level of significance.

4.4.6.4 Significance After Mitigation

Impacts to archaeological resources within housing sites 1, 2, and 3 (Impact (CUL-2) would be mitigated through the application of mitigation measure CUL-2. Although significant impacts to historical resources may be mitigated through future review of project-specific development proposals, specific mitigation at the program EIR level is not available since specific development projects are not known at this time. Therefore, the impact to historical resources is considered significant and unavoidable.

4.4.7 Issue 3: Paleontological Resources

Result in the disturbance of any human remains, including those interred outside of formal cemeteries?

4.4.7.1 Impacts

a. Housing Sites

While the HEU itself does not specifically propose ground-disturbing activities, future development projects consistent with the HEU that would grade housing sites with potential to contain undisturbed deposits of Torrey Sandstone and/or the Del Mar formation would have the potential to significantly impact subsurface paleontological resources (Impact CUL-3). Impacts would be considered significant if development of a housing site would require the excavation of over 1,000 cubic yards of a geologic formation with high resource potential to contain paleontological resources, excavation depths within the geologic formation of 10 feet or greater, or over 2,000 cubic yards of a geologic formation with moderate resource potential to contain paleontological resources. The following housing sites may be underlain by geological formations that have moderate to high resource potential to contain paleontological resources: ALT-3, ALT-4, ALT-5, ALT-6, ALT-7, C-6, L-7, NE-3, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-1, OE-2, OE-7, and OE-8. Future site-specific geotechnical studies would identify the geologic formations underlying these housing sites in conjunction with future development.

As identified in Table 4.4-3, the following are aimed at protection of paleontological resources: Policy 7.2 of the General Plan Resource Management Element (2011); and Policies 2.1 and 2.2 of the Encinitas Ranch Specific Plan (2005a). As future projects are planned they must adhere to these policies and regulations. However, as the site-specific requirements are unknown at this program-level of analysis, it is unknown whether direct or indirect impacts to paleontological resources would be potentially significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) has potential to impact:

- Paleontological resources on NE-4, O-2, O-5, O-6, OE-1, and OE-7.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to impact:

- Paleontological resources on L-7, NE-3, NE-7, O-2, O-4, O-5, OE-2, OE-7, and OE-8.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to impact:

- Paleontological resources on ALT-3, ALT-4, ALT-5, ALT-6, ALT-7, C-6, L-7, NE-7, O-2, O-3, O-4, O-5, OE-1, and OE-7.

4.4.7.2 Significance of Impacts

Impacts to paleontological resources within housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) (Impact CUL-3) would be significant and require mitigation.

4.4.7.3 Mitigation Framework

CUL-3: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts to paleontological resources, shall be required to comply with the following mitigation framework:

A qualified paleontological monitor shall be present during grading on housing sites where development would require the excavation of over 1,000 cubic yards of a geologic formation with high resource potential to contain paleontological resources, excavation depths within the geologic formation of 10 feet or greater, or over 2,000 cubic yards of a geologic formation with moderate resource potential to contain paleontological resources. Geologic formations would be determined by a site-specific geotechnical study. The monitor shall have the authority to stop and/or divert grading, trenching, or excavating if a significant paleontological resource is encountered. An excavation plan shall be implemented to mitigate the discovery. Excavation shall include the salvage of the fossil remains (simple excavation or plaster-jacketing of larger and/or fragile specimens); recording stratigraphic and geologic data; and transport of fossil remains to laboratory for processing and curation.

4.4.7.4 Significance After Mitigation

Impacts to paleontological resources within housing sites 1 (RM), 2 (BYO), and 3 (MMUP) (Impact CUL-3) would be mitigated to below a level of significance by measure CUL-3.

4.4.8 Issue 4: Human Remains

Allow development to occur that could significantly impact a unique paleontological resource or a geologic formation possessing a moderate to high fossil bearing potential?

4.4.8.1 Impacts

a. Housing Sites

There are no known burial sites or cemeteries within the vicinity of the City. Therefore, it is not expected that human remains would be disturbed as a result of construction of the housing sites.

In the unlikely event that human remains are discovered, then the provisions set forth in California Public Resources Code Section 5097.98 and State Health and Safety Code Section 7050.5 would be implemented in consultation with the assigned Most Likely Descendant as identified by the NAHC. No further construction activities would be permitted until the coroner is contacted, as well as any applicable Native American tribes. The City shall be required to comply with the California Native American Graves Protection and Repatriation Act (2001) and the federal Native American Graves Protection and Repatriation Act (1990). As regulations are in place to treat any inadvertent uncovering of human remains during grading, impacts to human remains would be less than significant.

b. Housing Strategy Summaries

Although grading activities associated with development of all housing sites within housing strategies 1 through 3 has the potential to inadvertently uncover human remains, state regulations control the procedures that must take place under these circumstances. There would be no inherent differences in impacts among the housing strategies.

4.4.8.2 Significance of Impacts

Potential impacts to human remains within housing strategies 1, 2, and 3 would be less than significant.

4.5 Geology and Soils

This section evaluates potential geology and soils impacts that could affect or result from the future development consistent with the Encinitas Housing Element Update (HEU). Information in this section comes from secondary sources and the Final Existing Conditions Report (City of Encinitas 2010).

4.5.1 Existing Conditions

4.5.1.1 Environmental Setting

a. Geologic Overview

The geologic history of the entire San Diego area is strongly influenced by tectonic movement along series of faults. Earthquakes along these faults represent hazards that must be addressed. Uplift associated with these faults have created a diverse topographic environment that has also brought with it hazards, such as landslides, mudslides, and hillside creep (gradual downhill soil movement).

Erosion of mountains and the creation of sedimentary rocks have also produced soil conditions that are geotechnical challenges in the form of both compressible and expansive soils.

b. Geologic Formations

San Diego County can be divided between three distinct geomorphic regions: the Coastal Plain region as exposed west of the Peninsular Ranges, the Peninsular Range region, and the Salton Trough region as exposed east of the Peninsular Ranges. The City is within the Coastal Plain region. The Coastal Plain region is underlain by a sequence of marine and non-marine sedimentary rock units from the last 140 million years. Over this period of time the relationship of land and sea has fluctuated drastically, so that today we have ancient marine rocks preserved up to elevations around 900 feet above sea level and ancient river deposits as high as 1,200 feet. Faulting related to the local La Nacion and Rose Canyon fault zones has broken up this sedimentary sequence into a number of distinct fault blocks.

There are different formation types by three sedimentary and tectonic periods: Holocene, Pleistocene, and Eocene. A review of the geologic map of the Oceanside 30 feet x 60 feet Quadrangle, California, shows the following seven geologic formations mapped within the City (California Department of Conservation 2015).

Paralic Estuarine Deposits (Qpe)

The paralic estuarine deposits consist mostly of fine-grained sand and clay. This formation dates from the late Holocene.

Young Alluvial Floodplain Deposits (Qya)

The young alluvial floodplain deposits consist mostly of poorly consolidated, poorly sorted, permeable floodplain deposits. This formation dates from the Holocene and late Pleistocene.

Old Paralic Deposits Undivided (Qop)

The old paralic deposits consist mostly of poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine and colluvial deposits composed of siltstone, sandstone, and conglomerate. This formation dates from the late to middle Pleistocene.

Very Old Paralic Deposits Undivided (Qvop)

The very old paralic deposits consist mostly of poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine and colluvial deposits composed of siltstone, sandstone and conglomerate. This formation dates from the middle to early Pleistocene.

Torrey Sandstone (Tt)

The Torrey Sandstone consists mostly of white to light brown, medium- to coarse-grained, moderately well-indurated, massive and broadly cross-bedded, arkosic sandstone. This formation dates from the middle Eocene.

Del Mar Formation (Td)

The Del Mar Formation consists of dusky yellowish green, sandy claystone interbedded with medium-gray, coarse-grained sandstone. The Del Mar Formation dates from the middle Eocene.

Santiago Formation (Tsa)

The Santiago Formation is a middle Eocene stratum composed of three distinctive parts. Throughout the formation, both vertically and laterally, there exist greenish-brown, massive claystone interbeds, tongues and lenses of often fossiliferous, lagoonal claystone and siltstone.

c. Soil Characteristics

Compressible Soils

Compressible soils underlie a significant part of the City, typically in the lowland areas, lagoons and in canyon bottoms. These are generally younger sediments like stream or tidal deposits of low density with variable amounts of organic materials. Under the added weight of fill embankments or buildings and vibration from vehicle traffic on roads, these sediments will settle, causing distress to improvements. Some older portions of the City may require remedial effort to correct this condition during redevelopment. Low-density soils, if sandy in composition and saturated with water, will also be susceptible of the effects of liquefaction during a moderate to strong earthquake.

Expansive Soils

Some of the geologic units east of Interstate 5, including both surficial soils and bedrock, have fine-grained (clay) soils that are moderately to highly expansive. These materials may be present at the surface or exposed by grading activities. Artificial fills can also be expansive, depending on the soils used to construct them. In new development, grading can remove or lessen the effect of this condition, but in older buildings, the effects must be mitigated by strategies to control moisture or by structurally altering the building in accordance with the Building Code.

d. Area Soils

The majority of the City is located in the coastal plains physiographic province, though the northeastern portion of the City is included in the foothills province (City of Encinitas 2010).

The coastal plains province is composed of dissected, mesa-like terraces that graduate inland into rolling hills. The terrain of the coastal plain province is underlain by sedimentary rocks composed mainly of sandstone, shale, and conglomerate beds, reflecting the erosion of the provinces to the east. The foothills province is a belt of narrow winding valleys and rolling to hilly uplands that have very few steep slopes.

e. Geological Hazards

Faulting and Seismicity

The City is in an area that is exposed to risk from multiple earthquake fault zones. The highest risks originate from the Elsinore fault zone, the Rose Canyon fault zone, and the offshore faults, each with the potential to cause moderate to large earthquakes that would cause ground shaking in Encinitas and nearby communities. Earthquake-triggered geologic effects also include surface fault rupture, landslides, liquefaction, subsidence, tsunamis, and seiches. Earthquakes can also lead to urban fires, dam failures, traffic accidents, and toxic chemical releases.

Strong ground motions can worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions.

Much of the area in eastern Encinitas, mapped by the California Geologic Survey as subject to ordinary landslide, is potentially vulnerable to seismically induced slope failure. In steep areas, strong ground shaking can cause slides or rockfalls in this material. Rupture along the Rose Canyon fault zone and other faults in southern California could reactivate existing landslides and cause new slope failures throughout local hillsides.

The effects of earthquake shaking for new structures can be addressed by requiring conformance with the most current edition of the California Building Code.

The project area is within a low to moderate earthquake shaking probability zone (California Emergency Management Agency 2015). Based on published geologic maps, no active or potentially active faults cross beneath the project area. The nearest active fault, the Rose Canyon Fault, lies offshore to the west of the project area. Historically, the Rose Canyon Fault has exhibited low seismicity with respect to earthquakes in excess of magnitude 5.0 or greater.

Seismic Settlement and Liquefaction

Strong ground shaking can result in liquefaction. Liquefaction, a geologic process that causes ground failure, typically occurs in loose, saturated sediments primarily of sandy composition. Areas of Encinitas susceptible to liquefaction and related ground failure (i.e., seismically induced settlement) include areas along the coastline that include Batiquitos and San Elijo lagoons. None of the housing sites are located within a mapped liquefaction seismic hazard zone.

Landslides and Mudslides

Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, triggered either by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Slope failures often occur as elements of interrelated natural conditions that create hazards where an adverse site condition exists, and another event or series of events, like rain or irrigation, grading, changes to drainage patterns, trigger a subsequent event such as earth movement like mudflows, slumps or landslides. Mudflows are fluid-like wet masses of suspended soil that flow downhill. Slumps are more coherent soil masses that fail along surfaces that develop due to the weakness of the materials, wetting, or a change in the shape by grading. Landslides are more typically larger scale features caused by movement along a discrete surface like a weak clay bed. Slope failure can occur on natural and man-made slopes.

The City's remaining natural hillsides and coastal bluff areas are generally vulnerable to various types of slope failures depending on location. Coastal areas in Leucadia, Old Encinitas, and Cardiff by the Sea are subject to coastal processes, but the eastern sections of these communities and including New Encinitas and Olivenhain are underlain by weaker

and adversely oriented geologic units that are more prone to slope movement like slumping and landsliding. Landslide susceptibility within the City is shown on Figure 4.5-1.

4.5.2 Regulatory Framework

A number of regulatory requirements and/or guidelines related to potential geologic and soils issues are applicable to future development within the HEU area. Generally, these regulatory requirements and guidelines contain standards and measures to evaluate risk and address potential hazards through design and construction techniques. Specific requirements and/or guidelines that may be applicable to future development associated with implementation of the HEU are outlined below.

4.5.2.1 State

a. Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act requires that proposed developments incorporating tracts of four or more dwelling units investigate the potential for ground rupture within Alquist-Priolo Zones. Where such zones are designated, no building may be constructed without a geologic study to determine the locations of all active fault lines in the zone. There are no Alquist-Priolo Zones in the project area.

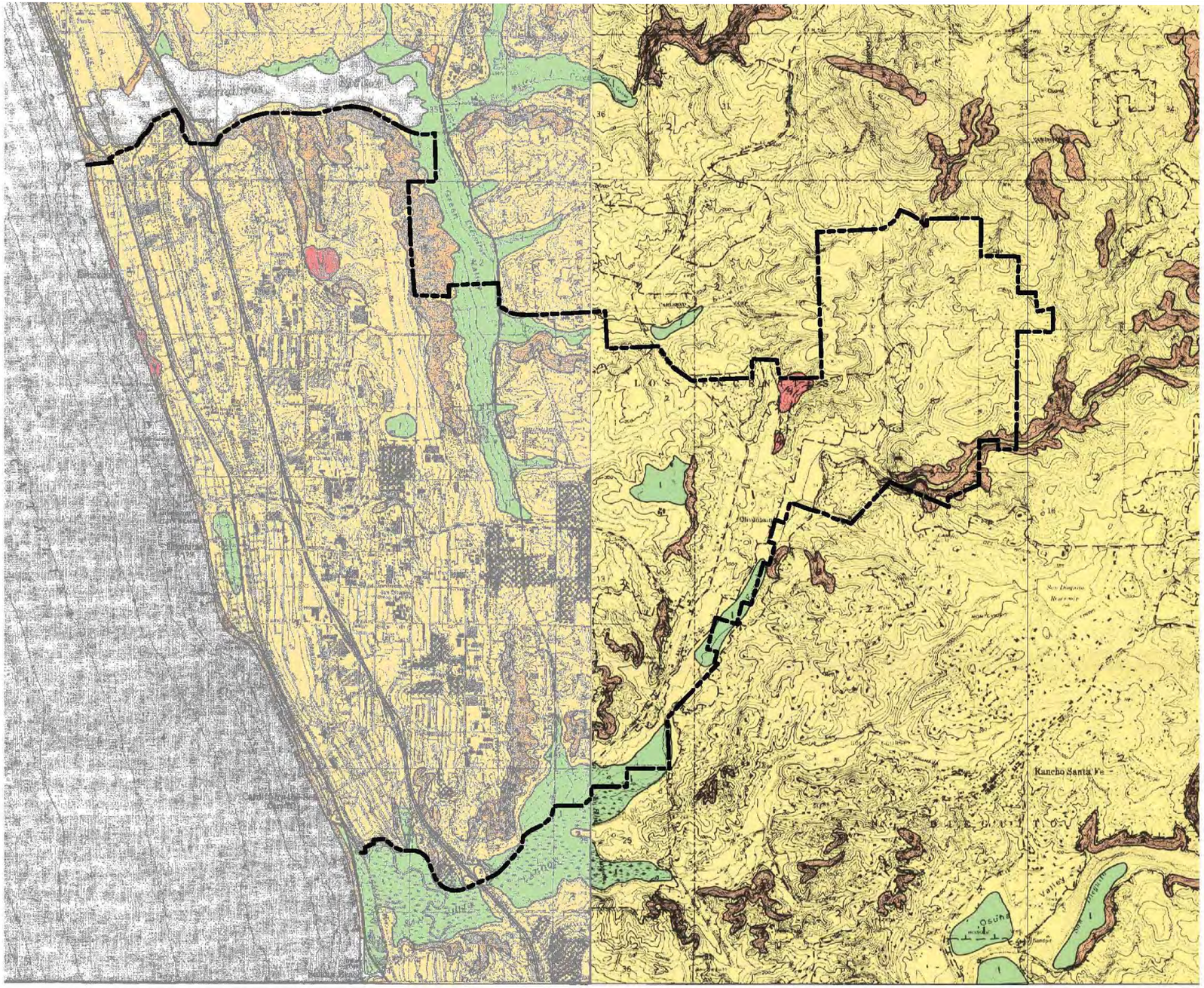
b. Building Code/Residential Code

Slope instability or erosion problems in the City are primarily regulated through the California Building Code (CBC) and the City of Encinitas Grading, Erosion and Sediment Control Ordinance (see below). The CBC requires special foundation engineering and investigation of soils on proposed development sites located in geologic hazard areas. These reports must demonstrate either that the hazard presented by the project will be eliminated or that there is no danger for the intended use. The CBC also contains design and construction regulations pertaining to seismic safety for buildings. These regulations cover issues such as ground motions, soil classifications, redundancy, drift, and deformation compatibility.

The CBC is part of the California Code of Regulations (CCR), Title 24 Part 2. The California Residential Code (CRC) will become part of the CCR, Title 24 Part 2.5. The CBC and CRC are based on the 2012 International Building Code and International Residential Code. The State updates the codes on a regular basis. It is anticipated that the next update will continue to require foundation analysis and reporting.

The CBC and CRC contain seismic safety standards outlining design and construction requirements. Development projects must show compliance with the CBC and/or CRC through the development review process. Building permits are submitted and reviewed for compliance prior to obtaining necessary construction and building permits.

Map Source: TerraCosta Consulting Group



LANDSIDE HAZARDS IN THE ENCINITAS QUADRANGLE (Colorized)
SAN DIEGO COUNTY, CALIFORNIA
Landslide Hazard Identification Map No. 4
by Siang S. Tan, 1986

LANDSIDE HAZARDS IN THE RANCHO SANTA FE QUADRANGLE (Partial)
SAN DIEGO COUNTY, CALIFORNIA
Landslide Hazard Identification Map No. 6
by Siang S. Tan, 1986

RELATIVE LANDSLIDE SUSCEPTIBILITY

EXPLANATION

RELATIVE LANDSLIDE SUSCEPTIBILITY AREAS

1 Least	2 Marginally	3 Generally	4 Most Susceptible

Increasing Landslide Susceptibility →

AREA 1 - *Least Susceptible Area. Landslides and features related to slope stability are very rare to nonexistent within this area. Included within this area are topographically low–lying valley bottoms and alluviated floodplains. Part of the area may be underlain by material that lacks the strength to support steep slopes (such as unconsolidated alluvium) but occupies a relatively stable position due to the flatness of the slope (lacks potential engergy). Also included are broad, relatively level areas along the tops of ridges underlain by resistant rock that is either exposed at the surface or covered only by shallow soil or colluvium. Land within area 1 will probably remain relatively stable unless the topography is altered radically.*

AREA 2 - *Marginally Susceptible Area. This area includes gentle to moderate slopes underlain by relatively competent material or colluvium that is considered unlikely to remobilize under natural conditions. Also includes ridgetops and spur crests that are underlain by relatively competent material but flanked by steep, potentially unstable slopes. The stability of slopes within area 2 may change radically in response to future natural or artificial alteration of the adjacent terrain.*

AREA 3 - *Generally Susceptible Area. Slopes within this area are at or near their stability limits due to a combination of weaker materials and steeper slopes. Although most slopes within area 3 do not currently contain landslide deposits, the materials that underlie them can be expected to fail, locally, when modified by natural processes or the activities of man because they are close to their stability limits. Most landslides now present in area 3 are interpreted to be in relatively more stable positions than those classified within area 4. Debris flows (also called debris avalanches or soil slips) may originate within area 3 and flow downslope, sometimes at high speeds, to impact land included within areas 1, 2, 3, or 4.*

AREA 4 - *Most Susceptible Area. This area is characterized by steep slopes and includes most landslides in upslope areas, whether apparently active at present or not, and slopes upon which there is substantial evidence of downslope creep of surface materials. Land within area 4 should be naturally unstable, subject to failure even in the absence of the activities of man.*

LIMITS OF CITY OF ENCINITAS

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FIGURE 4.5-1
Relative Landslide Susceptibility – City of Encinitas

4.5.2.2 Local

a. General Plan/Local Coastal Program

Table 4.5-1 shows the goals and policies related to geology and soils from the City's General Plan.

Table 4.5-1
Goals and Policies Related to Geology and Soils

Goal/Policy	Description
City of Encinitas General Plan Land Use Element	
Goal 8	Environmentally and topographically sensitive and constrained areas within the City shall be preserved to the greatest extent possible to minimize the risks associated with development in these areas. (Coastal Act/30240/30253) Goal 8 amended 5111195 (Reso. 95-32)
8.1	Require that any improvement constructed in an area with a slope of more than 25% and other areas where soil stability is at issue to submit soils and geotechnical studies to the City for review and approval. These studies shall document that the proposed development will not adversely affect hillside or soil stability and that no future protective measures will be required. (Coastal Act/30253) Policy 8.1 amended 5111195 (Reso. 95-32)
8.5	The City will encourage the retention of the coastal bluffs in their natural state to minimize the geologic hazard and as a scenic resource. Construction of structures for bluff protection shall only be permitted when an existing principal structure is endangered and no other means of protection of that structure is possible. Only shoreline/ bluff structures that will not further endanger adjacent properties shall be permitted as further defined by City coastal bluff regulations. Shoreline protective works, when approved, shall be aligned to minimize encroachment onto sandy beaches. Beach materials shall not be used as backfill material where retaining structures are approved. Approved devices protecting against marine waves shall be designed relative to a design wave, at least equal to 1982- 83 winter storm waves. (Coastal Act/ 30235/ 30240/ 30251/ 30253)
City of Encinitas General Plan Resource Management Element	
Goal 13	Create a desirable, healthful, and comfortable environment for living while preserving Encinitas, unique natural resources by encouraging land use policies that will preserve the environment. (Coastal Act/30250/30251)
13. 1	The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring. (Coastal Act/30250)
Goal 14	The City shall stringently control erosion and sedimentation from land use and development to avoid environmental degradation of lagoons and other sensitive biological habitat, preserve public resources and avoid the costs of dealing with repair and sedimentation removal. (Coastal Act/30231/30240/30250/30253)
14. 1	The best strategy to reduce erosion and sedimentation is to reduce to the maximum extent feasible, grading and removal of vegetation. It is the policy of the City that, in any land use and development, grading and vegetation removal shall be limited to the minimum necessary. (Coastal Act/30240/30250)

Table 4.5-1
Goals and Policies Related to Geology and Soils

Goal/Policy	Description
14. 3	The City will reduce the rate of sedimentation of the lagoons by requiring procedures for controlling runoff and erosion associated with upland grading and development based on a minimum 10-year, six-hour storm event. The City shall provide regulations for the use of sedimentation basins and the potential transfer of sediment as beach replenishment (if of an acceptable material). (Coastal Act/30250/30251)
14. 4	Revegetation and appropriate landscaping of all areas graded and scraped of vegetative cover shall be required with land use and development. Plantings, hydroseeding, and irrigation systems used shall be selected on the bases of minimizing erosion and conserving water. (Coastal Act/30251)
14. 5	To minimize erosion and allow sedimentation control systems to work, no grading or vegetation removal shall be allowed to occur during the wet season, October 1 April 15, without all systems and devices per an approved erosion control plan and program being in place. During other times of the year such systems shall be provided and operative as required by a comprehensive City erosion control ordinance. No grading shall occur during the rainy season within the Special Study Overlay area, or in areas upland of sensitive areas including lagoons, floodplains, riparian or wetland habitat areas, unless by site- specific determination, the grading would not be occurring on sensitive slopes, in floodplain areas or upland of floodplains, where sedimentation might occur in other sensitive habitat areas. Then, if grading is determined to be allowable, all necessary erosion control devices, including sedimentation basins, must be in place, and shall be monitored and maintained throughout the grading period. (Coastal Act/30251)
14. 6	To achieve the ends of erosion control, a comprehensive erosion control plan shall be required with final building permit and improvement plans, subject to review and approval prior to commencement of grading and construction. (Coastal Act/30251)
14. 7	Minimize extensive or premature grading or filling, and penalize illegal grading or filling.

SOURCE: City of Encinitas 1989, as amended.

b. Multi-Jurisdictional Hazard Mitigation Plan

In 2010, San Diego County and 18 local jurisdictions, including the City, adopted the Multi-Jurisdictional Hazard Mitigation Plan (MHMP). The MHMP is a countywide plan that identifies risks and ways to minimize damage by natural and manmade disasters. The MHMP is a comprehensive document that serves many purposes, including creating a decision tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination. Member agencies work together to update the MHMP every five years. As of this writing, the plan is currently being reviewed and revised to reflect changes to both the hazards threatening San Diego as well as the programs in place to minimize or eliminate those hazards.

The City's specific hazard mitigation goals, objectives, and related potential actions for earthquake hazards are included in the MHMP (County of San Diego Office of Emergency Services and Unified Disaster Council 2010).

c. City of Encinitas Jurisdictional Runoff Management Program

The Jurisdictional Runoff Management Plan (JRMP) is the City of Encinitas's approach to improving water quality in its creeks, lagoons, and the ocean through reducing discharges of pollutants to the municipal separate storm sewer system (or storm drain system). The JRMP is discussed in Section 4.8, Hydrology and Water Quality.

d. Municipal Code

Grading, Erosion, and Sediment Control Ordinance

The City of Encinitas Grading, Erosion, and Sediment Control Ordinance (Ord. 94-06; Municipal Code Chapter 23.24.010) establishes minimum requirements for grading, excavating, and filling of land, to provide for the issuance of grading permits and to provide for the enforcement of the requirements. This ordinance was adopted pursuant to, and to implement provisions of, the General Plan and certified Local Coastal Program Land Use Plan (LUP). It is the intent of the City to protect life and property and promote the general welfare; enhance and preserve the physical environment of the community; and maintain the natural scenic character of the City. The provisions of this Ordinance shall be administered to achieve, to the extent possible, appropriate goals and policies of the General Plan/LUP. Key provisions include, but are not limited to, the following:

- Section 23.24.140, which requires that a grading plan be prepared and signed by a California registered civil engineer and if a soils and geology report is required, the grading plan shall also be signed by a registered soils engineer and a certified engineering geologist.

- Sections 23.24.150 and 23.24.160, which require an interim and final erosion and sediment control plan to be included as part of the grading plan by a California registered civil engineer with respect to conditions existing on the site during land disturbing or filling activities or soil storage and the conditions existing on the site after final structures and improvements (except those required under this section) have been completed and where these final structures have not been covered by an interim plan

- Section 23.24.170, which states that a soil engineering report, when required by the City Engineer, shall be prepared and certified by a California registered soils engineer and shall be based on adequate and necessary test borings.

- Section 23.24.180, which requires the preparation of an engineering geology report in accordance with Ordinance 2008–03. In addition to a soils report, an engineering geology report will be required when the City Engineer determines that the proposed development is located within an existing or a potential geologic hazardous

area. Geological hazardous area is referred to as areas subject to landslide, faulting, or other hazards identified by the City Engineer. The report shall be prepared by a California certified engineering geologist and California certified civil engineer or geotechnical engineer and shall be based on adequate and necessary test borings.

e. Hillside/Inland Bluff Overlay Ordinance

The Hillside/Inland Bluff Overlay Ordinance regulations apply to all areas within the Special Study Overlay Zone where site-specific analysis indicates that 10 percent or more of the area of a parcel of land exceeds 25 percent slope. The Planning Commission is the authorized agency for reviewing and granting discretionary approvals for proposed development within the Hillside/Inland Bluff Overlay Zone. Where development is proposed on slopes of greater than 25 percent grade, the following additional standards apply:

- Slopes of greater than 25 percent grade should be preserved in their natural state.
- A geological reconnaissance report must be submitted.
- Where unstable conditions are indicated, a preliminary engineering geology report is also required.
- No principal structure or improvement or portion thereof shall be placed or erected, and no grading shall be undertaken, within 25 feet of any point along an inland bluff edge.
- All slopes over 25 percent grade which remain undisturbed or which are restored or enhanced as a result of a development approval, shall be conserved as a condition of that approval through a deed restriction, open space easement, or other suitable device that will preclude any future development or grading of such slopes.

4.5.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to geology and soils would be significant if the HEU project would:

1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

    a. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42);

    b. Strong seismic ground shaking;

    c. Seismic-related ground failure, including liquefaction; or

    d. Landslides; or

2. Result in substantial soil erosion or the loss of topsoil;

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

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

4.5.4 Methodology

4.5.4.1 Sources

A review of secondary source information was completed to determine potential geologic hazards present within or adjacent to the housing sites, including the 2010 Final Existing Conditions Report.

4.5.4.2 Future Project Implementation

As noted previously in this chapter, for housing sites containing steep slopes within the Hillside/Inland Bluff Overlay Zone, the City of Encinitas Municipal Code requires a slope and impact analysis. In these instances, the City would review project applications for compatibility, applicable requirements for hillside/inland bluff overlay protection, and require specific conditions as part of the approval process. Additionally, the Municipal Code requires preparation of a soils study and/or engineering geology report when hazardous geologic conditions are present. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process.

Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone. The floating zone gives a property owner a choice whether to opt into the housing plan, or forgo doing so and retain their existing zoning rights. Depending on the category of the existing zoning, different levels of development or reconstruction activities are already permitted on the housing sites.

The impact analysis below describes the type and magnitude of the environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential to impact geologic and soil resources. The analysis in the following section identifies significant impacts and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on geologic and soil resources, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.5.5 Issue 1: Seismic Hazards

Impacts related to geology and soils would be significant if the project would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

a. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42);

b. Strong seismic ground shaking;

c. Seismic-related ground failure, including liquefaction; or

d. Landslides.

4.5.5.1 Impacts

a. Housing Sites

There are no active faults near any of the housing sites; however, the project area is subject to seismic activity from the San Andreas fault to the east and the parallel fault systems of the Elsinore to the east, as well as the offshore Rose Canyon and Coronado Bank faults. Seismic hazards affecting the project area may include ground acceleration (shaking), liquefaction, and earthquake-induced landslides.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. However, it is acknowledged that future development within the proposed housing sites would involve the construction of two to three-story structures in a seismically active area. While surface rupture from a known fault is unlikely to occur, all lands in the City including the proposed housing sites would likely experience moderate ground shaking as a result of earthquakes occurring on off-site faults. Earthquake-related ground shaking may cause concrete slabs, building walls, and pavement at the sites to crack, potentially threatening the integrity of the structures and the safety of the people present at the time of the earthquakes. Moreover, ground motions have the potential to initiate secondary events such as differential compaction, liquefaction, and seismically induced flooding and landslides, all of which could also threaten the integrity of the structures and safety of the people present on the sites. However, seismic-related risks may be reduced through the redevelopment of housing sites, on which existing improvements, especially older structures, do not meet current foundation or improvements standards.

The potential hazards of differential compaction, liquefaction, and seismically induced flooding at the housing sites are all low during a large earthquake. However, areas of loose soil or fill within the housing sites may be subject to seismically induced settlement or liquefaction and seismically induced landslides are possible in areas of steep topography

(discussed below under Issue 3). Housing sites that have been identified as containing steep slopes include: NE-3, NE-7, OE-4 and OE-7.

General Plan Policy 8.1 requires that soils and geotechnical studies be prepared for development on any site containing slopes in excess of 25 percent gradient. The Hillside/Inland Bluff Overlay Ordinance regulations would apply to housing sites containing slopes of greater than 25 percent grade, requiring a geological reconnaissance report and, where unstable conditions are indicated, a preliminary engineering geology report. The City's Grading, Erosion and Sediment Control Ordinance requires that an engineering geology report be prepared for proposed developments located within an existing or a potential geologic hazardous area, including those areas subject to landslide, faulting, or other hazards, as determined by the City engineer. In addition, HEU Policies 3.2, 3.7, and 3.10 would be implemented in conjunction with future projects, including the enforcement of building codes and standards (Policy 3.2), and those for developing on steep slopes (Policies 3.7 and 3.10; see Section 3.4.1.1)

Implementation of General Plan Land Use Policy 8.1; and compliance with City ordinances, the CBC, engineering standards and codes; and future site-specific geotechnical reports, would reduce risks of seismic hazards in conjunction with future development. Additionally, the typical site constraints for steep slopes would limit development potential and the potential for slope failure and landslides. Therefore, the existing regulatory process and policy framework (i.e. the General Plan policies and HEU Policies 3.2, 3.7, and 3.10), results in a future outcome where potential impacts associated with seismic hazards would be less than significant.

b. Housing Strategy Summaries

Development of the housing sites in housing strategy 1 – Ready Made (RM)), housing strategy 2 - Build Your Own (BYO) and housing strategy 3 - Modified Mixed Use Places (MMUP) has the potential to result in impacts associated with loss, injury, or death involving seismic hazards. Relative to the project overall, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from the three housing strategies would be less than significant.

4.5.5.2 Significance of Impacts

Adherence to the CBC; City of Encinitas Grading, Erosion, and Sediment Control Ordinance; General Plan policies related to geology and soils; HEU policies (specifically 3.2, 3.7, and 3.10); and implementation of any recommendations described in a subsequent project's geotechnical investigation would avoid or reduce potentially significant seismic and geological impacts to below a level of significance.

4.5.6 Issue 2: Soil Erosion

Impacts related to geology and soils would be significant if the project would result in substantial soil erosion or the loss of topsoil.

4.5.6.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; it provides capacity for future development consistent with State Housing Element Law. The housing sites are susceptible to erosion from runoff (slopewash), including runoff along steep slopes. Future development would involve vegetation removal, grading, and potentially earth excavation, which would expose soils and increase the potential for soil erosion from wind or storm water runoff. Buildout of the housing sites would have the potential to result in short-term soil erosion during construction activities; especially on sites with steeper slopes. Grading activities associated with future development would disrupt soil profiles, thereby resulting in an increased exposure of soils to wind and rain, which are erosive forces. Erosion on drainage slopes could cause downstream sedimentation impacts. Other related impacts resulting from substantial short-term erosion or loss of topsoil include topography changes and the creation of impervious surfaces in the project area.

As part of the future development permitting process, adherence to the City's Grading, Erosion, and Sediment Control Ordinance; CBC; and the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (as discussed in Section 4.8) would be required. Conformance with these requirements would ensure that future grading and construction operations would avoid significant soil erosion impacts. In accordance with the NPDES General Construction Permit, a storm water pollution prevention plan (SWPPP) is required to consider the full range of erosion control best management practices, including any additional site-specific and seasonal conditions. Project compliance with NPDES requirements would reduce the potential for substantial erosion or topsoil loss to occur in association with future housing site development.

General Plan policies listed in Table 4.5-1 contain provisions related to soil erosion. Implementation of these policies; compliance with the CBC; City ordinances; engineering standards and codes; and site-specific SWPPP would reduce impacts related to soil erosion. Therefore, through compliance with the existing regulatory process and General Plan policies, potential soil erosion impacts associated with future housing site development would be less than significant.

b. Housing Strategy Summaries

The Ready Made, (Housing Strategy No. 1), Build Your Own (Housing Strategy No. 2) and Modified Mixed Use Places (Housing Strategy No. 3) would result in soil erosion from future construction activities associated with development of the housing sites. Overall,

there would be no inherent differences in impacts among the housing strategies. Impacts resulting from the three housing strategies would be less than significant.

4.5.6.2 Significance of Impacts

Adherence to the CBC; City Grading, Erosion, and Sediment Control Ordinance; General Plan policies concerning soil erosion; and implementation of any recommendations described in subsequent project's SWPPP would avoid or reduce potentially significant soil erosion impacts to below a level of significance.

4.5.7 Issues 3 and 4: Unstable and Expansive Soils

Impacts related to geology and soils would be significant if the project would:

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

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

4.5.7.1 Impacts

a. Housing Sites

As discussed above, the project area contains fine-grained (clay) soils that are moderately to highly expansive. These materials may be present at the surface or exposed by grading activities. No areas of high liquefaction potential occur on the housing sites.

The project area contains steep slopes and formations that may be landslide-prone. Several housing sites have been identified as containing steep slopes. Future development within landslide-prone formations represents a potentially significant impact to buildout of the housing sites. Compressible and expansive soils in the City form a mild to moderate potential impact on development, which can result in the movement and/or cracking of structures.

Future development of housing sites would be required to comply with local, state, and federally mandated grading and construction requirements, including, but not limited to the CBC and City Grading, Erosion, and Sediment Control Ordinance. The City's Grading, Erosion, and Sediment Control Ordinance requires that an engineering geology report for proposed development located within an existing or a potential geologic hazardous area as determined by the City Engineer.

General Plan Land Use Policy 8.1 contains provisions related to soil stability. The Hillside/Inland Bluff Overlay Ordinance regulations would apply to housing sites containing slopes of greater than 25 percent grade, requiring a preliminary engineering

geology report where unstable conditions are indicated. Implementation of General Plan Land Use Policy 8.1; compliance with City ordinances and the CBC; City ordinances and engineering standards; and a site-specific geotechnical report would help minimize risks in conjunction with future development related to soil stability. Therefore, through existing regulatory processes and General Plan policies, potential impacts related to unstable or expansive soils in the project area would be less than significant.

b. Housing Strategy Summaries

The Ready Made, (Housing Strategy No. 1), Build Your Own (Housing Strategy No. 2) and Modified Mixed Use Places (Housing Strategy No. 3) may expose people or structures to potential substantial adverse effects involving unstable or expansive soils. Overall, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from the three housing strategies would be less than significant.

4.5.7.2 Significance of Impacts

Adherence to the CBC; City of Encinitas Grading, Erosion, and Sediment Control Ordinance; the City's General Plan policies; and implementation of any recommendations described in a site-specific geotechnical investigation would avoid or reduce potentially significant impacts related to unstable or expansive soils to below a level of significance.

4.6 Greenhouse Gas Emissions

This section evaluates potential greenhouse gas (GHG) emissions impacts associated with the Housing Element Update (HEU). This GHG analysis evaluates potential effects associated with cumulative GHG emissions generated by each housing strategy. In accordance with California Environmental Quality Act (CEQA), this analysis evaluates the significance of project impacts in terms of: (1) whether, or not, the project would generate GHG emissions that may have a significant impact on the environment; and (2) whether, or not, the project would conflict with any applicable policy, plan, or regulation intended to reduce GHG emissions. Complete GHG modeling data are contained in Appendix L of this EIR, and include GHG emission data calculated using the California Emissions Estimator Model (CalEEMod), a discussion of Federal and State plans and regulations that would indirectly reduce GHG emissions associated with buildout of the HEU, and an explanation of how these plans and regulations were accounted for in modeling.

4.6.1 Existing Conditions

4.6.1.1 Environmental Setting

a. Understanding Global Climate Change

To evaluate the incremental effect of the project on statewide GHG emissions and global climate change, it is important to have a basic understanding of the nature of the global climate change problem. Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation and temperature. The earth's climate is in a state of constant flux with periodic warming and cooling cycles. Extreme periods of cooling are termed "ice ages," which may then be followed by extended periods of warmth. For most of the earth's geologic history, these periods of warming and cooling have been the result of many complicated interacting natural factors that include: volcanic eruptions that spew gases and particles (dust) into the atmosphere; the amount of water, vegetation and ice covering the earth's surface; subtle changes in the earth's orbit; and the amount of energy released by the sun (sun cycles). However, since the beginning of the Industrial Revolution around 1750, the average temperature of the earth has been increasing at a rate that is faster than can be explained by natural climate cycles alone.

With the Industrial Revolution came an increase in the combustion of carbon-based fuels such as wood, coal, oil, natural gas and biomass. Industrial processes have also created emissions of substances not found in nature. This in turn has led to a marked increase in the emissions of gases shown to influence the world's climate. These gases, termed "greenhouse" gases (or GHG), influence the amount of heat trapped in the earth's atmosphere. Because recently

observed increased concentrations of GHGs in the atmosphere are related to increased emissions resulting from human activity, the current cycle of "global warming" is generally believed to be largely due to human activity. Of late, the issue of global warming or global climate change has arguably become the most important and widely debated environmental issue in the United States and the world. The effects of global warming or global climate change may impact ecosystems in a broad variety of ways, including rising surface temperatures, loss of snow pack, sea level rise, more extreme weather events, and more drought years. Even though there has been improvements over the past decade in understanding what is responsible for global climate change, scientific uncertainties remain regarding the response of the Earth's climate system to combinations of changes, particularly at a regional and local level. Because it is the collective of human actions taking place throughout the world that contributes to climate change, it is quintessentially a global or cumulative issue.

b. Greenhouse Gases of Primary Concern

There are numerous GHGs, both naturally occurring and manmade. Table 4.6-1 summarizes some of the most common. Each GHG has variable atmospheric lifetime and global warming potential (GWP).

Table 4.6-1
Global Warming Potentials and Atmospheric Lifetimes (years)

Gas	Atmospheric Lifetime	100-year GWP	20-year GWP	500-year GWP
Carbon dioxide (CO_2)	50–200	1	1	1
Methane (CH_4)[1]	12	25	72	7.6
Nitrous oxide (N_2O)	114	298	289	153
HFC-23	270	14,800	12,000	12,200
HFC-32	4.9	675	2,330	205
HFC-125	29	3,500	6,350	1,100
HFC-134a	14	1,430	3,830	435
HFC-143a	52	4,470	5,890	1,590
HFC-152a	1.4	124	437	38
HFC-227ea	34.2	3,220	5,310	1,040
HFC-236fa	240	9,810	8,100	7,660
HFC-43-10mee	15.9	1,640	4,140	500
CF_4	50,000	7,390	5,210	11,200
C_2F_6	10,000	12,200	8,630	18,200
C_3F_8	2,600	8,830	6,310	12,500
C_4F_{10}	2,600	8,860	6,330	12,500
c-C_4F_8	3,200	10,300	7,310	14,700
C_5F_{12}	4,100	9,160	6,510	13,300
C_6F_{14}	3,200	9,300	6,600	13,300
SF_6	3,200	22,800	16,300	32,600

SOURCE: Intergovernmental Panel on Climate Change 2007.
[1]The methane GWP includes the direct effects and those indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

The atmospheric lifetime of the gas is the average time a molecule stays stable in the atmosphere. Most GHGs have a long atmospheric lifetime, staying in the atmosphere hundreds or thousands of years. GWP is a measure of the potential for a gas to trap heat and warm the atmosphere. Although GWP is related to its atmospheric lifetime, many other factors including chemical reactivity of the gas also influence GWP. GWP is reported as a unitless factor representing the potential for the gas to affect global climate relative to the potential of CO_2. Because CO_2 is the reference gas for establishing GWP, by definition its GWP is 1. Although CH_4 has a shorter atmospheric lifetime than CO_2, it has a 100-year GWP of 25; this means that CH_4 has 25 times more effect on global warming than CO_2 on a molecule-by-molecule basis.

All of the gases in Table 4.6-1 are produced by both biogenic (natural) and anthropogenic (human) sources. These are the GHGs of primary concern in this analysis. CO_2 would be emitted by the future land uses consistent with the HEU due to the combustion of fossil fuels in vehicles (including construction); from electricity generation and natural gas consumption; water use and from solid waste disposal. Smaller amounts of CH_4 and N_2O also would be emitted from operations of future development.

c. State and Regional GHG Inventories

The California Air Resources Board (CARB) performs statewide GHG inventories. The inventory is divided into nine broad sectors of economic activity: agriculture, commercial, electricity generation, forestry, high GWP emitters, industrial, recycling and waste, residential and transportation. Emissions are quantified in million metric tons of CO_2 equivalent (MMT CO_2E). Table 4.6-2 shows the estimated statewide GHG emissions for the years 1990, 2008 and 2012.

Table 4.6-2
California GHG Emissions by Sector in 1990, 2008 and 2012

Sector	1990 Emissions in MMT CO_2E (% total) [1,2]	2008 Emissions in MMT CO_2E (% total)[2,3]	2012 Emissions in MMT CO_2E (% total)[2,3]
Sources[4]			
Agriculture	23.4 (5%)	37.99 (7%)	37.86 (7%)
Commercial	14.4 (3%)	13.37 (3%)	14.20 (3%)
Electricity Generation	110.6 (26%)	120.15 (25%)	95.09 (19%)
High GWP	--	12.87 (2%)	18.41 (3%)
Industrial	103.0 (24%)	87.54 (18%)	89.16 (21%)
Recycling and Waste	--	8.09 (1%)	8.49 (2%)
Residential	29.7 (7%)	29.07 (6%)	28.09 (7%)
Transportation	150.7 (35%)	178.02 (37%)	167.38 (38%)
Forestry (Net CO_2 flux)[5]	-6.5	--	--
Not Specified	1.3	--	--
TOTAL	**426.6**	**487.10**	**458.68**

SOURCE: CARB 2007 and 2014a.
[1]1990 data was retrieved from the CARB 2007 source.
[2]Percentages may not total 100 due to rounding.
[3]2008 and 2012 data was retrieved from the CARB 2014a source.
[4]Reported emissions for key sectors. The inventory totals for 2008 and 2012 did not include Forestry or Not Specified sources.
[5]Forestry includes 6.69 MMT CO_2E sink from forests sequestration and a 0.19 MMT CO_2E source from forest and range management.

As shown in Table 4.6-2, statewide GHG source emissions totaled about 427 MMT CO_2E in 1990, 487 MMT CO_2E in 2008 and 459 MMT CO_2E in 2012. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. While CARB has adopted multiple GHG emission reduction measures, the effect of those reductions will not be seen until around 2015. (Please note that as of this writing, a 2015 statewide emissions inventory has not been prepared.) According to CARB, most of the reductions since 2008 have been driven by economic factors (recession), previous energy-efficiency actions and the renewable portfolio standard (CARB 2014a). Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

The forestry sector is unique because it not only includes emissions associated with harvest, fire and land use conversion (sources), but also includes removals of atmospheric CO_2 (sinks) by photosynthesis, which is then bound (sequestered) in plant tissues.

A San Diego regional emissions inventory, prepared by the University of San Diego School of Law, Energy Policy Initiative Center, took into account the unique characteristics of the region. The 2010 emissions inventory for the San Diego region is shown in Table 4.6-3. The sectors included in this inventory are somewhat different from those in the statewide inventory.

Table 4.6-3 San Diego Region GHG Emissions by Sector in 2010		
Sector	2010 Emissions	
	MMT CO_2E	% total[1]
Agriculture/Forestry/Land Use	0.05	0.2%
Waste	0.6	1.8%
Electricity	8.3	25.0%
Natural Gas Consumption	2.9	8.7%
Industrial Processes & Products	1.8	5.4%
On-Road Transportation	14.4	43.4%
Off-Road Equipment & Vehicles	1.4	4.2%
Civil Aviation	1.9	5.7%
Rail	0.32	1.0%
Water-Borne Navigation	0.1	0.3%
Other Fuels/Other	1.58	4.8%
Land Use Wildfires	0.28	0.8%
Development (Loss of Vegetation)	0.18	0.5%
Sequestration from Land Cover	(0.66)	(0.5%)
TOTAL	**33.15**	
SOURCE: University of San Diego 2013. [1]Percentages may not total 100 due to rounding.		

Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use.

d. Encinitas GHG Inventories

In 2009, Encinitas worked with the International Council for Local Environmental Initiatives (ICLEI), now known as the Local Governments for Sustainability, to develop a government operations and community-wide GHG emissions inventory for baseline year 2005. These inventories are meant to establish the City's baseline GHG emissions and comprise the first step in developing and then adopting a Climate Action Plan (CAP) for Encinitas (City of Encinitas 2011). These inventories use the protocol developed by CARB in conjunction with ICLEI, the California Climate Action Registry and the Climate Registry for conducting both a community-wide inventory and government operations inventory. The community-wide GHG emissions inventory is shown in Table 4.6-4, and government operations inventory is shown in Table 4.6-5.

Table 4.6-4 Encinitas Community-Wide GHG Emissions in 2005		
Sector	2005 Emissions in MT CO_2E (% total)	
Transportation	383,566	70.2%
Residential	82,975	15.2%
Commercial/Industrial	59,793	10.9%
Solid Waste	17,333	3.2%
Wastewater	2,901	0.5%
TOTAL	**546,568**	**100%**
SOURCE: City of Encinitas 2011.		

In 2005, the Encinitas community emitted approximately 546,568 metric tons CO_2 equivalent (MT CO_2E; or 0.55 MMT CO_2E). Transportation comprised the largest source of GHG emissions, generating approximately 70.2 percent of the community's total 2005 emissions.

Table 4.6-5
Encinitas Government Operations GHG Emissions in 2005

Sector	2005 Emissions in MT CO_2E	(% total)
Employee Commute	887	35.8
Public Lighting	576	23.2
Buildings and Facilities	515	20.8
Vehicle Fleet	384	15.5
Government Generated Solid Waste	99	4.0
Water/Sewage Transport	18	0.7
TOTAL	**2,479**	**100%**

SOURCE: City of Encinitas 2011.

Based on the ICLEI government operation inventory, GHG emissions in 2005 from the City's governmental operations totaled 2,479 MT CO_2E (City of Encinitas 2011). Of the total emissions accounted for in this inventory, transportation-related emissions were also the largest, with the City's vehicle fleet and employee commute accounting for 51.3 percent of total government operations emissions.

4.6.2 Regulatory Framework

4.6.2.1 Federal

a. Environmental Protection Agency

The U.S. EPA has many Federal level programs and projects to reduce GHG emissions. The U.S. EPA provides technical expertise and encourages voluntary reductions from the private sector. One of the voluntary programs applicable to the project is the Energy Star program.

Energy Star is a joint program of U.S. EPA and the U.S. Department of Energy, which promotes energy-efficient products and practices. Tools and initiatives include the Energy Star Portfolio Manager, which helps track and assess energy and water consumption across an entire portfolio of buildings, and the Energy Star Most Efficient 2013, which provides information on exceptional products that represent the leading edge in energy-efficient products in 2013 (U.S. EPA 2013).

The U.S. EPA also partners with the public sector, including states, tribes, localities and resource managers, to encourage smart growth, sustainability preparation and renewable energy and climate change preparation. These initiatives include the Clean Energy–Environment State Partnership Program, the Climate Ready Water Utilities Initiative, the Climate Ready Estuaries Program and the Sustainable Communities Partnership (U.S. EPA 2014).

4.6.2.2 State

The State of California has a number of policies and regulations that are either directly or indirectly related to GHG emissions. Only those most relevant to land use planning and development are included in this discussion.

a. Executive Orders

S-3-05—Statewide GHG Emission Targets

This executive order (EO), essentially the Executive Brach's managerial policy statements, established the following GHG emission reduction targets for the State of California:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels;
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the Secretary of the California EPA to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline and forestry. The report must also include mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years.

B-30-15—2030 Statewide GHG Emission Goal

This EO, issued on April 29, 2015, established the Executive Branch's interim GHG emission reduction goal for the State of California of 40 percent below 1990 levels by 2030. This EO also directed all State agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal. Therefore, in the coming months, CARB is expected to develop statewide inventory projection data for 2030, as well as commence its efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the EO's new interim goal.

b. California Global Warming Solutions Act

In response to EO S-3-05, the California legislature passed Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006," which was signed by the governor on September 27, 2006. It required the CARB to adopt rules and regulations that would reduce statewide GHG emissions to 1990 levels by 2020. The CARB was also required to publish a list of discrete GHG emission reduction measures.

c. Climate Change Scoping Plan

In 2008, as directed by the California Global Warming Solutions Act of 2006, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*), which identifies the main strategies California will implement to achieve the GHG reductions necessary to reduce forecasted business as usual (BAU) emissions in 2020 to the State's historic 1990 emissions level (CARB 2008).

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) (CARB 2014b). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050" (CARB 2014b). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the State realizes the expected benefits of existing policy goals (CARB 2014b).

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the State's economy to evaluate and describe the larger transformative actions that will be needed to meet the State's more expansive emission reduction needs by 2050" (CARB 2014a). Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of the 2050 reduction goal.

Based on CARB's research efforts, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014b). Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the Intergovernmental Panel on Climate Change. Using the recalculated 1990 emissions level and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15 percent from the BAU conditions.

d. Regional Emissions Targets – SB 375

Senate Bill 375 (SB 375), the 2008 Sustainable Communities and Climate Protection Act, was signed into law in September 2008 and required CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets and fair-share housing allocations under State housing law. SB 375 requires Metropolitan Planning

Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan (RTP).

The San Diego Association of Governments (SANDAG) is the San Diego region's MPO. SANDAG completed and adopted its San Diego Forward in October 2015. CARB's targets for the SANDAG region call for a 7 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035. (The reduction targets are to be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets.) As stated by SANDAG, the strategy set forth in San Diego Forward is to "focus housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all and implement the Plan through incentives and collaboration." In December 2015, CARB–by executive order G-15-075–accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emission reduction targets for the region.

Pursuant to Government Code Section 65080(b)(2)(K), a SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

e. California Building Standards Code (Title 24)

The California Code of Regulations (CCR), Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction including, plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards.

Part 6 - Energy Code

The CCR, Title 24, Part 6 is the Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2008 update to the Energy Code, which became effective January 1, 2010, was developed in large part in response to AB 32. The 2008 Energy Code required energy savings of at least 21 percent above the former 2005 Energy Code, which is relevant as the original GHG inventory for the State was based on the 2005 Energy Code.

The current version of the Energy Code, known as the 2013 Energy Code, became effective July 1, 2014. The 2013 Energy Code provides mandatory energy-efficiency measures as well as voluntary tiers for increased energy efficiency. Based on an impact analysis prepared by the CEC for single-family residences, the 2013 Energy Code has been estimated to achieve a 36.4 percent increase in electricity efficiencies and a 6.5 percent increase in natural gas efficiencies over the 2008 Energy Code (CEC 2013). The same report estimates increased efficiencies for multi-family residences of 23.3 percent for electricity use and 3.8 percent for natural gas use, and a 21.8 percent increased efficiency for electricity use and 16.8 percent increased efficiency for natural gas use for non-residential buildings.

The next update to the Energy Code (2016) will become effective January 1, 2017. According to the CEC's frequently asked questions on the 2016 Energy Code, they indicate the 2016 standards will be 28 percent more efficient than the current 2013 standards (CEC 2016).

Part 11 – California Green Building Standards Code

The California Green Building Standards Code, referred to as CalGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The 2013 CalGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent mandatory reduction in indoor water use relative to specified baseline levels;
- 50 percent construction/demolition waste diverted from landfills;
- Infrastructure requirements for electric vehicle charging stations;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Requirements for low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring and particleboards.

The voluntary standards require:

- Tier I—15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, cool/solar reflective roof; and

- Tier II—30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving and 30 percent cement reduction, cool/solar reflective roof.

Similar to the reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CalGreen water reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. The water use compliance form must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CalGreen or a reduced per-plumbing-fixture water use rate.

f. AB 341 – Solid Waste Diversion

The Commercial Recycling Requirements mandate that businesses (including public entities) that generate 4 cubic yards or more of commercial solid waste per week and multi-family residential with five units or more arrange for recycling services. Businesses can take one or any combination of measures in order to reuse, recycle, compost, or otherwise divert solid waste from disposal. Additionally, AB 341 mandates that 75 percent of all solid waste generated in the State be reduced, recycled, or composted by 2020 regardless of the source.

4.6.2.3 Local

a. Ordinances and Programs

The City has implemented various ordinances, policies, programs and activities to enhance the community's sustainability and improve energy efficiency. The City has adopted an ordinance requiring construction, remodel, or renovation projects greater than 10,000 square feet to prepare a Waste Management Plan and reuse or recycle at least 60 percent of construction and demolition debris. In February 2010, the City adopted a Water Efficient Landscape Ordinance, which requires residential and non-residential projects above a certain size to prepare a Soil Management Report, provide water-efficient landscaping and irrigation in compliance with the City's Landscape Design Manual, demonstrate storm water management best practices, and provide defensible space for fire safety. The City will adopt a new Water Efficient Landscape Ordinance in 2016, as required by the State. On January 1, 2010, the Planning and Building Department began administering a Green Building Incentive Program that provides financial incentives (up to $2,000 to complete the green building certification process), priority plan check and recognition for projects that register and achieve certification through the U.S. Green Building Council's (USGBC) Leadership in Energy

b. General Plan/Local Coastal Program

The City of Encinitas General Plan, along with relevant specific plans, contains policies directly and indirectly related to GHG emissions. Pertinent goals and policies related to GHG emissions are listed below in Table 4.6-6.

Table 4.6-6 Goals and Policies Related to GHG Emissions	
Goal/Policy	Description
City of Encinitas General Plan Circulation Element	
Policy 1.15	The City will actively support an integrated transportation program that encourages and provides for mass-transit, bicycle transportation, pedestrians, equestrians, and car-pooling.
Goal 3	The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile.
3.2	Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost-effective alternatives.
3.3	Create a safe and convenient circulation system for pedestrians.
3.4	Cooperate with San Diego County, SANDAG, and other jurisdictions to help plan and implement a regional multi-modal transportation system that is accessible to residents in the City.
3.5	Encourage development of mass transit and transit access points along the existing Interstate 5 freeway corridor or along the railroad right-of-way.
3.6	The City should provide and encourage efficient links between possible rail transit service and other transportation modes, including rerouting of bus service to interface with transit stops.
3.11	The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following: · All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network. · The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use. · The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.
City of Encinitas General Plan Resource Management Element	
Policy 1.1	Require new development to utilize measures designed to conserve water in their construction.
Policy 1.10	Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.
Goal 5	The City will make every effort to participate in programs to improve air and water quality in the San Diego region.
5.1	The City will monitor and cooperate with the ongoing efforts of the U. S. Environmental Protection Agency, the San Diego Air Pollution Control District, and the State of California Air Resources Board in improving air quality in the regional air basin. The City will implement appropriate strategies from the San Diego County SIP which are consistent with the goals and policies of this plan.
Goal 6	The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes.
6.1	The City will phase in all practical forms of mandatory recycling as soon as possible.
6.2	The City will contract only with waste haulers who will willingly cooperate with the City's recycling effort.
Goal 9	The City will encourage the abundant use of natural and drought tolerant landscaping in new development and preserve natural vegetation, as much as possible, in undeveloped areas.
9.4	Encourage and adopt standards for the use of drought tolerant and/ or natural landscaping and efficient irrigation systems throughout the City.

Table 4.6-6 Goals and Policies Related to GHG Emissions	
Goal/Policy	Description
Goal 13	Create a desirable, healthful, and comfortable environment for living while preserving Encinitas, unique natural resources by encouraging land use policies that will preserve the environment.
13.1	The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring.
Goal 15	The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.
15.1	The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development.
15.2	The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.
15.3	Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.
SOURCE: City of Encinitas 1989, amended 2014.	

4.6.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to GHG emissions would be significant if the HEU project would:

1. Generate GHG emissions that may have a significant impact on the environment; or

2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

In the context of CEQA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective" (CAPCOA 2008). Additionally, there is no current scientific or regulatory consensus regarding what specific quantity of GHG emissions is considered significant to the environment, and there remains no applicable, adopted numeric threshold for assessing the significance of a project's emissions. Furthermore, the global scale of climate change makes it difficult to assess the significance of a single project, particularly one designed to accommodate anticipated population growth (Council on Environmental Quality 2014). Indeed, unlike criteria pollutants, GHG emissions and climate change are not localized effects, and their magnitude cannot be quantified locally (CAPCOA 2008). Thus, in order to evaluate the project's significance relative to the two significance criteria identified, several analyses have been utilized.

The first analysis discloses the estimated GHG emissions associated with HEU implementation; however, given the limitations on the ability to determine the specific quantity of GHG emissions that would have an adverse effect on the environment, the stated quantity does not provide sufficient information to determine significance under CEQA and is primarily informational.

The second analysis evaluates the HEU for compliance with regulatory programs designed to reduce greenhouse gas emissions. This second analysis is based on CEQA Guidelines section 15064.4(b)(3), which states a lead agency should also consider "[t]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions." Under this evaluation transportation emissions are evaluated for compliance with the SANDAG San Diego Forward, plan, which includes the regional SCS as required under SB 375. Energy and water use emissions are evaluated based on compliance with the California Energy Code and CalGreen Code, both of which have been identified by CARB as regulatory actions intended to reduce GHG emissions. Finally, solid waste emissions are evaluated based on compliance with the CalGreen Code recycling requirements and goals under AB 341.

The third analysis is a qualitative evaluation of the HEU to determine if the project would conflict with an applicable policy, plan, or regulation adopted for the intent of reducing GHG emissions. Applicable policies include statewide policies such as AB 32, S-3-05, and B-30-15 and local policies in the City General Plan; applicable plans include the State Scoping Plan, and Renewable Portfolio Standard (RPS); applicable regulations include the Energy Code, CalGreen Code, as well as local ordinances, such as the Water Efficient Landscape Ordinance.

4.6.4 Methodology

For informational purposes, GHG emissions associated with each of the housing strategies were quantified and projected to the year 2020. GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) (CAPCOA 2013). In brief, the model estimates criteria air pollutants and GHG emissions by multiplying emission source intensity factors by estimated quantities of emission sources based on the land use information. All CalEEMod estimates are in terms of total MT CO_2E.

Emission estimates were calculated for the three GHGs of primary concern (CO_2, CH_4 and N_2O) that would be emitted from construction and the five primary operational sources that would be associated with HEU buildout: mobile sources, area sources, energy use, water use and solid waste disposal.

Appendix * contains details of the parameters used to model GHG emissions and full modeling outputs. Included in Appendix * also is a discussion of Federal and State plans and regulations that would indirectly reduce GHG emissions associated with buildout of the HEU and an explanation of how these plans and regulations were accounted for in modeling.

4.6.5 Issue 1: GHG Emissions

Would the project generate GHG emissions that may have a significant impact on the environment?

4.6.5.1 Impacts

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. GHG emissions would be associated with the future construction and operation of each housing site. The amount of GHG emissions is proportional to the size of proposed development.

a. GHG Emissions

The primary sources of direct and indirect GHG emissions were calculated for buildout of the housing strategies. The project emissions reflect the effects of statewide laws intended to reduce GHG emissions. Specifically, GHG emissions associated with each housing site is affected by the Energy Code, CalGreen Code, and statewide regulations on vehicles, fuels, and renewable energy requirements (e.g., Pavley I, LEV III, the Low Carbon Fuel Standard, and the RPS). Additionally, housing sites that are located in close proximity to transit or provide mixed use amenities on-site would generate fewer vehicle miles traveled (VMT) than similar sites without access to transit or amenities.

Housing Strategy Summary

Table 4.6-7 summarizes the GHG emissions associated with buildout of housing strategy 1 (RM), 2 (BYO), and 3 (MMUP). As shown, buildout of housing strategy 1 (RM) would result in 42,812 MT CO_2E per year, housing strategy 2 (BYO) would result in 46,437 MT CO_2E per year, and buildout of housing strategy 3 (MMUP) would result in 55,865 MTCO_2E per year. While the housing strategy 3 (MMUP) would result in the greatest overall emissions, as shown in Table 4.6-7, it would result in the lowest per capita emissions among the housing strategies.

Table 4.6-7
Year 2020 GHG Emissions (MT CO_2E)

Source	Housing Strategy 1 (RM)	Housing Strategy 2 (BYO)	Housing Strategy 3 (MMUP)
Vehicles	33,710	37,820	39,569
Energy	4,919	4,538	9,315
Area	1,553	1,491	2,625
Water	972	913	1,756
Waste	777	720	1,451
Construction	881	955	1,149
TOTAL	**42,812**	**46,437**	**55,865**
MT CO_2E per Capita[1]	**8.36**	**9.39**	**6.58**

[1]The per capita calculation is based on the dividing the total emission associated with a housing strategy by the population increases for each strategy shown in Tables 4.11-3 through 4.11-5.

While the HEU would result in an increase in GHG emissions from the existing condition, climate change is occurring on a global scale; therefore, it is not possible to quantify the true effect of new GHG emissions caused by a single project or whether a project's net increase in GHG emissions, when combined with other activities in the region, is cumulatively considerable. This is supported by the Sacramento Metropolitan Air Quality Management District (SMAQMD), which has stated "that there is no known level of emissions that determines if a single project will substantially impact overall GHG emission levels in the atmosphere" (SMAQMD 2014). Additionally, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has concluded that "existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change" (SJVAPCD 2009). Thus, the numeric increase of approximately 42,812 to 55,865 MT CO_2E annually, is not a sufficiently informative or reliable indicator of the significance of the project's GHG emissions. As discussed below, this analysis also considers other methods for analyzing the significance of the project's GHG emissions.

b. GHG Regulatory Programs

As another means of assessing the significance of the GHG emissions of the HEU, the proposed project is evaluated based on compliance with regulatory programs designed to reduce greenhouse gas emissions, such as SB 375, the Energy Code, the CalGreen Code, AB 341, and the City's Water Efficient Landscape Ordinance.

Transportation Emissions

The transportation regulatory programs are designed to improve the fuel efficiency of vehicles, e.g., tire programs, Pavley and LEV III; decrease the carbon content in fuel (LCFS); and reduce emissions through comprehensive planning (SB 375). As the requirements for vehicle fuel efficiencies and fuel formulations are implemented at the State and manufacturer level, compliance with these regulatory programs are already taken into consideration and are not attributed to the HEU. Therefore, impacts from transportation GHG emissions of the HEU are evaluated based on consistency with SANDAG's SCS.

At this time, the land density and intensity in the SCS does not take into consideration the HEU. Chapter 5 of the SCS makes provisions for updating the SCS on a 4-year cycle under SB 375. Thus, it is necessary to consider compliance with the growth patterns and population projections in terms of the goals and policies GHG emissions.

The SCS encourages "smart growth" as a means of reducing GHG emissions. All three housing strategies encourage increased development diversity by increasing the buildout potential for commercial/mixed use and multi-family land uses. Locating different land use types near one another has been shown to decrease VMT, since trip lengths between land use types are shorter and uses may be accommodated by alternative modes of transportation (CAPCOA 2010).

To assist in the evaluation of the three housing strategies, the VMT and average trip length (trip generation efficiency) was calculated and compared to the No Project/Adopted Plan scenario. It was found that housing strategy 3 (MMUP) would have the highest efficiency,

followed by housing strategy 1 (RM), housing strategy 2 (BYO). All three strategies would have higher efficiency (lower trip lengths) than the No Project/Adopted Plan scenario (refer to Table 4.6-8).

Table 4.6-8
VMT to Trip Generation Efficiency – HEU Growth in Land Use

Scenario	Change in Daily Trip Generation	Change in VMT	VMT/Trip Generation Ratio	Efficiency Ranking
No Project	0.00%	0.00%	1.000	4
Ready Made (RM)	2.35%	1.71%	0.728	2
Build Your Own (BYO)	3.53%	3.02%	0.855	3
Modified Mixed Use Places (MMUP)	4.33%	2.93%	0.676	1

Thus, while the HEU housing strategies would allow greater development than the existing condition or No Project/Adopted Plan scenario with greater trip generation and total VMT, any of the HEU housing strategies would be more efficient because they would result a reduction in the overall average trip length. This can be attributed to the fact that housing strategies emphasize mixed use development with housing in close proximity to retail and employment land uses.

The goals and policies of the HEU are provided in Section 3.4.1.1 of this EIR. Table 4.6-9 provides a summary of the applicable San Diego Forward policies that apply to land use developments and a description of the HEU's compliance with those policies and supplementing policies.

Table 4.6-9
San Diego Forward Applicable Policies

San Diego Forward Policy	Description of Project Compliance
Focus growth in areas that are already urbanized, allowing the region to set aside and restore more open space in our less developed areas.	All proposed development is within the incorporated area already serviced by existing transportation and utility systems.
Support energy programs that promote sustainability.	As stated in Policy 3.12, "[c]ost effective energy-efficient housing, including the use of passive systems, will be encouraged within the City to decrease energy use." Additionally, all proposed development would be constructed to comply with the California Energy Code and CalGreen Code in effect at the time building plans are submitted.
Increase the supply and variety of housing types -- affordable for people of all ages and income levels in areas with frequent transit service and with access to a variety of services.	As stated in Goal 1 of the HEU, "the City will encourage a wide range of housing by location, type of unit, and price to meet the existing and future housing needs in the region and city. This goal includes policies aimed at including housing for a variety of income levels within the City in proximity to a variety of services. Some of the proposed sites include mixed use development.

As shown, the project would be consistent with the applicable policies of the SCS and would promote the concepts and strategies of the SCS. However, due to the overall increase in VMT, transportation-related GHG emissions would be significant.

Energy and Water Emissions

Since the adoption of AB 32, State agencies have been developing various regulations to comply with the requirement to reduce GHG emissions to 1990 level by 2020. This includes the development of the California Green Building Code and revisions to the California Energy Code. The 2005 Energy Code only provided a 4 or 5 percent increase in energy efficiency over the previous codes. The 2008 update to the Energy Code achieved about a 30 percent improvement in energy efficiency over the 2005 Energy Code; the 2013 update achieves an average of 23 percent energy efficiency improvement over the 2008 Energy Code; and the 2016 update is anticipated to achieve an average 28 percent increase in energy efficiency over the 2013 Energy Code. The next Energy Code requirements are anticipated to require all residential structures to be net-zero energy demand, which would include provision of on- or off-site power generation for all proposed land uses. Compliance with current building regulations would achieve an approximate 46 percent in energy efficiency from 2005 and anything built under the 2016 Energy Code would likely achieve a 61 percent increase over the initial 2005 efficiency standards. However, precise energy reductions from future projects consistent with the HEU cannot be adequately quantified at this time. Given this uncertainty, energy-related GHG emissions would be significant at the program-level. Furthermore, while residential projects built after 2020 would be required to meet the net-zero energy standard, this would not ensure residential projects built prior to this requirement, would achieve the energy reductions required for post 2020 emissions reductions.

CalGreen requires water use reductions, including a minimum 20 percent reduction in indoor water use. This is achieved by specifying the flow rate of toilets, urinals, showerheads, and faucets. Similarly, outdoor water use is controlled and reduced through requirements for water efficient landscaping, soil/air moisture sensors, as well as flow rate controls on exterior faucets and hose bibs. Outdoor water use is also regulated locally through the City's Water Efficient Landscape Ordinance, which requires setting maximum use allowances and designing reduction measures as part of landscaping plans. Compliance with building regulations would ensure future projects include all necessary water efficiency measures in-line with the State regulatory programs for water reductions and energy efficiency standards. However, precise water reductions from future projects within the HEU area cannot be adequately quantified at this time. Given this uncertainty water-related GHG emissions would be significant at the program-level.

Area Sources

Area sources are groups of numerous small emission sources, which individually do not emit significant amounts of pollutants but together make an appreciable contribution to the emission inventory. Area sources associated with land use GHG emissions include hearths, i.e. wood-burning and natural fireplaces and heating-stoves, and equipment used in landscaping, e.g., lawn mowers, weed trimmers, chainsaws, etc.

Hearths are sources of GHG emissions and traditional fireplaces can also be energy inefficient as they create a poorly controlled opening in the building envelope. Currently, there are no regional or local regulations on fire places to reduce GHG emissions. CalGreen requires any installed fireplace to be a direct-vent sealed-combustion appliance and any wood-burning or wood pellet fueled appliance to meet EPA Tier II standards. Since 1988 the EPA has required wood-burning stoves and fireplace inserts sold in the U.S. to limit particulate emissions and increase the efficiency of the appliances. Currently these appliances emit approximately 90 percent less smoke than a traditional non-certified fireplace. The EPA also recommends considering using a wood-pellet burning stove, or a natural gas fireplace insert as an alternative to an EPA certified wood-burning stove of fireplace insert.

While the EPA recommendations are not specifically related to GHG emission reductions, the EPA states the requirements "reduce indoor and outdoor wood smoke pollution, including CO_2, CH_4 and black carbon. Thus, compliance with these regulations would reduce pollution and significantly increase the energy efficiency of the hearths that may be installed in future developments. Additionally, wood, or wood-pellets, fuel represent a biogenic and fuel-efficient heat source. While the inclusion of a natural gas fueled insert would not be biogenic as it would consume a fossil fuel, the efficiency of the natural gas appliances are much greater than the wood-burning technologies. Thus, while the inclusion of natural gas, wood-burning, or wood-pellet fueled fire places in future multiple-family homes would generate GHG emissions, due to the regulatory controls of these sources the emissions would be reduce to the maximum extent currently feasible, the GHG emissions from the these sources would be less than significant.

Small off-road engines (i.e. less than 25 horse power), such as those used in most landscape equipment are subject to emissions control standards under CCR Title 13, Division 3, Chapter 9, Off-Road Vehicles and Engines Pollution Control Device, Article 1, Small Off-Road Engines, these emission control requirements are intended to reduce emission of NO_X and PM but do not regulate the emission of GHGs. Because gasoline, or two-stoke, fueled engine use by future residents would generate GHG emission where no regulatory controls exist to require emissions reduction or significant increase in efficiency, the emissions from small engines associated with landscape maintenance would be significant.

Solid Waste Emissions

Solid waste is primarily limited to the emissions associated with decomposing garbage and other organic waste. Solid waste can be substantial sources of GHG emissions. Currently there are statewide regulations requiring municipalities, commercial businesses, and multi-family residential developments to increase recycling and divert waste from landfills. As part of implementing reduction requirements, the City and EDCO disposal provide recycling and green waste recovery services to residents. This has assisted the City in meeting the statewide 50 percent reduction requirement. Additionally, under AB 341, commercial business and multi-family residential developments are required to increase recycling to divert waste from landfills. As future projects would be required to comply with this regulatory program developed to reduce GHG emissions from solid waste would be less than significant.

While buildout of the HEU would be based on market demand and is not actually anticipated to occur until 2030 or beyond, complying with the regulatory programs developed by the State

to reduce GHG emissions from waste, the HEU would continue to be in-line with achieving the 2030 and 2050 reduction goals as stated in EO S-03-05 and B-30-15.

4.6.5.2 Significance of Impacts

No scientific or regulatory consensus exists regarding what particular quantity of GHG emissions is considered significant, and there remains no applicable, adopted numeric threshold for assessing the significance of a project's emissions. Therefore, the numeric increase of GHG emissions by approximately 42,812 to 55,865 MT CO_2E annually, is not a sufficiently informative or reliable indicator of the significance of the project's GHG emissions. Therefore, as discussed, this analysis also considers compliance with regulatory programs intended to reduce GHG emissions in analyzing the significance of the HEU's GHG emissions.

Based on the analysis of the available regulatory programs, future development under the HEU would result in significant impacts due to transportation, energy, water use, and area sources as described above.

4.6.5.3 Mitigation Framework

The following mitigation measure would address the GHG emission impacts at the program-level.

GHG-1: Within six months of adopting the HEU, the City shall provide a revised land use plan to SANDAG to ensure that any revisions to the population and employment projections used in updating the SCS will accurately reflect anticipated growth due to the HEU.

Applications for future development of housing sites consistent with the HEU floating zone program shall be required to comply with the following mitigation framework:

GHG-2: Demonstrate compliance with CalGreen Tier II standards.

GHG-3: Multi-family residential development shall provide energy star appliances, including refrigerators, stoves, and dishwashers.

GHG-4: Include 1 electric vehicle charging station for every 50 parking spaces.

GHG-5: Demonstrate a 25 percent reduction in outdoor water use.

4.6.5.4 Significance After Mitigation

The provision of land use data would assist SANDAG in revising the housing forecasts; however, until the anticipated growth is included in the emission estimates of the SCS, impacts relative to conformance with the SCS would remain significant and unavoidable.

In addition, while the proposed mitigation framework would reduce GHG emissions associated with future projects consistent with HEU, GHG emission reductions from future development

cannot be adequately quantified at this time, and this impact would be significant and unavoidable.

4.6.6 Issue 2: Policies, Plans, and Regulations Intended to Reduce GHG Emissions

Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

4.6.6.1 Impacts

The following analysis is based on the whether the proposed HEU and subsequent development would conflict with policies, plans, or regulations. Thus, the question is not whether the GHG emissions from future development would be controlled by regulations to the extent they are not considered significant, but rather would the HEU result in a conflict with a policy, plans, or regulations that would result in the policy, plan, or regulation not be implemented or creating a situation the goals of the plan, policy, or regulation could not be achieved.

EO S-3-05 and B-30-15 establish the GHG emission reduction policy of the Executive Branch for the State, and AB 32 codified the 2020 goal of EO S-3-05 and launched the Climate Change Scoping Plan (CARB 2008) that outlined the reduction measures needed to reach these goals. Subsequent to the adoption of AB 32 and the development of the Scoping Plan, several levels of government have implemented regulatory programs to reduce GHG emissions. Several State agencies, including CARB, CEC, California Public Utilities Commission (CPUC), CalRecycle, Caltrans, CalFire, the Department of Water Resources, the Department of Food and Agriculture, and the Department of Goods and Services have developed regulatory and incentive programs to reduce GHG emissions. Policies related to Department of Food and Agriculture and CalFire are primarily related to the agriculture business and forest and rangeland management. Caltrans measures were limited to consideration of material selection and operational considerations. Thus, in order to determine whether or not the HEU would conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs, the project was analyzed to determine if it conflicted with regulations developed to reduce GHG and included in the State Scoping Plan and is summarized in Table 4.6-10. It should be noted that the measures identified in Table 4.6-10 are generally beyond the ability of the HEU or any future development to affect as many, such as RPS are implemented at the utility provider or the manufacture level. However, all measures included in the Scoping Plan and regulated by the agencies listed were included for completeness, regardless of whether or not the project could conflict with the regulation.

Table 4.6-10
Scoping Plan Regulatory Programs Implemented to Reduce GHG Emissions

State Agency	Regulatory Program	Description	Would the Project Conflict
CARB	Pavley I	Sets fleet-average GHG standards for new passenger vehicles, phasing in over 2009-2016. The emission reductions increase to 26 MMT CO_2E annually in 2020 as the GHG standards are fully implemented	No. As this requirement is applied at the point of sale the project would not conflict with the program nor block its implementation.
CARB	Diesel Anti-Idling	This regulation reduces the amount of diesel fuel used in California, saving 50 million gallons per year. Each gallon saved reduces climate change emissions by 0.01005 metric tons of CO_2 (MT CO_2E).	No, the project would not conflict with the program nor block its implementation.
CARB	Tire Pressure Program	Requires specified automobile servicing businesses to ensure proper tire inflation at the time of service, as well as public education about proper tire inflation.	No, the project would not conflict with the program nor block its implementation.
CARB	Goods Movement (Drayage Trucks)	This regulation requires the reduction of GHG, diesel particulate matter (PM), and oxides of nitrogen (NOx) emissions from drayage trucks operating at, or transporting cargos to or from, California's ports and intermodal rail yards through retrofits, and fleet turnover of pre-1994 trucks.	No, the project would not conflict with the program nor block its implementation.
CARB	Ship Electrification	This regulation requires most container, passenger, and refrigerated cargo ships to shut off their auxiliary engines while at dock and receive power from the electrical grid, or reduce their emissions by a similar amount via the implementation of other technologies.	No, the project would affect and port operations and would not conflict with the program nor block its implementation.
CARB	Reduction of Refrigerant Emissions from Non-Professional Services	This regulation requires a self-sealing valve on small cans of refrigerant, and a deposit and recycling program for the cans.	No, the project would not conflict with the program nor block its implementation.
CARB	SF6 Limits in Non-Utility and Non-Semiconductor Applications	This regulation achieves GHG emission reductions from SF6 use in non-semiconductor and nonutility applications through a phase-out of use over several years.	No, the project would not conflict with the program nor block its implementation.
CARB	High Global Warming Potential GHG Reduction in Semiconductor Operations	This regulation requires semiconductor operations to use process optimization, alternative chemistries, and abatement technologies in combination or separately to reduce GHGs.	No, the project would not conflict with the program nor block its implementation.
CARB	Global Warming Potential Use in Consumer Products	This regulation sets Global Warming Potential (GWP) limits for compounds used in specific consumer products.	No, as this requirement is applied to at the point of sale the project would not conflict with the program nor block its implementation.
CARB	Refrigerant Management Program	This regulation requires facilities with large refrigeration systems with more than 50 pounds of high GWP refrigerant to conduct periodic leak inspections, promptly repair leaks, and keep service	No, the project would not include a high GWP source and thus would not conflict with the program nor block its implementation.

Table 4.6-10
Scoping Plan Regulatory Programs Implemented to Reduce GHG Emissions

State Agency	Regulatory Program	Description	Would the Project Conflict
		records on-site. These facilities are also required to register and submit annual refrigerant usage reports to ARB. This regulation also affects any person who installs, services, or disposes of any appliance using a high-GWP refrigerant; as well as refrigerant wholesalers, distributors, and reclaimers.	
CARB	SF6 Emission Reductions from Gas Insulated Switchgear	This regulation sets an annual emission rate limit for sulfur hexafluoride as a proportion of an entity's capacity of sulfur hexafluoride in gas-insulated switchgear.	No, the project would not conflict with the program nor block its implementation.
CARB	Landfill Methane	This regulation requires enhanced control of methane emissions from municipal solid waste landfills and requires owners and operators to install gas collection and control systems at smaller and other uncontrolled landfills.	No, the project would not conflict with the program nor block its implementation.
CARB	Low Carbon Fuel Standard	This regulation requires fuel providers in California to ensure that the mix of fuel they sell into the California market meets, on average, a declining standard for GHG emissions measured in CO_2 equivalent grams per energy unit of fuel sold.	No. As this requirement is applied to at the point of sale the project would not conflict with the program nor block its implementation.
CARB	Heavy-Duty Vehicle Aerodynamic Efficiency	This regulation reduces GHG emissions from long-haul tractors and 53-foot or longer dry-van and refrigerated-van trailers pulled by these tractors, by requiring them to be either U.S. Environmental Protection Agency SmartWay certified or retrofitted with SmartWay verified aerodynamic technologies and low rolling resistance tires.	No, the project would not conflict with the program nor block its implementation.
CARB	Medium- and Heavy- Duty Vehicle Hybridization	This incentive program reduces the GHG emissions of urban, stop-and-go vehicles, such as parcel delivery trucks and vans, utility trucks, garbage trucks, transit buses, and other vocational work trucks, through the use of hybrid and zero-emission technology.	No, the project would not conflict with the program nor block its implementation.
CEC	Specifications for New Supermarket Refrigeration	The measure sets minimum prescriptive standards for energy efficient refrigeration systems and for design and installation of leak-tight refrigeration systems, which will apply to new supermarket construction and new supermarket refrigeration installation beginning January 1, 2014. The measures have been added to the California Title 24 Building Standards Code, Part 6 (Energy Efficiency), and Part 11 (Green Building Standards Code).	No, all future development would comply with Title 24 and would not conflict with the program nor block its implementation.
CEC	Appliance Energy Efficiency	The Appliance Efficiency Regulations increase efficiency of appliances sold to	No. As this requirement is applied to at the point of sale

Table 4.6-10
Scoping Plan Regulatory Programs Implemented to Reduce GHG Emissions

State Agency	Regulatory Program	Description	Would the Project Conflict
	Standards	California consumers and businesses. Emission reductions result from energy-efficient appliances consuming less electricity and natural gas, avoiding emissions associated with electricity generation and natural gas combustion.	the project would not conflict with the program nor block its implementation.
CEC	Building Energy Efficiency Standards	The Building Energy Efficiency Standards are designed to increase the efficiency of all newly constructed residential and nonresidential buildings and additions and alterations to existing buildings in California. The strategy is to develop, implement, and enforce standards that require and result in reductions in energy and water use in buildings.	No, all future development would comply with Title 24 and would not conflict with the program nor block its implementation.
CEC	Comprehensive Publicly Owned Utility Customer Energy Efficiency Programs	The publicly owned utilities (POU) in California offer electricity efficiency (EE) programs to their ratepayers.	No, the project would not conflict with the program nor block its implementation.
CPUC	California Solar Initiative	SB1 established a $3 billion rebate program to support the deployment of 3,000 MW of distributed solar generation capacity statewide through 2016. The State has already exceed the 3,000 MW in January 2016.	While the project does not specifically call for solar generation requirements, it would not conflict with nor block the implementation of the program as its goals have been reached.
CPUC	California Solar Initiative – Thermal Program (Solar Water Heating)	The California Solar Initiative (CSI)-Thermal program offers incentives based on the amount of natural gas or electricity displaced by solar water heaters. Incentives are available for residential, multi-family and commercial applications.	While the project does not specifically call for solar generation requirements, it would not conflict with nor block the implementation of the program.
CPUC	Investor-Owned Utilities Energy Efficiency Programs	The program was developed for energy efficiency to reach residential (single family, and multi-family), commercial, industrial, and agricultural customers of investor-owned distribution utilities.	No, the project would not conflict with the program nor block its implementation.
CPUC	Renewables Portfolio Standard	The RPS program requires each retail seller to increase its total procurement of eligible renewable energy resources so that 33 percent of retail sales are served by eligible renewable energy resources no later than December 31, 2020. Recently the RPS was amended by SB 350, which requires each retail seller to increase its total procurement of eligible renewable energy resources so that 50 percent of retail sales are served by eligible renewable energy resources no later than December 31, 2030.	No, the project would not conflict with the program nor block its implementation.
DWR	End Use Water Conservation & Efficiency	Mandates a 20% reduction in statewide per capita urban water use by the year 2020. The Integrated Regional Water Management grant program includes a	No, the project would not conflict with the program nor block its implementation.

Table 4.6-10
Scoping Plan Regulatory Programs Implemented to Reduce GHG Emissions

State Agency	Regulatory Program	Description	Would the Project Conflict
		climate change standard which requires the consideration of water-related GHG emissions in regional water planning. In addition, Urban Water Management Plan guidelines recommend the inclusion of a climate change element that addresses water-related energy demand.	
CalRecycle	Statewide Recycling	CalRecycle provides assistance to local jurisdictions, businesses and the public with their recycling efforts. In 2013, a per-resident disposal rate of 4.3 pounds/resident/day was calculated using SB 1016's measurement system; the per-resident "diversion rate equivalent" was 65 percent.1 The Budget Act of 2014 authorized CalRecycle to issue grants that result in reduced greenhouse gas emissions. CalRecycle awarded $5 million for three fiber, plastic and glass recycling projects that increases the amount of material being landfilled, reduces greenhouse gases and focuses on infrastructure development.	No, the project would not conflict with the program nor block its implementation.

SOURCE: CalEPA 2015.

As discussed in Table 4.6-9, the HEU would not conflict with any State regulation to reduce GHG emissions; it would not conflict with the most applicable plan, i.e., the Scoping Plan, nor policies as codified in AB 32 and stated in EO S-3-05 and B-30-15. Additionally, implementation of mitigation measure GHG-1 through GHG-6 would further reduce GHG emissions from future development under the HEU. Therefore, the project would not conflict with any applicable policy, plan, or regulation intended to reduction GHG emissions and the impact to GHG reduction policies, plans, and regulations would be less than significant.

4.6.6.2 Significance of Impacts

As shown, the HEU would not conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs, and impacts would be less than significant.

4.7 Hazards and Hazardous Materials

Hazardous materials may have the potential to affect the environment or human health. This section analyzes potential environmental impacts related to development of future housing on a hazardous materials site; the routine transport, use, storage, or disposal of hazardous materials; the potential release of hazardous materials into the environment; and the potential to emit hazardous emissions or handle hazardous materials within one-quarter mile of a school. Additionally, this section of the PEIR addresses the potential for public safety impacts associated with conflicts with an adopted emergency response plan and wildland fire hazards. It is based on secondary source information from public hazardous materials databases, adopted fire hazard mapping, and the City of Encinitas Final Existing Conditions Report (2010).

4.7.1 Existing Conditions

4.7.1.1 Hazardous Materials, Transportation, Storage, Use and Disposal

Land uses in the project area that may handle or have handled or generated hazardous wastes include commercial, residential, and agricultural uses. Generally, the developed housing sites have supported commercial office, retail, restaurants, civic, and residential uses with little potential to handle or generate substantial amounts of hazardous materials. Specific commercial uses on the housing sites include: surface parking lots, convenience stores, restaurants, specialty retailers, grocery stores, churches, a tennis club, motels, gas stations, professional offices, fast-food drive-thru restaurants, a recycling center, banks, and a preschool. Of these commercial uses, the current gas stations at housing sites ALT-2, C-7, OE-2, NE-1, and NE-7 have the potential for contamination resulting from current uses (e.g., leaking underground storage tanks). Environmental issues must also be considered in the redevelopment of former gas stations, such as the old service station at housing site C-1.

Encinitas has current and former agricultural areas scattered throughout the central and eastern portions of the City. These agricultural areas could have a potential risk of contamination from herbicides, pesticides, and fertilizer uses. Specifically, housing sites L-5 and L-6 have been identified as areas of current agricultural use (greenhouses).

Finally, household hazardous waste may be generated by residential uses throughout the project area. Household hazardous waste is any product labeled: toxic, poison, corrosive, flammable, combustible or irritant that is disposed of. Hazardous materials, used in many household products (such as drain cleaners, waste oil, cleaning fluids, insecticides, and car

batteries), are often improperly disposed of as part of normal household trash. These hazardous materials can interact with other chemicals to create risks to people or cause soil and groundwater contamination.

4.7.1.2 Known Hazardous Materials Sites

a. Hazardous Waste and Substances Sites (EnviroStor Database)

The State of California Hazardous Waste and Substances Site List (also known as the Cortese List) is a planning document used by State and local agencies to comply with CEQA requirements in providing information about the location of hazardous materials sites. The California Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List, through its EnviroStor database of sites listed pursuant to Section 25256 of the Health and Safety Code. This includes a listing of hazardous substance release sites selected for, and subject to, a response action. EnviroStor must update the list of sites at least annually to reflect new information regarding previously listed sites or the addition of new sites requiring a response action.

b. Underground Storage Tanks (GeoTracker Database)

The GeoTracker database is the State Water Resources Control Board (SWRCB; 2015) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (leaking underground storage tanks [LUSTs], Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating underground storage tanks (USTs) and land disposal sites.

LUSTs are a significant source of petroleum impacts to groundwater and can also result in potential threats to health and safety. The SWRCB records soil and/or groundwater contamination caused by LUSTs in its GeoTracker database.

c. Database Search Results

An environmental database record search was completed for the housing sites and surrounding properties. Using the EnviroStor and GeoTracker databases, a total of 36 potential hazardous materials locations were identified within a 1/8-mile radius of the housing sites, as shown in Table 4.7-1. For the GeoTracker database, 35 of the 36 have a "Completed–Case Closed" status. Dry Clean 4 Less, located at 199 N. El Camino Real (NE-3), is an Open Cleanup Program Site investigating a possible contamination of Tetrachloroethylene (PCE). A review of the Cortese List also was completed (refer to Section 4.7.2.2). There are no hazardous materials sites in the City of Encinitas included on the Cortese List (DTSC 2015).

Table 4.7-1
Listed Hazardous Materials Sites

Housing Site	EnviroStor Database	GeoTracker database
ALT-2 510–1900 North Coast Highway 101, Encinitas, CA 92024	None	5-Unit Residential Property - Case Closed 1865 North Vulcan Avenue, Encinitas, CA 92024 Cleanup Program Site: None specified ARCO - Case Closed 1766 N. Highway 101, Encinitas, CA 92024 LUST Cleanup Site: None specified Leucadia Auto Body - Case Closed 1508 N. Highway 101, Encinitas, CA 92024 Cleanup Program Site: Stoddard solvent, mineral spirits, distillates Art Woldenga and/or Joe Stix - Case Closed 1508 N. Highway 101, Encinitas, CA 92024 LUST Cleanup Site: Waste oil, motor, hydraulic, lubricating 7-Eleven Food Store - Case Closed 102 Leucadia Blvd., Encinitas, CA 92024-1714 LUST Cleanup Site: Gasoline Neighborhood Market - Case Closed 1144 Highway 101, Encinitas, CA 92024-1421 Cleanup Program Site: None specified
ALT-3 141–215 South Camino Real, Encinitas, CA 92024	None	Village Cleaners - Case Closed 127 El Camino Real, Encinitas, CA 92024 Cleanup Program Site: Chlorinated hydrocarbons Herman Cook Volkswagen Inc. - Case Closed 1435 Encinitas Blvd., Encinitas, CA 92024 Cleanup Program Site: None specified Encinitas Car Wash - Case Closed 293 El Camino Real, Encinitas, CA 92024 LUST Cleanup Site: Gasoline Shell Station - Case Closed 1355 Encinitas Boulevard, Encinitas, CA 92024 Cleanup Program Site: Gasoline Encinitas Burn Site - Closed with monitoring as of 10/2006 100 El Camino Real, Encinitas, CA 92024 Land Disposal Site: Copper, lead, polynuclear aromatic hydrocarbons (PAHS) Encinitas Ford - Case Closed 1424 Encinitas Boulevard, Encinitas, CA 92024 LUST Cleanup Site: Waste oil, motor, hydraulic, lubricating
ALT-5 185–225 Quail Gardens Drive, Encinitas, CA 92024	None	Cam-Mar Growers, Inc. - Case Closed 185 Quail Gardens Dr., Encinitas, CA 92024 LUST Cleanup Site
ALT-6 315 – 587 South	None	Don Hubbard Contracting Co. - Case Closed 46 Encinitas Boulevard, Encinitas, CA 92024

Table 4.7-1
Listed Hazardous Materials Sites

Housing Site	EnviroStor Database	GeoTracker database
Coast Highway 101, Encinitas, CA 92024		LUST Cleanup Site: None specified Alba Honda - Case Closed 111 C Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel Discount Auto Service - Case Closed 710 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel Redsand - Case Closed 687 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel
ALT-7 315-1205 South Coast Highway 101, Encinitas, CA 92024	None	Don Hubbard Contracting Co. - Case Closed 46 Encinitas Boulevard, Encinitas, CA 92024 LUST Cleanup Site: None specified Alba Honda - Case Closed 111 C Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel Discount Auto Service - Case Closed 710 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel Redsand - Case Closed 687 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel L & V Industrial Supply Inc. - Case Closed 1131 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Gasoline San Dieguito Towing - Case Closed 1205 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Gasoline
C-1 411–481 Santa Fe Drive, Encinitas, CA 92024	Hall Property Community Park. 425 Santa Fe Dr. Encinitas, CA 92024. Cleanup Program Site: Open Site Assessment.	76 Gas Station - Case Closed 411 Santa Fe Dr. Encinitas, CA 92024-5134 Cleanup Program Site: Gasoline, waste oil, hydraulic, lubricating 76 Gas Station - Case Closed 411 Santa Fe Dr., Encinitas, CA 92024-5134 LUST Cleanup Site: Gasoline Shell/Crane Diversified RTLRS - Case Closed 510 Santa Fe Dr., Encinitas, CA 92024 Cleanup Program Site: Gasoline Scripps Memorial Hospital - Case Closed 354 Santa Fe Dr., Encinitas, CA 92024 LUST Cleanup Site: Diesel
C-2 735 – 875 Santa Fe Drive, Encinitas, CA 92024	None	76 Gas Station - Case Closed 411 Santa Fe Dr., Encinitas, CA 92024-5134 Cleanup Program Site: None specified.
C-3 102-154 Aberdeen	None	7-Eleven Food Store - Case Closed 2211 San Elijo Ave., Cardiff, CA 92007-1923

Table 4.7-1
Listed Hazardous Materials Sites

Housing Site	EnviroStor Database	GeoTracker database
Drive and 2011-2121 San Elijo Avenue Cardiff, CA 92007		LUST Cleanup Site: Gasoline 7-Eleven - Case Closed 2009 Newcastle Rd, Cardiff, CA 92007-1724 LUST Cleanup Site: Gasoline
C-7 2211 San Elijo Avenue Cardiff, CA 92007	None	7-Eleven Food Store - Case Closed 2211 San Elijo Avenue, Cardiff, CA 92007-1923 LUST Cleanup Site: Gasoline
CBHMG-1 601 Santa Fe Drive, Encinitas, CA 92024.	None	Shell/Crane Diversified RTLRS - Case Closed 510 Santa Fe Dr., Encinitas, CA 92024 Cleanup Program Site: Gasoline 76 Gas Station - Case Closed 411 Santa Fe Dr. Encinitas, CA 92024-5134 Cleanup Program Site: None specified
L-1 1444-1578 North Coast Highway 101, Encinitas, CA 92024		Art Woldenga and/or Joe Stix - Case Closed 1508 N. Highway 101, Encinitas, CA 92024 LUST Cleanup Site: Waste oil, motor, hydraulic, lubricating Leucadia Auto Body - Case Closed 1508 N. Highway 101, Encinitas, CA 92024 Cleanup Program Site: Stoddard solvent, mineral spirits, distillates
L-2 1034 – 1160 North Coast Highway 101, Encinitas, CA 92024	None	Neighborhood Market - Case Closed 1144 Highway 101, Encinitas, CA 92024-1421 Cleanup Program Site: None specified; LUST Cleanup Site: Gasoline
L-4 825–837 Orpheus Avenue, Encinitas, CA 92024	None	Texaco Refining & Marketing - Case Closed 905 Orpheus Ave., Encinitas, CA 92024 Cleanup Program Site: Gasoline, waste oil, motor, hydraulic, lubricating, diesel Shell - Case Closed 865 Orpheus Ave, Encinitas, CA 92024 LUST Cleanup Site: Gasoline Encinitas Fire District - Case Closed 801 Orpheus Ave., Encinitas, CA 92024 Cleanup Program Site: Gasoline
NE-3 137 North El Camino Real, Encinitas, CA 92024	None	Frontier Cleaners - Case Closed 170 North El Camino Real, Encinitas, CA 92024 Cleanup Program Site: Chlorinated hydrocarbons Dry Clean 4 Less - **Open** 199 North El Camino Real, Encinitas, CA 92024 Cleanup Program Site: Tetrachloroethylene (PCE)
NE-4 105–131 North El Camino Real, Encinitas, CA 92024	None	Dry Clean 4 Less - **Open** 199 North El Camino Real, Encinitas, CA 92024 Cleanup Program Site: Tetrachloroethylene (PCE) County of San Diego/Encinitas Road Station -

Table 4.7-1
Listed Hazardous Materials Sites

Housing Site	EnviroStor Database	GeoTracker database
		Case Closed 135 North El Camino Real, Encinitas, CA 92024 LUST Cleanup Site: None specified Encinitas Burn Site - Closed with monitoring as of 10/2006 100 El Camino Real, Encinitas, CA 92024 Land Disposal Site: Copper, lead, polynuclear aromatic hydrocarbons (PAHS) Village Cleaners - Case Closed 127 El Camino Real, Encinitas, CA 92024 Cleanup Program Site: Chlorinated hydrocarbons Shell Station - Case Closed 1355 Encinitas Boulevard, Encinitas, CA 92024 Cleanup Program Site: Gasoline Rosanos 76 - Case Closed 236 North El Camino Real, Encinitas, CA 92024 LUST Cleanup Site: Gasoline Herman Cook Volkswagen Inc. - Case Closed 1435 Encinitas Blvd., Encinitas, CA 92024 Cleanup Program Site: None specified Encinitas Ford - Case Closed 1424 Encinitas Boulevard, Encinitas, CA 92024 LUST Cleanup Site: Waste oil, motor, hydraulic, lubricating
NE-7 1271-1355 Encinitas Boulevard, Encinitas, CA 92024	None	County of San Diego/Encinitas Road Station - Case Closed 135 North El Camino Real, Encinitas, CA 92024 LUST Cleanup Site: None specified Encinitas Burn Site - Closed with monitoring as of 10/2006 100 El Camino Real, Encinitas, CA 92024 Land Disposal Site: Copper, lead, polynuclear aromatic hydrocarbons (PAHS). Encinitas Ford - Case Closed 1424 Encinitas Boulevard, Encinitas, CA 92024 LUST Cleanup Site: Waste oil, motor, hydraulic, lubricating Shell Station - Case Closed 1355 Encinitas Boulevard, Encinitas, CA 92024 Cleanup Program Site: Gasoline Village Cleaners - Case Closed 127 El Camino Real, Encinitas, CA 92024 Cleanup Program Site: Chlorinated hydrocarbons Herman Cook Volkswagen Inc. - Case Closed 1435 Encinitas Blvd., Encinitas, CA 92024 Cleanup Program Site: None specified Harloff BMW - Case Closed 1302 Encinitas Boulevard, Encinitas, CA 92024

Table 4.7-1
Listed Hazardous Materials Sites

Housing Site	EnviroStor Database	GeoTracker database
		LUST Cleanup Site: None specified. Encinitas Car Wash - Case Closed 293 El Camino Real, Encinitas, CA 92024 LUST Cleanup Site: Gasoline
OE-1 345 – 369 Third Street and 364 – 371 C Street, Encinitas, CA 92024	None	Alba Honda - Case Closed 111 C Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel
OE-2 102–154 Encinitas Boulevard, Encinitas, CA 92024	None	Encinitas Cleaners - Case Closed 130 Encinitas Blvd., Encinitas, CA 92024 Cleanup Program Site: Chlorinated hydrocarbons Shell - Case Closed 160 Encinitas Blvd., Encinitas, CA 92024 LUST Cleanup Site: Gasoline
OE-4 505 South Vulcan Avenue, Encinitas, CA, 92024	None	Redsand- Case Closed 687 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel
OE-5 701–1205 South Coast Highway 101, Encinitas, CA 92024	None	L & V Industrial Supply Inc. - Case Closed 1131 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Gasoline San Dieguito Towing - Case Closed 1205 1st St, Encinitas, CA 92024 LUST Cleanup Site: Gasoline Redsand - Case Closed 687 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel Discount Auto Service - Case Closed 710 1st Street, Encinitas, CA 92024 LUST Cleanup Site: Diesel
OE-7 696 Encinitas Blvd., Encinitas, CA 92024	None	Erwin Mojonnier - Case Closed 201 Quail Dr., Encinitas, CA 92024 Cleanup Program Site: None specified Cam-Mar Growers, Inc. - Case Closed 185 Quail Gardens Dr., Encinitas, CA 92024 LUST Cleanup Site: None Specified

SOURCE: DTSC EnviroStor (2015) and SWRCB GeoTracker databases (2015). Accessed September 14, 2015.

The project area contains one site listed in the EnviroStor database, Hall Property Community Park, at 425 Santa Fe Drive, which is located directly to the south of housing site C-1. This site was listed as a "local agency investigation" as of May 2004. The site consists of 43 acres of property, which has historically been used for agricultural purposes. Several different pesticides have been identified in the shallow subsurface soil. There is the potential for Chlordane, DDD/DDE/DDT, Endrin, Other Insecticides/Pesticide/Fumigants/

Herbicides, and Toxaphene. The City of Encinitas implemented and completed a remediation plan for contaminated soils, prior to the development of a park at this site.

Housing site NE-3 also is the site of a former landfill. The site is identified in the database as the Encinitas Burn Site, located at 100 El Camino Real[1], and is listed as Open (Closed with monitoring as of 10/2006). The Encinitas Burn Site was a Land Disposal Site investigating copper, lead, and polynuclear aromatic hydrocarbons (PAHS) contaminations. The site has been remediated and capped; however, it was not remediated to a standard permissible for future residential development.

No Federal Superfund Sites, Voluntary Cleanup Sites, School Cleanup Sites, Permitted–Operating Sites, Post-Closure Permitted Sites, Historical Non-Operating Sites, or Tiered Permit Sites were found during the preliminary review of publicly available records.

d. Older Structures

Hazardous materials are commonly found in the building materials of structures, including residential structures, built prior to approximately 1978. Buildings constructed prior to 1978 potentially contain hazardous building materials such as asbestos-containing materials (ACMs), lead containing surfaces (LCSs) including lead-based paint (LBP), and other toxic materials such as mercury, polychlorinated biphenyls (PCBs) and Freon. The project area includes some structures that were built prior to 1978.

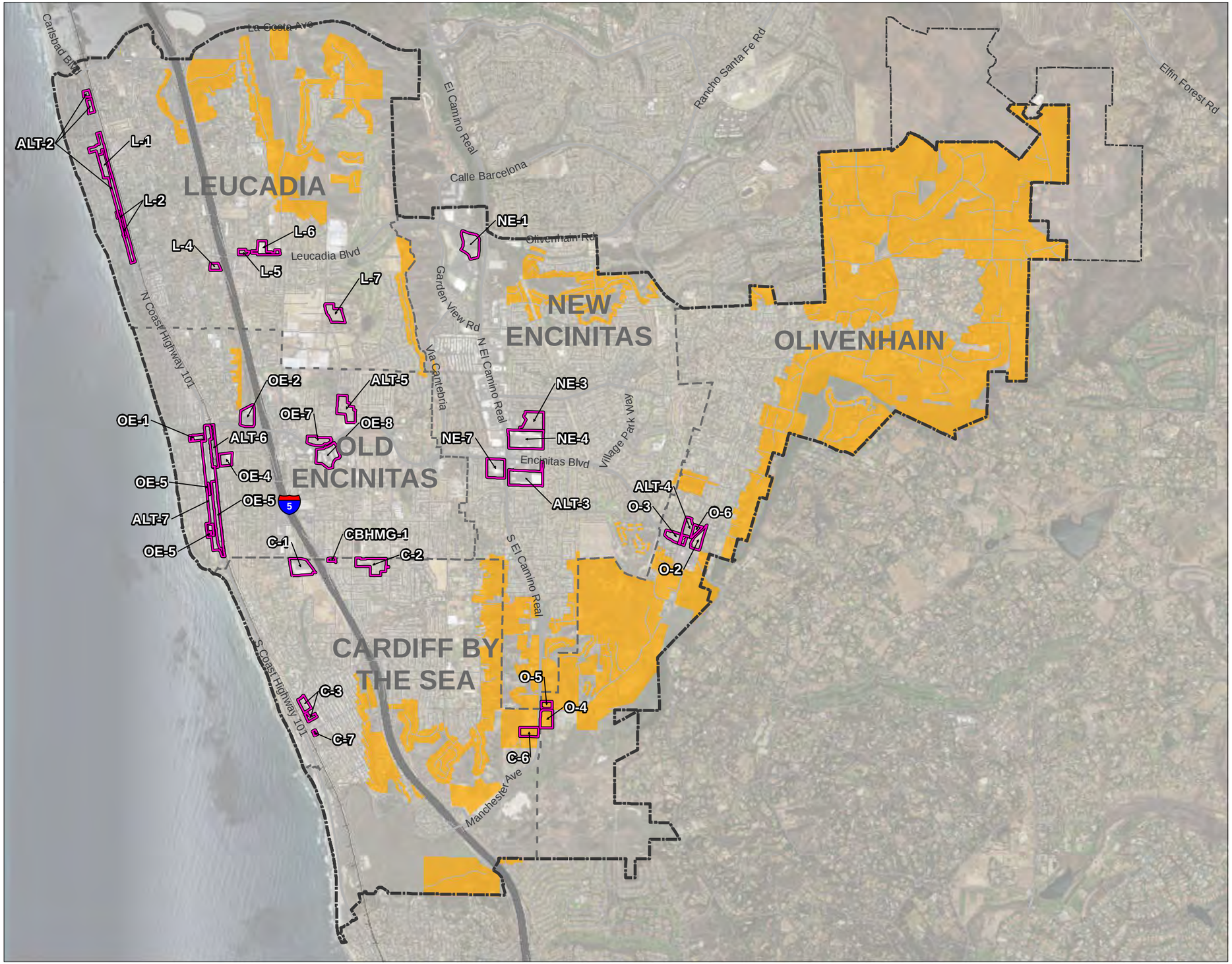
4.7.1.3 Wildland Fire Hazards

The potential for wildland fires represents a hazard where development is adjacent to open space or within close proximity to wildland fuels. Steep hillsides and varied topography within portions of the City also contribute to the risk of wildland fires. The geographic extent of the wildland-urban interface fire hazard in the City of Encinitas includes Saxony Canyon, South El Camino Real/Crest Drive, and Olivenhain; other smaller areas of the City near open space and canyons containing heavy fuel loads are also susceptible to wildland fire risk. The most major fire that has occurred in the City within the last 25 years includes the Harmony Grove Fire in 1996. The fire started near Harmony Grove Road, west of Escondido, and burned almost to Batiquitos Lagoon in Carlsbad. Only a small section of the fire was in Encinitas and the City's Sphere of Influence. Most of the fire was in Carlsbad, San Marcos, and Escondido. The fire destroyed more than 120 homes and burned 8,600 acres total.

The City has adopted a Very High Fire Hazard Severity Zone (VHFHSZ) Map for its Local Responsibility Area (LRA) as illustrated on Figure 4.7-1. Properties within this zone and other smaller areas are susceptible to wildfire because they are situated near open space and canyons containing heavy fuel loads. Housing sites C-6, O-4, and O-5 have been identified for potential

[1]This address reflects the nearest cross streets according to the data base records; however, the listed site is actually located on housing site NE-3.

Image source: USDA FSA (flown June 2014)



City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites
Very High Fire Hazard Severity Zone

0 Miles 0.5

FIGURE 4.7-1

Very High Fire Hazard Severity Zone

RECON

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fire hazards. Sites OE-2 and O-2 are adjacent to, but not within the VHFHSZ (see Figure 4.7-1).

4.7.2 Regulatory Framework

4.7.2.1 Federal

Numerous Federal, State, and local laws and regulations regarding hazardous materials have been developed with the intent of protecting public health, the environment, surface water, and groundwater resources. Over the years, the laws and regulations have evolved to deal with different aspects of the handling, treatment, storage, and disposal of hazardous substances. Applicable regulatory agencies have also kept records on hazardous materials storage, use, and disposal, and make these lists publicly available. The most relevant Federal, State, and local regulations are described below.

a. Federal Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 is also known as "Superfund," and the Superfund Amendments and Reauthorization Act (SARA) of 1986 (amended CERCLA, SARA Title III). CERCLA, SARA Title III provides a Federal framework for setting priorities for cleanup of hazardous substances releases to air, water, and land. This framework provides for the regulation of the cleanup process, cost recovery, response planning, and communication standards.

b. Federal Resource Conservation and Recovery Act

The Federal Resource Conservation and Recovery Act (RCRA) of 1976 established the authority of the U.S. Environmental Protection Agency (U.S. EPA) to develop regulations to track and control hazardous substances from their production, through their use, to their disposal. The U.S. EPA has the authority under RCRA to authorize states to implement RCRA, and California is an RCRA authorized state. Title 40 California Code of Regulations (CCR), Part 290 establishes technical standards and corrective action requirements for owners and operators of USTs under RCRA.

4.7.2.2 State

a. California EPA

The California EPA (Cal EPA) and the SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable State and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law

- Hazardous Substances Information and Training Act
- Underground Storage of Hazardous Substances Act

b. State Water Resources Control Board

The SWRCB maintains a data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (LUSTs, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

c. Department of Toxic Substances Control

Within Cal EPA, the DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law.

The DTSC regulates hazardous waste primarily under the authority of the Federal RCRA and Title 22 of the California Public Health and Safety Code. The DTSC regulates hazardous waste, maintains a public database (EnviroStor) of potentially contaminated properties (through its List and Hazardous Materials Division [HMD] database), cleans up existing contamination, and researches ways to reduce the hazardous waste produced in California.

The DTSC also maintains the Cortese List pursuant to Government Code Section 65962.5(a). Section 65962.5(a)(1) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: . . . (1) [a]ll hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code ("HSC")."

The hazardous_waste facilities identified in HSC Section 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC Section 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is a very small and specific subgroup of facilities.

d. California Hazardous Waste and Hazardous Substances Act

The California Hazardous Waste and Hazardous Substance Act is intended to protect the public health and the environment and to regulate hazardous waste generation and hazardous waste management practices (DTSC 2014).

e. Health and Safety Code and Occupational Safety and Health Administration

The California HSC is the collection of State laws that govern the handling of hazardous waste, corrective action (remediation), and permitted facilities. Chapter 6.7 of the HSC outlines the requirements for USTs, identifies requirements for corrective actions, cleanup funds, liability, and the responsibilities of owners and operators of USTs. Consistent with the HSC, USTs are monitored annually by County of San Diego's Department of Environmental Health (DEH) and their removal and remediation of any associated contamination is regulated through a required regulatory oversight process. The LUST Information System maintained by the SWRCB is available to determine if LUSTs have been reported within or near a specified property. For the purposes of environmental analysis, the HSC requirements are considered self-mitigating for USTs and LUSTs.

The California Occupational Safety and Health Administration, or Cal-OSHA, defines and enforces worker safety standards and requires proper handling and disposal of hazardous materials including ACMs and LCS according to OSHA and EPA regulations. The OSHA/EPA Occupational Chemical Database compiles information from several government agencies and organizations. This database provides reports on physical properties, exposure guidelines, and emergency response information, including the U.S. Department of Transportation (DOT) emergency response guide.

f. 2013 California Fire Code

The 2013 California Fire Code establishes the minimum requirements consistent with best practices to safeguard public health and safety from fire and explosive hazards and dangerous conditions in new and existing development throughout California.

Jurisdictions may choose to adopt the 2013 California Fire Code as an enforceable set of regulations for safeguarding life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, material and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises. Title 10 of the City's Municipal Code adopts the 2013 California Fire Code.

g. Fire Hazard Severity Zones

To assist each fire agency in addressing its responsibility area, California Department of Forestry and Fire (CAL FIRE) uses a severity classification system to identify areas or zones of severity for fire hazards within the State. CAL FIRE is required to map these zones for State Responsibility Areas and identify VHFHSZ for LRAs. In January 2008, CAL FIRE updated these Fire Hazard Severity Zone maps to reflect revised VHFHSZ for LRAs throughout the State.

Fire Hazard Severity Zone maps identify moderate, high, and very high hazard severity zones using a science-based and field-tested computer model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Factors considered

include fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. The maps are used to:

- Implement wildland–urban interface building standards;
- Create property development standards such as road widths, water supply, and signage for use in general plans;
- Establish defensible space clearance requirements around buildings; and
- Provide natural hazard real estate disclosure at time of sale.

Government Code Section 51179 states, "A local agency shall designate, by ordinance, very high fire hazard severity zones in its jurisdiction…" The City has adopted VHFHSZ Maps, consistent with State code, as previously illustrated on Figure 4.7-1.

Senate Bill 1241 requires local jurisdictions to update their Safety Element with information, goals, and policies relating to wildland fire protection upon the next revision of their Housing Element after January 1, 2014.

h. California Environmental Quality Act

Under the CEQA Guidelines Article 19, Categorical Exemptions, Section 15300.2(e) applies to hazard waste sites. "A categorical exemption shall not be used for a project located on a site, which is included on any list compiled pursuant to Section 65962.5 of the Government Code." Therefore, even if a project were otherwise qualified for an infill exemption (15332) or New Construction or Conversion of Small Structures exemption (15303), etc., it would not be exempt from CEQA if located on a listed hazardous waste site, and the lead agency would be required to prepare a Negative Declaration or EIR.

4.7.2.3 Local

a. County of San Diego Department of Environmental Health

HMD is one of the four divisions of the DEH. HMD is the Certified Unified Program Agency (CUPA) for San Diego County responsible for regulating hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, USTs, aboveground petroleum storage, and risk management plans. The HUD administers the Site Assessment and Mitigation (SAM) program. The goal of the SAM program is to protect public health and the environment from releases of contaminants by providing oversight of assessments and cleanups in accordance with the California Health and Safety Code and the CCR. A key program of SAM is property redevelopment and "brownfields," a term which refers to real property including the expansion, redevelopment, or reuse of property which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Contaminated sites are regulated by Federal and State law as described above.

b. County of San Diego Office of Emergency Services

The County of San Diego Office of Emergency Services (OES) coordinates the overall county response to disasters. OES is responsible for notifying appropriate agencies when a disaster occurs; coordinating all responding agencies; ensuring resources are available and mobilized; developing plans and procedures for response to and recovery from disasters; and developing and providing preparedness materials for the public.

OES staffs the Operational Area Emergency Operations Center, a central facility that provides regional coordinated emergency response, and also acts as staff to the Unified Disaster Council (UDC), its governing body. The UDC, established through a joint powers agreement among all 18 incorporated cities and the County of San Diego, provides for coordination of plans and programs countywide to ensure protection of life and property.

c. Multi-Jurisdictional Hazard Mitigation Plan

In 2010, the County and 18 local jurisdictions, including the City of Encinitas, adopted the Multi-Jurisdictional Hazard Mitigation Plan (MHMP). The MHMP is a countywide plan that identifies risks and ways to minimize damage by natural and manmade disasters. The MHMP is a comprehensive document that serves many purposes, including creating a decision tool for management, promoting compliance with State and Federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination.

The City of Encinitas identified the following hazards within the MHMP, based on their probability and potential impact:

- **Earthquake** – Addressed in Section 4.5.
- **Wildfire** – A significant number of Encinitas residents live within the wildland-urban interface. The geographic extent of this hazard includes the following areas of the city, for the most part: (1) Saxony Canyon; (2) South El Camino Real/Crest Drive; and (3) Olivenhain.
- **Dam Failure** – Addressed in Section 4.8.
- **Coastal Bluff Failures** – Not Applicable to Housing Sites.
- **Flooding** – Addressed in Section 4.8.
- **Hazardous Materials** – One major freeway (Interstate 5), one railway, and a major liquefied petroleum transmission pipeline pass through the community.

The City of Encinitas's specific hazard mitigation goals, objectives, and related potential actions for wildfire, dam failure, and hazardous materials are included in the MHMP (County of San Diego Office of Emergency Services and Unified Disaster Council 2010).

d. Municipal Code

Toxic Materials, Fire, and Explosion Hazards

Section 30.40.010 of the City of Encinitas Municipal Code, requires that "All storage, use, transportation and disposal of toxic, flammable, or explosive materials shall be performed in compliance with the California Hazardous Substance Act and in accordance with guidelines issued by the County of San Diego Department of Health Services, Hazardous Materials Division on Hazardous Waste Requirements. All activities involving toxic, flammable, or explosive materials shall be provided and conducted with adequate safety and fire suppression devices as specified by the Fire District and per the City's adopted fire code."

Fire Code

Title 10 of the Municipal Code provides regulations regarding fire prevention in the City and adopts the California Fire Code. The Fire Hazard Severity Zone map is adopted through City Code Chapter 10.02 – Fire Map and is used by several City departments for hazard planning, mitigation and response, land use planning, and in the development review process.

Landscape/Brush Management Regulations

The California Fire Code Title 19, Division 1, Section 3.07(b) requires that a distance of not less than 30 feet be kept clear of all flammable vegetation or combustible growth around all buildings and structures. If conditions are considered a high fire danger, a distance of 30 feet to 100 feet should be kept clear of all bush, flammable vegetation, or combustible growth around all buildings and structures.

The City of Encinitas Design Guidelines (2005) contain landscape guidelines intended to maintain the landscape character of the City. Guideline 7.3.17 indicates that fire retardant/resistant plants shall be used when consistent with fire standards in areas adjacent to natural open space areas and/or fire sensitive areas.

e. City of Encinitas Emergency Response

The Encinitas Fire and Marine Services Department provides emergency response throughout the City. As discussed in Section 4.12, the national standard adopted by the National Fire Protection Association requires an initial response within 6 minutes and 20 seconds (90 percent of the time). In 2014, the Encinitas Fire and Marine Services Department's average response time for the City as a whole was 4 minutes and 35 seconds. The Department responded to 75 percent of all calls in under 5 minutes, 27 seconds; and 90 percent of all calls in under 6 minutes, 37 seconds. Although the City has no adopted emergency response plan, the Encinitas Fire Department is re-evaluating its response time goal to align it with current industry standards. The Department of Fire and Marine Safety provides information on emergency preparedness, including evacuation routes in the event of tsunami or wildland fire. The Encinitas Tsunami Hazard Map shows the evacuation

routes in the northern and southern extents of the tsunami hazard zone. These routes primarily run north–south out of the hazard zones, and east in the northern tsunami hazard zone. The Fire Approaches and Evacuation Routes map depicts the many evacuation routes for fires approaching from the northeast, south, or east.

f. General Plan/Local Coastal Program

There is an important relationship between land use planning and the reduction of potential hazards. Certain considerations need to be given when development is proposed in areas subject to environmental constraints that could result in loss of life, personal injury, or property damage. In addition, physical design controls are key in providing protection against a number of potential hazards. Policies related to building design and site planning provide a basis for the development of specific guidelines and regulations that are effective in reducing the damaging effects of natural and human-caused disasters. City of Encinitas General Plan goals and policies related to hazards are listed in Table 4.7-2.

Table 4.7-2
Goals and Policies Related to Hazards

Goal/Policy	Description
City of Encinitas General Plan Resource Management Element	
13.1	The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring. (Coastal Act/ 30250)
City of Encinitas General Plan Public Safety Element	
Goal 1	Public health and safety will be considered in future]Land Use Planning (Coastal Act/ 30253)
1.9	Adequate safety service levels shall be maintained and provided for by new development.
1.10	The public safety program shall provide for a response plan that strives to reduce life and property losses through technology, education, training, facilities and equipment.
1.11	The public safety system shall provide standards and levels of service guidelines that assure a quality of life and protection of life and property from preventable losses.
1.13	In areas identified as susceptible to brush or wildfire hazard, the City shall provide for construction standards to reduce structural susceptibility and increase protection. Brush clearance around structures for fire safety shall not exceed a 30-foot perimeter in areas of native or significant brush, and as provided by Resource Management Policy 10. 1.
1.17	In order to protect the health and safety of the residents of Encinitas and surrounding communities, the City shall control the development of hazardous waste facilities as required in Chapter 30. 57 of the Municipal Code. The City shall also participate in programs to reduce the amounts of hazardous wastes being generated in the San Diego region, as provided in the adopted San Diego County Hazardous Waste Management Plan.

Table 4.7-2 Goals and Policies Related to Hazards	
Goal/Policy	Description
Goal 2	The City of Encinitas will make an effort to minimize potential hazards to public health, safety, and welfare and to prevent the loss of life and damage to health and property resulting from both natural and man- made phenomena.
2.1	The City will cooperate with and support in every way possible current Federal, State, and County agencies responsible for the enforcement of health, safety, and environmental laws.
2.2	Implement an emergency preparedness program (referenced by the State as a Multihazard Function Plan) to ensure that emergency shelters and emergency evacuation and response routes are provided and clearly identified.
2.4	Setbacks, easements, and accesses, necessary to assure that emergency services can function with available equipment, shall be required and maintained.
2.5	Emergency equipment response routes and evacuation procedures shall be defined and provided for.
Goal 3	The City will make every effort to ensure that all City residents and workers are protected from exposure to hazardous materials and wastes and the transport of such materials.
3.1	Cooperate with the enforcement of disclosure laws requiring all users, producers, and transporters of hazardous materials and wastes to clearly identify such materials at the site and to notify the appropriate local County, State and/ or Federal agencies in the event of a violation.
3.2	Restrict the transport of hazardous materials to identified truck routes as established by an implementing policy.
3.3	Cooperate with the railroads to ensure that hazardous materials transported by rail through the City do not present a threat to life or property in Encinitas.
3.4	Land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials will be located a safe distance from land uses that may be adversely impacted by such activities. (Coastal Act/ 30250)
3.5	Commercial and industrial facilities shall be required to participate in a hazardous materials and wastes mitigation and response program.
3.6	The City shall cooperate with the efforts of the County Department of Health, Hazardous Waste Management Division to inventory and properly regulate land uses involving hazardous wastes and materials.
City of Encinitas General Plan Circulation Element	
1.1	Ensure that the arterial circulation system provides adequate connections across the freeway for convenient circulation and rapid emergency access.
1.13	Emergency response routes shall be identified as a basis for implementing an Opticon or other traffic signal control system designed to reduce emergency vehicle response time.
City of Encinitas General Plan Housing Element	
3.1	Where determined to be dangerous to the public health and safety, substandard units in the City shall be repaired so that they will comply with the applicable building, safety and housing codes. When compliance through repair is not of cannot be achieved, abatement of substandard units shall be achieved.
SOURCE: City of Encinitas 1989, amended.	

4.7.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to hazards and hazardous materials would be significant if the project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment;

5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

6. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas, within brush fire management zones, or where residences are intermixed with wildlands.

As the project would have no impact related to airport hazards, this topic is covered in Chapter 8, Effects Found Not to be Significant.

4.7.4 Methodology

4.7.4.1 Sources

A review of secondary sources, including published hazardous materials databases, was conducted to determine potential hazards and hazardous materials present at the housing sites. The review included: (1) the EnviroStor database; (2) the GeoTracker database; (3) the VHFHSZ Map; and (4) Federal, State, and local regulations. No site-specific surveys were conducted; instead, analysis relied on the use of existing information. The evaluation of the potential for future development consistent with the HEU floating zone to cause a substantial adverse change with respect to hazards or hazardous materials was based on Appendix G of the CEQA Guidelines.

4.7.4.2 Future Project Implementation

As noted previously in this chapter, future development on housing sites containing known hazardous materials would be regulated by Federal and State law. In these instances, the

City would review project applications for compatibility, applicable requirements for hazardous materials, and require specific conditions as part of the approval process. In addition, all future projects on housing sites would be reviewed and approved by the City Fire Department prior to issuance of building permit, which would ensure that future project development would be consistent with guidelines related to emergency response and brush management contained in the City's emergency response plan and Design Guidelines (2005). Adoption of the floating zone would not alter the City's adopted discretionary review process. Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone. The floating zone gives a property owner a choice whether to opt into the housing plan, or forgo doing so and retain their existing zoning rights. Depending on the category of the existing zoning, different levels of development or reconstruction activities are already permitted on sites.

The impact analysis below describes the type and magnitude of the potential environmental impacts of future development on the housing and how such impacts would affect the existing environment. Future development has the potential to result in impacts related to hazards and hazardous materials. The analysis in the following section identifies the significance of impacts and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts with regards to hazards and hazardous materials, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.7.5 Issues 1, 2, and 3: Hazardous Materials—Use, Transport, Disposal; Accidental Release; and Emissions near a School

Impacts related to hazards and hazardous materials would be significant if the project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

4.7.5.1 Impacts

a. Housing Sites

Routine Use, Transport and Disposal

The Housing Element Update (HEU) does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with

State Housing Element Law. Buildout of the housing sites may result in the transport of hazardous materials during construction (e.g., ACMs, LBPs, and/or contaminated soils); however, this transport would be limited in duration and not considered routine. Additionally, handling measures are required by the City, County (DEH), and the San Diego Air Pollution Control District (SDAPCD) during both construction and operational phases of future projects. These measures include standards and regulations regarding the storage, handling, and use of hazardous materials.

Future residential and commercial development on the housing sites would not involve the ongoing or routine use of substantial quantities of hazardous materials during operations. Only small quantities of hazardous materials would be anticipated to occur in conjunction with residential and mixed/commercial uses. Hazardous materials use on the housing sites may include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and upkeep of the proposed land uses. In addition, Hazardous Materials Business Plans (HMBP) are required of businesses that handle hazardous substances in amounts greater than or equal to specified thresholds. The purpose of an HMBP is to minimize hazards to human health and the environment from unplanned, accidental releases of hazardous substances into the air, soil, or surface water. An HMBP must include an emergency response program that serves to manage emergencies at the given facility and prepare response personnel for a variety of conditions. HMBPs are submitted to County of San Diego's DEH HMD, and are reviewed and updated as necessary every three years, or in the event of an accidental release, change in materials storage location or use, or change in business name, address, or ownership.

With proper use and disposal, as required by Municipal Code Section 30.40.010, California Hazardous Waste Control Law, California H&SC, California Fire Code, and RCRA regulations, these chemicals would not result in hazardous or unhealthful conditions for those that would use and/or reside within the project area. A less than significant impact would occur in this regard given compliance with applicable Federal, State, and local regulations.

Accidental Release

An accidental release of hazardous materials could occur during: (1) the routine use, transport, and disposal of materials during project operation (as discussed above); or (2) through the accidental upset of hazardous materials – either known or unknown – during excavation and construction of future housing site development. Exposure to hazardous materials could occur through contact with contaminated soil or groundwater, skin contact, or the inhalation of vapors or dust.

The housing sites discussed in Section 4.7.1.1 could be sites of potential concern with respect to accidental releases of hazardous materials during excavation and construction associated with future development. Specifically, housing sites with existing commercial uses, such as the gas stations at housing sites ALT-2, C-7, OE-2, NE-1, and NE-7, could have the potential for contamination resulting from current uses (e.g., leaking underground storage tanks). Environmental issues must also be considered in the redevelopment of former gas stations, such as the old service station at on housing site C-1. Additionally,

sites presently used for agricultural purposes could pose a risk of contamination from herbicides, pesticides, and fertilizer uses. Specifically, housing sites L-5 and L-6 have been identified as areas of current agricultural use (greenhouses).

Additional properties, undocumented at this time, also could contain on-site contaminants both in the form of building materials and underground contaminants. Based on the uses in the project area, unknown hazardous materials sites may involve pesticides, herbicides, fungicides, petroleum products (gasoline, diesel, and oils), antifreeze, solvents, cleaners, acids, bases, and ignitable hazardous wastes releases. Unknown sites not presently identified on public databases would have the potential to create a significant hazard to the public or the environment.

Future development on housing sites also could result in the accidental upset of hazardous materials at known hazardous materials sites, resulting in the potential exposure of people and the environment to unacceptable levels of contamination associated with hazardous materials. Any development or redevelopment proposed for residential, or other sensitive land uses on listed hazardous materials sites represents a potential significant impact to health and safety. As detailed in Section 4.7.1.2, several listed hazardous materials sites are located on or within close proximity to proposed housing sites. Of the 36 sites of potential environmental concern (refer to Section 4.7.1.2), 21 housing sites are also listed on, or within 1/8-mile of, hazardous materials sites and, therefore, pose a potentially significant hazard to future development, as identified in Table 4.7-3.

Table 4.7-3
Housing Sites Identified as Containing Hazardous Materials

Housing Site	Hazardous Material Site (including former agricultural use)	Housing Strategy		
		1-Ready Made	2-Build Your Own	3-Modified Mixed Use Places
ALT-2	Yes			X
ALT-3	Yes			X
ALT-5	Yes			X
ALT-6	Yes			X
ALT-7	Yes			X
C-1	Yes			X
C-2	Yes	X	X	X
C-3	Yes	X		
C-7	Yes	X		
CBHMG-1	Yes			X
L-1	Yes	X	X	
L-2	Yes	X		
L-4	Yes	X		
L-5	Yes (former agricultural use)	X		
L-6	Yes (former agricultural use)	X		
NE-3	Yes		X	
NE-4	Yes	X		
NE-7	Yes		X	X

Table 4.7-3
Housing Sites Identified as Containing Hazardous Materials

Housing Site	Hazardous Material Site (including former agricultural use)	Housing Strategy		
		1-Ready Made	2-Build Your Own	3-Modified Mixed Use Places
OE-1	Yes	X		X
OE-2	Yes		X	
OE-4	Yes	X		X
OE-5	Yes	X		
OE-7	Yes		X	X

Future redevelopment or construction activities at housing sites may pose hazards to the public or the environment by disturbance of existing contaminated soils or groundwater or hazardous building materials. Grading and excavation activities could disturb soils and cause contaminants below ground to become airborne. Excavation below the groundwater table or dewatering could also bring construction workers in contact with contaminants through skin contact, ingestion, or inhalation. Likewise, excavation of land could expose workers to chemicals stored in or leaking from underground storage tanks or pesticide residues.

During construction, workers also could be exposed to hazardous materials during demolition of buildings. Demolition of buildings built prior to 1978 in the project area may expose workers to ACMs or LBPs. Inhalation of asbestos-containing dust may cause acute or chronic toxicity. Exposure to persons other than construction workers would be minimized by the exclusion of non-authorized personnel in construction areas determined to contain potentially hazardous materials. Exposure to construction workers would be controlled through conformance with Cal-OSHA worker safety standards.

Existing regulations, as described in Section 4.7.2, require that future projects proposed on listed hazardous materials sites complete site assessments for hazardous materials. If hazardous materials or contamination are identified, further evaluation or remediation may be necessary, depending upon the substances present, their concentration, and their location. For sites with recorded hazardous material concerns, project applicants must obtain confirmation from the DEH that the site has been remediated to the extent that it is required for the proposed use. For example, residential development requires a greater level of remediation than a commercial or industrial use.

Future development projects on listed hazardous materials sites are exceptions to any applicable exemptions under CEQA, pursuant to CEQA Guidelines Section 15300.2, which states that "a categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code." Therefore, future development projects on known hazardous materials sites would be subject to future environmental review pursuant to CEQA and would be required to identify and assess the impacts of hazardous materials during the land use permitting process.

However, because (1) there are potentially unknown sources of hazardous materials both subsurface and within the existing on-site structures and (2) all sites with the potential to contain hazardous materials and the status of past listed sites cannot be completely known at this program-level of analysis, risks from accidental release of hazardous materials would be potentially significant. In the unlikely event of upset or accidental release, mandated protocols for reporting the release, notifying the public, and remediating the event (if determined necessary by regulatory agencies) are intended to reduce public risks. Specifically, the risks associated with the accidental release of hazardous materials would be managed through the implementation of Municipal Code Section 30.40.010, California Hazardous Waste Control Law, California H&SC, California Fire Code, and RCRA regulations.

Emissions Near a School

Housing sites ALT-2, C-1 and C-7 contain listed hazardous materials sites within 0.25 mile of a school (see Table 4.7-1). Housing sites C-2 and CBHMG-1 are also less than 0.25 from a school. These listed hazardous materials sites have been remediated, and the cases have been closed for each site. These sites pose no significant risks associated with the emission of hazardous materials near a school. There could also be additional properties with currently unknown contaminants both subsurface and within existing structures that may pose a hazardous threat. Because schools are located within 0.25 mile of housing sites, as well as the uncertainty of where future schools may be sited, there would be potentially significant impacts associated with hazardous emissions. Adherence to Municipal Code Section 30.40.010, California Hazardous Waste Control Law, California H&SC, California Fire Code, and RCRA regulations, discussed above, would reduce potential impacts associated with the accidental release of hazardous materials.

b. Housing Strategy Summaries

Routine Use, Transport, and Disposal

Future development consistent with housing strategies 1 (RM), 2 (BYO) and 3 (MMUP) would not result in the routine transport, use, or disposal of substantial quantities of hazardous materials. Overall, there would be no inherent difference in impacts among the housing strategies relative to these issues.

Accidental Release

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) has potential to result in impacts from:

- Development on or near known and potentially unknown hazardous material sites on C-2, C-3, C-7, L-1, L-2, L-4, L-5, L-6, NE-4, OE-1, OE4, and OE-5.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to result in impacts from:

- Development on or near known and potentially unknown hazardous material sites on C-2, L-1, NE-3, NE-7, OE-2, and OE-7.

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to result in impacts from:

- Development on or near known and potentially unknown hazardous material sites on ALT-2, ALT-3, ALT-5, ALT-6, ALT-7, C-1, C-2, CBHMG-3, NE-7, OE-1, OE-4, and OE-7.

Emissions Near a School

Housing strategies 1 through 3 (RM, BYO, MMUP) all pose similar risks associated with accidental release or emissions near a school with regard to potentially unknown sources of hazardous materials both subsurface and within the existing on-site structures. Overall, there would be no inherent difference in impacts relative to accidental release and upset among the housing strategies.

4.7.5.2 Significance of Impacts

Impacts associated with the routine use, transport, and disposal of hazardous materials would be less than significant through compliance with local, State, and Federal regulations.

Impacts associated with the accidental release of hazardous materials and emissions near a school during future buildout of the housing sites would be potentially significant.

4.7.5.3 Mitigation Framework

Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for impacts relative to known and unknown hazardous materials sites, shall be required to comply with the following mitigation framework:

HAZ-1: Future projects shall be required to identify potential conditions, which require further regulatory oversight and demonstrate compliance based on the following measures prior to issuance of any permits:

A. A Phase I Environmental Site Assessment (ESA) shall be completed in accordance with American Society of Testing and Materials (ASTM) Standards. If hazardous materials are identified requiring remediation, a

Phase II ESA and remediation effort shall be conducted in conformance with Federal, State, and local regulations.

B. If the Phase II ESA identifies the need for remediation, then the following shall occur prior to the issuance of grading permits:

1. The applicant shall retain a qualified environmental engineer to develop a soil and/or groundwater management plan to address the notification, monitoring, sampling, testing, handling, storage, and disposal of contaminated media or substances (soil, groundwater). The qualified environmental consultant shall monitor excavations and grading activities in accordance with the plan. The groundwater management and monitoring plans shall be approved by the City prior to development of the site.

2. The applicant shall submit documentation showing that contaminated soil and/or groundwater on proposed development parcels have been avoided or remediated to meet cleanup requirements established by appropriate local regulatory agencies (Regional Water Quality Control Board [RWQCB]/DTSC/DEH) based on the future planned land use of the specific area within the boundaries of the site (i.e., commercial, residential), and that the risk to human health of future occupants of these areas therefore has been reduced to below a level of significance.

3. The applicant shall obtain written authorization from the appropriate regulatory agency (RWQCB/DTSC/DEH) confirming the completion of remediation. A copy of the authorization shall be submitted to the City to confirm that all appropriate remediation has been completed and that the proposed development parcel has been cleaned up to the satisfaction of the regulatory agency. In the situation where previous contamination has occurred on a site that has a previously closed case or on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the DEH shall be notified of the proposed land use.

4. All cleanup activities shall be performed in accordance with all applicable Federal, State, and local laws and regulations, and required permits shall be secured prior to commencement of construction to the satisfaction of the City and compliance with applicable regulatory agencies such as but not limited to the Encinitas Municipal Code.

4.7.5.4 Significance after Mitigation

Future development consistent with the HEU would be required to implement the Mitigation Framework adopted in conjunction with certification of this PEIR, which requires preparation of a Phase I Site Assessment, consultation with the appropriate regulatory agencies and verification that health risk has been remediated in accordance with all applicable local, State and Federal regulations. In addition, as noted above in

Section 4.7.4.1, future development would be required to implement policies contained in the General Plan, and regulations imposed by Federal, State, and local agencies, including the U.S. EPA, RCRA, County Department of Health Services (DHS), and County of San Diego DEH. Therefore, potential impacts would be reduced to below a level of significance.

4.7.6 Issue 4: Hazardous Materials—Sites

Impacts related to hazards and hazardous materials would be significant if the project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment.

4.7.6.1 Impacts

a. Housing Sites

No sites compiled pursuant to Government Code Section 65962.5 (Cortese List) are present on the housing sites.

b. Housing Strategy Summaries

No sites compiled pursuant to Government Code Section 65962.5 are present on the housing sites. There would be no inherent difference in impacts among the housing strategies relative to this issue.

4.7.6.2 Significance of Impacts

No sites compiled pursuant to Government Code Section 65962.5 are present on the housing sites. Impacts would be less than significant.

4.7.7 Issue 5: Emergency Response and Evacuation Plans

Impacts related to hazards and hazardous materials would be significant if the project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

4.7.7.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Buildout of the housing sites would increase density and create new mixed-use development in certain areas of the City; resulting in greater population concentrations

within these redeveloped neighborhoods. This could result in an increase in demand on emergency evacuation.

As indicated in Section 4.7.2, the City does not have an adopted emergency response plan. The HEU does not propose any changes in the City's existing circulation network, and no land uses are proposed that would impair implementation of or physically interfere with the City's emergency tsunami or wildfire evacuation plans; or that would conflict with any of the MHMP's specific hazard mitigation goals, objectives, and related potential actions. Furthermore, applications for all future projects on housing sites would be reviewed and approved by the City Fire Department prior to issuance of building permit. Therefore, buildout of the HEU would not conflict with an emergency response plan, and impacts would be less than significant.

b. Housing Strategy Summaries

Housing strategies 1 through 3 (RM, BYO, MMUP) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Overall, there would be no inherent differences in impacts among the housing strategies.

4.7.7.2 Significance of Impacts

Potential impacts associated with the interference of emergency response plans would be less than significant.

4.7.8 Issue 6: Wildland Fires

Impacts related to hazards and hazardous materials would be significant if the project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas, within brush fire management zones, or where residences are intermixed with wildlands.

4.7.8.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Housing sites C-6, O-4, and O-5 are near open space (just north of San Elijo Lagoon) in the southeastern portion of the City and are located within the City's designated VHFHSZ. Locating residential land uses adjacent to or within a high fire hazard area can result in increased fire related risk to people and structures.

To avoid the risk from wildland fire, future development projects on housing sites C-6, O-4, and O-5 would be required to adhere to California Fire Code Title 19, Division 1, Section 3.07(b), requiring a minimum 30-foot brush clearance around structures for fire safety.

Adherence to these regulations and landscape guideline 7.3.17, which includes the use of fire retardant/resistant plants, in the City of Encinitas Design Guidelines (2005) would reduce risks in conjunction with future development related to wildland fire. Thus, impacts associated with risk of wildland fires would be less than significant.

b. Housing Strategy Summaries

Overall, there would be no inherent differences in impacts among the housing strategies. Adherence to the State and local fire codes and City Design Guidelines would reduce risks in conjunction with future development related to wildland fire.

4.7.8.2 Significance of Impacts

Potential impacts associated with wildland fire would be avoided through the implementation of existing local and State regulations. Mandatory compliance with these regulations would ensure that impacts would be less than significant.

4.8 Hydrology and Water Quality

This section evaluates potential hydrology and water quality impacts that could result from the future development consistent with the Encinitas Housing Element Update (HEU). Information in this section comes from secondary sources and the City of Encinitas Final Existing Conditions Report (2010).

4.8.1 Existing Conditions

4.8.1.1 Hydrology

a. Surface Water

There are numerous important surface hydrologic features within the City, including the coastal waters of the Pacific Ocean, two lagoons, and three major creeks (Figure 4.8-1). In addition, the City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other municipal separate storm sewer system (MS4) facilities.

b. Watershed

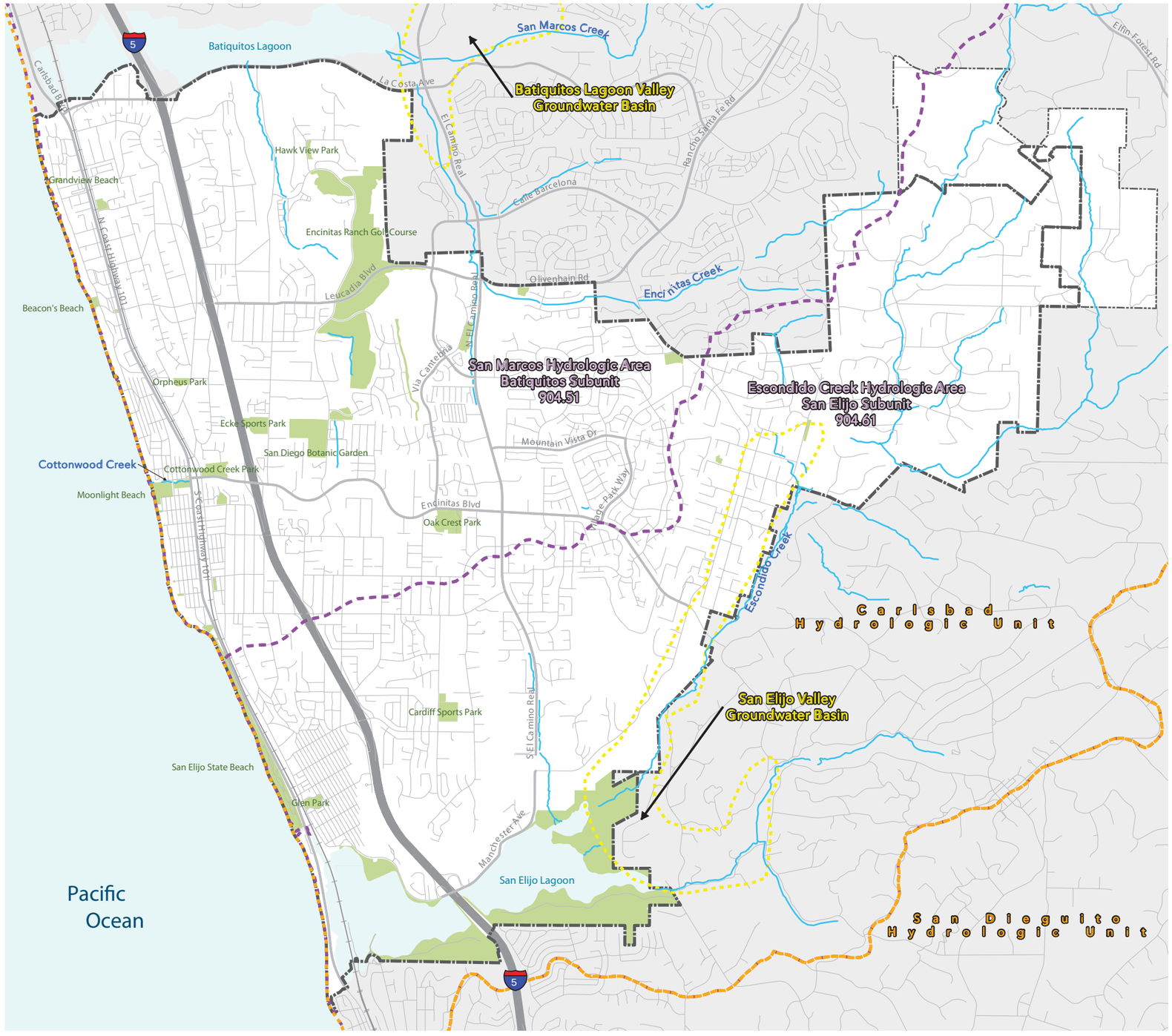
The City of Encinitas is situated entirely within the Carlsbad Hydrological Unit (HU) and is split between the San Marcos Hydrological Area (HA), Batiquitos Subunit (HAS 904.51) to the north and the Escondido Creek HA, San Elijo Subunit (HAS 904.61) to the south (see Figure 4.8-1). The City is naturally divided by eight distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins.

Three creeks drain the City: Cottonwood Creek, Encinitas Creek, and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. Encinitas Creek drains the north-central portion of the City into Batiquitos Lagoon. Escondido Creek drains the southern and northeast (Olivenhain) portion of the City into San Elijo Lagoon. The location of the creeks and lagoons are also displayed on Figure 4.8-1.

c. Groundwater

A groundwater basin is generally defined as a hydrogeologic unit containing one large aquifer as well as several connected and interrelated aquifers that has reasonably well-defined boundaries and more or less definite areas of recharge and discharge. All major

Map Source: City of Encinitas; MIG, Inc.



Hydrological Features within the City of Encinitas

- City Limits
- Sphere of Influence
- Parks and Open Space
- Waterbodies
- Streams
- Roads
- Railroad
- Groundwater Basins
- Watershed boundaries
- Hydrologic Area

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FIGURE 4.8-1
Hydrological Features in the City of Encinitas

drainage basins in the San Diego region contain groundwater basins. The basins are relatively small in area and usually shallow. Although these groundwater basins are limited in size, the groundwater yield from the basins has been historically important to the development of the San Diego region. Nearly all of the local groundwater has been intensively developed for municipal and agricultural supply purposes. Two groundwater basins, Batiquitos Lagoon Valley and San Elijo Valley, occur within the City (see Figure 4.8-1).

Batiquitos Lagoon Valley Groundwater Basin

The Batiquitos Lagoon Valley groundwater basin underlies Green Valley and San Marcos Creek Valley at the northwestern portion of the City. The basin is bounded on the northeast by impermeable crystalline rocks, on the west by Batiquitos Lagoon and by semi-permeable rocks of the La Jolla Formation. San Marcos and Encinitas creeks drain the valleys westward into Batiquitos Lagoon.

San Elijo Valley Groundwater Basin

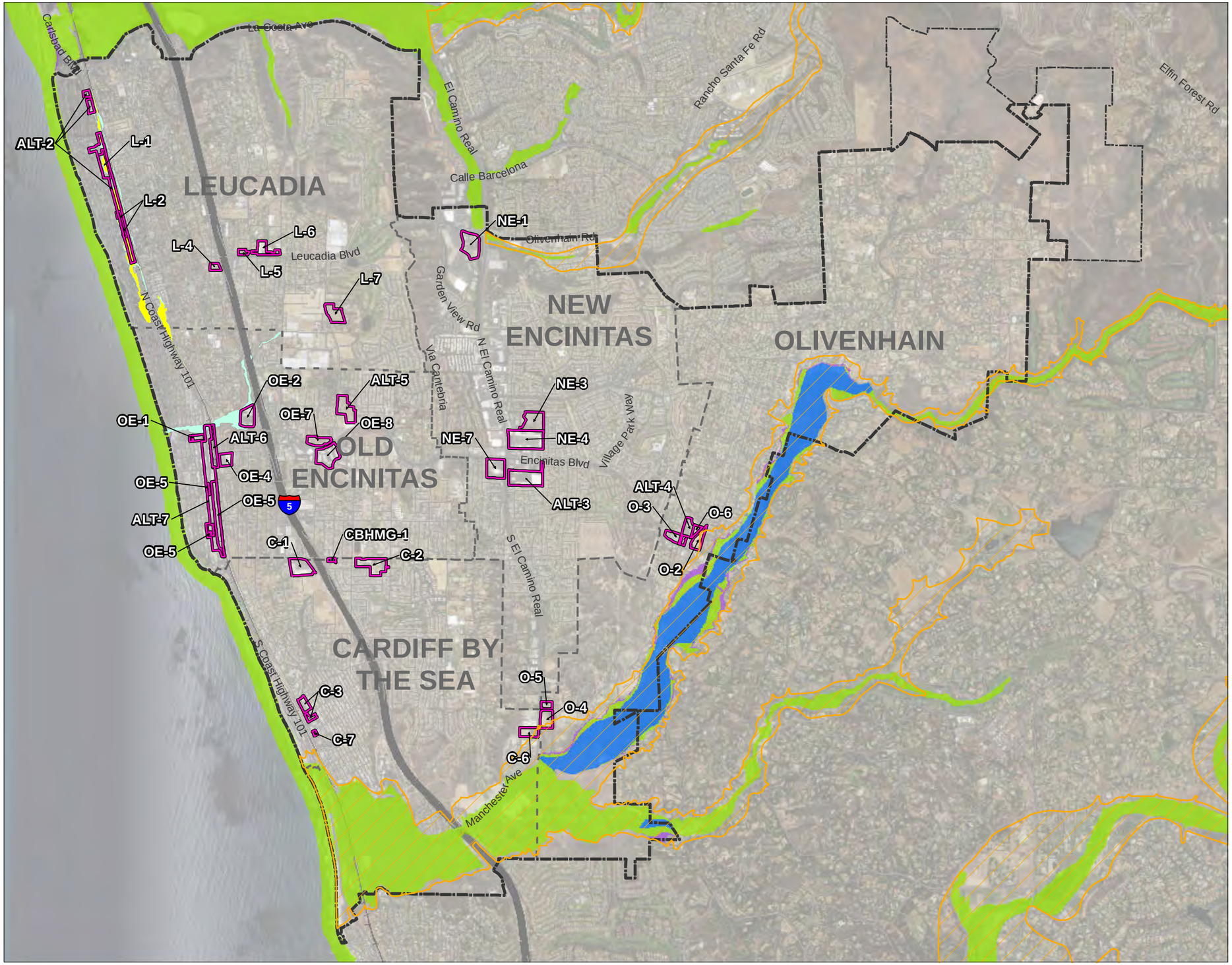
The San Elijo Valley groundwater basin is located in the southeastern part of the City and underlies two valleys. Escondido Creek flows occasionally through the upper northeast valley, discharging into San Elijo Lagoon. The basin is bounded to the north and to the south by alluvium and semi-permeable marine deposits of the La Jolla Group. The northeastern boundary is defined by impermeable Cretaceous deposits of the Santiago Peak volcanics. The western boundary is the Pacific Ocean (Izbicki 1983). Groundwater in storage was estimated to be approximately 8,500 acre-feet in 1983.

d. Flood Hazard

Flood zones are geographic areas that the Federal Emergency Management Act (FEMA) has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. Although portions of the City are within a FEMA 100-year flood zone, none of the housing sites are. However, the City completed a hydrologic study of Highway 101 between Encinitas Boulevard and La Costa Avenue, which identified 10-year and 100-year 'flood problem areas' along portions of Highway 101 that have potential for flooding due to run-off (Figure 4.8-2).

Portions of the City are within a dam inundation area. Dam inundation areas are downstream areas subject to flooding or other effects during large storm events. Dam inundation areas are subject to the uncontrolled release of an upstream reservoir as well as events leading to breaks in levees or dams. Figure 4.8-2 shows the limits of the maximum probable dam inundation in the City. The areas of potential dam inundation are generally along the Cottonwood Creek, Encinitas Creek, and Escondido Creek; portions of tributary stream channels; and the low-lying areas near the coastal portions of the City. Based on historical data, the potential for serious hazards in the event of a dam failure is significant.

Image source: USDA FSA (flown June 2014)



- City Limits
- Sphere of Influence
- Community Area Boundaries
- Housing Sites
- Dam Inundation Area

Flood Problem Areas

- 10-year
- 100-year

FEMA Flood Zones

- 100-year Flood Plain
- 500-year Flood Plain
- Flood Way

0 Miles 0.5

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FIGURE 4.8-2
Flood Hazards
in the City of Encinitas

Housing sites identified as containing or with the potential to contain flood hazards are shown in Table 4.8-1.

Table 4.8-1
Housing Sites Identified as Containing or with Potential to Contain Flood Hazards

Housing Site	Flood Problem Area	Dam Inundation
ALT-2	Yes	
ALT-6	Yes	
ALT-7	Yes	
C-6		Yes
L-1	Yes	
L-2	Yes	
O-2		Yes
O-4		Yes
OE-2	Yes	

e. Tsunamis and Seiches

The project area, at its nearest point, is approximately 400 feet east of the Pacific Ocean. Due to its elevation (approximately 150 feet above mean sea level), the nearest housing site to the coast would not likely be affected in the event of a tsunami. Furthermore, according to maps prepared to quantify risk from tsunamis/seiches, none of the housing sites are located within a tsunami hazard zone (California Emergency Management Agency 2011).

4.8.1.2 Water Quality

Water quality refers to the effect of natural and human activities on the composition of water. Water quality is expressed in terms of measurable physical and chemical qualities that can be related to planned water use. Within the City, urban runoff is transmitted directly to the storm drain system (rather than the sewer system). In general, storm water can potentially contain a host of pollutants such as trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, flora and fauna and public health. Water quality issues are especially prevalent during rainy periods; however, due to urban runoff (e.g., irrigation or car washing) that is transferred to the storm drain system, pollution can be a year-round problem. Combinations of urban runoff, agricultural runoff, sewage spills, livestock, and domestic animals affect water quality within the San Marcos and Escondido Creek HAs.

a. Beneficial Uses

Pursuant to the California Water Code Section 13240 and the Clean Water Act (CWA) Section 303, all surface waters and groundwater in the City are assigned beneficial uses by the Regional Water Quality Control Board (RWQCB) in the adopted Basin Plan.

The beneficial uses of surface water in the San Marcos and Escondido Creek HAs include industrial service supply, agricultural supply, navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, preservation of biological habitats of special concern, estuarine habitat, wildlife habitat, preservation of rare and endangered species, marine habitat, fish migration, and shellfish harvesting. Contact uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, and fishing. Non-contact uses include, but are not limited to, picnicking, sunbathing, hiking, beach-combing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

The existing beneficial uses of San Diego County beaches and nearshore areas include water contact recreation (e.g., surfing, swimming), non-contact recreation (e.g., walking, jogging), ocean commercial and sport fishing, aquaculture, shellfish harvesting, municipal and domestic supply, preservation of rare and endangered species, marine and wildlife habitat, migration and spawning of aquatic organisms, and navigation.

Batiquitos Lagoon and San Elijo Lagoon are designated as estuarine habitats and have the same beneficial uses as the Pacific Ocean except for commercial fishing, industrial service supply, spawning of aquatic organisms, aquaculture, shellfish harvesting, and navigation.

b. 303(d) List Status

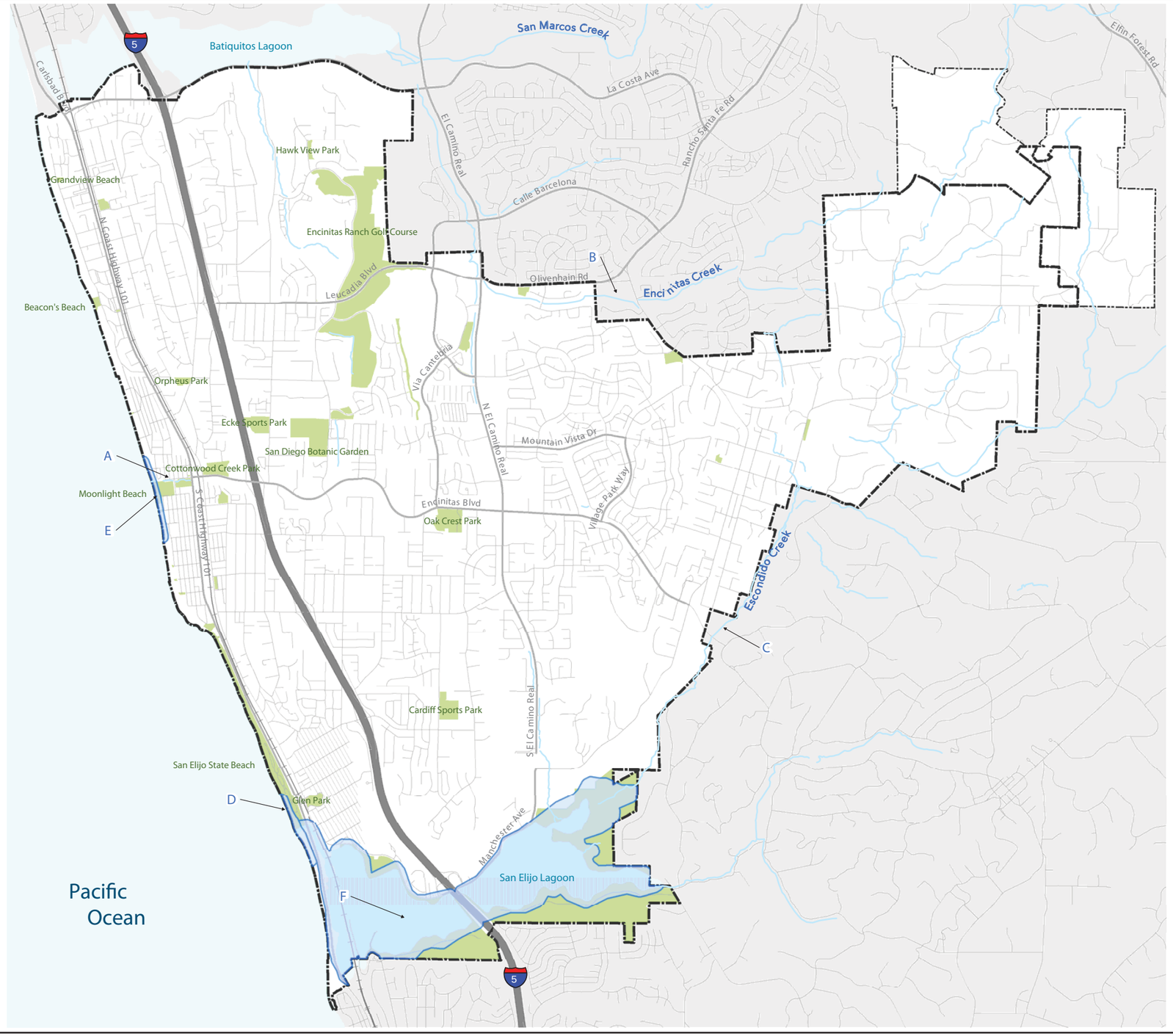
The Federal Clean Water Act (CWA) Section 303(d) requires that states assess the quality of their waters every two years and publish a list of those waters not meeting water quality standards. For water bodies placed on the 303(d) List of Water Quality Limited Segments, states are required to develop total maximum daily loads (TMDLs) for the pollutant(s) that are causing standards impairment. Once a water body is placed on the 303(d) List of Water Quality Limited Segments, it remains on the list until a TMDL is adopted and/or water quality standards are attained.

As identified in the 2010 California 303(d) List and TMDL Priority Schedule (303(d) List):

- The Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach and San Elijo Lagoon Outlet for bacteria indicators due to urban runoff.
- San Elijo Lagoon is listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic condition.
- Cottonwood Creek is listed for DDT (pesticide), phosphorous and sediment toxicity stressors (State Water Resources Control Board 2015).
- Encinitas Creek is listed for phosphorous impairments.
- Escondido Creek is listed for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids.

The affected segments within the City that are listed on the 303(d) List are summarized in Table 4.8-2 and shown on Figure 4.8-3.

Map Source: City of Encinitas; MIG, Inc.



303(d) List of Impaired Water Quality Segments within the City of Encinitas

- City Limits
- Sphere of Influence
- Parks and Open Space
- Waterbodies
- Streams
- Roads
- Railroad

Imparied Water Quality Segments (303(d) list)

- A - Cottonwood Creek
- B - Encinitas Creek
- C - Escondido Creek
- D - San Elijo Lagoon Outlet
- E - Moonlight State Beach
- F - San Elijo Lagoon

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FIGURE 4.8-3
303(d) List of Impaired Water Quality Segments for the City of Encinitas

Table 4.8-2
303(d) List of Impaired Water Quality Segments for the City of Encinitas

Name	Pollutant/Stressor	Potential Sources	Segment*	Estimated Size Affected
Cottonwood Creek	DDT, Phosphorous, Sediment Toxicity	Unknown	A	1.9 miles
Encinitas Creek	Phosphorous	Unknown	B	3 miles
Escondido Creek	DDT, Phosphorous, Sediment Toxicity, Manganese, Phosphate, Selenium, Sulfates, TDS	Unknown	C	26 miles
Pacific Ocean Shoreline, Escondido Creek HA (San Elijo Lagoon Outlet)	Indicator Bacteria	Nonpoint/ Point Source	D	0.44 mile
Pacific Ocean Shoreline, San Marcos HA (Moonlight State Beach)	Indicator Bacteria	Nonpoint/ Point Source	E	0.5 mile
San Elijo Lagoon	Eutrophic/Nutrients, Indicator Bacteria, Sedimentation/Siltation	Nonpoint/ Point Source	F	566 acres

SOURCE: City of Encinitas 2008 Jurisdictional Urban Runoff Management Program, Table 1-1.
*See Figure 4.8-3.
HA = Hydrological Area; TDS = total dissolved solid

On February 10, 2010, the San Diego Regional Water Quality Control Board adopted the TMDL for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region. This TMDL includes the mouth of Cottonwood Creek and Moonlight Beach in Encinitas. This TMDL set in motion a far-reaching regulatory statute that will shape management strategies in the future as the City and contributing jurisdictions develop plans around newly established compliance standards for bacterial indicators. Ongoing efforts are being made by the City to address the priority constituent and water body combinations as defined by the evolving 303(d) List.

Housing sites identified as discharging or with the potential to discharge to impaired water bodies are shown in Table 4.8-3.

Table 4.8-3
Housing Sites Identified as Discharging or with Potential to Discharge to Impaired Water Bodies

Housing Site	303(d)-Listed Water Body
ALT-5	Yes
C-6	Yes
L-7	Yes
O-4	Yes
OE-7	Yes

c. Groundwater Quality

Within the Batiquitos Lagoon Valley Groundwater Basin, average total dissolved solid (TDS) content is about 1,280 mg/L with a range from about 788 to 2,362 mg/L. The groundwater was rated inferior for irrigation because of high chloride content and marginal for domestic use because of high sulfate and TDS concentrations (California Department of Water Resources 2004a as cited in City of Encinitas 2010). Within the San Elijo Valley Groundwater Basin, TDS concentration ranges from 1,170 to 5,090 milligrams per liter, with concentrations lowest in the eastern part of the basin and increasing toward the west (California Department of Water Resources 2004).

4.8.2 Regulatory Framework

4.8.2.1 Federal

a. Clean Water Act

The Federal Water Pollution Control Act, commonly called the CWA, establishes a broad national program for protecting water quality and regulating discharges of waste and pollutants into waters of the United States (Title 33, United States Code, Section 1251 et seq.). It provides authority for establishment of water quality standards and waste discharge limits for point source discharges (such as those from industrial facilities, sewage treatment plants, and storm water). The act also prohibits discharges of pollutants without a permit or other authorization and allows authorized states to implement provisions of the act in lieu of the U.S. Environmental Protection Agency (EPA).

Section 401 Water Quality Certification

Section 401 of the CWA requires that any applicant for a Federal permit to conduct any activity, including the construction or operation of a facility which may result in the discharge of any pollutant, must obtain certification from the State. This process is known as the Water Quality Certification.

Section 402 National Pollutant Discharge Elimination System General Construction Storm Water Permit

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources and discharge pollutants into waters of the United States. In the State of California, the U.S. EPA has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program. In general, the SWRCB issues two baseline general permits: one for industrial discharges and one for construction activities. Rather than setting numeric effluent limitations for storm water and urban runoff, CWA regulation calls for the implementation of best management practices (BMPs) to reduce or prevent the discharge of pollutants from these activities to the Maximum Extent Practicable for urban runoff and meeting the Best Available Technology Economically

Achievable and Best Conventional Pollutant Control Technology standards for construction storm water. Regulations and permits have been implemented at the Federal, State, and local level to form a comprehensive regulatory framework to serve and protect the quality of the nation's surface water resources.

Section 303(d) Total Maximum Daily Loads

Under Section 303(d) of the CWA, states and territories are required to develop a list of water quality limited segments for jurisdictional waters of the United States. The waters on the list are those that do not meet water quality standards, even after point source polluters have installed the minimum required levels of pollution control technology.

b. National Flood Insurance Act

The National Flood Insurance Act (1968) established the National Flood Insurance Program (NFIP), which is based on the minimal requirements for floodplain management and is designed to minimize flood damage within Special Flood Hazard Areas (SFHAs). FEMA administrates the NFIP. SFHAs are defined as areas that have a 1 percent chance of flooding within a given year. This is also referred to as the 100-year flood. FIRMs were developed to identify areas of flood hazards within a community.

4.8.2.2 State

a. Porter–Cologne Water Quality Control Act, as amended

The Porter–Cologne Water Quality Control Act was established to protect the water quality and beneficial uses of waters of the State (California Water Code, Division 7, Section 13000 et seq.) The law gives broad authority to the SWRCB and nine RWQCBs to establish water quality standards and discharge prohibitions, issue waste discharge requirements, and implement provisions of the Federal CWA. Under the Porter-Cologne Act, "waters of the State" include both surface and groundwater. Any entity or person proposing to discharge waste within any region of the State must file a Report of Waste Discharge with the appropriate regional board.

b. State Water Resources Control Board and Regional Water Resources Control Boards

In California, the SWRCB and local RWQCBs have assumed the responsibility of implementing the EPA's NPDES program and other programs under the CWA. In addition to its permitting programs, the SWRCB, through its nine RWQCBs, developed Regional Water Quality Control Plans (or Basin Plans) that designate beneficial uses and water quality objectives for California's surface waters and groundwater basins, as mandated by both the CWA and the State's Porter-Cologne Act. Water quality standards are thus established in these Basin Plans and provide the foundation for the regulatory programs implemented by the State.

The San Diego Basin encompasses approximately 3,900 square miles, including most of San Diego County and portions of southwestern Riverside and Orange counties. The Basin Plan provides all relevant information necessary to carry out Federal mandates for the anti-degradation policy, CWA Section 303(d) listing of impaired waters, and related TMDLs, and provides information relative to NPDES and WDR permit limits.

c. State Construction General Permit

For development projects that disturb greater than one acre of land area to comply with local NPDES regulations, a project applicant must meet the requirements of the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). In order to be covered under the State Construction General Permit, a Notice of Intent (NOI) must be filed with the SWQRCB. Compliance with the permit requires that a storm water pollution prevention plan (SWPPP) be prepared and implemented.

d. California Coastal Act

The California Coastal Commission (CCC) is responsible for protecting water quality in coastal environments as defined under Sections 30230 and 30231 of the California Coastal Act (Coastal Act). These water quality provisions provide a broad basis for protecting coastal waters, habitats, and biodiversity associated with new development and redevelopment projects. New development and redevelopment projects that are within the Coastal Zone are required to apply for a Coastal Development Permit (CDP) through the CCC prior to construction. As part of the CDP process, projects must provide drainage and erosion control plans..

4.8.2.3 Local

a. Municipal Stormwater Permit

The City of Encinitas and 20 other cities or jurisdictions in the region were issued a NPDES Municipal Stormwater (MS4) Permit on May 8, 2013, by the San Diego RWQCB (Order No. R9-2013-0001). The Municipal Stormwater Permit names the City and 20 other municipalities within the County of San Diego as Copermittees.

Under the Municipal Stormwater Permit, Copermittees must reduce, to the maximum extent possible, the pollutants discharged from their respective storm drain systems. The Municipal Stormwater Permit outlines the individual responsibilities of the Copermittees including, but not limited to, the implementation of: (1) management programs; (2) BMPs; and (3) monitoring programs. The San Diego RWQCB acknowledges that the retention of as much stormwater on-site is the most effective way to reduce pollutants in stormwater discharges to and from local watersheds. Pending regulations will allow Copermittees to focus on the ability to track the progress and improvements in the quality of receiving waters and discharges from storm drain and wastewater systems. Prior MS4 Permit standards were broader in scope and required a series of actions to be implemented;

however, they not provide the tools necessary to effectively and efficiently assess improvements in water quality after implementing their actions. As a result, the pending MS4 Permit will have stricter water quality regulations relative to on-site treatment for future projects.

Each Copermittee must implement the requirements of the Municipal Stormwater Permit across two broad levels of responsibility. Copermittees have responsibility for the water quality impacts of urbanization within: (1) their jurisdiction and (2) their watershed(s). The Municipal Stormwater Permit reflects these two broad levels of responsibility, in that it requires implementation of a comprehensive Jurisdictional Runoff Management Plan (JRMPs) at the jurisdictional level and a Water Quality Improvement Plan (WQIP) at the watershed level.

b. City of Encinitas Jurisdictional Runoff Management Program

In accordance with the Municipal Stormwater Permit, the City produced a Jurisdictional Runoff Management Program (JRMP). The JRMP document outlines the City's approach to improving water quality in its creeks, lagoons, and the ocean through reducing discharges of pollutants to the municipal separate storm sewer system (MS4). As the owner and operator of a MS4, the City is subject to an NPDES Municipal Permit issued by the RWQCB. The permit requires the City to reduce pollutants in discharges from its storm drain system to water bodies.

The JRMP document serves as the City's foundational program management tool, capturing the developed process, procedure, and implementation strategies for various program elements. The purpose of the JRMP is to implement an integrated approach to reducing the discharge of pollutants from the MS4 to the maximum extent practicable (MEP) standard, and to protect and improve the quality of water bodies in Encinitas. The JRMP document describes operational programs and activities developed to meet the requirements of Municipal Stormwater Permit.

c. Encinitas Stormwater Manual

In 2011, the Encinitas Stormwater Manual was developed based on the countywide model Standard Urban Stormwater Mitigation Plan (SUSMP) for the County of San Diego approved by the RWQCB in 2009. The Encinitas Stormwater Manual includes requirements for the control measures to reduce storm water pollutants to the maximum extent practicable for new development and redevelopment. It also addresses water surface elevation profiles, such as those affected by the Leucadia special flood area. Pursuant to the Encinitas Stormwater Manual, future development and redevelopment projects citywide are required to implement measures including source control, treatment control and hydromodification management as warranted.

The Encinitas Stormwater Manual establishes new development and significant redevelopment standards related to runoff quality and quantity in the City. The manual requires permanent BMPs, designed and installed to treat and control runoff, to remain functioning throughout the "use" phase of a project site. The Encinitas Stormwater Manual

policies are designed to ensure, to the maximum extent practicable, that development: (1) does not increase pollutant loads from a project site and (2) considers urban runoff flow rates and velocities. The manual identifies appropriate BMPs for certain designated project types to achieve this goal. Under the Encinitas Stormwater Manual, the City will approve each project's permanent BMPs as part of the development plan approval process for discretionary projects and prior to issuing permits for ministerial projects.

d. Construction Phase BMPs

Construction and grading activities have the potential to impact neighboring water bodies due to the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering the storm drain system. Therefore, an erosion control plan is required for all projects for which a grading or improvement plan is required. The Public Works Engineering Division uses a standard checklist to review the Erosion Control Plan submittals for consistency with the BMP requirements in the Storm Water Manual. Proposed BMPs are required to be appropriate to construction phases, and the City may require phased erosion control plans, usually for larger projects. When phased plans are required, separate sets of erosion control sheets are required for mass grading and precise grading. The erosion control plan is included as part of the overall grading or improvement plan submittal to Engineering, and a grading or improvement permit is not issued until the erosion control plan is approved. Construction sites within the City's jurisdiction are required to implement and maintain general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the maximum extent practicable. The City emphasizes erosion control BMPs as the primary approach to reducing pollution in discharges from construction sites. The City requires that all implemented BMPs must be properly maintained until they are allowed to be removed.

e. Multi-Jurisdictional Hazard Mitigation Plan

In 2010, San Diego County and 18 local jurisdictions, including the City, adopted the Multi-Jurisdictional Hazard Mitigation Plan (MHMP). The MHMP is a countywide plan that identifies risks and ways to minimize damage by natural and manmade disasters. The MHMP is a comprehensive document that serves many purposes, including creating a decision tool for management, promoting compliance with State and Federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination. The MHMP includes potential mitigation actions related to flooding hazards.

f. General Plan/Local Coastal Program

The General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and

drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The City implements the policies in the General Plan using a variety of resources including: the Jurisdictional Runoff Management Program (JRMP), Municipal Code, the Encinitas Stormwater Manual, and other various land use plans and permits.

Table 4.8-4 provides the specific policies included in the General Plan (1995) and Draft Cardiff-by-the-Sea Specific Plan (2008) for the protection of groundwater, flooding, and water quality.

Table 4.8-4
General Plan Policies Related to Hydrology and Water Quality

Policy	Description
City of Encinitas General Plan Land Use Element	
Goal 2	The City should manage slow, orderly growth in accordance with a long- term plan which protects and enhances community values.
2.8	Development shall not be permitted where it will result in significant degradation of ground, surface, or ocean water quality, or where it will result in significant increased risk of sewage overflows, spills, or similar accidents. (Coastal Act/30231)
Goal 8	Environmentally and topographically sensitive and constrained areas within the City shall be preserved to the greatest extent possible to minimize the risks associated with development in these areas. (Coastal Act/30240/30253) Goal 8 amended 5111195 (Reso. 95-32)
8.2	Development within coastal and flood plain areas identified in the Land Use and Resource Management Elements must be limited, designed to minimize hazards associated with development in these areas, and to preserve area resources. Within the floodway, channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to necessary water supply projects, flood control projects where no other method for protecting existing public or private structures is feasible and where such protection is necessary for public safety or to protect existing development, and other development where the primary function is the improvement of fish and wildlife habitats. No development shall occur in the 100- year Floodplain that is not consistent and compatible with the associated flood hazard. Only uses which are safe and compatible with periodic flooding and inundation shall be considered, such as stables, plant nurseries, a minimum intrusion of open parking, some forms of agriculture, and open space preservation, as appropriate under zoning, and subject to applicable environmental review and consistency with other policies of this Plan. No grading or fill activity other than the minimum necessary to accommodate those uses found safe and compatible shall be allowed. Such grading shall not significantly redirect or impede flood flows or require floodway modifications.
City of Encinitas Local Coastal Program (*from Land Use Element)*	
Goal 2	The City should manage slow, orderly growth in accordance with a long- term plan which protects and enhances community values.
2.3	Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services. (Coastal Act/ 30250)
2.8	Development shall not be permitted where it will result in significant degradation of ground, surface, or ocean water quality, or where it will result in significant increased risk of sewage overflows, spills, or similar accidents.

Table 4.8-4 General Plan Policies Related to Hydrology and Water Quality	
Policy	Description
	Coastal Act/ 30231)
2.10	Development shall not be allowed prematurely, in that access, utilities, and services shall be available prior to allowing the development. Coastal Act/ 30252)
2.11	Incremental development of large properties shall not be permitted without a master plan and environmental analysis of the full potential development. (Coastal Act/30250)
Goal 8	Environmentally and topographically sensitive and constrained areas within the City shall be preserved to the greatest extent possible to minimize the risks associated with development in these areas. (Coastal Act/ 30240/ 30253) Goal 8 amended 5111195 (Reso. 95- 32)
8.2	Development within coastal and flood plain areas identified in the Land Use and Resource Management Elements must be limited, designed to minimize hazards associated with development in these areas, and to preserve area resources. Within the floodway, channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to necessary water supply projects, flood control projects where no other method for protecting existing public or private structures is feasible and where such protection is necessary for public safety or to protect existing development, and other development where the primary function is the improvement of fish and wildlife habitats. No development shall occur in the 100- year Floodplain that is not consistent and compatible with the associated flood hazard. Only uses which are safe and compatible with periodic flooding and inundation shall be considered, such as stables, plant nurseries, a minimum intrusion of open parking, some forms of agriculture, and open space preservation, as appropriate under zoning, and subject to applicable environmental review and consistency with other policies of this Plan. No grading or fill activity other than the minimum necessary to accommodate those uses found safe and compatible shall be allowed. Such grading shall not significantly redirect or impede flood flows or require floodway modifications.
8.10	Ecological Resource/ Open Space/ Parks is an Amended 1130191 category intended to be applied to both active and passive parklands; lagoons; wetland habitat areas and their adjacent buffers; and other areas of significant environmental quality or public resource value. Lands in the Ecological Resource/ Open Space/ Parks category, other than public parks, and similar areas for active recreation, will be limited to uses and activities related to habitat enhancement; educational and scientific nature study; passive recreation which will have no significant adverse impact on habitat values; and, aquaculture having no significant adverse effect or negative visual impact on natural processes or scenic quality. All areas possessing wetland resource values, including coastal salt marsh and freshwater marsh habitat types, shall be protected by appropriate buffers. Buffer zones sufficient to protect wetlands shall generally be minimum 100 feet in width, and buffer zones to protect riparian areas shall generally be minimum 50 feet in width, unless a use or development proposal demonstrates that a smaller buffer will protect the resources of the wetland/ riparian area based on site- specific information, including but not limited to, the type and size of the development and/ or proposed mitigation (such as planting of vegetation) which will also achieve the purposes of the buffer. The buffer should be measured landward from the wetland or riparian area. Maps and supplemental information submitted as part of the application should be used to specifically determine these boundaries. The

Table 4.8-4 General Plan Policies Related to Hydrology and Water Quality	
Policy	Description
	California Department of Fish and Game and the U. S. Fish and Wildlife Service shall be consulted in such buffer determinations and their comments shall be accorded great weight.
City of Encinitas General Plan Public Safety Element	
Goal 1	Public health and safety will be considered in future Land Use Planning (Coastal Act/ 30253)
1.1	Development and grading or filling in drainage courses, floodways and floodplains shall be prohibited except as provided by Land Use Element Policy 8. 2. An exception may be made upon the finding that strict application of this policy would preclude any reasonable use of property (one dwelling unit per legal parcel). Exceptions may also be made for development of circulation element roads; necessary water supply projects; flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development; developments where the primary function is the improvement of fish and wildlife habitat; and other vital public facilities, but only to the extent that no other feasible alternatives exist, and minimum disruption to the natural floodplain, floodway or drainage course is made. When flood/drainage improvements are warranted, require developers to mitigate flood hazards in those areas identified as being subject to periodic flooding prior to actual development.
Goal 2	The City of Encinitas will make an effort to minimize potential hazards to public health, safety, and welfare and to prevent the loss of life and damage to health and property resulting from both natural and [human-caused] phenomena.
2.6	Except as provided in Public Safety Policy 1.1, no development or filling shall be permitted within any 100- year floodplain.
City of Encinitas General Plan Resource Management Element	
Goal 1	The City will conserve, protect and enhance the water resources in the Planning Area. (Coastal Act/30231)
1.1	Require new development to utilize measures designed to conserve water in their construction.
1.6	Phase out the use of water softeners which utilize salt in the water-softening process to prevent continued degradation of the water. (Coastal Act/30231)
Goal 2	The City shall make sure every effort to improve ocean water quality. (Coastal Act/30231)
2.1	In that ocean water quality conditions are of utmost importance, the City shall aggressively pursue the elimination of all forms of potential unacceptable pollution that threatens marine of human health.
2.2	In that the San Eljio ocean wastewater outfall lies within the jurisdiction of the City and the Encina outfall lies north of the City, the City shall encourage the highest feasible level of treatment of said wastewater prior to entering the outfalls and continually encourage the reduction of volume of wastewater to said outfalls by this City and other jurisdictions.
2.3	To minimize harmful pollutants from entering the ocean environment from lagoons, streams, storm drains and other waterways containing potential contaminants, the City shall mandate the reduction or elimination of contaminants entering all such waterways; pursue measures to monitor the quality of such contaminated waterways, and pursue prosecution of intentional and grossly negligent polluters of such waterways.
SOURCE: City of Encinitas 1989, amended 2014.	

g. Municipal Code

Stormwater Management and Discharge Control Ordinance

Chapter 20.08 of the Municipal Code makes up the Stormwater Management and Discharge Control Ordinance. The purpose of this ordinance is to protect the health, safety and welfare of the public by regulating all discharges into the storm water conveyance system and the Waters of the State in order to preserve and enhance water quality.

Chapter 20.08 establishes the City's legal authority to enforce a wide spectrum of storm water and water quality related requirements.

Grading, Erosion and Sediment Control Ordinance

Chapter 23.24 of the Municipal Code makes up the Grading, Erosion and Sediment Control Ordinance. This ordinance establishes the minimum requirements for grading excavation and filling of land. The code provides the basis for City requirements regarding submittal of applicable project plans and schedules (including a grading plan, an interim and final erosion and sediment control plan, a landscape and irrigation plan and a work schedule); timing of grading operations; wet season work; erosion control systems; erosion control system maintenance; dry season work; and slope planting.

Floodplain Management Regulations

Chapter 23.40 of the Municipal Code contains the City's regulations pertaining to development within floodplains or special flood hazard areas. It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by legally enforceable regulations applied uniformly throughout the community to all publicly and privately owned land within flood prone, mudslide (i.e., mudflow) or flood-related erosion areas.

Section 23.40.051 includes standards for construction in areas of special flood hazard. These standards pertain to anchoring of structures, use of flood resistant materials and methods, elevation, and storage of materials and equipment.

4.8.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to hydrology and water quality would be significant if the HEU project would:

1. Violate any water quality standards or waste discharge requirements;

2. Substantially deplete ground water supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site;

4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

5. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;

6. Otherwise substantially degrade water quality;

7. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or FIRM or other flood hazard delineation map;

8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

9. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or

10. Inundation by seiche, tsunami, or mudflow.

Due to overlap in the threshold issues and for clarity of analysis, the hydrology/water quality thresholds evaluated in Section 4.8.4 are grouped into the four issue headings of water quality, ground water, drainage pattern/runoff, and flooding/inundation.

4.8.4 Methodology

4.8.4.1 Sources

A review of secondary sources was conducted to determine potential hydrologic resources within the housing sites. The literature review included: (1) Final Existing Conditions Report (2010); (2) Flood Insurance Rate Maps (FEMA 2014); (3) California's Groundwater Bulleting 118 – San Elijo Valley Groundwater Basin (DWR 2004); Evaluation of the San Dieguito, San Elijo and San Pasqual Hydrologic Subareas for Reclaimed Water Use (Izbicki 1983); (4) the Impaired Water Bodies list (SWRCB 2015); (5) special flood hazard mapping provided by the City of Encinitas; and (6) Federal, State, and local regulations. No site-specific surveys were conducted; instead, analysis relied on the use of existing information. The evaluation of the potential for the HEU to cause a substantial adverse change in hydrology or water quality was based on Appendix G of the CEQA Guidelines. The evaluation of the potential for implementation of the GPU to cause a substantial adverse change in water resources and water quality was based on Appendix G of the CEQA Guidelines.

4.8.4.2 Future Project Implementation

As noted previously in this chapter, for housing sites located within or adjacent to an aquatic resource or occurring within a 100-year floodplain or special flood hazard area, the City of Encinitas would review project applications for compatibility, applicable requirements for hydrology and water quality, and require specific conditions as part of the approval process. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process.

Redevelopment of any of the housing sites may occur with or without implementation of the HEU. The floating zone gives a property owner a choice whether to opt into the housing plan, or forgo doing so and retain their existing zoning rights. Depending on the category of the existing zoning, different levels of development or reconstruction activities are permitted on the housing sites.

The impact analysis below describes the type and magnitude of environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential to impact hydrology and water quality. The analysis in the following section identifies the significance of impacts and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on hydrology and water quality,, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.8.5 Issues 1 and 6: Water Quality

Impacts related to water quality would be significant if the project would:

- *Violate any water quality standards or waste discharge requirements or*
- *Otherwise substantially degrade water quality.*

4.8.5.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; it provides capacity for future development consistent with State Housing Element Law. Future development of the housing sites would entail grading and other earth-moving activities during construction. Exposed soils could be eroded and deposited into the surrounding water bodies, increasing the amount of sediment and turbidity in these water bodies. Additionally, chemicals or fuels could accidentally spill and be released into receiving waters, which could adversely alter water chemistry.

Buildout of the housing sites could result in the generation of runoff pollutants such as sediments, oils and grease, heavy metals, pesticides, fertilizers, trash and debris, oxygen demanding substances, and bacteria and viruses, which are typical for residential and mixed uses. In addition, new development would result in greater vehicular use of roadways, which could potentially increase contaminants that would be carried in runoff and discharged into receiving waters. Therefore, nonpoint source pollutants would be the primary contributors to potential water quality degradation as a result of housing site buildout. Nonpoint source pollutants could be washed by rainwater from rooftops, landscaped areas, parking areas, and other impervious surfaces into the on-site drainage system.

All future development, including that on housing sites located in proximity to impaired water bodies in the project area (ALT-5, C-6, L-7, O-4, OE-7), would be required to comply with the City's Municipal Code (e.g., Chapter 20.08 and Chapter 23.24), all pertinent requirements of the City's JRMP, Encinitas Stormwater Manual, and Stormwater Standards Manual, NPDES General Construction Permit, as well as all regulations related to water quality. The General Construction Permit requires preparation and implementation of a SWPPP, which must include erosion and sediment control BMPs that would meet or exceed measures required by the NPDES General Permit, as well as BMPs that control hydrocarbons, trash and debris, and other potential construction-related pollutants. Therefore, adherence to the Municipal Code, the JRMP, Encinitas Stormwater Manual, and Stormwater Standards Manual, General Construction Permit, and General Plan policies (1.6, 2.1, 2.2, 2.3, 2.8, and 2.11) would ensure that impacts related to water quality would be less than significant.

b. Housing Strategy Summaries

Development of all housing sites within housing strategies 1 through 3 has the potential to increase the level of runoff and pollutants discharged to water bodies in the project area as described above. There would be no inherent differences in impacts among the housing strategies.

4.8.5.2 Significance of Impacts

While development of the housing sites has the potential to increase the amount of pollutants discharged into surface waters, all development would be subject to Federal, State, and local regulations aimed at controlling water quality impacts. Thus, substantial adverse water quality impacts would be avoided and impacts resulting from buildout of the HEU would be less than significant.

4.8.6 Issue 2: Groundwater

Impacts related to groundwater would be significant if the project would:

- *Substantially deplete ground water supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).*

4.8.6.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; it provides capacity for future development consistent with State Housing Element Law. The majority of the housing sites are covered by impervious surfaces in the existing condition. However, several sites (or portions thereof) are presently undeveloped (ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7). Future development of vacant sites would result in an increase in impervious surfaces at those locations. Buildout of the HEU would allow for additional development, thereby decreasing the amount of infiltration of water into the groundwater basins with an associated reduction of ground water recharge. However, future development, including redevelopment, would be required to incorporate low impact development (LID) features that would minimize impervious area as much as feasible and promote water infiltration. In addition, the required installation of treatment control and hydromodification management facilities, would promote retention and infiltration of storm water on the project site. Sites subject to redevelopment would be required to adhere to new, more stringent water quality standards, thereby, resulting in reduced runoff, greater infiltration and improved water quality relative to the existing condition.

Potable water for future development would be obtained from either the San Dieguito Water District (serving Leucadia, Old Encinitas, Cardiff and portions of New Encinitas) or Olivenhain Municipal Water District (serving other areas of the City). According to the Urban Water Management Plans for each District (2010), neither uses groundwater for part of their potable supplies. Therefore, future development associated with buildout of the housing sites would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

b. Housing Strategy Summaries

Development of all housing sites within housing strategies 1 through 3 has the potential to increase impermeable surfaces and decrease groundwater discharge. There would be no inherent differences in impacts among the housing strategies.

4.8.6.2 Significance of Impacts

While future development of the housing sites has the potential to increase impervious surfaces and decrease groundwater infiltration, requirements for LID and BMPs would reduce impacts. Therefore, impacts on groundwater levels and groundwater recharge resulting from buildout of the housing sites would be less than significant.

4.8.7 Issues 3, 4, and 5: Drainage Pattern/Runoff

Impacts related to drainage and runoff would be significant if the project would:

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site;*
- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or*
- *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.*

4.8.7.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; it provides capacity for future development consistent with State Housing Element Law. Buildout of the housing sites would not result in substantial changes to the overall drainage patterns within the City. Storm water runoff from housing sites would be collected within the existing storm water conveyance system and runoff would ultimately be discharged into the Pacific Ocean. The overall drainage area as well as the drainage characteristics/patterns in the post-buildout condition would be similar to existing conditions, although an increase in paved areas on previously undeveloped sites would result in an increase in impervious surfaces, thereby potentially increasing storm water runoff to the drainage systems. Runoff associated with new development is required to be controlled per the City's Grading, Erosion and Sediment Control Ordinance, so that it would not result in significant impacts to upstream or downstream properties. Any proposed storm drain system improvements for future development would also be required to be designed for the 100-year storm event so it would not result in flood hazards on surrounding lands, erosion or siltation, or exceed the capacity of the storm drain system. Since all future development would be required to adhere to General Plan policies and the City's Municipal Code, with existing regulations, impacts associated with buildout of the HEU would be less than significant.

b. Housing Strategy Summaries

Development of all housing sites within housing strategies 1 through 3 would be consistent with the drainage patterns in the City and handled through the storm drain system. There would be no inherent differences in impacts among the housing strategies.

4.8.7.2 Significance of Impacts

Future development would conform to applicable Federal, State, and City regulatory standards to effectively avoid and/or address potentially significant impacts related to hydrology; therefore, drainage and runoff impacts would be less than significant.

4.8.8 Issues 7, 8, 9, and 10: Flooding/Inundation

Impacts related to flooding and inundation would be significant if the project would:

- *Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or FIRM or other flood hazard delineation map;*
- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows;*
- *Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or*
- *Result in inundation by seiche, tsunami, or mudflow.*

4.8.8.1 Impacts

a. Housing Sites

As noted above, portions of the City are within a FEMA 100-year flood zone, but none of the housing sites are within the FEMA 100-year flood zone. However, housing sites ALT-2, ALT-6, ALT-7, L-1, L-2, and OE-2 have been identified as occur within special 10-year and 100-year flood problem areas identified by the City. Although buildout of these housing sites has the potential to result in flooding issues related to mapped flood hazard areas, the City has implemented a policy for development in the flood problem areas that serves to reduce the flooding hazard of new development on surrounding properties. Future improvement projects must consider these areas during the design phase to ensure that the proposed development will provide an onsite floodwater storage capacity equal to the runoff displaced by the improvements in a 10-year storm event.

With regard to tsunami risk, several identified housing sites are near the Pacific Ocean, but not within a tsunami hazard zone (California Emergency Management Agency 2011). Furthermore, existing regulations, emergency management plans, and protective structures would enhance the structural integrity of coastal development, and Federal

emergency notification plans would assist people in affected areas in successful evacuation and avoidance of tsunamis. Thus, buildout of the housing sites would not result in impacts associated with inundation related to tsunamis.

As noted in 4.8.1.1, seiche and mudflow risk is low in the project area. The San Elijo Lagoon is a large contained body of water in the project area, but seiche would be unlikely to affect the southernmost housing sites given the distance between the lagoon and the sites. Although there are steep slopes throughout the project area, housing sites would be subject to constraints associated with unstable soils, similar to the remainder of the City. Grading activities can remove or lessen the effect of this condition. Thus, buildout of the housing sites would not result in impacts related to or to seiches or mudflows.

The primary concern related to inundation hazards is the three housing sites (C-6, O-2, and O-4), which are within a dam inundation area. These sites could be impacted by dam or levee failure (Impact HYD-1). To ensure public safety, the City requires that flood hazards be considered before development occurs and there are several policies in the General Plan (see Table 4.8-4) which address flood hazards. However, potential impacts associated with dam inundation are not specifically addressed through the current regulatory framework; therefore, impacts associated with dam inundation would be potentially significant for housing sites C-6, O-2 and O-4.

Overall, buildout of the housing sites would not result in flooding issues related to tsunamis, seiche, or mudflow; however, buildout would result in potentially significant impacts related to dam inundation specific to housing sites C-6, O-2, and O-4 and potentially significant impacts related to flood hazard areas at housing sites ALT-2, ALT-6, ALT-7, L-1, L-2, and OE-2.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Development within housing strategy 1 (RM) has potential for impacts related to:

- Flood hazard areas on L-1 and L-2; and
- Dam failure on O-2.

Housing Strategy 2 – Build Your Own (BYO)

Development within housing strategy 2 (BYO) has potential to impact:

- Flood hazard areas on L-1 and OE-2; and
- Dam failure on O-2 and O-4.

Housing Strategy 3 – Modified Mixed-Use Places (MMUP)

Development within housing strategy 3 (MMUP) has potential to impact:

- Flood hazard areas on ALT-2, ALT-6, and ALT-7; and
- Dam failure on C-6, O-2 and O-4.

4.8.8.2 Significance of Impacts

Buildout of the housing sites would result in less than significant impacts relative to flooding associated with seiche, tsunami and mudflow.

Impacts associated with buildout of housing sites C-6, O-2, and O-4 would be potentially significant relative to dam inundation (Impact HYD-1). In addition, impacts associated with buildout of housing sites ALT-2, ALT-6, ALT-7, L-1, L-2, and OE-2.would be potentially significant relative to flooding (Impact HYD-1)

4.8.8.3 Mitigation Framework

HYD-1: Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for flooding impacts, shall be reviewed by the City for compliance with applicable components of the City's Floodplain Management Regulations, specifically Section 23.40.051, which includes standards for construction in areas of special flood hazard. All future development on housing sites consistent with the HEU floating zone program, located within mapped flood problem areas or dam inundation areas, shall be designed to reduce potential flooding hazards subject to the satisfaction of the City Engineer.

4.8.8.4 Significance After Mitigation

Impacts relative to flooding and dam inundation would be reduced to a level less than significant with mitigation framework HYD-1.

4.9 Land Use and Planning

This section discusses land use and planning impacts related to the HEU. This section analyzes potential environmental impacts related to land use plans or policies, state planning initiatives, neighborhood compatibility, proximity to agricultural sites, and noise/land use compatibility. This section is based on land use and technical data developed by the City of Encinitas (City).

4.9.1 Existing Conditions

4.9.1.1 Environmental Setting

As previously discussed in Chapter 2.0, the City is bounded on the west by the Pacific Ocean; on the north by Batiquitos Lagoon Reserve and the City of Carlsbad; on the east by open space in unincorporated San Diego County; and on the south by San Elijo Lagoon Reserve and the City of Solana Beach. The City is comprised of five unique and geographically distinct communities: Old Encinitas, New Encinitas, Leucadia, Cardiff, and Olivenhain (see Figure 2-2). The City is geographically characterized by long stretches of coastal beaches, cliffs, bluff-top mesas, rolling hills and mountain foothills tied together by watershed canyons and coastal tidal lagoons.

4.9.1.2 Existing Land Uses

Reflective of the topography, historic agricultural land uses and rural residential character of the inland areas of the City, urban-style development has concentrated along the coast and transportation routes. In the coastal communities of Leucadia, Old Encinitas, and Cardiff, development intensity generally decreases from west to east into New Encinitas and becomes semi-rural in the hills of Olivenhain. The City is developed with a range of land uses that include a mix of single-family and multi-family (condominiums, apartments, and duplexes), and estate residential homes spread through coastal, inland, and rural residential neighborhoods.

Retail, office, and service commercial uses in the City are primarily located along transportation corridors and generally are characterized as automobile oriented strip commercial, Main Street - downtown, Village Center, and neighborhood service commercial types. The City has a significant number of agricultural greenhouses located along both sides of Interstate 5 in Leucadia, Old and New Encinitas, and Cardiff. There are also mixed public facilities (including educational, institutional, public utility, and governmental offices); and other land uses (including agricultural field crops, recreational parks, trails, and open space, public beaches, habitat areas, watersheds, and vacant lands). Lower

density uses, including agriculture, recreational uses, and low-density residential uses are largely located within the eastern portion of the City.

4.9.1.3 Existing Land Use Detail

The City encompasses 13,328 acres within the Planning Area. The Planning Area includes the City's incorporated limits and Sphere of Influence (SOI), with a distribution of uses including residential, commercial and office, industrial, public and quasi-public, parks and open space, agriculture, vacant uses, and roads. This inventory includes 240 acres of bays/lagoons, ponds, and water. Table 4.9-1 shows the City's existing land use and activities distribution. (This is different than the land use plan or zoning). This table is useful as it shows the "on-the-ground" allocation of different land use activities. Figures 4.9-1a through 4.9-1d shows the spatial arrangements of these existing land uses in the City. The following sections describe specific acreages and existing land use patterns.

Table 4.9-1
Existing Land Use Distribution

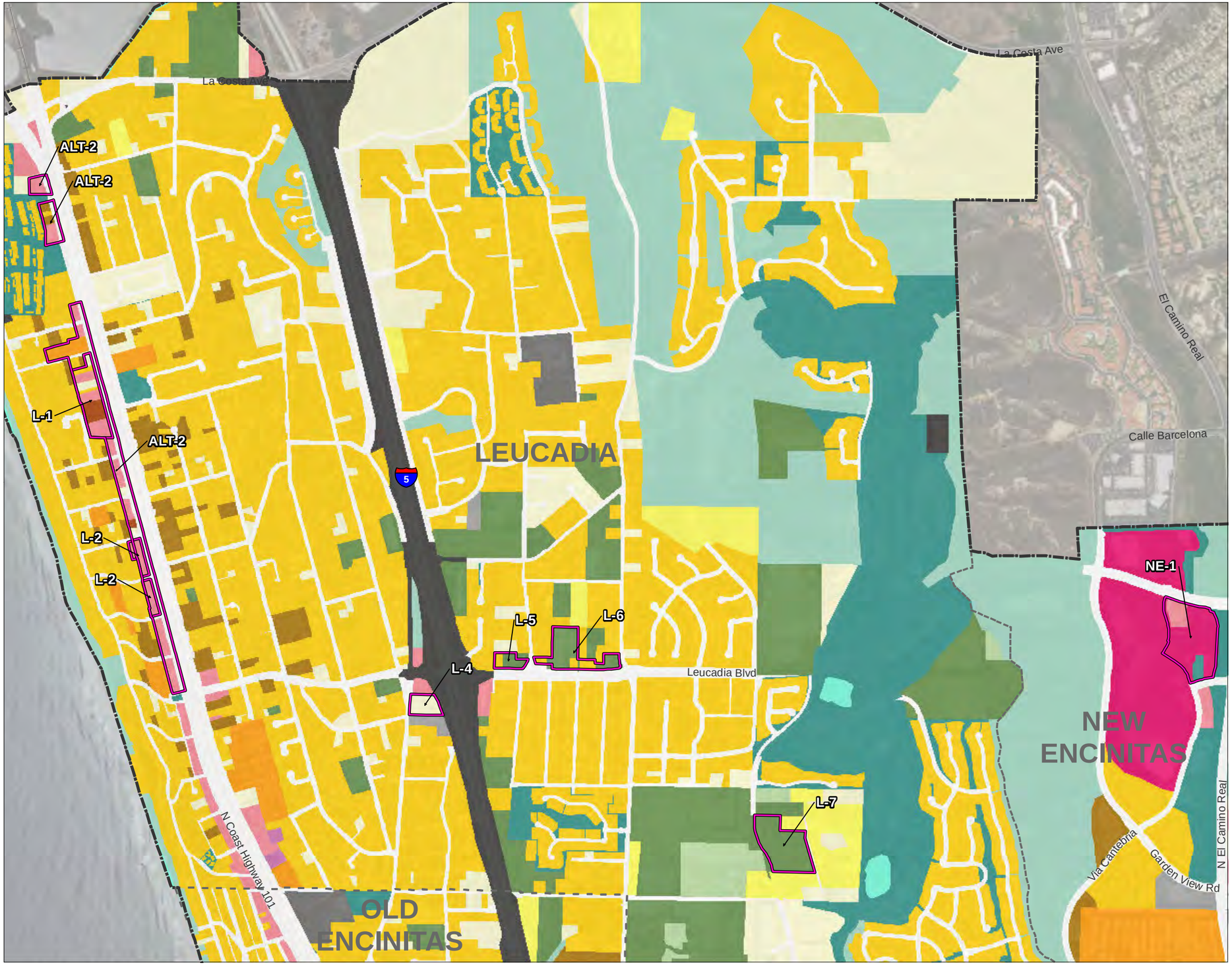
Land Use	Land Use Acres	Percent of Total
Residential	5,926	44.5%
Spaced Rural Residential	1,572	11.8%
Single-Family Detached	3,269	24.5%
Single-Family Multiple Units	797	6.2%
Single-Family Residential Without Units	23	0.2%
Mobile Home Park	64	0.5%
Multiple Family	194	1.5%
Multiple Family Residential Without Units	0.18	<0.1%
Mixed Use	7	<0.1%
Commercial and Office	417	3.1%
Arterial Commercial	85	0.6%
Automobile Dealership	15	0.1%
Community Shopping Center	115	0.9%
Hotel/Motel (Low-Rise)	14	0.1%
Neighborhood Shopping Center	98	0.7%
Office (Low-Rise)	60	0.4%
Other Retail Trade and Strip Commercial	10	0.1%
Service Station	14	0.1%
Specialty Commercial	6	<0.1%
Industrial	21	0.2%
Industrial Park	8	0.1%
Light Industry – General	1	<0.1%
Public Storage	12	0.1%
Warehousing	0.00	0
Public and Quasi-Public	787	5.9%
Communication and Utilities	48	0.4%
Elementary School	69	0.5%
Fire/Police Station	8	0.1%
Freeway	300	2.3%
Government Office/Civic Center	5	<0.1%
Hospital – General	5	<0.1%
Junior College	42	0.3%

Table 4.9-1
Existing Land Use Distribution

Land Use	Land Use Acres	Percent of Total
Junior High School or Middle School	39	0.3%
Junkyard/Dump/Landfill	38	0.3%
Library	2	<0.1%
Other Group Quarters Facility	18	0.1%
Other Health Care	23	0.2%
Other Public Services	7	0.1%
Other School	22	0.2%
Other Transportation	13	0.1%
Park and Ride Lot	1	<0.1%
Parking Lot – Surface	19	0.1%
Post Office	5	<0.1%
Rail Station/Transit Center	2	<0.1%
Religious Facility	78	0.6%
School District Office	3	<0.1%
Senior High School	40	0.3%
Parks and Recreation	2,945	22.1%
Beach – Active	31	0.2%
Beach - Passive	46	0.3%
Golf Course	191	1.4%
Golf Course Clubhouse	6	<0.1%
Landscape Open Space	17	1.3%
Open Space Park or Preserve	2,299	17.3%
Other Recreation – High	32	0.2%
Park – Active	119	0.9%
Residential Recreation	45	0.3%
Agriculture	419	3.1%
Field Crops	56	0.4%
Intensive Agriculture	363	2.7%
Vacant / Undeveloped	1,075	8.1%
Commercial Under Construction	0.18	<0.1%
Office Under Construction	2	<0.1%
Residential Under Construction	43	0.3%
Vacant and Undeveloped Land	1,030	7.7%
Road Right-of-Way	1,498	11.2%
Water	240	1.8%
Bay or Lagoon	233	1.7%
Lake/Reservoir/Large Pond	5	<0.1%
Water	2	<0.1%
TOTAL	**13,328**	

SOURCE: SanGIS Landbase, San Diego Association of Governments (SANDAG), San Diego County Assessor's Master Property Records, 2015a.

Image source: USDA FSA (flown June 2014)



Location Map

City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

Existing Landuse

Residential
- Spaced Rural Residential
- Single Family Residential
- Mobile Homes
- Multi-Family Residential
- Mixed Use

Commercial and Office
- Shopping Centers
- Commercial and Office

INDUSTRIAL
- Light Industry

Public Facilities and Utilities
- Transportation, Communications, Utilities
- Education
- Institutions

Parks and Recreation
- Recreation
- Open Space Parks

Agriculture
- Intensive Agriculture
- Extensive Agriculture

Undeveloped
- Undeveloped
- Water
- Road Rights of Way

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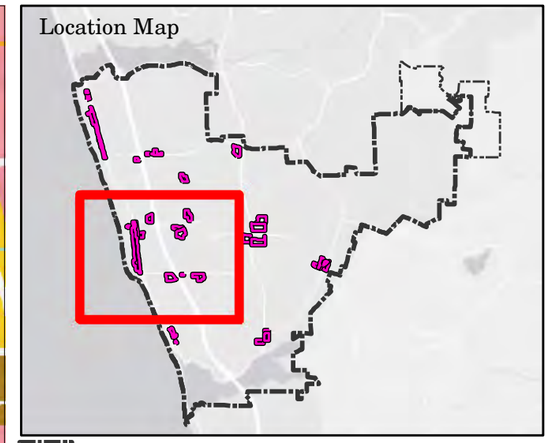
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FIGURE 4.9-1a
Existing Land Uses

Image source: USDA FSA (flown June 2014)





City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

Existing Landuse

Residential
- Spaced Rural Residential
- Single Family Residential
- Mobile Homes
- Multi-Family Residential
- Mixed Use

Commercial and Office
- Commercial and Office

INDUSTRIAL
- Light Industry

Public Facilities and Utilities
- Transportation, Communications, Utilities
- Education
- Institutions

Parks and Recreation
- Recreation
- Open Space Parks

Agriculture
- Intensive Agriculture
- Extensive Agriculture

Undeveloped
- Undeveloped
- Water
- Road Rights of Way

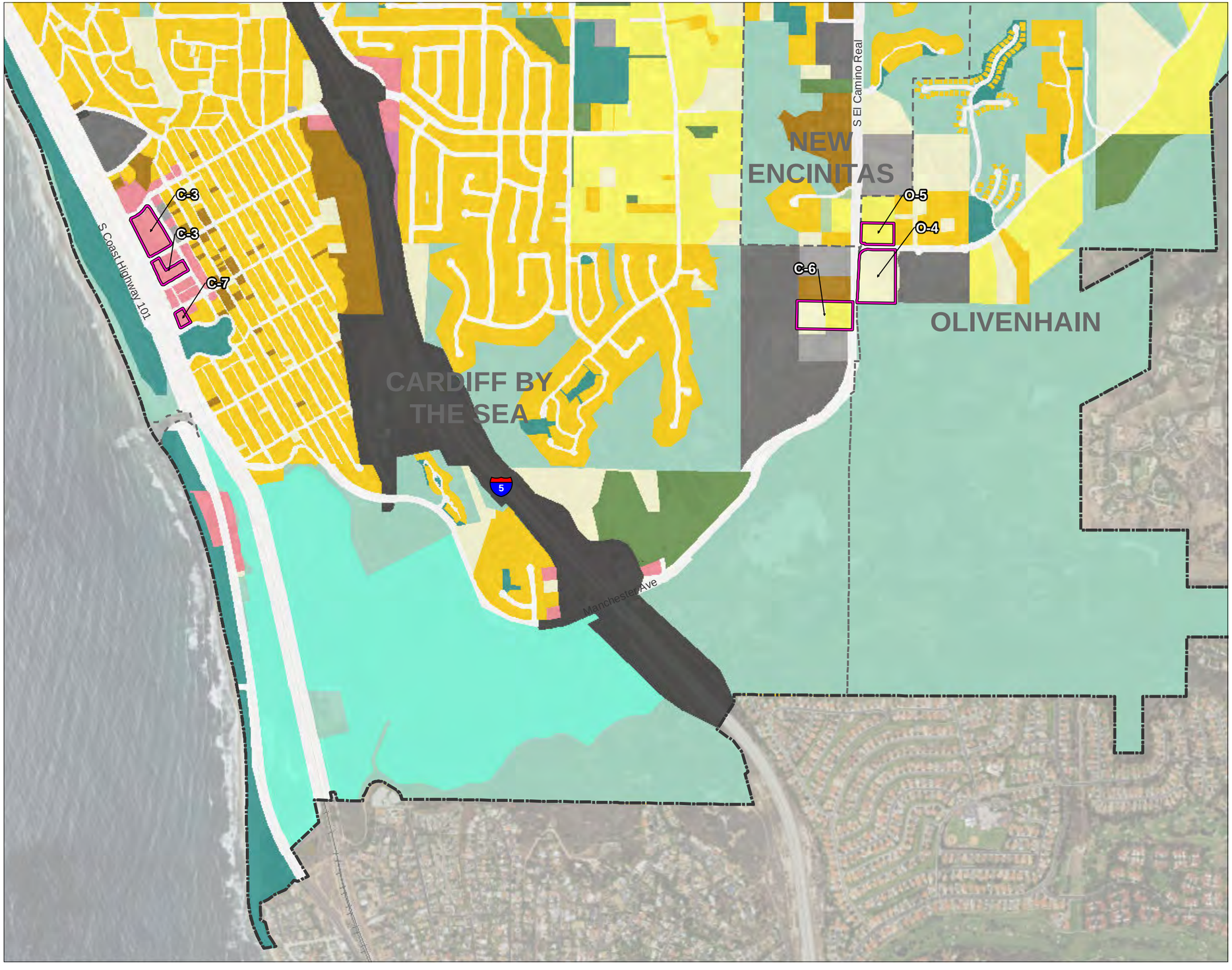
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FIGURE 4.9-1b
Existing Land Uses

Image source: USDA FSA (flown June 2014)



Location Map

City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

Existing Landuse

Residential
- Spaced Rural Residential
- Single Family Residential
- Multi-Family Residential

Commercial and Office
- Commercial and Office

INDUSTRIAL
- Light Industry

Public Facilities and Utilities
- Transportation, Communications, Utilities
- Education
- Institutions

Parks and Recreation
- Recreation
- Open Space Parks

Agriculture
- Intensive Agriculture
- Extensive Agriculture

Undeveloped
- Undeveloped
- Water
- Road Rights of Way

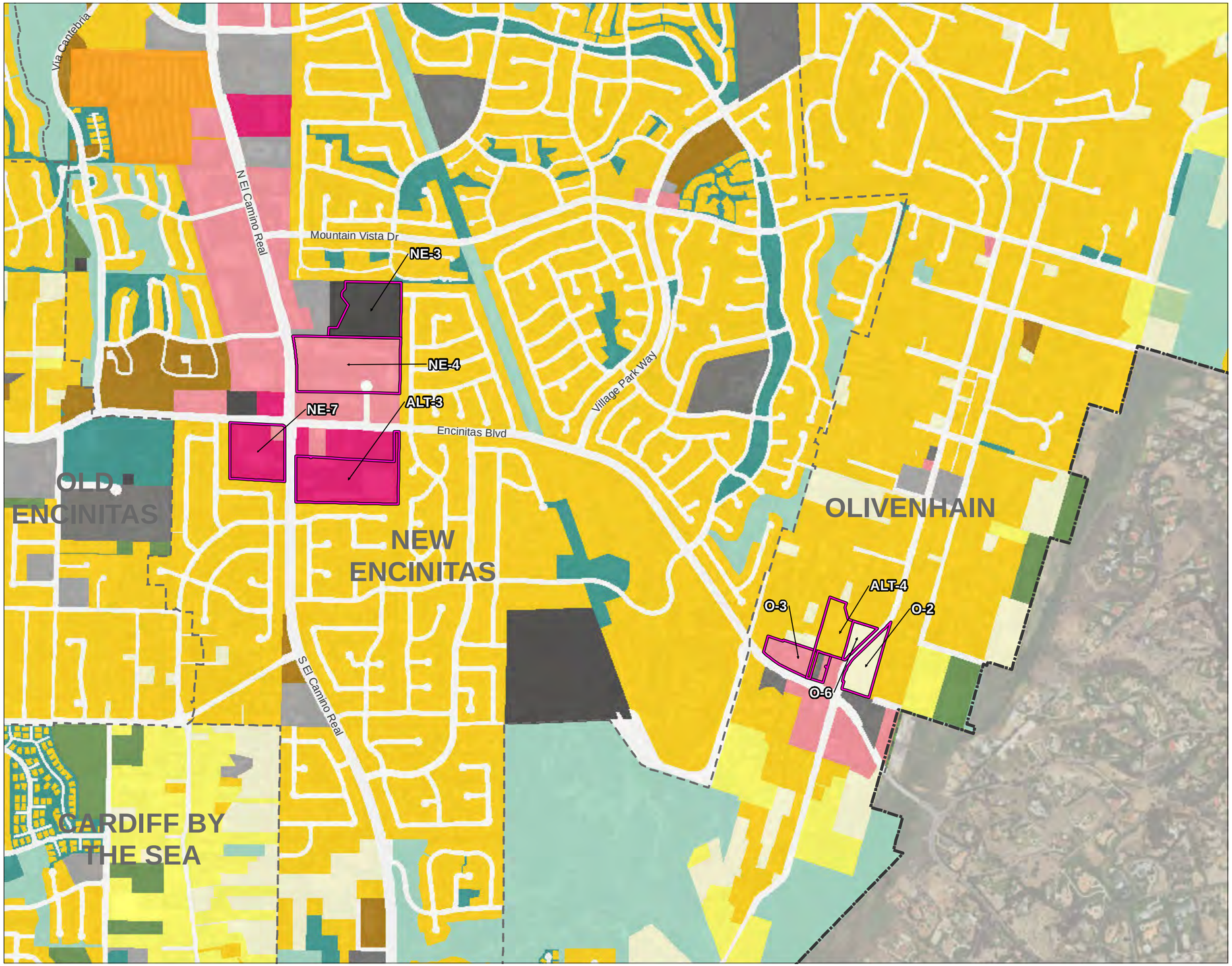
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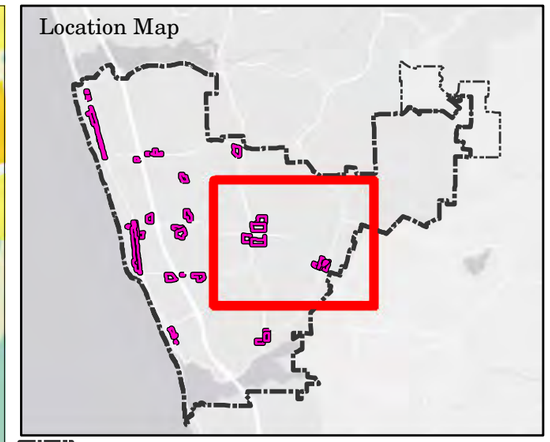
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FIGURE 4.9-1c
Existing Land Uses

Image source: USDA FSA (flown June 2014)





City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

Existing Landuse

Residential
- Spaced Rural Residential
- Single Family Residential
- Mobile Homes
- Multi-Family Residential

Commercial and Office
- Shopping Centers
- Commercial and Office

Public Facilities and Utilities
- Transportation, Communications, Utilities
- Education
- Institutions

Parks and Recreation
- Recreation
- Open Space Parks

Agriculture
- Intensive Agriculture
- Extensive Agriculture

Undeveloped
- Undeveloped
- Road Rights of Way

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FIGURE 4.9-1d
Existing Land Uses

a. Residential

Residential uses are primarily located in the City's residential neighborhoods. The types of single-family housing range from historic single-family bungalows in Cardiff and Old Encinitas to post World War II homes located in the hills of Olivenhain. Old Encinitas has a variety of park, public, and residential uses along its Pacific coastline. The coastal edge is generally urbanized, primarily as single-family with some multi-family residential units. Residential zoning in Old Encinitas includes high density along the coast, with high, medium, and low density east of Coast Highway 101 and Interstate 5. The inland residential area in the northeast of Old Encinitas features a single-family residential subdivision, typical of the late 1970s through the mid-1990s suburban style with curvilinear streets and cul-de-sacs with larger homes set back from the street. The inland residential neighborhoods east and west of Interstate 5 in Old Encinitas were developed in the 1960s and 1970s and feature grid streets and is comprised mainly of single-family dwellings with some "twin homes" and condominiums dispersed throughout. The existing zoning allows for attached single-family and multi-family infill along major arterials.

Most of New Encinitas' residential neighborhoods include suburban housing styles typical of the 1980s and 1990s. The community's residential areas were mainly developed through planned residential developments and are generally characterized by low density single-family neighborhoods, with pockets of medium density single-family and multi-family residential with greenbelt and natural open space networks. New Encinitas is primarily zoned for attached and detached single-family residential.

Almost all of the City's mobile home parks are located in the beach-oriented community of Leucadia. Leucadia is generally urbanized, primarily with single-family residential and some multi-family residential uses. Residential uses predominate, with limited commercial and specialty retail along Highway 101. Residential zoning density is higher along Coast Highway 101, with the remaining residential areas of Leucadia containing lower density zoning.

The coastal community of Cardiff is comprised primarily of single-family residential uses, and can be characterized as a vibrant, walkable beach village.

Olivenhain is characterized by rural, low density residential uses on large lots, considerably different than the coastal communities to the west. Olivenhain is reminiscent of a semi-rural or country community with a pastoral setting, a trail system, and historic buildings which reinforce its relaxed and open theme.

Table 4.9-2 provides the housing types and the number of each type in the City.

Table 4.9-2 City of Encinitas Existing Housing Types	
Unit	Estimated 2015
Total Housing Units	**25,818**
Single-Family	20,998
Multiple Family	4,081
Mobile Homes	739
SOURCE: SANDAG Estimation (SANDAG 2015b).	

Residential land use currently accounts for 44.5 percent of all land area in the City, more than any other land use. The primary existing housing type in the City (81.3 percent) is single-family homes. Multi-family condominiums, townhomes, and apartments currently comprise 15.8 percent of the existing housing supply. Mobile homes make up 2.9 percent of the supply.

b. Commercial and Office

Commercial and office uses account for 417 acres or approximately 3 percent of total land area in the City. These uses are located along commercial corridors, including El Camino Real, Encinitas Boulevard and Highway 101, and in the commercial districts of downtown at Old Encinitas and Cardiff. Local-serving commercial uses, such as restaurants, cafes, supermarkets, and other types of retail, are located along the commercial corridors, while a mix of tourist and local-serving uses are located in downtown. Motels and hotels, which are also assigned to this category, are mostly located along the Highway 101 corridor. There are primarily two mixed use corridor locations in the City, where residential and commercial land uses can be mixed together on the same parcel or site. One is located on 1st Street (Coast Highway 101) and 2nd Street in the downtown area and the other on N. Coast Highway 101 in the community of Leucadia.

c. Light Industrial

Light industrial and warehousing use account for 21 acres or less than one-half percent of total land area in the City. These uses include storage facilities and some service-related uses, such as auto body repair.

d. Public and Quasi-Public

Public and quasi-public uses include schools, public facilities, churches, medical facilities, and utilities, among others. These uses account for 787 acres or approximately 6 percent of the total land area in the City. Specific uses include the Encinitas Civic Center and Library, San Elijo Water Reclamation Facility, and the City's five fire stations.

e. Parks and Open Space

Encinitas' diverse range of parks and open space includes regional, community, and neighborhood parks, as well as open space areas designated for wildlife habitat. These

public and private uses account for 2,945 acres or approximately 22 percent of land area in the City.

f. Agriculture

Agricultural uses include greenhouses, small orchards, and crops. These uses account for 419 acres or approximately 3 percent of land area in the City. Agricultural uses are dispersed within the inland flat areas, mostly east of Interstate 5. The City has significant agricultural greenhouses located along both sides of Interstate 5 in Leucadia, Old and New Encinitas, and Cardiff.

g. Vacant and Undeveloped

Vacant and undeveloped lands account for 1,075 acres or approximately 8 percent of the total land area in the City. These areas are dispersed throughout the City and are located primarily by Public Facilities and Utilities or Single-family Residential land use areas of each community. Although over 200 vacant and undeveloped lots are located throughout the City, only housing sites L-4, L-7, Alt-5, OE-7, O-2, O-4, O-6, and C-6 (study area portion) are presently vacant.

4.9.1.4 Housing Sites

As discussed in Chapter 3, the City conducted an extensive community visioning and mapping exercise for the HEU with the objective to preserve the character of most existing neighborhoods while channeling growth to targeted areas (see Appendix D.

Five neighborhood prototypes were developed to help the public better visualize how additional housing could be accommodated within the fabric of the five communities and 33 housing opportunity sites were ultimately identified in locations dispersed throughout the City.

4.9.1.5 Regional Land Use (Adjacent Land Uses and Surrounding Communities)

a. City of Carlsbad

The City of Carlsbad is located to the north of the City of Encinitas. Between the cities is the 610-acre Batiquitos Lagoon State Marine Reserve. To the northwest of the Batiquitos Lagoon is the Ponto Beach area. The community surrounding the Ponto Beach area primarily consists of small lot, single-family homes; mobile homes; and a mixture of non-residential uses. Some non-residential uses in the Ponto Beach area include South Carlsbad State Beach campgrounds on Highway 101, general commercial uses along Avenida Encinas, and vacant and underutilized commercial properties on Ponto Drive. Efforts are ongoing to envision a variety of new uses in the 50-acre Ponto Beach area, which may include a mixture of recreation, visitor-serving commercial and residential uses. The Ponto Beach area is in the master planned Aviara community, which is situated inland and north

and overlooks portions of the Batiquitos Lagoon. The Aviara community features large single-family homes, as well as an 18-hole golf course and a resort and spa. Most of the land uses in the southeast quadrant of the City of Carlsbad consist of single-family residential. The La Costa community consists of several master planned communities. The La Costa Oaks and La Costa Valley master planned developments are the closest in proximity to the City. Some commercial/office uses are located along El Camino Real, Calle Barcelona, and Rancho Santa Fe Road. An assisted living/retirement community is located at the southeast corner of El Camino Real and La Costa Avenue.

The City of Carlsbad has a total area of about 24,788 acres. The majority of existing land uses in the City, or 57 percent, are residential uses (14,194 acres). There are approximately 43,844 total housing units in the City. Approximately 4,134 acres, or 17 percent of the City area, are devoted to nonresidential uses such as retail, commercial, and/or industrial use.

b. City of Solana Beach

The City of Solana Beach (total population of 13,547) is located just south of Encinitas. Land uses adjacent to the City of Encinitas include single-family residential and recreation/open space. Most of the San Elijo Lagoon Reserve is located in the City of Encinitas, but a small portion of the lagoon is within the City of Solana Beach. Solana Beach's predominant commercial land uses are located along Highway 101, representing one of the key focus areas of Solana Beach's business activity. Along Highway 101, there are many family-owned and operated stores, restaurants and businesses. Some office/professional land uses are on the west side of Highway 101, just south of the City; however, most of the uses on this north-south corridor are commercial.

The incorporated area of Solana Beach is about 2,211 acres, with approximately 54 percent, or 1,200 acres, dedicated to some type of residential development. There are approximately 6,521 total housing units in the City. There are mixes of some other land uses in the City such as recreation/open space (12 percent), commercial/office (6 percent), and public/institutional (6 percent). Solana Beach has already been developed extensively, and less than 1 percent of the City is vacant.

c. County of San Diego

To the east of the City of Encinitas are unincorporated areas of San Diego County, including the San Dieguito Community Planning Area. The San Dieguito Community Planning Area is generally a low density estate residential area with a population of about 28,815 persons. There are approximately 10,987 total housing units in the San Dieguito Community Planning Area.

Prior to incorporation of the cities of Encinitas and Solana Beach in 1986, urbanized coastal areas represented the core or focus of the unincorporated community planning area. Today, the focus has shifted to inland communities including Elfin Forest, Fairbanks Ranch, Harmony Grove, Ranch Santa Fe, and Whispering Palms.

The most developed communities of the unincorporated County are located along the unincorporated territory's westernmost boundaries and include the community planning areas of Spring Valley, Sweetwater, Valle de Oro, Lakeside, San Dieguito, portions of North County Metro, and Fallbrook. There are approximately 503,320 persons living in an unincorporated area of the County.

4.9.2 Regulatory Framework

4.9.2.1 State

a. General Plan and Housing Element Law

The California Constitution grants to local (City and County) governments the authority to regulate land use through the police power. It also requires all cities and counties to prepare a comprehensive, long-term general plan for land use within their jurisdictions. The general plan serves as a broad policy framework and guide for future development and must contain seven mandated elements addressing land use, housing circulation, conservation, open space, noise, and safety. All other land use regulations, including specific plans, ordinances, and land use decisions within the jurisdiction must be consistent with the general plan.

State Housing Element Law

In the face of mounting housing costs and the lack of affordable housing throughout the State, the legislature has prioritized the provision of a decent home and suitable living environment to each Californian, with particular focus on housing affordable to low and very low income households. As a result, State Housing Element law (Government Code sections 65583 et seq.) now requires all incorporated cities and unincorporated counties to regularly update their general plan housing to ensure each city and county in the State provides its fair share of housing at all economic levels. State Housing Element Law is discussed in detail in Chapter 3. Housing Element Law requires cities to regularly update their housing elements to identify and analyze housing need; establish reasonable goals, objectives, and policies based on those needs; and set forth a comprehensive list of actions to achieve the identified goals and substantially comply with the requirements of State law.

State Review

Government Code Section 65585 requires that the City submits its draft and final (adopted) housing elements to Housing and Community Development (HCD) for review and "certification." Specifically, the City must submit its draft Housing Element to HCD at least 60 days prior to the adoption of its final Housing Element. HCD reviews the draft and reports its findings back to the City within 60 days. In its findings, HCD determines whether the draft Housing Element substantially complies with the requirements of State housing element law (refer to Appendix A-1, HCD Review Letter). The City must consider HCD's findings prior to the adoption of its final Housing Element. State law requires that

HCD review the final element and report its findings of whether the element is substantially in compliance with Housing Element Law to the City within 90 days.

Regional Housing Needs Assessment

Government Code Section 65584 requires that cities and counties with a regional council of governments (COG) establish the housing needs associated with projected population growth for defined regions in the State. HCD uses the Department of Finance population projections to determine the regional housing need that is distributed to the cities and county by SANDAG through the Regional Housing Needs Assessment (RHNA) planning process (see Section 3.2 for details of the assessment process and details of its application to the City).

b. California Coastal Act

The California Coastal Act (Public Resources Code, Division 20, sections 30000 et seq., was adopted by the California legislature on January 1, 1977. The Coastal Act established the following goals for the coastal zone affecting land use:

a. Protect, maintain and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.

b. Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the State.

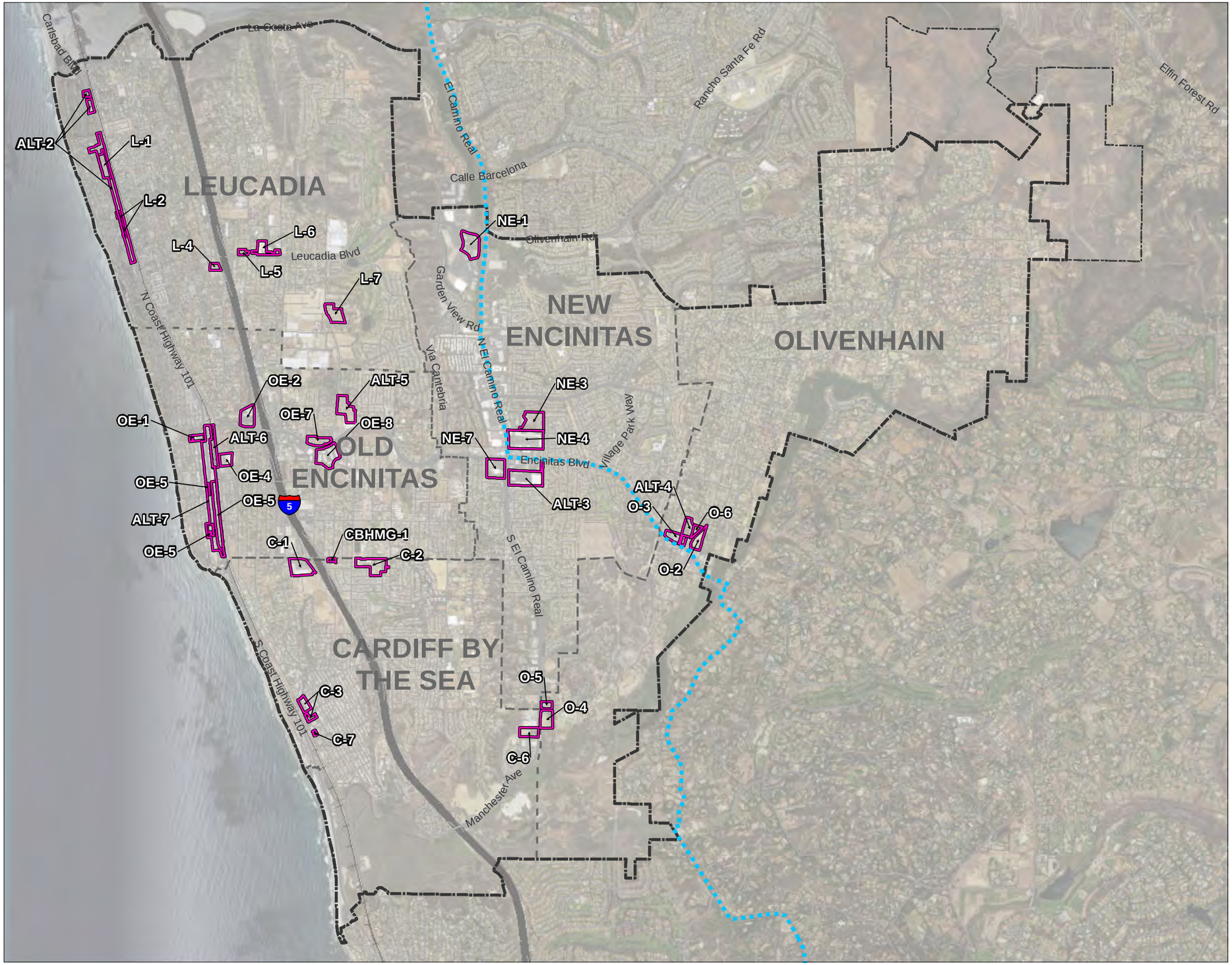
c. Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.

d. Assure priority for coastal-dependent and coastal-related development over other development on the coast.

e. Encourage State and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial, uses, including educational uses, in the coastal zone (California Coastal Act, Section 30001.5).

The Coastal Act also established the California Coastal Commission (CCC) which has land use authority in the coastal zone. Development within the Coastal Zone may not commence until a coastal development permit has been issued by either the CCC or a local government that has a certified Local Coastal Program (LCP). After certification of an LCP, coastal development permit authority is generally delegated to the local government, with some exceptions. Figure 4.9-2 shows where the coastal zone falls within the City and the location of the proposed HEU housing sites relative to the coastal zone.

Image source: USDA FSA (flown June 2014)



City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites
Coastal Zone Boundary

0 Miles 0.5

RECON

M:\JOBS4\7722\common_gis\fig4.9-2.mxd 9/15/2015 fmm

FIGURE 4.9-2
Project in Relation to Coastal Zone Area

c. SB 743

State Senate Bill 743 (SB 743) (2013) created a process to change the way projects analyze transportation impacts pursuant to CEQA. Currently, environmental review of transportation impacts focuses on the delay that vehicles experience at intersections and on roadway segments. That delay is often measured using a metric known as "level of service," or LOS. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks and promotion of a mix of land uses. SB 743 requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service for evaluating transportation impacts. The alternative criteria must promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses (OPR 2014). According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

d. SB 375

SB 375 (2008) reduces greenhouse gas (GHG) emissions from passenger vehicles through an integrated approach to regional transportation and land use planning. Local governments have an important role to play in reducing GHG emissions since cities and counties are required to update the housing elements of their general plans to implement their share of their RHNA allocation, which, in areas with Metropolitan Planning Organizations (MPOs), must be consistent with the Sustainable Communities Strategy (SCS) of the regional transportation plans.

There is a strong link between land use, housing location decisions, and strategies to reduce emissions from the transportation sector. Within urbanized areas, residential development accounts for the largest share of land area, constituting a major influence on regional development footprints and travel patterns. As such, integrating transportation and residential land use is one of the most impactful strategies for reducing GHG emissions, as well as other forms of air pollution, for the transportation system. Governmental actions supporting the location, variety and availability of housing are critical to implementing GHG emissions reduction policies. This can support the integration of transportation and housing development, offering more varied and efficient consumer choices. Infill development patterns that emphasizes proximity and connectivity to public transit, walkable areas, employment and service centers and amenities can increase the effectiveness of these relationships.

e. California Code of Regulations Title 24 Interior Noise Building Standards

Interior noise compatibility levels for dwellings other than detached single-family dwellings are regulated by Title 24 of the California Code of Regulations (CCR), California Noise Insulation Standards. Title 24, Chapter 12, Section 1207, of the California Building Code

requires that interior noise levels, attributable to exterior sources, not exceed 45 community noise equivalent level (CNEL) in any habitable room within a residential structure. A habitable room in a building is used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable spaces. Additionally, acoustical studies must be prepared for proposed residential structures located where the exterior noise level exceeds 60 CNEL. The studies must demonstrate that the design of the building would reduce interior noise to 45 CNEL in habitable rooms. If compliance requires windows to be inoperable or closed, the structure must include ventilation or air conditioning (24 CCR 1207 2010).

Note that the City's noise compatibility are expressed in terms of the day-night equivalent level (L_{dn}). For all practical purposes, CNEL and L_{dn} can be considered synonymous. For consistency, L_{dn} is used in this analysis.

4.9.2.2 Regional

a. San Diego Association of Governments

San Diego Association of Governments (SANDAG) is comprised of elected representatives of the 18 cities in San Diego County and the County itself. SANDAG serves as the forum for regional decision-making and long-term transportation plans to meet future growth and community needs. SANDAG builds consensus; makes strategic plans; obtains and allocates resources; plans, engineers, and builds public transportation; and provides information on a broad range of topics pertinent to the region's quality of life.

b. San Diego Forward: The Regional Plan (San Diego Forward) October 2015

San Diego Forward was adopted by the SANDAG Board of Directors on October 9, 2015. San Diego Forward combines and updates the region's two big picture planning documents: the Regional Comprehensive Plan (RCP) and the RTP/SCS. San Diego Forward provides a big picture vision for the region's growth through the year 2050. The Plan reflects a strategy for a more sustainable future which includes investing in a transportation network that will provide people more travel choices, protects the environment, creates healthy communities, and stimulates economic growth (SANDAG 2015c).

The 2004 RCP set goals for the creation of "focused community centers." San Diego Forward builds on those goals developing a plan for connecting those neighborhood centers with real transportation choices, giving people the option to walk, bike, or take transit in addition to driving a car (SANDAG 2015b). Generally, latest regional growth forecasts reflect the need and desire for more compact communities, providing housing, jobs, and services closer to one another, and giving residents more choices in where to live and how to get around.

The main goal of the Plan is to develop an overarching plan for future growth in the County based upon the principles of sustainability and smart growth. The intent of SB 375 is to use the RTP/SCS to integrate regional land use, RHNA, environmental, and transportation

planning to ensure efficient regional planning in the future that leads to reduced greenhouse gas emissions from land and transportation uses.

The SCS focuses on "housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all, and implement the plan through incentives and collaboration." The SCS includes four building blocks: (1) a land use component that accommodates the RHNA and includes the protection of sensitive resources, including areas protected under habitat conservation plans; (2) transportation networks including highways, transit, and local streets and roads; (3) transportation demand management strategies; and (4) transportation system management programs and policies.

As a result of SB 375, preparation of local RHNA Plans is required to be coordinated and consistent with the RTP and SCS for the length of the housing element cycle. Local governments play a large role in helping to develop the transportation and land use scenarios used in the SCS development process. Land use authority remains within the purview of the local governments

The San Diego Forward plan contains all required elements of a regional plan including: Policy Element; Sustainable Communities Strategy; Financial Element; and Action Element. The goals of the Plan are to provide innovative mobility choices and planning to support a sustainable and healthy region, a vibrant economy, and an outstanding quality of life for all. To meet these broad goals, the Plan offers six general categories of policy objectives with two to three specific policy objectives within each.

The six general categories of policy objectives, each with specific objectives are as follows:

Habitat and Open Space Preservation

- Focus growth in areas that are already urbanized, allowing the region to set aside and restore more open space in our less developed areas.
- Protect and restore our region's urban canyons, coastlines, beaches, and water resources.

Regional Economic Prosperity

- Invest in transportation projects that provide access for all communities to a variety of jobs with competitive wages.
- Build infrastructure that makes the movement of freight in our community more efficient and environmentally friendly.

Environmental Stewardship

- Make transportation investments that result in cleaner air, environmental protection, conservation, efficiency, and sustainable living.
- Support energy programs that promote sustainability.

Mobility Choices

- Provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play.
- Take advantage of new technologies to make the transportation system more efficient and accessible.

Partnerships/Collaboration

- Collaborate with Native American tribes, Mexico, military bases, neighboring counties, infrastructure providers, the private sector, and local communities to design a transportation system that connects to the megaregion and national network, works for everyone, and fosters a high quality of life for all.
- As we plan for our region, recognize the vital economic, environmental, cultural, and community linkages between the San Diego region and Baja California.

Healthy and Complete Communities

- Create great places for everyone to live, work, and play.
- Connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.
- Increase the supply and variety of housing types -- affordable for people of all ages and income levels in areas with frequent transit service and with access to a variety of services.

4.9.2.3 Local

a. Local Coastal Program

The California Coastal Act requires each coastal city to adopt a Local Coastal Program (LCP) to protect coastal resources and to manage coastal development. The LCP is a basic planning tool to guide development in the Coastal Zone. While each LCP reflects unique characteristics of individual local coastal communities, regional and State interests and concerns must also be addressed in conformity with Coastal Act goals and policies.

Approximately two-thirds of the City is located within the Coastal Zone and falls under CCC jurisdiction. Coastal areas within the City are within the Coastal Zone as shown on Figure 4.9-2. In compliance with the Coastal Act, the City has adopted and implemented a LCP. The LCP is included within the General Plan, and consists of a coastal land use plan

and supporting ordinances that are incorporated into each of the General Plan elements. The goals of the LCP are to protect, maintain, and enhance the Coastal Zone environment; ensure balanced utilization and conservation; maximize public access to and along the coast; prioritize coastal-dependent and related development; and encourage coordinated State and local initiatives to implement beneficial programs and other educational uses.

A LCP has two parts: a Land Use Plan (LUP) and an Implementation Plan (IP). The City's LUP is combined with the General Plan and Land Use Policy Map. Those portions of the adopted General Plan that comprise the LUP are indicated by back shaded text, and span across most elements. Under Section 30500.1 of the Coastal Act, no LCP shall be required to include housing policies and programs. For that reason, the City's currently adopted Housing Element is not included in the current LCP; and an update to the Housing Element portion of the General Plan will not trigger LCP amendment. However, the implementation of those housing policies and programs, as well as project conforming amendments would require CCC certification through LCP amendment. The IP portion of the City's LCP is composed of the various portions of the Municipal Code (Titles 24 and 30, Chapters 23.08 and 23.24), the various Specific Plans (Downtown Encinitas, North 101 Corridor, Encinitas Ranch), and the zoning map.

Under the City's LCP, a coastal development permit is required for all development within the City's Coastal Zone, with the exception of the following:

- Improvements to an existing structure or a public works facility.
- Repair and maintenance activities to existing structures or facilities that do not result in an addition to, or enlargement or expansion of, the structures or facilities.
- The installation, testing, and placement in service or the replacement of any necessary utility connection between an existing service facility and any development which has been approved under the California Coastal Act.
- The replacement of any structure other than a public works facility destroyed by a disaster.
- Temporary uses or events.
- Signs which are exempted from provisions of the Municipal Code.

Table 4.9-3 provides the LCP's relevant land use goals and policies.

Table 4.9-3 Goals and Policies Related to Land Use	
Goal/Policy	Description
City of Encinitas Local Coastal Program: Land Use	
1.2	Encourage the development of unified commercial centers and neighborhood commercial centers rather than the continued development of "strip commercial." The Highway 101 corridor may be an exception because of its existing configuration and land uses. (Coastal Act/30250)
1.14	The City will maintain and enhance the Hwy 101 commercial corridor by providing appropriate community-serving tourist-related and pedestrian-oriented uses. (Coastal Act/30250)
2.3	Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services. (Coastal Act/30250)
2.11	Incremental development of large properties shall not be permitted without a master plan and environmental analysis of the full potential development. (Coastal Act/30250)
6.6	The construction of very large buildings shall be discouraged where such structures are incompatible with surrounding development. The building height of both residential and nonresidential structures shall be compatible with surrounding development, given topographic and other considerations, and shall protect public views of regional or statewide significance. (Coastal Act/30251/30252/30253)
Goal 8	Environmentally and topographically sensitive and constrained areas within the City shall be preserved to the greatest extent possible to minimize the risks associated with development in these areas. (Coastal Act/30240/30253)
8.4	Within residentially designated areas, lot averaging and PRDs may be allowed to preserve areas of unique topographic features, riparian woodlands, and other significant open space areas of importance to the community based on the following criteria: Lot averaging and PRDs shall only be used to create a quality development, but shall not increase the overall density of the subdivision; the areas of open space shall be determined and preserved in perpetuity; no further subdivisions of land within lot-averaged subdivisions shall occur. (Coastal Act/30240)

b. City of Encinitas General Plan

The City's General Plan serves as a blueprint for physical development and contains goals and policies which aim to maintain the City's seaside community character, provide a balance of land uses and services, and to preserve environmentally sensitive areas. All zoning ordinances, specific plans, individual projects, and land use regulations and decisions within the jurisdiction must be consistent with the general plan.

In June 2013, the voters in the City approved Proposition A, an initiative placed on the ballot by local citizens – known as the "Encinitas Right to Vote Amendment." Codified in the Encinitas Municipal Code 30.00.010 as the Community Character and Voters' Rights Initiative, Proposition A requires future voter approval for any major amendments to planning policy documents by the Planning Commission and City Council, including the Land Use Element, Land Use Policy Maps of the General Plan, Zoning Code, Zoning Map,

any specific plan, and development agreements. Proposition A specifically requires an affirmative majority vote of the City's voters for any redesignation of land to allow:

1. The allowable maximum density of any property designated for residential use to be increased.

2. Property designated/zoned for non-residential use to be redesignated/rezoned to allow residential uses.

3. Property designated/zoned for residential use to be redesignated/rezoned for any non-residential use.

4. Property designated/zoned for non-residential use shall not be redesignated/rezoned to allow more non-residential uses or greater intensity of use.

Exceptions to the requirements of City voter approval for specified general plan and land use map amendments include: minor adjustments in land use boundaries, minor changes to land use designations for corrections, and any change in any land use designation to ecological resource/open space/parks.

Not only does Proposition A affect how amendments are made to planning policy documents, but the ballot measure modifies building height standards in the City. Proposition A also requires that before the City can make an exception to a citywide height limit of 30 feet/two stories (with few exceptions), a public vote approving the change to the height regulations must take place.

Land Use Element

The Land Use Element of the City General Plan serves as a guide for future development in the City. The Land Use Element affects a number of key issues that are addressed in the remaining elements. For example, land use policies have a direct bearing on the local system of streets and roadways, which is planned for in the Circulation Element. Housing issues and needs identified in the Housing Element are linked to land use policies for both existing and future residential development. Even issues related to safety, noise, and the environment are directly related to the policies contained in the Land Use Element.

Through the use of text and diagrams, the City Land Use Element establishes clear and logical patterns of land use as well as standards for new development. The single most important feature of this element is the Land Use Policy map which indicates the location, density, and intensity of development for all land uses citywide. In addition, the goals and policies contained in the Land Use Element provide a constitutional framework for future land use planning and decision making in the City.

Pertinent General Plan Land Use Element goals and policies related to land use and housing are listed below in Table 4.9-4. The project's proposed amendments to the growth management goals and policies are discussed below.

Table 4.9-4 Goals and Policies Related to Land Use and Housing	
City of Encinitas General Plan Land Use Element	
Goal 1	Encinitas will strive to be a unique seaside community providing a balance of housing, commercial light industrial/office development, recreation, agriculture and open space compatible with the predominant residential character of the community.
1.12	The residential character of the City shall be substantially single-family detached housing
Goal 2	The City should manage slow, orderly growth in accordance with a long-term plan which protects and enhances community values.
2.3	Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services. (Coastal Act/30250)
Goal 3	To assure successful planning for future facilities and services, and a proper balance of uses within the city, the City of Encinitas will establish and maintain a maximum density and intensity of residential and commercial uses of land within the City which will: a) provide a balance of commercial and residential uses which creates and maintains the quality of life and small-town character of the individual communities; and b) protect and enhance the City's natural resources and indigenous wildlife.
3.1	For purposes of growth management, to ensure that existing desirable community character is maintained and to ensure that facilities planning is economical and comprehensive, the ultimate buildout figure for residential dwelling units will be determined by utilizing the total mid-range density figure of the Land Use Element, which shall be derived from the total of all land use acreage devoted to residential categories, assuming a mid-range buildout density overall.
3.2	The City will designate land use categories/zones for residential development which provide housing opportunities for all segments of society at densities consistent with the goals of this Element.
3.6	Except where overriding considerations are found to exist, property will not be designated so as to allow or otherwise encourage development along circulation roads in a continuous or "strip" manner.
3.7 – 3.9	In summary, with the exceptions described in Policy 3.12, once acknowledged as being consistent with the General Plan and Local Coastal Program, 3.7 - the allowable maximum density of any property designated for residential use shall not be increased 3.8 - property designated/zoned for non-residential use shall not be redesignated/rezoned to allow residential uses 3.9 - property designated/zoned for residential use shall not be redesignated/rezoned for any non-residential use.
3.12	The following may be considered as exceptions to the requirements for voter approval for specified general plan land use map amendments: 1. Minor adjustments in land use boundaries to correctly reflect property or development site boundaries. 2. Changes to land use designations to correct (a) map omissions and (b) mapping errors. 3. A change from any land use designation to the Ecological Resource/Open Space/Parks designation.

Table 4.9-4 Goals and Policies Related to Land Use and Housing	
Goal 4	The City of Encinitas will ensure that the rate of residential growth: (a) does not create demand which exceeds the capability of available services and facilities; (b) does not destroy the quality of life and small town character of the individual communities; (c) does not exceed a rate which excludes the public from meaningful participation in all aspects of land use decision making regarding proposed projects; (d) provides the City with the ability to plan ahead for the location, timing and financing of required services and facilities; and does not exceed an annual allotment of dwelling units based on the projected ultimate buildout of dwellings in the City of Encinitas assuming a 25-year buildout period.
9.1	Encourage and preserve low-density residential zoning within the Interstate 5 Corridor while preserving the best natural features and avoiding the creation of a totally urbanized landscape and maintain Interstate 5 Interchange areas to conform to the specifications of this overall goal. The city will develop an Interstate 5 view corridor plan to implement this policy. (Coastal Act/30240/30251)
[1]"Minor" is defined as changes for which certified environmental review per CEQA has determined that there will be no unmitigable significant negative environmental impacts, and one of the following apply: (a) Exception for Decrease in Intensity (b) Exception for Change Within Land Use Class The change applies to 5 acres of land area or less, and is a change from one land use category to another when both are within the same class of categories.	
SOURCE: City of Encinitas 1989, amended 2014.	

Noise Element

The City has established Noise Land Use Compatibility Guidelines in the City's adopted General Plan Noise Element. These guidelines identify compatible exterior noise levels for various land use types. Table 4.9-5 shows the City Exterior Noise Limits. The accompanying discussion set forth the existing criteria for siting new development in the City. Any project which would be located in a "normally unacceptable" noise exposure area, based on the Land Use Compatibility Guidelines, shall require an acoustical analysis. Noise mitigation in the future shall be incorporated in the project as needed.

Table 4.9-5
City of Encinitas Exterior Noise Limits – Adopted Noise Element

	CNEL or L_{dn}						
	55	60	65	70	75	80	85
Residential – Low Density Single-Family, Duplex, Mobile Home							
Residential – Multiple Family							
Transient Lodging – Hotels, Motels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business, Commercial, and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

SOURCE: City of Encinitas 1989

Notes:

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 insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

c. City of Encinitas Specific Plans

The City has adopted the following specific plans, which offer a range of housing types, densities, and/or mix of uses:

- Downtown Encinitas Specific Plan (Adopted February 9, 1994)
- Encinitas Ranch Specific Plan (Adopted September 28, 1994)
- North 101 Corridor Specific Plan (Adopted May 21, 1997)
- Cardiff-by-the-Sea Specific Plan (Adopted July 21, 2010) – approved by the Coastal Commission in 2012

The City anticipates that much of its new residential growth will occur in these specific plan areas, especially as mixed use developments. For purposes of this EIR, the Home Depot Specific Plan will not be included in the analysis as no viable housing sites fall within the Specific Plan area.

Downtown Encinitas Specific Plan

The Downtown Encinitas Specific Plan area consists of approximately 198.6 acres located within the community of Old Encinitas. The area is bounded by the Pacific Ocean to the west, B Street on the north, Cornish Drive on the east, and K Street on the south. The purpose of this Specific Plan was to address the unique aspects, problems, and opportunities of the Downtown Encinitas area, and maintain its identity, community character, and scale, while fostering rehabilitation and successful economic restructuring.

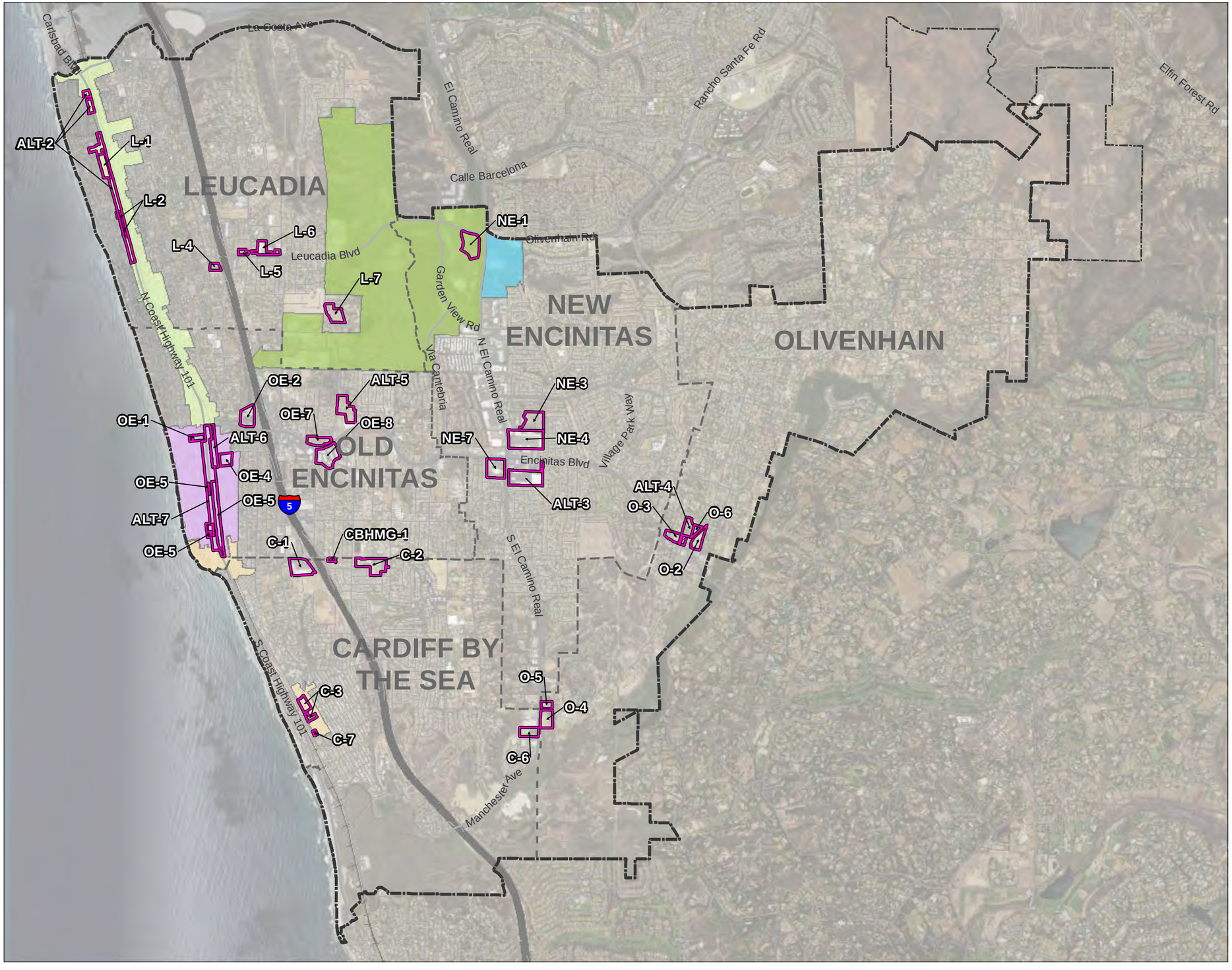
The Specific Plan outlines strategies for increasing housing potential in the following areas. Relevant land use and housing goals and objectives contained within the text of the Downtown Encinitas Specific Plan are listed in Table 4.9-6.

Table 4.9-6
Downtown Encinitas Specific Plan 1994 (2010)

Land Use Goals & Objectives	
Goal 1	Maintain the small scale and beach town character of the Downtown Encinitas specific plan area.
Goal 4	Identify under-utilized land and propose potential land uses.
4.1	Change the zoning of the property designated as limited visitor-serving commercial located at 112 C Street and 371 Second Street to a mixed use zone that would allow more development flexibility of the property.
Goal 6	Provide for mixed-use land opportunities in the specific plan area.
6.1	Rezone First Street to allow mixed-use development which would enable properties to develop as either commercial or a mix of primarily commercial with secondary residential uses.
6.2	Rezone portions of Second Street to allow mixed use development which would enable properties to develop as residential, commercial, office professional, or a mix of these uses.
Goal 7	Maintain and enhance a pedestrian-oriented environment and economically viable downtown by limiting ground floor uses along the First Street Corridor (S. Coast Hwy 101) to pedestrian oriented uses only.
7.3	Pedestrian activity at the street level should be strongly encouraged to create and maintain a compact, uninterrupted walking experience that represents a unique, attractive, and memorable destination for residents and visitors.
Housing Goals & Objectives	
Goal 1	Maintain existing housing stock in specific plan area.
Goal 2	Provide for affordable housing.
2.1	Eliminate incompatibilities between land uses within the specific plan area.
2.2	Encourage senior citizen housing development in the downtown area.
2.3	Allow existing nonconforming housing.
2.4	Permit restricted residential uses in commercial zones
2.5	Apply for available grant programs and funding sources.

As shown in Figure 4.9-3, the following HEU sites are proposed to be located within the boundaries of the Downtown Encinitas Specific Plan area: OE-1, OE-2, OE-4, ALT-6, ALT-7, and OE-5.

Image source: USDA FSA (flown June 2014)



- City Limits
- Sphere of Influence
- Community Area Boundaries
- Housing Sites

Specific Plans

- Downtown
- Encinitas Ranch
- Home Depot
- North 101
- Proposed

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FIGURE 4.9-3

Project in Relation to Specific Plans

Encinitas Ranch Specific Plan

The Encinitas Ranch Specific Plan is designed to allow agricultural uses to continue operating as a viable business, while permitting a mix of residential, commercial, mixed use, recreation, and open space uses to develop on the remaining portions of Encinitas Ranch. The Encinitas Ranch Specific Plan provides residential, commercial, and mixed use development, in addition to a substantial amount of natural open space, recreational area, and agricultural uses on a total of 852.8 acres, which includes the 29.8-acre Magdalena Ecke Park.

The area with the densest development within Encinitas Ranch occurs in the Green Valley Planning Area, adjacent to El Camino Real. This area includes a 73.8-acre Regional Commercial Center (straddling Leucadia Boulevard) and approximately 24.8 acres of multi-family housing types including townhomes, condominiums and apartments in close proximity to the planned commercial and office uses. Residential densities up to 25 dwelling units per acre are permitted for free-standing residential structures.

Besides the mixed use development in Green Valley, there is a total of 13 acres of mixed-use development planned on the west side of Saxony Road in the southwestern portion of the project site. The West Saxony Planning Area is designed with the ability to contain community-serving uses such as a theater, and/or museum. If these uses are not built, then the area would develop with a mix of traditional residential and office uses. The Encinitas Ranch project also includes single-family residential development. Single-family dwelling units will be constructed in the Quail Hollow East, North Mesa, South Mesa, and Sidonia East planning areas.

Relevant goals and objectives contained within the text of the Encinitas Ranch Specific Plan are listed in Table 4.9-7.

Table 4.9-7
Encinitas Ranch Specific Plan 1994 (2005)

Residential Goals & Objectives	
Goal 13	Reflect anticipated marketing needs and public demand by providing a diversity of housing types and locations which will be marketable within the region.
13.1	Strive to maintain a balance of housing types in the Specific Plan
13.2	Strive to provide a wide variety of housing types so that a range of housing needs and tastes will be made available to existing and future residents
13.3	Provide design guidelines to serve as a guide to builders, designers, and developers in designing residential developments and individual homes that would encourage diversity and creativity in design to reflect the various housing types.
Goal 14	Provide detached and attached housing to serve a spectrum of buyers
14.1	Support ongoing efforts of the State, County and City to enforce “fair-housing” laws.
14.2	Promote the development of high-quality multi-family townhomes, condominiums, and apartments which convey a distinctive regional character and residential neighborhood character and are integrated within their setting.

Table 4.9-7 Encinitas Ranch Specific Plan 1994 (2005)	
Residential Goals & Objectives	
14.3	Provide an opportunity in the Green Valley and West Saxony areas to meet some of the needs of the City of Encinitas for affordable housing.
Goal 15	Provide "move-up" opportunities for present residents in the vicinity and in the surrounding areas.
15.1	Encourage developers to provide a balance of housing opportunities between entry-level and high-end housing.
15.2	Encourage developers to provide move-up housing opportunities in the area of western-facing mesa.
Goal 16	Provide an opportunity for lower cost housing in the immediate vicinity of the office and commercial uses.
16.1	Allow for the provision of multi-family residential uses in conjunction with office and commercial uses within the Specific Plan.
16.3	Encourage the study of alternative methods of reducing the cost of housing through the development of self-help housing programs.
16.4	Encourage builders to provide smaller homes with less amenities to make homes affordable to first-time buyers.
16.5	Allow for clustering of dwellings and other innovative housing designs that will reduce the cost per unit.
16.6	Allow bonus densities for lower or very low income housing, senior and/or disabled housing, transitional housing, and student housing.
Mixed Use Development Goals & Objectives	
Goal 24	Encourage properly designed mixed-use projects to insure compatibility among residential, commercial, industrial, and office uses.
24.2	Provide for the development of multi-family residential areas near job centers to maximize opportunities for people to live and work in close proximity to one another.
24.3	Promote the use of progressive density and increasing building heights (up to three stories) at community centers (e.g., West Saxony and Green Valley) as a means of minimizing housing costs and reinforcing community centers.
Economic Goals & Objectives	
38.1	Adopt mixed-use plans for West Saxony and Green Valley to meet major community needs for affordable housing, commercial services/financial tax base, and community serving facilities as soon as feasible.

As shown in Figure 4.9-3, the following HEU sites are proposed to be located within the boundaries of the Encinitas Ranch Specific Plan: NE-1.

North 101 Corridor Specific Plan

The North 101 Corridor planning area consists of approximately 231 acres located within the communities of Leucadia and Old Encinitas. The specific plan allocates 83.1 acres of residential-only zoning which includes 10.4 acres of Residential 3 (N-R3), 28.4 acres of Residential 8 (N-R8), 1.4 acres of Residential 11 (N-R11), 4.9 acres of Residential 15 (N-R15), 15.8 acres of Residential 20 (N-R20), 10.6 acres of Residential 25 (N-R25), and 11.6 acres of Mobile Home Park (NMHP).

The specific plan has also expanded previous commercial zoning in the North Highway 101 Corridor Specific Plan area to allow residential use. There are five distinct commercial mixed-use zoning classifications in the Plan area. The N-CM-1, N-CM-2 and N-CM-3 zones provide for stand-alone commercial or commercial and residential uses at a maximum density of 25.0 dwelling units per net acre on the same property or in the same structure. The N-CRM-1 zone provides for a variety of development opportunities including: (1) stand-alone commercial; (2) stand-alone residential at a maximum density of 25 dwelling units per net acre; and (3) mixed use at a maximum density of 25 dwelling units per net acre. The N-CRM-2 zone provides for the same development opportunities as the N-CRM-1 zone except that the maximum density is set at 15 dwelling units per net acre. Relevant goals and objectives contained within the text of the North 101 Corridor Specific Plan are listed in Table 4.9-8.

Table 4.9-8
North 101 Corridor Specific Plan 1997 (2005)

Land Use Goals & Objectives	
Goal 3	Provide for flexible land use opportunities such as mixed-use.
Goal 5	Identify land use opportunities for under-utilized land.
Goal 9	Encourage land use buffers between incompatible uses such as commercial frontage adjacent to residential development.
Housing Goals & Objectives	
Goal 1	Provide affordable housing opportunities
Goal 2	Establish development guidelines that encourage high quality housing.

As shown in Figure 4.9-3, the following HEU sites are proposed to be located within the boundaries of the North 101 Corridor Specific Plan: ALT-2, L-1, and L-2.

Cardiff-by-the-Sea Specific Plan

The Cardiff-by-the-Sea Specific Plan focuses on a small but highly visible and highly valued portion of the Cardiff community. Generally considered the "business district" or sometimes "Downtown Cardiff," the area is principally a mix of low rise retail, office, institutional, and residential uses. Boundaries of the Cardiff-by-the-Sea Specific Plan are irregular but generally include properties between the west side of San Elijo Avenue and the west side of the alley between Newcastle Avenue and Manchester Avenue; and from the south side of Mozart Avenue to the north side of Orinda Drive.

Within the Cardiff-by-the-Sea Specific Plan area are four separate planning areas, two of which allow residential uses of up to 11 dwelling units per acre. Planning Area 1 is roughly bound by Mozart Avenue on the north, Montgomery Avenue on the east, Birmingham Drive on the south, and San Elijo Avenue on the west. Single- and multi-family housing, professional and administrative offices, and restaurants define this planning area. This planning area functions as a transition between the residential area to the south and the commercial area to the north. More than half the area is developed residentially. Relevant goals and objectives contained within the text of the Cardiff-by-the-Sea Specific Plan are listed in Table 4.9-9.

Table 4.9-9 Cardiff-by-the-Sea Specific Plan 2010 (2013)	
Goal 2	Reinforce community identity and the existing scale and beach town feel.
Goal 3	Retain existing residential uses within the Specific Plan area.
3.1	Apply residential zoning in areas where residential concentrations exist.
3.2	Retain housing along the edges of the Specific Plan area to transition single-family neighborhoods from commercial areas.
Goal 4	Enhance pedestrian access and orientation.

As shown in Figure 4.9-3, the following HEU sites are proposed to be located within the boundaries of the Cardiff-by-the-Sea Specific Plan area: C-3 and C-7.

d. The City of Encinitas Municipal Code

Volume II, Titles 20-30 of the City's Municipal Code, contains the primary zoning implementation mechanisms for the Land Use Element. The policies contained in the zoning ordinances classify and regulate the uses of land and structures within the City, consistent with the General Plan. The Zoning Code (Chapter 30) is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the City. The City's Zoning Code also regulates the physical development of land by imposing minimum standards on lot size, lot width and depth, setbacks, and by placing maximum limits on lot coverage and floor area ratio. These development standards are intended to control for unacceptable mass and bulk, ensure proper scale of development, provide minimum light, air, and open space for every lot, and minimize the potential for spillover and edge effects between uses. Citywide, the standards vary among zoning categories and are “fine-tuned” for the specific plan areas. The City's determination of realistic site capacity reflects these standards.

Zoning Districts

Citywide, outside the specific plan areas, the City regulates the type, location, density, and scale of residential development primarily through the Municipal Zoning Code. The City's Land Use Element includes 18 land use categories broadly characterized into the following groups: Residential, Commercial Development, Public/Institutional, Transportation and Open Space/Parks. Table 4.9-10 details the 2010 General Plan land use designations.

Table 4.9-10 General Plan Land Use Distribution		
	Acres	Percent of Total
Rural Residential (RRFP)	345	2.6%
Rural Residential (RR)	2,506	18.8%
Rural Residential (RR1)	916	6.9%
Rural Residential (RR2)	1,152	8.6%
Residential (R3)	1,805	13.5%
Residential (R5)	637	4.8%
Residential (R8)	1,397	10.5%
Residential (R11)	796	6.0%
Residential (R15)	132	1.0%
Residential (R25)	99	0.7%
Mobile Home Park (MHP)	52	0.4%
Office Professional (OP)	65	0.5%
Local Commercial (LC)	11	0.1%
General Commercial (GC)	396	3.0%
Visitor Serving Commercial (VSC)	55	0.4%
Light Industrial (LI)	28	0.2%
Public/Semi Public (P/SP)	444	3.3%
Ecological Resource/Open Space/Park (ER/SO/PK)	1,108	8.3%
Transportation Corridor (TC)	443	3.3%
Encinitas Ranch Specific Plan	883	6.6%
Home Depot Specific Plan	60	0.4%
TOTAL	**13,330**	
SOURCE: City of Encinitas, General Plan Update Final Existing Conditions Report (2010)		

Coastal Development Permit

For all development within the City's Coastal Zone, the reviewing authority for the coastal development permit varies depending on the type of application submitted. Furthermore, specific findings may be required for decisions on coastal development permits can include:

- Project effects on demand for access and recreation
- Shoreline processes
- Historic public use
- Physical obstructions
- Other adverse impacts on access and recreation

e. City of Encinitas Design Guidelines

Adopted in 2005, the City's current Design Guidelines include provisions that are applicable to all development subject to design review (as identified in the Municipal Code). The guidelines provide design direction to developers that are consistent with the character of each community. The guidelines incorporate criteria for architecture, landscaping and site planning, and seek to promote an integrated approach to design that supports the overall goals of the City without constraining innovation or private enterprise.

4.9.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to land use would be significant if the HEU project would:

1. Conflict with any applicable land use plan or policy of an agency with jurisdiction over the project;

2. Conflict with State Planning Initiatives;

3. Result in substantial neighborhood compatibility impacts associated with significant traffic, noise, or aesthetics impacts;

4. Result in land use conflicts in relation to the proximity of housing to existing agricultural uses/commodity sites (i.e., indirect impacts associated with pesticides, fugitive dust, noise, etc.); or

5. Result in exposure of persons to noise levels in excess of standards established in the local General Plan.

4.9.4 Methodology

The land use analysis in this section evaluates the potential for the HEU to cause an inconsistency with applicable plans and policies or introduce incompatible land uses relative to existing surrounding land uses, which could result in environmental impacts. Specifically, the project was evaluated against the goals, policies and standards of the relevant plans to determine whether land use inconsistencies would result, and whether those inconsistencies would create physical impacts in various issues including, but not limited to, air quality, biological resources, noise, human health and safety, aesthetics, and traffic.

4.9.4.1 Sources

The land use analysis relies upon and use and technical data developed by the City of Encinitas (City) and secondary sources information including the adopted City of Encinitas General Plan, various Specific Plans (detailed above), Municipal Code regulations and the draft HEU and floating zone program and associated documents, described in Chapter 3.

4.9.4.2 Future Project Implementation

As noted previously in this chapter, future development within the City would be subject to adopted General Plan/Local Coastal Program and Specific Plan policies, along with existing Municipal Code processes that govern various types of discretionary actions, including design review. Additionally, the City has established noise land use compatibility guidelines in the City's General Plan Noise Element. The City would review future project applications for compatibility, policy consistency, applicable requirements for noise, and

require specific conditions as part of the approval process. Adoption of the proposed floating zone would not alter the City's adopted discretionary review process.

Redevelopment of any of the housing sites may occur with or without implementation of the HEU. The creation of the new floating zone would establish development standards and procedures for multi-family development at a density of 20 to 30 units per acre in the General Plan Land Use Element and Development Code. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review, but would be subject to compliance with the floating zone standards, associated design guidelines, and applicable the mitigation framework, as outlined in the this PEIR. This would ensure development is compatible with land use designations, and consist with the context of each neighborhood's character.

4.9.5 Issue 1: Land Use Plans or Policies

Would the project conflict with any applicable land use plan or policy of an agency with jurisdiction over the project?

4.9.5.1 Impact Analysis

a. Housing Sites

The HEU does not propose the construction of new housing or other development; however, it would entail a General Plan Land Use Element Amendment and rezones, to allow future development of higher density housing on designated sites, along with other conforming General Plan and Municipal Code Amendments, as detailed in Chapter 3.0. Therefore, the HEU could result in inconsistencies with regional and/or local adopted plans and policies governing land use in the City. However, as noted earlier the floating zone program provides supplemental land use rights. Property owners have to "opt" in to the floating zone program. The rezoning does not change the nature of a property owner's existing zoning rights. Land use impacts would be significant if the proposed project were to conflict with any applicable adopted land use plan, policy, or regulation and the conflict results in or relates to a significant environmental effect.

This section specifically addresses the HEU's potential inconsistency with regional plans, City plans including the General and Specific Plans, City's Municipal Code and Zoning, and additional relevant guidelines discussed under Section 4.9.2, above.

San Diego Forward

The HEU represents a plan for anticipated future growth throughout the City in a sustainable manner. The neighborhood prototypes present options for channeling this growth to targeted areas that can accommodate such growth without impeding the function of natural resources or community character. Selection of any of the housing strategies would be consistent with the relevant policies contained within the SANDAG documents, including the principles of sustainability and smart growth as detailed in the RTP/SCS.

This is illustrated in the specific planning principles used to identify the housing sites (see Section 3.2.2).

Sustainable communities as articulated through the RTP/SCS are designed to provide housing for all income groups with increased mobility and transportation choices. The project would not conflict with the objectives of the 2050 RTP/SCS and San Diego Forward. The designation of growth using the HEU housing strategies would also be consistent with the relevant policy objectives of the newly adopted San Diego Forward plan. The housing strategies identify developable sites based on multiple factors of: livability; proximity to jobs, transit and activity centers; preserve environmentally sensitive resources; and fit as part of a cohesive community. Overall, the provision of increased growth within the proposed housing sites would contribute to anticipated housing needs while conforming to the principles of regional growth as contained in SANDAG planning documents. The HEU would be consistent with all regional plans; no impacts would result.

City of Encinitas General Plan and Local Coastal Program

As set forth by State law, the General Plan serves as the primary land use planning document for the City and all subordinate plans and implementing ordinances are required to be consistent with the General Plan. As stated above, approximately two-thirds of the City is located within the Coastal Zone; therefore, in addition to the general elements of the General Plan, the City also maintains the LCP, which goals and policies are directly related to the requirements of the California Coastal Act. The HEU includes a number of housing sites (within each housing strategy) that are located within the Coastal Zone and would therefore be subject to the policies of the LCP (see Figure 4.9-2).

As discussed in Chapter 3, *At Home in Encinitas* is an update to the City's goals, policies and programs relative to the development, improvement and maintenance of housing. The HEU would work with other general Plan Elements to guide future development throughout the City. Consistent with CEQA Guidelines Section 151225(d), an EIR must discuss any inconsistencies between the proposed project and applicable goals and policies of the General Plan. Appendix M of this PEIR documents each of the goals and policies of the City's adopted General Plan and describes how the HEU responds to such a framework. The General Plan also consists of a Community Character and Voters' Rights Initiative (known as Prop A), which is a distinct part of the Land Use Element and is included in the consistency analysis). In accordance with CEQA, a summary of the HEU's inconsistencies with adopted plans are listed in Table 4.9-12, below.

HEU Program 1A – Floating Zone District

HEU Program 1A proposes to redesignate land use on these 33 sites to allow by-right construction of up to 1,283 low and very low income housing units via the floating zone program to provide sites that can ensure the continued availability of capacity to accommodate a minimum of 1,093 lower income units throughout the entire Housing Element period, with a sufficient buffer to accommodate specific site conditions and development trends to maintain adequate capacity, pursuant to State law. This would allow the City to accommodate 100 percent of the RHNA identified housing deficit, including the

carryover of prior housing cycle units, as detailed in Chapter 3. The HEU includes a new floating zone district that would accommodate by-right residential uses at densities consistent with State Housing Element law (default maximum density of 30 units per acre) in zones that allow residential and/or mixed uses. Overall, the City is committed to providing an adequate inventory of land to satisfy the City's remaining RHNA obligations and maintaining adequate sites for the remaining duration of the 2013-2021 planning period. There are 33 potential candidate sites which have been identified as candidate sites of the rezoning program. Only a portion of these sites are needed to meet the RHNA targets for the planning period. These 33 sites total 233.65 (+/-) acres of land distributed throughout the five communities in the City; 27.22 acres of this land is vacant and undeveloped and the remainder has a mix of residential, commercial. Table 4.9-1 details the existing distribution of the units in the City.

These sites would be rezoned concurrent with adoption of the HEU in order to satisfy the RHNA and accommodate the City's future housing needs.

Based upon the dispersed approach to accommodating housing throughout the City (as approved by City Council on July 17, 2013), each community within the City needs to accommodate its new targeted percent of the share of housing units, as shown in in Table 4.9-11, to meet State requirements. It is important to note that the approximate targets assigned to each community, as noted in Table 4.9-11, are not absolute. The overall goal of this approach is to generally distribute housing fairly throughout the City – to each of the five communities, so that growth is not concentrated in one single area of the City.

Table 4.9-11
City of Encinitas Existing Community Housing Needs and State Targets

Area	Existing Housing Units	Percent of Shared Needs	Percent Increase	Approx. Target New Homes
Old Encinitas	5,141	23%	6%	295
New Encinitas	6,166	24%	5%	308
Leucadia	5,720	23%	5%	295
Cardiff	5,083	15%	4%	192
Olivenhain	2,410	15%	8%	192

A range of factors was considered during the sites identification effort. Site suitability, proximity to schools, retail, public amenities, civic uses, jobs, transit access, existing public services and infrastructure were all considered. This approach led to the selection of housing sites that helped preserve environmentally sensitive areas, minimized impacts to other valued lands, fit within existing neighborhoods and the built environment, and had the potential to facilitate pedestrian friendly and commercial activity centers.

The HEU distributes the housing sites throughout the community and addresses key community planning factors and integration with existing land uses. This approach is consistent with various land use and housing-related General Plan goals and policies. Overall, implementation of the HEU would be consistent with the City's General Plan policies relative to the provision of housing, specifically Land Use Element policy 3.2, which

addresses community planning for all economic segments; and, in combination with the new floating zone, would satisfy the City's remaining RHNA obligation for the current planning period.

As summarized in Table 4.9-12, the project is consistent with most of the City's existing goals and polices. The floating zone (discussed below) would be conveyed over approximately 1 to 2 percent of the City's total land, promoting infill development in key areas to preserve all other areas of land in the City, including preserving existing single-family neighborhoods and the protection of environmental and agricultural resources. Through this zoning, program, along with new development standards and design guidelines to implement the housing strategies, the project would be consistent with most General Plan policies. Inconsistencies associated with land use are resolved through amendments to goal and policy language and would be less than significant. The project would be consistent with circulation policies. Although the project would result in significant and unmitigated traffic impacts (see Section 4.13), a statement of overriding considerations would be adopted to demonstrate that the remaining impacts would be outweighed by overriding public benefits (Circulation Element Policies 1.3 and 2.19).

Table 4.9-12
Project Inconsistencies with Existing City General Plan

Goal/Policy	Inconsistency	Project Proposed Result to Remedy the Inconsistency
Circulation Element		
	The project is consistent with all goals and policies contained within this Element.	
Land Use Element		
Policy 2.1; Policy 3.1, 3.13 Goal 4/ Policy 4.1, 4.2, 4.3, 4.7	These goals/policies relate to City's growth management plan and allocation of build out density throughout the City. The City found that the cumulative number of unallocated permits from year-to-year was greater than housing production. As a result the City discontinued calculation of the permit cap due to the carryover of unallocated permits. Therefore, the project's proposed housing strategies are inconsistent with these goals/ policies.	Program 3F of the Draft Housing Plan identifies a need to amend these goals/policies. New policy language is proposed.
Proposition A, Community Character and Voters' Rights Initiative (Land Use Element)		
	Consistent with Proposition A, the Voters of Encinitas will be presented with the HEU, rezonings and Zoning Code amendments (currently scheduled for November 2016). However, the project proposes a new provision	Program 1A and 1B of the Draft Housing Plan address the need to amend the policy that addresses building height. The current height limit in the City is two stories and 30

Table 4.9-12
Project Inconsistencies with Existing City General Plan

Goal/Policy	Inconsistency	Project Proposed Result to Remedy the Inconsistency
	such that if future amendments to any part of its planning policy documents are required to secure or maintain Housing Element certification that may otherwise invoke the requirements of this Proposition, the City Council is authorized to make any and all necessary amendments with a four-fifths super majority vote. Proposition A also repealed former Land Use policy 7.10 and now is addresses maximum height limits for both residential and nonresidential development. Proposition A restricts the height of any structure to the lower of two stories or 30 feet, citywide.	feet. However, additional height is needed in order to facilitate development to reach a maximum density of 30 units per acre.
Noise Element		
	The Noise Element is being updated as an ancillary action to provide standards more consistent with: 1) interior attenuation provided by contemporary construction methods and 2) mixed use environments. The project would be consistent with the updated Element.	
Public Safety Element		
	The project is consistent with all goals and policies contained within this Element.	
Recreation Element		
	The project is consistent with all goals and policies contained within this Element.	
Resource Management Element		
	The project is consistent with all goals and policies contained within this Element.	

City of Encinitas Specific Plans

With respect to the housing sites proposed within existing specific plan areas, the project includes amendments to the Downtown Encinitas Specific Plan, North 101 Corridor Specific Plan, and Cardiff Specific Plan (see Appendices K1, K2, and K3, respectively). The specific plan amendments propose to include designation of the floating zone (discussed below).

Future development in the floating zone would be regulated by Chapter 30.36 of the Zoning Code and not by the applicable Specific Plan, and therefore, would allow for consistency throughout the City. The amendments would allow for implementation of the HEU housing strategies. The HEU through application of various neighborhood and housing prototypes seeks to retain the character surrounding each housing site; therefore, the HEU would not conflict with the goals and policies of the Downtown Encinitas Specific Plan, North 101 Corridor Specific Plan, and Cardiff Specific Plans. Impacts associated with any inconsistencies with this plan would be less than significant.

City of Encinitas Zoning/Design Guidelines

Housing Element Update Zoning Code Amendments

The project includes a Zoning Code Amendment and updates to the Zoning Code to implement the HEU. Specifically, the City proposes the creation of a floating zone, a concept which is not currently employed within the City. As discussed in Chapter 3 and shown in Table 3-3, floating zones allow for an intensification of land use, height and density. As previously discussed, the City proposes to implement the rezoning program through the floating zones. A floating zone would be conveyed over properties selected to accommodate future housing development through the HEU process (see Table 3-3 for the floating zone designation assigned to each housing site within each housing strategy). In summary, the floating zones are a set of pre-approved zone changes that "float" above the existing base zoning of designated properties, until they are activated when and if the property owner decides to do so. It is through implementation of the floating zones that the City is able to establish a minimum density to ensure that each project meets affordability requirements, as well as a maximum density to ensure that the City remains a community of modestly scaled development. The floating zone includes new provisions to ensure that new development responds to neighborhood character (design guidelines), be compatible with community specific settings and promote basic best practices in urban design.

Proposed zoning amendments also include a requirement for certain housing sites to obtain a Master Design Review Permit (MDP) which is a discretionary action that would designate the location and extent of S30 zoning to ensure an appropriate amount of ground floor nonresidential is included and to establish a phasing plan for development. Development subject to a MDP would be required to meet certain findings regarding walkability, phasing and amenities, and conformance to the Municipal Code and Housing Plan. Housing sites ALT-3, C-1, NE-1, NE-4, and NE-7 would be subject to a MDP. While the new floating zones establish basic requirements for new development, the proposed design guidelines would apply to the floating zones R30, X30 and S30, to establish clear goals and expectations for compatible design and for respecting community character. As detailed in Chapter 3, and Appendix F-2, the guidelines provide direction for the more qualitative aspects of a project and address design topics where more flexibility is appropriate and in which a variety of design solutions may meet the objectives for compatibility and appropriateness. The design guidelines direct individual development projects to match the unique character of the community in which it is being built. The detailed and comprehensive design guidelines address all aspects of new development from site design

(building placement, parking, access and connectivity) to building design (frontage, entries, height, mass and scale, materials, roofs, and windows).

Housing Element Update Design Guidelines

As detailed in Chapter 3 and Appendix G, the project includes design guidelines that illustrate principles for community compatibility requiring new construction to be tailored to the unique characteristics of each of the City's five distinct communities. The design guidelines would apply to the floating zones (R30, X30, and S30) (see Table 3-3). The new floating zones and design guidelines were created in tandem and are designed to work together.

Overall, application of the floating zone coupled with strict design guidelines assures that new development under the HEU would be consistent with the City's Municipal and Zoning Code and impacts would be less than significant.

b. Housing Strategy Summaries

Although the land uses proposed under each housing strategy would differ, housing strategies 1 - Ready-Made (RM), 2 – Build Your Own (BYO), or 3 – Modified Mixed-Use Places (MMUP) would all allow higher density housing and changes to existing land uses. There would be no inherent differences in impacts among the housing strategies.

4.9.5.2 Significance of Impacts

Implementation of any of the housing strategies would be mostly consistent with regional and local plans and policies. Impacts associated with the project's conflict with any applicable land use plan or policy would be less than significant.

4.9.6 Issue 2: State Planning Initiatives

Would the project conflict with State Planning Initiatives?

4.9.6.1 Impact Analysis

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. The additional population from buildout of the HEU would be consistent with State Planning Initiatives as described below.

State Housing Element Law

California State law recognizes the vital role local governments play in the supply and affordability of housing. Specifically, State Housing Element law mandates that local governments adequately plan to meet the existing and projected housing needs of all

economic segments of the community. The Housing Element is one of the seven mandated elements of a local general plan. An effective Housing Element provides the necessary conditions to support the development and the preservation an adequate supply of housing, including housing affordable to seniors, families and workers (California Department of Housing and Community Development 2012). As discussed in Chapter 3, the project consists of an update to the adopted Housing Element, providing revised housing goals and policies for the five communities that compose the City. Appendix B of the updated Housing Element includes specific housing programs that would implement the goals and policies identified in the HEU. The following identifies the project's consistency with State requirements.

Regional Housing Need Plan Allocation

As discussed in great detail in Section 3.2, SANDAG adopted the final RHNA Plan by resolution for the fifth housing element cycle on October 28, 2011. Overall, the RHNA identified a housing deficit of 1,283 low and very low income housing units in the City. State law requires that jurisdictions demonstrate in the Housing Element that the land inventory is adequately zoned to accommodate that jurisdiction's share of the regional growth. To address its housing deficit, the City developed the three housing strategies of the HEU, which identify housing sites that could be considered for rezoning in order to accommodate the City's future housing needs. Through any one of the three housing strategies, the City's remaining RHNA obligations would be met.

Goals, Policies, and Implementation Programs

State Housing Element law (Government Code Section 65300.5) requires internal consistency between all elements of a general plan. As part of the HEU, the goals, policies, and objectives of the Housing Element have been reviewed in the context of the rest of the elements of the City's adopted General Plan. Any inconsistencies which may lead to potential environmental impacts are identified and addressed under Issue 1, above.

The revisions proposed to the Housing Element include updated goals and policies intended to reflect changes in State law and circumstances. The proposed goals and policies are set forth in Section 3.4.1.1. As also required by State law, a list of implementation programs is included in the HEU to show how the City intends to implement the established goals and policies (see Section 3.4.1.1(f)).

Housing Plan

As required by State Housing Element law, the HEU includes a Housing Plan to facilitate and encourage the provision of housing consistent with the RHNA allocation.

The City's HEU is consistent with the requirements of State Housing Element law. Approval of any of the housing strategy maps would provide adequate housing sites to meet the City's RHNA. The proposed HEU contains all of the required component parts and would not conflict with any mandates of the State Housing Element law.

Senate Bill 743

SB 743 promotes changes in the process of evaluating transportation impacts as part of CEQA compliance. These changes will include elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. SB 743 intends to create a better balance of transportation management with statewide goals, including reduction of greenhouse gas emissions. Overall, SB 743 expresses the need to evaluate transportation impacts based on land use efficiency, rather than road capacity.

Vehicle miles traveled (VMT) is a measurement of miles traveled by vehicles within a specified region for a specified time period. Governmental actions supporting the location, variety, and availability of housing are critical to implementing VMT reductions. Infill development patterns that emphasize proximity and connectivity to employment and service centers and amenities can increase the effectiveness of these relationships. Denser and more compact development plans and mixed-use land use strategies can also result in reduced travel time, trips, and travel cost. An analysis of VMT for the HEU was performed in order to compare VMT for each of the housing strategies. A detailed analysis of the VMT comparison is located in Appendix N. A summary of the results follow below.

Table 4.9-13 summarizes the daily trip generation and citywide VMT for buildout under the adopted General Plan (No Project scenario) and for each of the housing strategies.

Table 4.9-13
Trip Generation and VMT Summary

Housing Strategy	Daily Trip Generation	Citywide VMT (miles)
No Project/Adopted Plan	696,144	1,165,329
Ready Made (RM)	712,505	1,185,279
Build Your Own (BYO)	720,710	1,200,486
Modified Mixed Use Places (MMUP)	726,293	1,199,428

SOURCE: SANDAG, Chen Ryan Associates, October 2015.

To assist with the evaluation of the various housing strategies, Tables 4.9-14 and 4.9-15 were prepared to compare the VMT to trip generation efficiency for each of the three housing strategies against the No Project scenario. Table 4.9-14 displays a citywide (including all planned land uses in Encinitas), while Table 4.9-15 shows growth over the No Project scenario associated with each strategy.

Table 4.9-14
VMT to Trip Generation Efficiency – Citywide (all) Land Uses

Housing Strategy	Daily Trip Generation Ratio	VMT Ratio	VMT/ Trip Generation Ratio (Citywide)	Efficiency Ranking
No Project/Adopted Plan	100.00%	100.00%	1.000	4
Ready Made (RM)	102.35%	101.71%	0.994	2
Build Your Own (BYO)	103.53%	103.02%	0.995	3
Modified Mixed Use Places (MMUP)	104.33%	102.93%	0.987	1
SOURCE: SANDAG, Chen Ryan Associates, October 2015.				

Table 4.9-15
VMT to Trip Generation Efficiency –
HEU Growth over No Project/Adopted General Plan (Ambient Growth)

Scenario	Change in Daily Trip Generation Ratio	Change in VMT	VMT/Trip Generation Ratio (LU Growth Only)	Efficiency Ranking
No Project	0.00%	0.00%	1.000	4
Ready Made (RM)	2.35%	1.71%	0.728	2
Build Your Own (BYO)	3.53%	3.02%	0.855	3
Modified Mixed Use Places (MMUP)	4.33%	2.93%	0.676	1
SOURCE: SANDAG, Chen Ryan Associates, October 2015.				

As shown above, while housing strategy 3 (MMUP) would yield the highest daily trip generation (resulting in increased LOS as discussed in Chapter 4.13), this housing strategy has the highest land use efficiency (on a per capita basis). With respect to the other housing strategies, all would result in greater land use efficiency than under the adopted General Plan due to the compact nature of the proposed land uses within each housing strategy. Efficiency in land use ultimately reduces greenhouse gas emissions and promotes environmental protections. Not only would the proposed housing strategies benefit air quality and environmental considerations, but they could also positively impact resource conservation, quality of life, public health measures, economic indicators, and social equity.

Therefore, although implementation of the housing strategies would decrease LOS on several roadway segments and intersections, implementation of any of the housing strategies would result in lower VMT per capita and higher land use efficiency as suggested by SB 743. The HEU would be consistent with intent of SB 743; and no impacts would result.

b. Housing Strategy Summaries

As shown above, each housing strategy would result in different VMT and efficiency rankings; however, there would be no inherent differences in impacts among the housing strategies.

4.9.6.2 Significance of Impacts

Implementation of any of the housing strategies would be consistent with state planning initiatives. Impacts would be less than significant.

4.9.7 Issue 3: Neighborhood Compatibility

Would the project result in substantial neighborhood compatibility impacts associated with significant traffic, noise, or aesthetics impacts?

4.9.7.1 Impact Analysis

The HEU would allow for residential infill and mixed-use development within housing sites. Buildout of the HEU would result in additional development of residential and commercial uses beyond that allowed under current zoning. See Issue 1, above for a discussion of the HEU's consistency with existing planning documents.

Due to the accommodation of additional housing units and mixed-use development, neighborhood incompatibility impacts could occur as a result of increased traffic, noise or aesthetics impacts.

a. Housing Sites

Traffic Impacts

An analysis of traffic impacts resulting from build out of the three housing strategies is provided in Chapter 4.13. As discussed therein, all three strategies would result in significant and unmitigated traffic impacts at multiple locations throughout the City (see Section 4.13).

Noise Impacts

An analysis of noise impacts resulting from build out of the housing sites is provided in Section 4.10. As discussed therein, while an increase in ambient noise levels would occur throughout the City under any of the housing strategies due to increased traffic volumes, such an increase would be less than the noise impact threshold of 3 decibels. Therefore, because no ambient noise impacts would occur, no neighborhood incompatibility associated with increased ambient noise levels noise would occur.

With respect to on-site generated noise, it was determined (see Section 4.10.6) that at this program-level of analysis, it cannot be verified whether future projects implemented in

accordance with the HEU would be capable of reducing noise levels to comply with City standards. Therefore, because future development consistent with the HEU could result in significant impacts from the on-site generation of noise, neighborhood incompatibility impacts from such noise generation could likewise be significant (see Impact NOS-1).

Aesthetic Impacts

An analysis of aesthetics/community character impacts resulting from build out of the HEU is provided in Section 4.1.7. As discussed therein, each of the City's communities has its own distinct character (see also Section 2.4.2). Neighborhood incompatibility impacts could result if implementation of the HEU resulted in development that was inconsistent with the existing character of the community. After a thorough evaluation of each housing site proposed within each community, it was determined that a significant community character impact would result with respect to development of housing sites L-7, O-4 and O-5 (see Impacts VIS-2, VIS-3, and VIS-4).

b. Housing Strategy Summaries

Traffic Impacts

Although buildout under each housing strategy would result in somewhat different specific traffic impacts, housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) would all allow higher density housing, increased commercial development and changes to existing land uses resulting in increased traffic. There would be no inherent differences in impacts among the housing strategies.

Noise Impacts

Housing strategies 1 (RM), 2 (BYO), or 3 (MMUP) would not result in a substantial increase in ambient noise; however, on-site generation noise could be significant (see Impact NOS-1). There would be no inherent differences in impacts among the housing strategies.

Aesthetic Impacts

Housing strategies 1 (RM), 2 (BYO), or 3 (MMUP) would all allow higher density housing and changes to existing land uses. Implementation of the HEU on housing sites O-4, O-5, and L-7 would result in significant impacts to community character as discussed in Section 4.1.7. Housing sites O-4 and L-7 are located within housing strategies 2 (BYO) and 3 (MMUP) and housing site O-5 is located within housing strategies 1 (RM) and 2 (BYO). Therefore, there would be no inherent differences in impacts among the housing strategies.

4.9.7.2 Significance of Impacts

a. Traffic Impacts

As discussed in Section 4.13, the HEU would allow the development of new residential and mixed uses throughout the City, resulting in a significant impact relative to the LOS of

existing roadways and intersections. Neighborhood incompatibility impacts from such traffic generation would be significant (Impact LU-1).

b. Noise Impacts

Ambient noise impacts were assessed by comparing future noise levels without implementation of the HEU and future noise levels with buildout of the housing strategies. As shown, when compared to buildout of the no project condition, the increases in ambient noise would be less than 3 decibels adjacent to all roadway segments. Impacts would be less than significant.

The HEU would allow the development of new residential uses adjacent to existing commercial uses, or in the context of the mixed use sites within the same structure as noise-generating commercial uses. As discussed in Section 4.10, noise levels resulting from existing and proposed noise-generating uses (i.e., commercial uses) could expose new noise-sensitive uses to noise levels in excess of the City's standards. Neighborhood incompatibility impacts from such noise generation would be significant (Impact LU-2).

c. Aesthetic Impacts

The HEU would allow development of new uses throughout existing communities of the City. While the application of zoning regulations and design guidelines would allow most development to be compatible with the existing community characters throughout the City, development of housing sites L-7, O-4 and O-5 would result in significant impacts to community character. Neighborhood incompatibility impacts from development of these housing sites would be significant. These impacts are discussed in Section 4.1.7 and identified as Impacts V-2, V-3, and V-4.

4.9.7.3 Mitigation Framework

a. Traffic Impacts

The mitigation framework and improvements required to reduce the potentially significant traffic impacts associated with the implementation of the HEU are detailed in Section 4.13.5.3.

b. Noise Impacts

Mitigation measure NOS-1, as detailed in Section 4.10.6.3, is required to be implemented to reduce significant impacts associated with on-site noise.

c. Aesthetic Impacts

As the floating zone standards and design guidelines are intended to maximize consistency with the surrounding land use context and character of individual neighborhoods, the project already incorporates features to maximize protection of community character to the extent feasible. Thus, no further mitigation has been identified at the program-level to

minimize the adverse impact resulting from development of housing sites L-7 (Impact VIS-2), O-4 (Impact VIS-3), and O-5 (Impact VIS-4)

4.9.7.2 Significance of Impacts

a. Traffic Impacts

As detailed in Section 4.13.5.4, impacts to roadway segments and intersections would remain significant and unavoidable. Therefore, neighborhood incompatibility impacts from increased project traffic generation would likewise remain significant and unavoidable.

b. Noise Impacts

Implementation of mitigation measure NOS-1 outlined in Section 4.10.6.3 would reduce inconsistent noise levels to less than significant.

c. Aesthetic Impacts

As detailed in Section 4.1.7.4, no mitigation has been identified at the program-level to minimize the adverse impact to community character resulting from development of housing sites L-7, O-4, and O-5; impacts would remain significant and unavoidable.

4.9.8 Issue 4: Proximity to Agricultural Sites

Would the project result in land use conflicts in relation to the proximity of housing to existing agricultural uses/commodity sites (i.e., indirect impacts associated with pesticides, fugitive dust, noise, etc.)?

4.9.8.1 Impact Analysis

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Impacts could occur if housing sites were developed within close proximity to agricultural uses resulting in conflicts associated with agricultural activities such as pesticide use, dust, and noise from agricultural operations.

a. Housing Sites

The City does not support a large amount of agricultural operations; however, the City does have agricultural areas, composed primarily of greenhouses, scattered throughout the central and eastern portions of the City. Housing sites that are on or adjacent to agricultural commodity parcels include L-5, L-6, and L-7. Specifically, housing sites L-5 and L-6 have been identified as areas of current agricultural use (greenhouses). Sites L-7 is located adjacent to greenhouse sites. Development of these housing sites in accordance with the HEU would require either demolition of the greenhouses or residences placed in close proximity to the greenhouse operations. In either scenario, construction of housing units

could result in impacts associated with the interface between agricultural operations and residential uses.

Greenhouses typically contain structures used to cultivate high-value products such as flowering/foliage plants and gourmet food products such as mushrooms. They may also be used to grow commodities such as landscaping, decorative plants, fruit trees, herbs, and flowers. Most activities associated with greenhouse cultivation would be contained within a controlled environment. The type of agriculture practiced on these housing sites would therefore be compatible with urban land uses, and impacts would be less than significant.

b. Housing Strategy Summaries

Housing sites L-5 and L-6 are part of housing strategy 1 (RM). Housing site L-7 is part of housing strategy 2 (BYO) and housing strategy 3 (MMUP). Therefore, implementation of any of the strategies would have a potential agricultural interface compatibility issue. There would be no inherent differences in impacts among the housing strategies.

4.9.8.2 Significance of Impacts

The HEU could allow the development of new uses adjacent to existing agricultural (greenhouse) operations. Due to the nature of such operations, land use conflicts in relation to the proximity of housing to existing agricultural uses would be less than significant.

4.9.9 Issue 5: Noise/Land Use Compatibility

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

4.9.9.1 Impact Analysis

Traffic noise occurs adjacent to every roadway and is directly related to the traffic volume, speed, and mix of vehicles. Existing and future freeway and roadway volumes under all housing strategies were obtained from the traffic study prepared for the HEU (see Appendix N).

Truck volumes for Interstate 5 were derived from Caltrans truck counts (Caltrans 2014). Caltrans existing truck counts indicate an approximate traffic mix of 94 percent cars, 4 percent medium trucks, and 2 percent heavy trucks. This traffic mix was used for modeling existing and future freeway noise. For local roadways, a traffic mix of 96 percent cars, 3 percent medium trucks, and 1 percent heavy trucks was modeled. Based on traffic counts taken during the existing noise measurements, this is a conservative vehicle mix. Table 4.9-16 summarizes the vehicle traffic parameters used in this analysis for each freeway and roadway segment.

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
Carlsbad Blvd	Between Avenida Encinas and La Costa Ave	12,160	25,300	25,500	25,400	25,500	50
	Between Poinsettia Lane and Avenida Encinas	16,194	24,700	25,400	25,100	25,400	50
Highway 101	Between La Costa Ave and 600 feet south of La Costa Ave	18,070	19,900	21,600	21,200	21,800	40
	Between 600 feet south of La Costa Ave and Leucadia Blvd	17,378	18,100	20,500	19,900	20,900	40
	Between Leucadia Blvd and Cadmus Street	19,145	19,900	20,900	20,500	21,300	40
	Between Cadmus Street and Marcheta Street	19,145	19,900	20,900	20,500	21,300	40
	Between Marcheta Street and 660 feet south of Marcheta Street	19,145	19,900	20,900	20,500	19,300	40
	Between 660 feet south of Marcheta Street and Encinitas Blvd	19,145	19,900	19,300	19,200	19,600	40
	Between Encinitas Blvd and D Street	18,746	19,400	19,200	19,100	19,300	30
	Between D Street and E Street	18,746	19,400	19,200	19,100	19,300	30
	Between E Street and F Street	18,746	19,400	19,200	19,100	19,300	30
	Between F Street and H Street	18,746	19,400	19,200	19,100	19,300	30
	Between H Street and J Street	20,337	21,100	20,800	20,700	20,900	30
	Between J Street and Swamis Ped Crossing	20,337	21,100	20,800	20,700	20,900	45
	Between Swami's Pedestrian Crossing and San Elijo State Beach	20,550	21,300	21,000	20,900	21,100	45
	Between San Elijo State Beach and Chesterfield	20,682	21,300	21,500	21,400	21,400	45
	Between Chesterfield and Cardiff State Beach	20,682	23,200	23,300	23,300	23,200	45
	Between Cardiff Beach State and Chart House	20,682	23,200	23,300	23,300	23,200	45
	Between Chart House and Las Olas Mexican Restaurant	20,682	23,200	23,300	23,300	23,200	45
	Between Las Olas Mexican Restaurant and Cardiff limits	20,682	23,200	23,300	23,300	23,200	45
	Between Cardiff limits and West Cliff Street	18,611	22,500	22,600	22,700	22,600	45
	Between West Cliff and Lomas Santa Fe	18,611	25,000	25,100	25,100	25,000	45
	Between Lomas Santa Fe Drive and Via de la Valle	17,056	23,600	23,300	23,600	23,600	45

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
Vulcan Ave	Between La Costa Ave and Leucadia Boulevard	3,621	7,000	7,200	7,200	7,300	35
	Between Leucadia Blvd and Encinitas Boulevard	6,221	7,500	7,700	7,500	7,600	35
	Between Encinitas Boulevard and D Street	10,368	12,900	13,400	13,300	13,300	40
	Between D Street and E Street	10,368	12,900	13,400	13,300	13,700	40
	Between E Street and Santa Fe Drive	10,486	13,100	13,600	13,500	14,200	40
San Elijo Ave	Between Santa Fe Drive and Birmingham Drive	9,332	10,100	10,000	10,100	10,200	35
	Between Birmingham Drive and Chesterfield Drive	9,332	12,500	12,900	12,600	12,700	35
	Between Chesterfield Drive and Manchester Ave	9,332	9,500	13,200	9,500	9,600	25
Saxony Road	Between La Costa Ave and Quail Gardens Drive	3,137	4,600	4,700	4,700	4,600	45
	Between Quail Gardens Drive and Normandy Road	2,858	3,400	3,500	3,500	3,400	35
	Between Normandy Road and Brittany Ave	2,858	3,900	4,000	3,900	3,800	35
	Between Brittany Ave and Leucadia Boulevard	2,858	3,500	3,400	3,500	3,400	35
	Between Leucadia Boulevard and Silver Berry Place	8,973	11,800	11,800	11,900	11,900	40
	Between Silver Berry Place and Encinitas Boulevard	8,973	13,800	13,900	14,800	14,000	40
Quail Hollow Drive	Between Swallow Tail Road and Saxony Road	3,235	5,000	5,000	5,000	5,000	25
Quail Gardens Drive	Between Swallow Tail Road and Lauren Court	3,235	4,900	4,900	4,900	4,900	40
	Between Lauren Court and Leucadia Boulevard	3,235	5,300	5,300	5,300	5,300	40
	Between Leucadia Boulevard and Paseo de las Flores	7,897	9,100	9,300	8,300	9,200	40
	Between Paseo de las Flores and Paseo De Las Verdes	7,897	8,900	9,000	8,300	9,200	40
	Between Paseo de las Verdes and Encinitas Boulevard	7,897	8,200	8,500	8,700	8,400	40
Westlake Street	Between Encinitas Boulevard and Requeza Street	9,688	11,800	11,900	16,300	11,800	30
Nardo Drive	Between Requeza Street and Melba Road	4,871	5,100	5,200	5,600	5,200	25
	Between Melba Road and Santa Fe Drive	4,871	5,100	5,200	4,900	5,200	25
MacKinnon Ave	Between Santa Fe Drive and Villa Cardiff Drive	5,413	6,200	6,300	6,500	6,300	35
	Between MacKinnon Ave and Windsor Road	5,413	6,500	6,600	6,800	6,600	35
	Between Windsor Road and Birmingham Drive	5,413	5,700	6,100	6,200	5,800	35
Garden View Road	Between Leucadia Boulevard and Via Cantebria	10,722	11,500	11,400	11,400	11,500	40
	Between Via Cantebria and El Camino Real	9,663	12,900	12,900	12,600	12,800	40
Town Center Place	Between Leucadia Boulevard and Town Center Place	14,817	20,000	20,100	20,500	20,500	25
	Between Town Center Place and Town Center Drive	14,817	17,800	17,900	17,100	17,200	25

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
Via Cantebria	Between Town Center Drive and Garden View Road	8,524	15,800	15,900	15,500	15,700	25
	Between Garden View Road and Forrest Bluff	13,715	14,900	14,900	15,000	15,100	40
	Between Forrest Bluff and Via Montoro	13,715	15,200	15,300	15,400	15,400	40
	Between Via Montoro and Via Molena	16,842	17,900	17,000	17,300	17,300	40
	Between Via Molena and Encinitas Boulevard	16,842	17,500	17,800	18,200	18,200	40
Balour Drive	Between Encinitas Boulevard and Melba Road	7,988	11,200	11,200	11,500	11,300	35
	Between Melba Road and Santa Fe Drive	7,988	10,700	11,000	10,700	11,100	25
Lake Drive	Between Santa Fe Drive and Woodlake Drive	6,565	6,600	6,600	6,600	6,600	35
	Between Woodlake Drive and Birmingham Drive	6,565	6,600	6,600	6,600	6,600	35
El Camino Real	Between Aviara Parkway and La Costa Ave	43,934	54,300	54,500	54,700[1]	54,400	55
	Between La Costa Ave and Calle Barcelona	34,929	38,400	38,400	38,300	38,700	55
	Between Calle Barcelona and City of Carlsbad boundary	34,929	36,500	36,400	36,000	36,400	55
	Between City of Carlsbad boundary and Leucadia Boulevard	43,939	46,700	46,500	46,200	46,500	55
	Between Leucadia Boulevard and Town Center Drive	43,939	58,600	58,300	58,700	59,200	45
	Between Town Center Drive and Garden View Road	43,939	54,200	54,100	54,000	54,500	45
	Between Garden View Road and 331-339 El Camino Real	39,969	42,900	43,000	42,800	43,100	35
	Between 331-339 El Camino Real and Via Montoro	39,969	48,900	49,100	49,000	49,300	35
	Between Via Montoro and Mountain Vista	39,969	44,300	44,600	44,400	44,900	35
	Between Mountain Vista and Via Molena	41,968	47,000	46,700	47,000	47,400	35
	Between Via Molena and Encinitas Boulevard	41,968	56,900	57,200	58,100	58,800	35
	Between Encinitas Boulevard and 213 S El Camino Real	33,151	39,400	39,500	39,800	40,100	40
	Between 213 S El Camino Real and Crest Drive	33,151	33,800	33,800	33,800	33,800	40
	Between Crest Drive and Willowspring Drive	33,151	36,200	35,400	36,100	36,400	40
	Between Willowspring Drive and Santa Fe Drive	33,151	37,500	36,800	37,600	37,800	40
	Between Santa Fe Drive and Sage Canyon Drive	23,024	28,400	27,600	29,300	29,500	55
	Between Sage Canyon Drive and Manchester Ave	23,024	27,700	26,800	28,600	29,000	55
Village Park Way	Between Mountain Vista Drive and Parkdale Drive	6,341	10,900	11,000	11,000	11,400	40
	Between Parkdale Drive and Encinitas Boulevard	6,341	14,200	14,200	14,400	14,700	40

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
Rancho Santa Fe Road	Between Olivenhain Road and Calle Acervo	17,363	17,400	17,400	17,400	17,400	45
	Between Calle Acervo/Avenida La Posta and Olive Crest Drive	14,901	15,900	16,400	16,400	16,500	40
	Between Olive Crest Drive and 13th Street	14,901	15,800	16,300	16,200	16,300	40
	Between 13th Street and 11th Street	14,901	15,700	16,200	16,100	16,300	40
	Between 11th Street and El Camino Del Norte	15,146	15,800	16,300	16,300	16,400	40
	Between El Camino Del Norte and 9th Street	13,236	13,300	13,700	13,800[1]	13,700	40
	Between 9th Street and 8th Street	13,236	13,500	13,800	14,000	13,800	40
	Between 8th Street and 7th Street	13,236	13,900	14,300	14,400	14,300	40
	Between 7th Street and Encinitas Boulevard	13,236	15,200	18,300	18,300	18,800	40
Manchester Ave	Between Manchester Ave and Mira Costa College	19,595	35,400	35,200	36,700	37,100	50
	Between Mira Costa College and I-5 NB On-Ramp	19,595	35,700	35,400	36,800	37,400	50
	Between I-5 NB Ramps and I-5 SB Ramps	26,567	40,200	40,000	40,700	40,800	40
	Between I-5 SB Ramps and Ocean Cove Drive	7,598	11,900	11,800	12,000	12,200	40
	Between Ocean Cove Drive and Seaside Cardiff residential area driveway	7,598	11,900	11,700	11,900	12,100	40
	Between Seaside Cardiff residential area driveway and San Elijo Water Reclamation Facility Driveway	7,598	11,900	11,700	11,900	12,100	40
	Between San Elijo Water Reclamation Facility Driveway and Manchester Ave	7,598	11,800	11,600	11,800	12,000	40
Manchester Ave	Between Encinitas Boulevard and El Camino Real	5,989	12,300	13,200	13,500	14,000	40

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
La Costa Ave	Between Highway 101 and Vulcan Ave	11,888	16,400	17,500	17,100	17,700	40
	Between Vulcan Ave and Sheridan Road	14,258	16,300	17,300	17,000	17,300	40
	Between Sheridan Road and I-5 SB Ramps	14,258	22,000	22,800	22,600	22,900	40
	Between I-5 SB Ramps and I-5 NB Ramps	25,817	29,300	29,900	29,700	30,000	40
	Between I-5 NB Ramps and Piraeus Street	36,550	39,500	39,600	39,700	39,700	55
	Between Piraeus Street and Saxony Road	36,550	39,600	39,700	39,900	39,800	55
	Between Saxony Road and El Camino Real	37,683	42,000	42,100	42,300[1]	42,100	55
	Between El Camino Real and La Costa Towne Center traffic signal	15,999	20,700	20,800	20,900	21,000	40
	Between La Costa Towne Center traffic signal and Fairway Lane	15,999	20,900	21,000	21,000	21,200	40
	Between Fairway Lane and Calle Madero	15,999	20,700	20,800	20,800	20,800	40
Leucadia Blvd	Between Highway 101 and Vulcan Ave	12,188	14,300	15,900	15,600	16,100	35
	Between Vulcan Ave and Hermes Ave	14,933	16,300	17,500	17,200	17,700	35
	Between Hermes Ave and Hygeia Ave	14,933	15,700	16,900	16,600	17,000	35
	Between Hygeia Ave and Hymettus Ave	14,933	17,400	15,000	15,000	15,000	35
	Between Hymettus Ave and Orpheus Ave	14,933	19,200	20,400	20,000	20,200	35
	Between Orpheus Ave and I-5 SB Ramps	14,933	17,700	15,300	18,500	15,200	40
	Between I-5 SB Ramps and I-5 NB Ramps	22,721	28,600	29,600	28,900	28,600	30
	Between Piraeus Street and Urania Ave	38,099	44,100	45,000	44,200	43,900	40
	Between Urania Ave and Saxony Road	38,099	44,100	45,000	44,200[1]	43,900	40
	Between Saxony Road and Sidonia Street	40,117	42,400	42,500	42,000	42,100	40
	Between Sidonia Street and Quail Gardens Drive	40,117	42,400	42,500	42,100	42,100	40
	Between Quail Gardens Drive and Garden View Road	43,786	47,100	47,200	47,600[1]	47,000	45
	Between Garden View Road and Town Center Place	31,439	34,700	31,900[2]	32,000	31,700	45
	Between Town Center Place and El Camino Real	34,214	39,000	39,400[1]	38,900	38,700	45
Mountain Vista Drive	Between El Camino Real and Wandering Road	11,478	15,000	15,100	15,000	15,100	45
	Between Wandering Road and Village Park Way	7,093	9,300	9,300	9,300	9,300	45
Lone Jack Drive	Between Rancho Santa Fe Road and northern terminus	6,745	8,400	8,200	8,200	8,200	40

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
El Camino Del Norte	Between Rancho Santa Fe Road and San Dieguito CPA boundary	6,915	7,900	7,800	7,900[1]	7,700	40
	Between San Dieguito CPA boundary to Via De Fortuna	6,915	7,800	7,500	7,600	7,400	40
Encinitas Blvd	Between Highway 101 and Vulcan Ave	21,095	22,300	23,600	22,700	24,300	40
	Between Vulcan Ave and Days Inn traffic signal	20,790	34,100	35,200	33,900	35,800	40
	Between Days Inn traffic signal and I-5 SB Ramps	20,790	34,100	35,200	33,900	35,800	40
	Between I-5 SB Ramps and I-5 NB Ramps	32,420	38,500	39,400	39,600	40,500	40
	Between I-5 NB Ramps and Saxony Road	38,312	41,400	42,100	43,000	43,100	40
	Between Saxony Road and Calle Magdalena	31,737	35,400	35,800	36,400	36,800	40
	Between Calle Magdalena and Encinitas Town Country traffic signal	31,737	40,000	40,500	41,400	41,600	40
	Between Encinitas Town Country traffic signal and Quail Gardens Drive	31,737	36,000	36,600	38,400	38,000	40
	Between Quails Garden Drive and Delphinium Street	27,446	37,700	38,300	39,700	39,600	45
	Between Delphinium Street and Balour Drive	27,446	38,300	38,600	39,900	40,000	45
	Between Balour Drive and Via Cantebria	38,142	47,500	47,800	48,700	48,800	45
	Between Via Cantebria and El Camino Real	26,806	29,400	29,500	30,400	30,500	45
	Between El Camino Real and Village Square Drive	28,841	31,000	31,300	30,900[1]	30,000	45
	Between Village Square Drive and Turner Ave	28,841	29,300	29,800	30,000	30,400	45
	Between Turner Ave and Cerro Street	28,841	29,300	29,800	30,000	30,400	45
	Between Cerro Street and Village Park Way	28,841	29,700	30,300	30,700	31,200	45
	Between Village Park Way to Willowspring Drive	22,619	27,900	28,800	29,000	29,400	45
	Between Willowspring Drive to Rancho Santa Fe Road	22,619	22,700	23,700	23,900	24,400	45
S Rancho Santa Fe Road	Between Manchester Ave and 770 feet east of Manchester Ave	18,476	18,600	19,400	19,500	19,900	45
	Between 770 feet east of Manchester Ave and San Dieguito CPA boundary	18,476	18,600	19,400	19,500	19,900	45

Table 4.9-16 Vehicle Traffic Parameters							
Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
F Street/Requeza Street	Between Vulcan Ave and Cornish Drive	5,631	6,200	6,200	6,400	6,400	25
	Between Cornish Drive and San Dieguito Drive	5,631	6,300	6,700	6,500	6,700	25
	Between San Dieguito Drive and Stratford Drive	5,631	6,300	6,700	6,500	6,700	25
	Between Stratford Drive and Regal Road	5,631	6,800	7,200	7,000	7,000	25
	Between Regal Road and West Lake Drive	5,631	6,400	6,500	7,600	6,400	25
	Between West Lake Drive and Nardo Drive	4,516	4,800	4,900	5,200	4,900	25
Santa Fe Drive	Between Vulcan Ave and Cornish Drive	8,554	9,000	8,800	9,000	8,900	35
	Between Cornish Drive and Summit Ave	8,554	9,000	9,500	9,000	9,700	35
	Between Summit Ave and Devonshire	8,554	10,100	10,400	10,300	10,300	35
	Between Devonshire Drive and Driveway	12,974	15,200	15,800	15,600	15,700	35
	Between Driveway and I-5 SB Ramps	12,974	15,200	15,800	15,600	15,700	35
	Between I-5 SB Ramps and I-5 NB Ramps	19,070	22,400	23,200	22,900	23,000	35
	Between I-5 NB Ramps and Regal Road	13,743	16,100	16,700	16,500	16,600	35
	Between Regal Road and Gardena Road	13,743	16,100	16,700	16,500	16,600	35
	Between Gardena Road and Nardo Road	13,743	16,100	16,700	16,500	16,600	35
	Between Nardo Road and Windsor Road/Bonita Drive	15,036	17,700	18,300	18,100	18,200	35
	Between Windsor Road/Bonita Drive and Balour Drive	15,036	17,700	18,300	18,100	18,200	35
	Between Balour Drive and Lake Drive	15,817	18,600	19,200	19,000	19,100	35
	Between Lake Drive and Crest Drive	15,107	17,700	18,400	18,200	18,200	35
	Between Crest Drive and El Camino Real	15,107	17,700	18,400	18,200	18,200	35

Table 4.9-16
Vehicle Traffic Parameters

Roadway	Segment	Existing ADT	No Project ADT	Housing Strategy 1 ADT	Housing Strategy 2 ADT	Housing Strategy 3 ADT	Speed (mph)
Birmingham Drive	Between San Elijo Ave and Newcastle Ave	14,588	15,500	15,400[2]	15,600[1]	15,800[1]	30
	Between Newcastle Ave and Manchester Ave	14,588	15,500	15,400[2]	15,600[1]	15,800[1]	30
	Between Manchester Ave and Montgomery Ave	14,588	15,500	15,400[2]	15,600[1]	15,800[1]	30
	Between Montgomery Ave and Cambridge Ave	14,588	14,600	15,400[2]	15,600[1]	15,800[1]	30
	Between Cambridge Ave and MacKinnon Ave	14,588	15,500	15,400[2]	15,600[1]	15,800[1]	30
	Between MacKinnon Ave and Carol View Drive	14,588	19,500	19,600[1]	19,700[1]	14,700[2]	30
	Between Carol View Drive and I-5 SB Ramps	14,588	19,500	19,600[1]	19,700[1]	14,700[2]	30
	Between I-5 SB Ramps and I-5 NB Ramps	16,342	21,800	21,900[1]	22,100[1]	21,400[1]	40
	Between I-5 NB Ramps and Villa Cardiff Drive	8,248	13,200	13,500[1]	13,500[1]	13,400[1]	40
	Between Villa Cardiff Drive and Playa Rivera	8,248	11,600	11,600[1]	11,600[1]	11,700[1]	35
	Between Playa Rivera and Freda Lane	8,248	13,100	13,100[1]	13,100[1]	13,200[1]	35
	Between Freda Lane and Lake Drive	8,248	8,700	8,600[2]	8,700[2]	8,800	35
I-5	Between Palomar Airport Road and Poinsettia Lane	201,000	241,796	242,077	242,028	242,240	65
	Between Poinsettia Lane and La Costa Ave	204,000	248,436	249,053	248,873	249,347	65
	Between La Costa Ave and Leucadia Boulevard	208,000	246,694	246,765	247,028	246,847	65
	Between Leucadia Boulevard and Encinitas Boulevard	211,000	164,587	164,640	165,412	165,789	65
	Between Encinitas Boulevard and Santa Fe Drive	210,000	249,008	249,446	249,344	248,717	65
	Between Santa Fe Drive and Birmingham Drive	201,000	252,315	252,764	252,953	252,293	65
	Between Birmingham Drive and Manchester Ave	203,000	261,209	261,702	262,124	261,150	65
	Between Manchester Ave and Lomas Santa Fe Drive	231,000	325,985	325,913	326,993	326,532	65
	Between Lomas Santa Fe Drive and Via de la Valle	230,000	318,264	318,072	318,801	318,187	65

[1]Since preparation of the noise analysis, slight changes in the future projected traffic volumes have been made. However, the revised traffic projections for these segments are less than the volumes shown here and used in this analysis. This therefore represents a worst case analysis.
[2]The revised traffic projections for these segments are slightly greater than the volumes shown here. However, the difference in noise due to these revised volumes ranges from 0.0 to 0.3 dB and has no effect on the results presented in this analysis.

The Federal Highway Administration (FHWA) Traffic Noise Model algorithms were used to calculate distances to noise contours for each roadway. The FHWA model takes into account traffic mix, speed, and volume; roadway gradient; relative distances between sources, barriers, and sensitive receptors; and shielding provided by intervening terrain or structures.

The analysis of the noise environment considered that the topography was flat with no intervening terrain between sensitive land uses and roadways. Because there are no obstructions, predicted noise levels are higher than would actually occur. In actuality, buildings and other obstructions along the roadways would shield distant receivers from the traffic noise.

The City has established noise land use compatibility guidelines in the City's adopted General Plan Noise Element. Additionally, as detailed in Chapter 3 (see Section 3.2.2.4), the project includes an amendment to the adopted General Plan Noise Element. The intent of the amendment is three-fold: (1) to resolve internal inconsistencies in the adopted Noise Element, specifically between policies and the noise land use compatibility matrix; (2) update the City's policies to be consistent with contemporary noise standards and account for changes that have occurred since adoption of the City's current element including enhancements in noise attenuation through standard construction practices; and (3) revise policies to allow for the application of smart growth through the promotion of mixed use development. It should be noted that the exterior noise compatibility standard for residential uses is the same in both the adopted Noise Element and the amendment.

The proposed Noise Land Use Compatibility Guidelines are presented in Table 4.9-17. The HEU would include new residential and mixed-use land uses. As shown, residential uses are normally acceptable up to 60 average sound level (L_{dn}), conditionally acceptable up to 70 L_{dn}, normally unacceptable up to 75 L_{dn}, and clearly unacceptable above 75 L_{dn}.

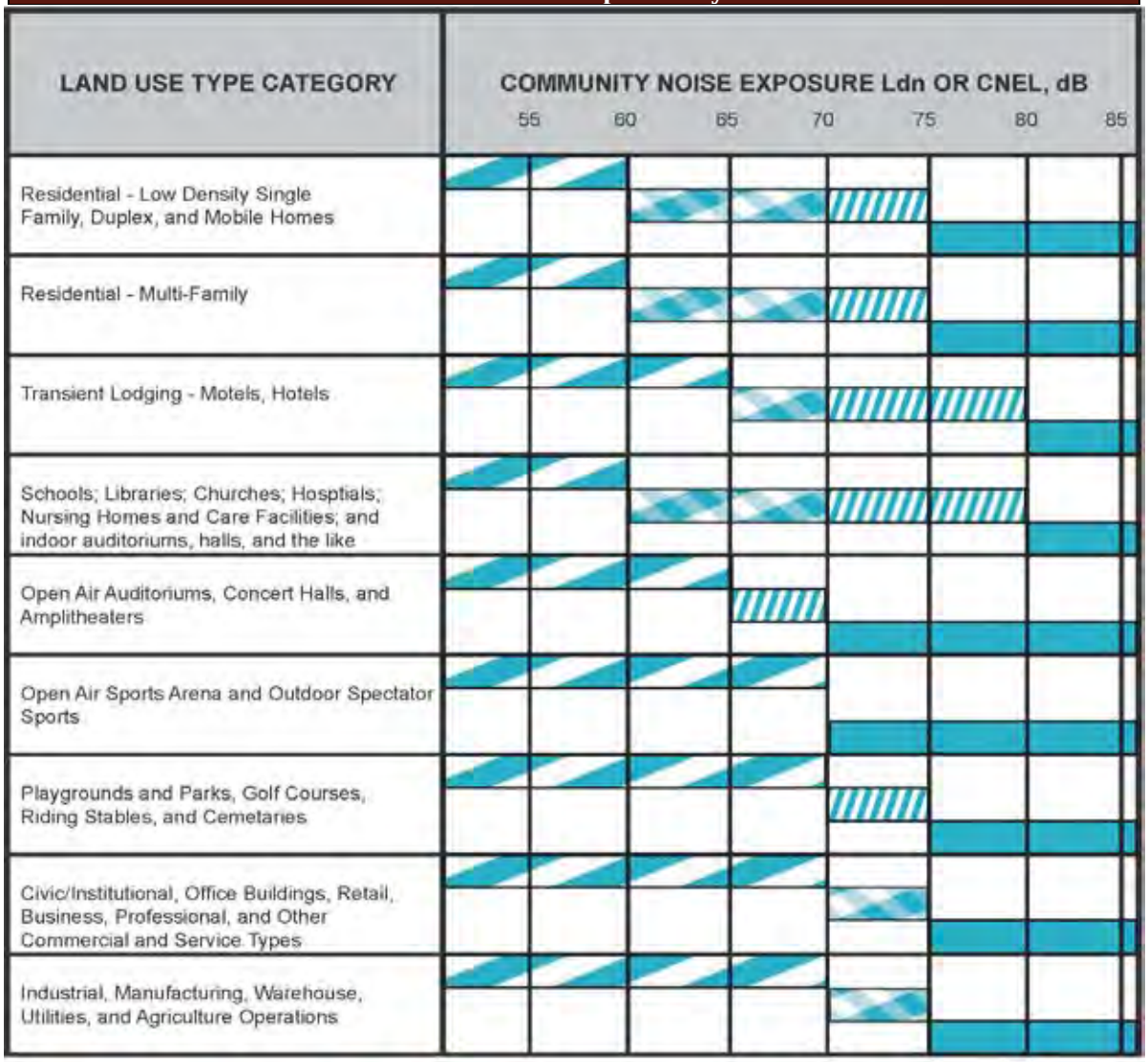
Interstate 5 is the dominant source of noise in the project area. The roadways generating the greatest noise levels in the project area are Interstate 5, Highway 101, El Camino Real, Encinitas Boulevard, Leucadia Boulevard, La Costa Avenue, and Manchester Avenue.

a. Housing Sites

All housing sites within each of the housing strategies would be affected by traffic noise. Noise contours for future conditions were modeled using projected traffic volumes on freeways and major roadways within the project area and are expressed in contour lines showing the anticipated noise levels as measured by the L_{dn}. The distances to the 60, 65, 70, and 75 L_{dn} noise contours for freeways and major roadways from housing sites within housing strategy 1 (RM), 2 (BYO), and 3 (MMUP) are shown in Tables 4.9-18, 4.9-19, and 4.9-20, respectively. A complete list of distances to all noise contours for all roadway segments for buildout are included in Appendix O.

Distances to the roadway noise contours are based on a flat site with no intervening barriers or obstructions (worst-case analysis). Future horizon year (2035) noise contours for building of sites within each housing strategy are shown in Figures 4.9-4, 4.9-5, and 4.9-6.

Table 4.9-17
Noise and Land Use Compatibility Guidelines



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

Conditionally Acceptable
New development should be undertaken only after a detailed analysis of noise reduction requirement is made. Conventional construction, but with closed windows and air conditioning will normally suffice.

Normally Unacceptable
New development should be generally discouraged. If new development does proceed, a detailed analysis of noise reduction requirement is made and noise attenuation included in the design.

Clearly Unacceptable
New development should generally not be undertaken.

Encinitas
General Plan

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Carlsbad Blvd	Between Avenida Encinas and La Costa Avenue	31	97	308	975
	Between Poinsettia Lane and Avenida Encinas	31	97	308	975
Highway 101	Between La Costa Avenue and 600 feet south of La Costa Avenue	15	48	151	477
	Between 600 feet south of La Costa Avenue and Leucadia Blvd	14	46	144	456
	Between Leucadia Blvd and Cadmus Street	15	47	148	467
	Between Cadmus Street and Marcheta Street	15	47	148	467
	Between Marcheta Street and 660 feet south of Marcheta Street	15	47	148	467
	Between 660 feet south of Marcheta Street and Encinitas Blvd	14	44	138	435
	Between Encinitas Blvd and D Street	8	24	77	245
	Between D Street and E Street	8	24	77	245
	Between E Street and F Street	8	24	77	245
	Between F Street and H Street	8	24	77	245
	Between H Street and J Street	8	27	85	269
	Between J Street and Swamis Ped Crossing	19	62	195	615
	Between Swami's Pedestrian Crossing and San Elijo State Beach	19	62	195	615
	Between San Elijo State Beach and Chesterfield	20	63	199	629
	Between Chesterfield and Cardiff State Beach	22	69	218	690
	Between Cardiff Beach State and Chart House	22	69	218	690
	Between Chart House and Las Olas Mexican Restaurant	22	69	218	690
	Between Las Olas Mexican Restaurant and Cardiff by the sea limits	22	69	218	690
	Between Cardiff by the sea limits and West Cliff Street	21	67	213	674
	Between West Cliff and Lomas Santa Fe	23	74	234	740
	Between Lomas Santa Fe Drive and Via de la Valle	22	69	218	690
Vulcan Avenue	Between La Costa Avenue and Leucadia Boulevard	4	12	37	117
	Between Leucadia Blvd and Encinitas Boulevard	4	13	40	126
	Between Encinitas Boulevard and D Street	10	30	95	301
	Between D Street and E Street	10	30	95	301
	Between E Street and Santa Fe Drive	10	30	95	301
San Elijo Avenue	Between Santa Fe Drive and Birmingham Drive	5	17	52	166
	Between Birmingham Drive and Chesterfield Drive	7	21	67	213
	Between Chesterfield Drive and Manchester Avenue	4	12	38	120

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Saxony Road	Between La Costa Avenue and Quail Gardens Drive	4	14	44	138
	Between Quail Gardens Drive and Normandy Road	2	6	18	57
	Between Normandy Road and Brittany Avenue	2	7	21	66
	Between Brittany Avenue and Leucadia Boulevard	2	6	18	56
	Between Leucadia Boulevard and Silver Berry Place	8	26	83	262
	Between Silver Berry Place and Encinitas Boulevard	10	31	97	308
Quail Hollow Drive	Between Swallow Tail Road and Saxony Road	1	5	14	46
Quail Gardens Drive	Between Swallow Tail Road and Lauren Court	3	11	35	109
	Between Lauren Court and Leucadia Boulevard	4	12	37	117
	Between Leucadia Boulevard and Paseo de las Flores	7	21	66	208
	Between Paseo de las Flores and Paseo de las Verdes	6	20	63	199
	Between Paseo de las Verdes and Encinitas Boulevard	6	19	60	190
Westlake Street	Between Encinitas Boulevard and Requeza Street	5	15	49	155
Nardo Drive	Between Requeza Street and Melba Road	1	5	15	47
	Between Melba Road and Santa Fe Drive	1	5	15	47
MacKinnon Avenue	Between Santa Fe Drive and Villa Cardiff Drive	3	10	33	104
	Between MacKinnon Avenue and Windsor Road	3	11	35	109
	Between Windsor Road and Birmingham Drive	3	10	32	100
Garden View Road	Between Leucadia Boulevard and Via Cantebria	8	26	81	256
	Between Via Cantebria and El Camino Real	9	29	91	288
Town Center Place	Between Leucadia Boulevard and Town Center Place	6	18	57	182
	Between Town Center Place and Town Center Drive	5	16	51	162
Via Cantebria	Between Town Center Drive and Garden View Road	5	14	46	144
	Between Garden View Road and Forrest Bluff	10	33	104	330
	Between Forrest Bluff and Via Montoro	11	35	109	346
	Between Via Montoro and Via Molena	12	38	120	379
	Between Via Molena and Encinitas Boulevard	13	40	126	397
Balour Drive	Between Encinitas Boulevard and Melba Road	6	19	59	186
	Between Melba Road and Santa Fe Drive	3	10	32	100
Lake Drive	Between Santa Fe Drive and Woodlake Drive	3	11	35	109
	Between Woodlake Drive and Birmingham Drive	3	11	35	109

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
El Camino Real	Between Aviara Parkway and La Costa Avenue	83	262	830	2,624
	Between La Costa Avenue and Calle Barcelona	59	186	587	1,858
	Between Calle Barcelona and City of Carlsbad boundary	56	177	561	1,774
	Between City of Carlsbad boundary and Leucadia Boulevard	71	223	706	2,233
	Between Leucadia Boulevard and Town Center Drive	55	173	548	1,734
	Between Town Center Drive and Garden View Road	51	162	512	1,618
	Between Garden View Road and 331-339 El Camino Real	22	71	223	706
	Between 331-339 El Camino Real and Via Montoro	26	81	256	811
	Between Via Montoro and Mountain Vista	23	74	234	740
	Between Mountain Vista and Via Molena	24	77	245	774
	Between Via Molena and Encinitas Boulevard	29	93	294	931
	Between Encinitas Boulevard and 213 S El Camino Real	28	89	281	889
	Between 213 S El Camino Real and Crest Drive	24	76	239	757
	Between Crest Drive and Willowspring Drive	25	79	251	792
	Between Willowspring Drive and Santa Fe Drive	26	83	262	830
	Between Santa Fe Drive and Sage Canyon Drive	43	135	426	1,346
	Between Sage Canyon Drive and Manchester Avenue	41	129	406	1,285
Village Park Way	Between Mountain Vista Drive and Parkdale Drive	8	24	77	245
	Between Parkdale Drive and Encinitas Boulevard	10	32	100	315
Rancho Santa Fe Road	Between Olivenhain Road and Calle Acervo	16	51	162	512
	Between Calle Acervo/Avenida La Posta and Olive Crest Drive	12	37	117	371
	Between Olive Crest Drive and 13th Street	11	36	115	362
	Between 13th Street and 11th Street	11	36	115	362
	Between 11th Street and El Camino Del Norte	11	36	115	362
	Between El Camino Del Norte and 9th Street	10	31	97	308
	Between 9th Street and 8th Street	10	31	97	308
	Between 8th Street and 7th Street	10	32	102	323
	Between 7th Street and Encinitas Boulevard	13	41	129	406

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Manchester Avenue	Between Manchester Avenue and Mira Costa College	43	135	426	1,346
	Between Mira Costa College and I-5 NB On-Ramp	43	135	426	1,346
	Between I-5 NB Ramps and I-5 SB Ramps	28	89	281	889
	Between I-5 SB Ramps and Ocean Cove Drive	8	26	83	262
	Between Ocean Cove Drive and Seaside Cardiff-by-the-sea residential area driveway	8	26	83	262
	Between Seaside Cardiff-by-the-sea residential area driveway and San Elijo Water Reclamation Facility Driveway	8	26	83	262
	Between San Elijo Water Reclamation Facility Driveway and Manchester Avenue	8	26	81	256
Manchester Avenue	Between Encinitas Boulevard and El Camino Real	9	29	93	294
La Costa Avenue	Between Highway 101 and Vulcan Avenue	12	39	123	388
	Between Vulcan Avenue and Sheridan Road	12	39	123	388
	Between Sheridan Road and I-5 SB Ramps	16	51	162	512
	Between I-5 SB Ramps and I-5 NB Ramps	21	67	213	674
	Between I-5 NB Ramps and Piraeus Street	60	190	601	1,901
	Between Piraeus Street and Saxony Road	62	195	615	1,945
	Between Saxony Road and El Camino Real	64	204	644	2,037
	Between El Camino Real and La Costa Towne Center traffic signal	15	47	148	467
	Between La Costa Towne Center traffic signal and Fairway Lane	15	47	148	467
	Between Fairway Lane and Calle Madero	15	47	148	467
Leucadia Blvd	Between Highway 101 and Vulcan Avenue	8	26	83	262
	Between Vulcan Avenue and Hermes Avenue	9	29	91	288
	Between Hermes Avenue and Hygeia Avenue	9	28	89	281
	Between Hygeia Avenue and Hymettus Avenue	8	24	77	245
	Between Hymettus Avenue and Orpheus Avenue	11	34	107	338
	Between Orpheus Avenue and I-5 SB Ramps	11	35	109	346
	Between I-5 SB Ramps and I-5 NB Ramps	12	38	120	379
	Between Piraeus Street and Urania Avenue	32	100	315	998
	Between Urania Avenue and Saxony Road	32	100	315	998
	Between Saxony Road and Sidonia Street	30	95	301	953
	Between Sidonia Street and Quail Gardens Drive	30	95	301	953
	Between Quail Gardens Drive and Garden View Road	45	141	446	1,409
	Between Garden View Road and Town Center Place	30	95	301	953
	Between Town Center Place and El Camino Real	37	117	371	1,172

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
		Distance To (feet)			
Roadway	Segment	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Mountain Vista Drive	Between El Camino Real and Wandering Road	14	45	141	446
	Between Wandering Road and Village Park Way	9	27	87	275
Lone Jack Drive	Between Rancho Santa Fe Road and northern terminus	6	18	57	182
El Camino Del Norte	Between Rancho Santa Fe Road and San Dieguito CPA boundary	5	17	55	173
	Between San Dieguito CPA boundary to Via De Fortuna	5	17	54	169
Encinitas Blvd	Between Highway 101 and Vulcan Avenue	17	52	166	524
	Between Vulcan Avenue and Days Inn traffic signal	25	79	251	792
	Between Days Inn traffic signal and I-5 SB Ramps	25	79	251	792
	Between I-5 SB Ramps and I-5 NB Ramps	28	89	281	889
	Between I-5 NB Ramps and Saxony Road	29	93	294	931
	Between Saxony Road and Calle Magdalena	25	79	251	792
	Between Calle Magdalena and Encinitas Town Country traffic signal	29	91	288	910
	Between Encinitas Town Country traffic signal and Quail Gardens Drive	26	81	256	811
	Between Quails Garden Drive and Delphinium Street	36	115	362	1,145
	Between Delphinium Street and Balour Drive	36	115	362	1,145
	Between Balour Drive and Via Cantebria	45	141	446	1,409
	Between Via Cantebria and El Camino Real	27	87	275	869
	Between El Camino Real and Village Square Drive	29	93	294	931
	Between Village Square Drive and Turner Avenue	28	89	281	889
	Between Turner Avenue and Cerro Street	28	89	281	889
	Between Cerro Street and Village Park Way	28	89	281	889
	Between Village Park Way to Willowspring Drive	27	85	269	849
	Between Willowspring Drive to Rancho Santa Fe Road	22	71	223	706
S Rancho Santa Fe Road	Between Manchester Avenue and 770 feet east of Manchester Avenue	18	57	182	574
	Between 770 feet east of Manchester Avenue and San Dieguito CPA boundary	18	57	182	574
F Street/Requeza Street	Between Vulcan Avenue and Cornish Drive	2	6	18	56
	Between Cornish Drive and San Dieguito Drive	2	6	19	60
	Between San Dieguito Drive and Stratford Drive	2	6	19	60
	Between Stratford Drive and Regal Road	2	6	20	64
	Between Regal Road and West Lake Drive	2	6	19	59
	Between West Lake Drive and Nardo Drive	1	4	14	45

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Santa Fe Drive	Between Vulcan Avenue and Cornish Drive	5	14	46	144
	Between Cornish Drive and Summit Avenue	5	15	49	155
	Between Summit Avenue and Devonshire	5	17	54	169
	Between Devonshire Drive and Driveway	8	26	83	262
	Between Driveway and I-5 SB Ramps	8	26	83	262
	Between I-5 SB Ramps and I-5 NB Ramps	12	38	120	379
	Between I-5 NB Ramps and Regal Road	9	27	87	275
	Between Regal Road and Gardena Road	9	27	87	275
	Between Gardena Road and Nardo Road	9	27	87	275
	Between Nardo Road and Windsor Road/Bonita Drive	10	30	95	301
	Between Windsor Road/Bonita Drive and Balour Drive	10	30	95	301
	Between Balour Drive and Lake Drive	10	32	100	315
	Between Lake Drive and Crest Drive	10	30	95	301
	Between Crest Drive and El Camino Real	10	30	95	301
Birmingham Drive	Between San Elijo Avenue and Newcastle Avenue	6	20	63	199
	Between Newcastle Avenue and Manchester Avenue	6	20	63	199
	Between Manchester Avenue and Montgomery Avenue	6	20	63	199
	Between Montgomery Avenue and Cambridge Avenue	6	20	63	199
	Between Cambridge Avenue and MacKinnon Avenue	6	20	63	199
	Between MacKinnon Avenue and Carol View Drive	8	25	79	251
	Between Carol View Drive and I-5 SB Ramps	8	25	79	251
	Between I-5 SB Ramps and I-5 NB Ramps	15	49	155	489
	Between I-5 NB Ramps and Villa Cardiff Drive	10	30	95	301
	Between Villa Cardiff Drive and Playa Rivera	6	19	60	190
	Between Playa Rivera and Freda Lane	7	21	67	213
	Between Freda Lane and Lake Drive	4	14	45	141

Table 4.9-18 Housing Strategy 1 (RM) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
I-5	Between Palomar Airport Road and Poinsettia Lane	271	583	1,256	2,706
	Between Poinsettia Lane and La Costa Avenue	275	592	1,275	2,748
	Between La Costa Avenue and Leucadia Boulevard	271	583	1,256	2,706
	Between Leucadia Boulevard and Encinitas Boulevard	208	449	967	2,084
	Between Encinitas Boulevard and Santa Fe Drive	275	592	1,275	2,748
	Between Santa Fe Drive and Birmingham Drive	275	592	1,275	2,748
	Between Birmingham Drive and Manchester Avenue	283	610	1,315	2,833
	Between Manchester Avenue and Lomas Santa Fe Drive	325	701	1,510	3,253
	Between Lomas Santa Fe Drive and Via de la Valle	320	690	1,487	3,204

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
		Distance To (feet)			
Roadway	Segment	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Carlsbad Blvd	Between Avenida Encinas and La Costa Avenue	31	97	308	975
	Between Poinsettia Lane and Avenida Encinas	30	95	301	953
Highway 101	Between La Costa Avenue and 600 feet south of La Costa Avenue	15	48	151	477
	Between 600 feet south of La Costa Avenue and Leucadia Blvd	14	45	141	446
	Between Leucadia Blvd and Cadmus Street	14	46	144	456
	Between Cadmus Street and Marcheta Street	14	46	144	456
	Between Marcheta Street and 660 feet south of Marcheta Street	14	46	144	456
	Between 660 feet south of Marcheta Street and Encinitas Blvd	13	43	135	426
	Between Encinitas Blvd and D Street	8	24	77	245
	Between D Street and E Street	8	24	77	245
	Between E Street and F Street	8	24	77	245
	Between F Street and H Street	8	24	77	245
	Between H Street and J Street	8	27	85	269
	Between J Street and Swamis Ped Crossing	19	62	195	615
	Between Swami's Pedestrian Crossing and San Elijo State Beach	19	62	195	615
	Between San Elijo State Beach and Chesterfield	20	63	199	629
	Between Chesterfield and Cardiff State Beach	22	69	218	690
	Between Cardiff Beach State and Chart House	22	69	218	690
	Between Chart House and Las Olas Mexican Restaurant	22	69	218	690
	Between Las Olas Mexican Restaurant and Cardiff by the sea limits	22	69	218	690
	Between Cardiff by the sea limits and West Cliff Street	21	67	213	674
	Between West Cliff and Lomas Santa Fe	23	74	234	740
	Between Lomas Santa Fe Drive and Via De La Valle	22	69	218	690
Vulcan Avenue	Between La Costa Avenue and Leucadia Boulevard	4	12	37	117
	Between Leucadia Blvd and Encinitas Boulevard	4	12	39	123
	Between Encinitas Boulevard and D Street	9	29	93	294
	Between D Street and E Street	9	29	93	294
	Between E Street and Santa Fe Drive	10	30	95	301
San Elijo Avenue	Between Santa Fe Drive and Birmingham Drive	5	17	52	166
	Between Birmingham Drive and Chesterfield Drive	7	21	66	208
	Between Chesterfield Drive and Manchester Avenue	3	8	27	85

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Saxony Road	Between La Costa Avenue and Quail Gardens Drive	4	14	44	138
	Between Quail Gardens Drive and Normandy Road	2	6	18	57
	Between Normandy Road and Brittany Avenue	2	6	20	64
	Between Brittany Avenue and Leucadia Boulevard	2	6	18	57
	Between Leucadia Boulevard and Silver Berry Place	8	27	85	269
	Between Silver Berry Place and Encinitas Boulevard	10	33	104	330
Quail Hollow Drive	Between Swallow Tail Road and Saxony Road	1	5	14	46
Quail Gardens Drive	Between Swallow Tail Road and Lauren Court	3	11	35	109
	Between Lauren Court and Leucadia Boulevard	4	12	37	117
	Between Leucadia Boulevard and Paseo De Las Flores	6	19	59	186
	Between Paseo De Las Flores and Paseo De Las Verdes	6	19	59	186
	Between Paseo De Las Verdes and Encinitas Boulevard	6	19	62	195
Westlake Street	Between Encinitas Boulevard and Requeza Street	7	21	66	208
Nardo Drive	Between Requeza Street and Melba Road	2	5	16	50
	Between Melba Road and Santa Fe Drive	1	4	14	45
MacKinnon Avenue	Between Santa Fe Drive and Villa Cardiff Drive	3	11	34	107
	Between MacKinnon Avenue and Windsor Road	4	11	35	112
	Between Windsor Road and Birmingham Drive	3	10	32	102
Garden View Road	Between Leucadia Boulevard and Via Cantebria	8	26	81	256
	Between Via Cantebria and El Camino Real	9	28	89	281
Town Center Place	Between Leucadia Boulevard and Town Center Place	6	19	59	186
	Between Town Center Place and Town Center Drive	5	15	49	155
Via Cantebria	Between Town Center Drive and Garden View Road	4	14	45	141
	Between Garden View Road and Forrest Bluff	11	34	107	338
	Between Forrest Bluff and Via Montoro	11	35	109	346
	Between Via Montoro and Via Molena	12	39	123	388
	Between Via Molena and Encinitas Boulevard	13	41	129	406
Balour Drive	Between Encinitas Boulevard and Melba Road	6	19	60	190
	Between Melba Road and Santa Fe Drive	3	10	31	97
Lake Drive	Between Santa Fe Drive and Woodlake Drive	3	11	35	109
	Between Woodlake Drive and Birmingham Drive	3	11	35	109

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
El Camino Real	Between Aviara Parkway and La Costa Avenue	83	262	830	2,624
	Between La Costa Avenue and Calle Barcelona	59	186	587	1,858
	Between Calle Barcelona and City of Carlsbad boundary	55	173	548	1,734
	Between City of Carlsbad boundary and Leucadia Boulevard	71	223	706	2,233
	Between Leucadia Boulevard and Town Center Drive	55	173	548	1,734
	Between Town Center Drive and Garden View Road	50	158	500	1,581
	Between Garden View Road and 331-339 El Camino Real	22	71	223	706
	Between 331-339 El Camino Real and Via Montoro	26	81	256	811
	Between Via Montoro and Mountain Vista	23	72	229	723
	Between Mountain Vista and Via Molena	24	77	245	774
	Between Via Molena and Encinitas Boulevard	30	95	301	953
	Between Encinitas Boulevard and 213 S El Camino Real	28	89	281	889
	Between 213 S El Camino Real and Crest Drive	24	76	239	757
	Between Crest Drive and Willowspring Drive	26	81	256	811
	Between Willowspring Drive and Santa Fe Drive	27	85	269	849
	Between Santa Fe Drive and Sage Canyon Drive	45	141	446	1,409
	Between Sage Canyon Drive and Manchester Avenue	44	138	435	1,377
Village Park Way	Between Mountain Vista Drive and Parkdale Drive	8	24	77	245
	Between Parkdale Drive and Encinitas Boulevard	10	32	102	323
Rancho Santa Fe Road	Between Olivenhain Road and Calle Acervo	16	51	162	512
	Between Calle Acervo/Avenida La Posta and Olive Crest Drive	12	37	117	371
	Between Olive Crest Drive and 13th Street	11	36	115	362
	Between 13th Street and 11th Street	11	36	115	362
	Between 11th Street and El Camino Del Norte	11	36	115	362
	Between El Camino Del Norte and 9th Street	10	31	97	308
	Between 9th Street and 8th Street	10	32	100	315
	Between 8th Street and 7th Street	10	32	102	323
	Between 7th Street and Encinitas Boulevard	13	41	129	406

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
		Distance To (feet)			
Roadway	Segment	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Manchester Avenue	Between Manchester Avenue and Mira Costa College	45	141	446	1,409
	Between Mira Costa College and I-5 NB On-Ramp	45	141	446	1,409
	Between I-5 NB Ramps and I-5 SB Ramps	29	91	288	910
	Between I-5 SB Ramps and Ocean Cove Drive	8	27	85	269
	Between Ocean Cove Drive and Seaside Cardiff-by-the-sea residential area driveway	8	27	85	269
	Between Seaside Cardiff-by-the-sea residential area driveway and San Elijo Water Reclamation Facility Driveway	8	27	85	269
	Between San Elijo Water Reclamation Facility Driveway and Manchester Avenue	8	26	83	262
Manchester Avenue	Between Encinitas Boulevard and El Camino Real	10	30	95	301
La Costa Avenue	Between Highway 101 and Vulcan Avenue	12	38	120	379
	Between Vulcan Avenue and Sheridan Road	12	38	120	379
	Between Sheridan Road and I-5 SB Ramps	16	50	158	500
	Between I-5 SB Ramps and I-5 NB Ramps	21	66	208	659
	Between I-5 NB Ramps and Piraeus Street	62	195	615	1,945
	Between Piraeus Street and Saxony Road	62	195	615	1,945
	Between Saxony Road and El Camino Real	64	204	644	2,037
	Between El Camino Real and La Costa Towne Center traffic signal	15	47	148	467
	Between La Costa Towne Center traffic signal and Fairway Lane	15	47	148	467
	Between Fairway Lane and Calle Madero	15	47	148	467
Leucadia Blvd	Between Highway 101 and Vulcan Avenue	8	26	81	256
	Between Vulcan Avenue and Hermes Avenue	9	28	89	281
	Between Hermes Avenue and Hygeia Avenue	9	27	87	275
	Between Hygeia Avenue and Hymettus Avenue	8	24	77	245
	Between Hymettus Avenue and Orpheus Avenue	10	33	104	330
	Between Orpheus Avenue and I-5 SB Ramps	13	42	132	416
	Between I-5 SB Ramps and I-5 NB Ramps	12	37	117	371
	Between Piraeus Street and Urania Avenue	32	100	315	998
	Between Urania Avenue and Saxony Road	32	100	315	998
	Between Saxony Road and Sidonia Street	29	93	294	931
	Between Sidonia Street and Quail Gardens Drive	29	93	294	931
	Between Quail Gardens Drive and Garden View Road	45	141	446	1,409
	Between Garden View Road and Town Center Place	30	95	301	953
	Between Town Center Place and El Camino Real	36	115	362	1,145

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
		Distance To (feet)			
Roadway	Segment	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Mountain Vista Drive	Between El Camino Real and Wandering Road	14	45	141	446
	Between Wandering Road and Village Park Way	9	27	87	275
Lone Jack Drive	Between Rancho Santa Fe Road and northern terminus	6	18	57	182
El Camino Del Norte	Between Rancho Santa Fe Road and San Dieguito CPA boundary	6	18	56	177
	Between San Dieguito CPA boundary to Via De Fortuna	5	17	54	169
Encinitas Blvd	Between Highway 101 and Vulcan Avenue	16	51	162	512
	Between Vulcan Avenue and Days Inn traffic signal	24	76	239	757
	Between Days Inn traffic signal and I-5 SB Ramps	24	76	239	757
	Between I-5 SB Ramps and I-5 NB Ramps	28	89	281	889
	Between I-5 NB Ramps and Saxony Road	30	95	301	953
	Between Saxony Road and Calle Magdalena	26	81	256	811
	Between Calle Magdalena and Encinitas Town Country traffic signal	29	93	294	931
	Between Encinitas Town Country traffic signal and Quail Gardens Drive	27	85	269	849
	Between Quails Garden Drive and Delphinium Street	37	117	371	1,172
	Between Delphinium Street and Balour Drive	37	117	371	1,172
	Between Balour Drive and Via Cantebria	46	144	456	1,442
	Between Via Cantebria and El Camino Real	28	89	281	889
	Between El Camino Real and Village Square Drive	29	91	288	910
	Between Village Square Drive and Turner Avenue	28	89	281	889
	Between Turner Avenue and Cerro Street	28	89	281	889
	Between Cerro Street and Village Park Way	29	91	288	910
	Between Village Park Way to Willowspring Drive	27	85	269	849
	Between Willowspring Drive to Rancho Santa Fe Road	22	71	223	706
S Rancho Santa Fe Road	Between Manchester Avenue and 770 feet east of Manchester Avenue	18	57	182	574
	Between 770 feet east of Manchester Avenue and San Dieguito CPA boundary	18	57	182	574
F Street/Requeza Street	Between Vulcan Avenue and Cornish Drive	2	6	18	57
	Between Cornish Drive and San Dieguito Drive	2	6	19	59
	Between San Dieguito Drive and Stratford Drive	2	6	19	59
	Between Stratford Drive and Regal Road	2	6	20	63
	Between Regal Road and West Lake Drive	2	7	22	69
	Between West Lake Drive and Nardo Drive	1	5	15	47

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Santa Fe Drive	Between Vulcan Avenue and Cornish Drive	5	15	47	148
	Between Cornish Drive and Summit Avenue	5	15	47	148
	Between Summit Avenue and Devonshire	5	17	54	169
	Between Devonshire Drive and Driveway	8	26	81	256
	Between Driveway and I-5 SB Ramps	8	26	81	256
	Between I-5 SB Ramps and I-5 NB Ramps	12	38	120	379
	Between I-5 NB Ramps and Regal Road	8	27	85	269
	Between Regal Road and Gardena Road	8	27	85	269
	Between Gardena Road and Nardo Road	8	27	85	269
	Between Nardo Road and Windsor Road/Bonita Drive	9	29	93	294
	Between Windsor Road/Bonita Drive and Balour Drive	9	29	93	294
	Between Balour Drive and Lake Drive	10	32	100	315
	Between Lake Drive and Crest Drive	10	30	95	301
	Between Crest Drive and El Camino Real	10	30	95	301
Birmingham Drive	Between San Elijo Avenue and Newcastle Avenue	6	20	63	199
	Between Newcastle Avenue and Manchester Avenue	6	20	63	199
	Between Manchester Avenue and Montgomery Avenue	6	20	63	199
	Between Montgomery Avenue and Cambridge Avenue	6	20	63	199
	Between Cambridge Avenue and MacKinnon Avenue	6	20	63	199
	Between MacKinnon Avenue and Carol View Drive	8	26	81	256
	Between Carol View Drive and I-5 SB Ramps	8	26	81	256
	Between I-5 SB Ramps and I-5 NB Ramps	15	49	155	489
	Between I-5 NB Ramps and Villa Cardiff Drive	10	30	95	301
	Between Villa Cardiff Drive and Playa Rivera	6	19	60	190
	Between Playa Rivera and Freda Lane	7	21	67	213
	Between Freda Lane and Lake Drive	5	14	46	144

Table 4.9-19 Housing Strategy 2 (BYO) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
I-5	Between Palomar Airport Road and Poinsettia Lane	271	583	1,256	2,706
	Between Poinsettia Lane and La Costa Avenue	275	592	1,275	2,748
	Between La Costa Avenue and Leucadia Boulevard	271	583	1,256	2,706
	Between Leucadia Boulevard and Encinitas Boulevard	208	449	967	2,084
	Between Encinitas Boulevard and Santa Fe Drive	275	592	1,275	2,748
	Between Santa Fe Drive and Birmingham Drive	275	592	1,275	2,748
	Between Birmingham Drive and Manchester Avenue	283	610	1,315	2,833
	Between Manchester Avenue and Lomas Santa Fe Drive	330	712	1,533	3,303
	Between Lomas Santa Fe Drive and Via De La Valle	325	701	1,510	3,253

Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Carlsbad Blvd	Between Avenida Encinas and La Costa Avenue	31	97	308	975
	Between Poinsettia Lane and Avenida Encinas	31	97	308	975
Highway 101	Between La Costa Avenue and 600 feet south of La Costa Avenue	15	49	155	489
	Between 600 feet south of La Costa Avenue and Leucadia Blvd	15	47	148	467
	Between Leucadia Blvd and Cadmus Street	15	48	151	477
	Between Cadmus Street and Marcheta Street	15	48	151	477
	Between Marcheta Street and 660 feet south of Marcheta Street	14	44	138	435
	Between 660 feet south of Marcheta Street and Encinitas Blvd	14	44	138	435
	Between Encinitas Blvd and D Street	8	25	79	251
	Between D Street and E Street	8	25	79	251
	Between E Street and F Street	8	25	79	251
	Between F Street and H Street	8	25	79	251
	Between H Street and J Street	8	27	85	269
	Between J Street and Swamis Ped Crossing	19	62	195	615
	Between Swami's Pedestrian Crossing and San Elijo State Beach	20	63	199	629
	Between San Elijo State Beach and Chesterfield	20	63	199	629
	Between Chesterfield and Cardiff State Beach	22	69	218	690
	Between Cardiff Beach State and Chart House	22	69	218	690
	Between Chart House and Las Olas Mexican Restaurant	22	69	218	690
	Between Las Olas Mexican Restaurant and Cardiff by the sea limits	22	69	218	690
	Between Cardiff by the sea limits and West Cliff Street	21	67	213	674
	Between West Cliff and Lomas Santa Fe	23	74	234	740
	Between Lomas Santa Fe Drive and Via De La Valle	22	69	218	690
Vulcan Avenue	Between La Costa Avenue and Leucadia Boulevard	4	12	38	120
	Between Leucadia Blvd and Encinitas Boulevard	4	13	40	126
	Between Encinitas Boulevard and D Street	9	29	93	294
	Between D Street and E Street	10	31	97	308
	Between E Street and Santa Fe Drive	10	32	100	315
San Elijo Avenue	Between Santa Fe Drive and Birmingham Drive	5	17	54	169
	Between Birmingham Drive and Chesterfield Drive	7	21	66	208
	Between Chesterfield Drive and Manchester Avenue	3	9	27	87

Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Saxony Road	Between La Costa Avenue and Quail Gardens Drive	4	13	43	135
	Between Quail Gardens Drive and Normandy Road	2	6	18	56
	Between Normandy Road and Brittany Avenue	2	6	20	63
	Between Brittany Avenue and Leucadia Boulevard	2	6	18	56
	Between Leucadia Boulevard and Silver Berry Place	8	27	85	269
	Between Silver Berry Place and Encinitas Boulevard	10	32	100	315
Quail Hollow Drive	Between Swallow Tail Road and Saxony Road	1	5	14	46
Quail Gardens Drive	Between Swallow Tail Road and Lauren Court	3	11	35	109
	Between Lauren Court and Leucadia Boulevard	4	12	37	117
	Between Leucadia Boulevard and Paseo De Las Flores	6	20	64	204
	Between Paseo De Las Flores and Paseo De Las Verdes	6	20	64	204
	Between Paseo De Las Verdes and Encinitas Boulevard	6	19	59	186
Westlake Street	Between Encinitas Boulevard and Requeza Street	5	15	48	151
Nardo Drive	Between Requeza Street and Melba Road	1	5	15	47
	Between Melba Road and Santa Fe Drive	1	5	15	47
MacKinnon Avenue	Between Santa Fe Drive and Villa Cardiff Drive	3	10	33	104
	Between MacKinnon Avenue and Windsor Road	3	11	35	109
	Between Windsor Road and Birmingham Drive	3	10	30	95
Garden View Road	Between Leucadia Boulevard and Via Cantebria	8	26	81	256
	Between Via Cantebria and El Camino Real	9	29	91	288
Town Center Place	Between Leucadia Boulevard and Town Center Place	6	19	59	186
	Between Town Center Place and Town Center Drive	5	15	49	155
Via Cantebria	Between Town Center Drive and Garden View Road	4	14	45	141
	Between Garden View Road and Forrest Bluff	11	34	107	338
	Between Forrest Bluff and Via Montoro	11	35	109	346
	Between Via Montoro and Via Molena	12	39	123	388
	Between Via Molena and Encinitas Boulevard	13	41	129	406
Balour Drive	Between Encinitas Boulevard and Melba Road	6	19	59	186
	Between Melba Road and Santa Fe Drive	3	10	32	100
Lake Drive	Between Santa Fe Drive and Woodlake Drive	3	11	35	109
	Between Woodlake Drive and Birmingham Drive	3	11	35	109

Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
El Camino Real	Between Aviara Parkway and La Costa Avenue	83	262	830	2,624
	Between La Costa Avenue and Calle Barcelona	59	186	587	1,858
	Between Calle Barcelona and City of Carlsbad boundary	56	177	561	1,774
	Between City of Carlsbad boundary and Leucadia Boulevard	71	223	706	2,233
	Between Leucadia Boulevard and Town Center Drive	55	173	548	1,734
	Between Town Center Drive and Garden View Road	51	162	512	1,618
	Between Garden View Road and 331-339 El Camino Real	22	71	223	706
	Between 331-339 El Camino Real and Via Montoro	26	81	256	811
	Between Via Montoro and Mountain Vista	23	74	234	740
	Between Mountain Vista and Via Molena	24	77	245	774
	Between Via Molena and Encinitas Boulevard	31	97	308	975
	Between Encinitas Boulevard and 213 S El Camino Real	28	89	281	889
	Between 213 S El Camino Real and Crest Drive	24	76	239	757
	Between Crest Drive and Willowspring Drive	26	81	256	811
	Between Willowspring Drive and Santa Fe Drive	27	85	269	849
	Between Santa Fe Drive and Sage Canyon Drive	46	144	456	1,442
	Between Sage Canyon Drive and Manchester Avenue	45	141	446	1,409
Village Park Way	Between Mountain Vista Drive and Parkdale Drive	8	26	81	256
	Between Parkdale Drive and Encinitas Boulevard	10	33	104	330
Rancho Santa Fe Road	Between Olivenhain Road and Calle Acervo	16	51	162	512
	Between Calle Acervo/Avenida La Posta and Olive Crest Drive	12	37	117	371
	Between Olive Crest Drive and 13th Street	11	36	115	362
	Between 13th Street and 11th Street	11	36	115	362
	Between 11th Street and El Camino Del Norte	12	37	117	371
	Between El Camino Del Norte and 9th Street	10	31	97	308
	Between 9th Street and 8th Street	10	31	97	308
	Between 8th Street and 7th Street	10	32	102	323
	Between 7th Street and Encinitas Boulevard	13	42	132	416

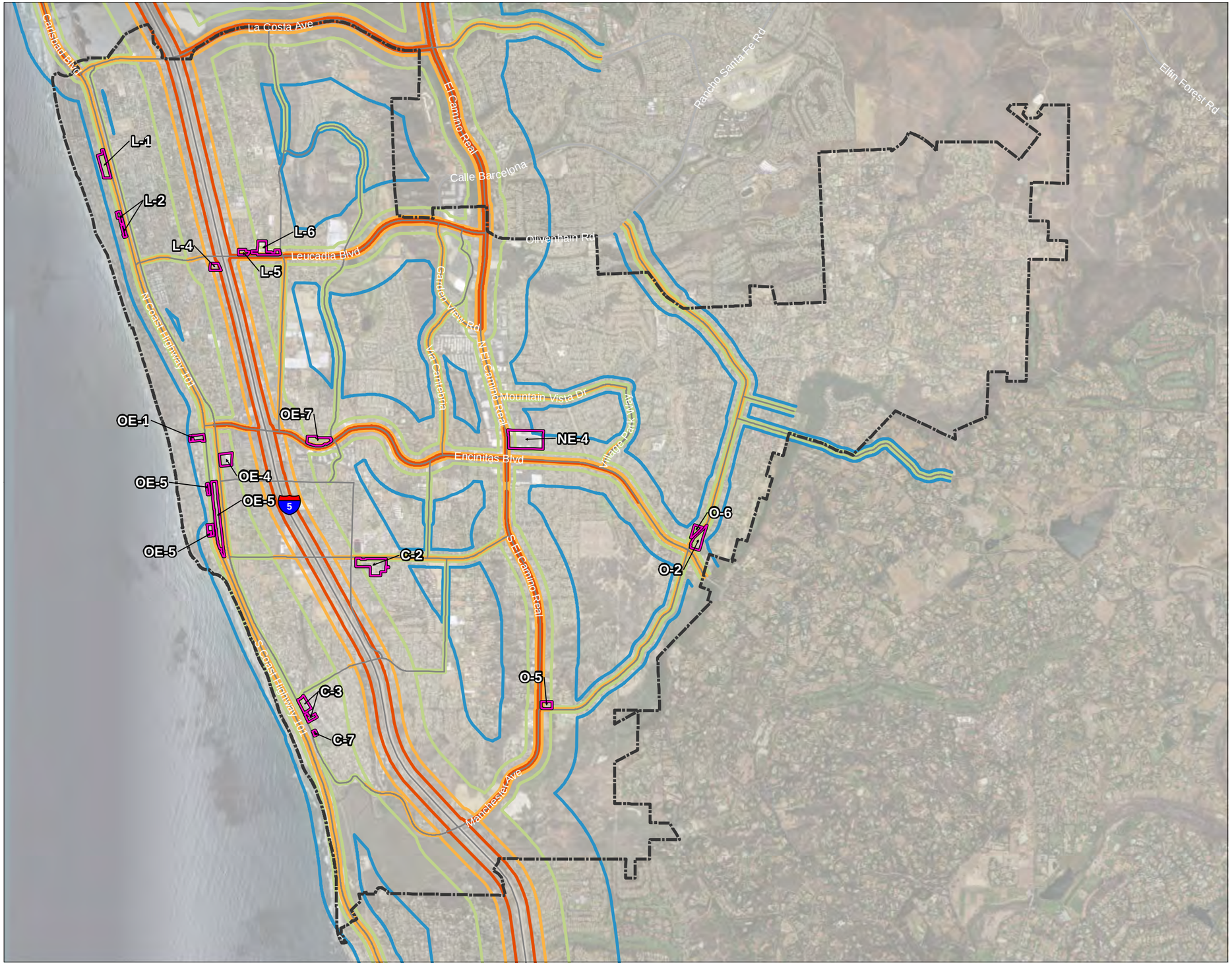
Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Manchester Avenue	Between Manchester Avenue and Mira Costa College	45	141	446	1,409
	Between Mira Costa College and I-5 NB On-Ramp	46	144	456	1,442
	Between I-5 NB Ramps and I-5 SB Ramps	29	91	288	910
	Between I-5 SB Ramps and Ocean Cove Drive	9	27	87	275
	Between Ocean Cove Drive and Seaside Cardiff-by-the-sea residential area driveway	8	27	85	269
	Between Seaside Cardiff-by-the-sea residential area driveway and San Elijo Water Reclamation Facility Driveway	8	27	85	269
	Between San Elijo Water Reclamation Facility Driveway and Manchester Avenue	8	27	85	269
Manchester Avenue	Between Encinitas Boulevard and El Camino Real	10	32	100	315
La Costa Avenue	Between Highway 101 and Vulcan Avenue	13	40	126	397
	Between Vulcan Avenue and Sheridan Road	12	39	123	388
	Between Sheridan Road and I-5 SB Ramps	16	51	162	512
	Between I-5 SB Ramps and I-5 NB Ramps	21	67	213	674
	Between I-5 NB Ramps and Piraeus Street	62	195	615	1,945
	Between Piraeus Street and Saxony Road	62	195	615	1,945
	Between Saxony Road and El Camino Real	64	204	644	2,037
	Between El Camino Real and La Costa Towne Center traffic signal	15	47	148	467
	Between La Costa Towne Center traffic signal and Fairway Lane	15	48	151	477
	Between Fairway Lane and Calle Madero	15	47	148	467
Leucadia Blvd	Between Highway 101 and Vulcan Avenue	8	26	83	262
	Between Vulcan Avenue and Hermes Avenue	9	29	93	294
	Between Hermes Avenue and Hygeia Avenue	9	28	89	281
	Between Hygeia Avenue and Hymettus Avenue	8	24	77	245
	Between Hymettus Avenue and Orpheus Avenue	10	33	104	330
	Between Orpheus Avenue and I-5 SB Ramps	11	34	107	338
	Between I-5 SB Ramps and I-5 NB Ramps	12	37	117	371
	Between Piraeus Street and Urania Avenue	31	97	308	975
	Between Urania Avenue and Saxony Road	31	97	308	975
	Between Saxony Road and Sidonia Street	29	93	294	931
	Between Sidonia Street and Quail Gardens Drive	29	93	294	931
	Between Quail Gardens Drive and Garden View Road	44	138	435	1,377
	Between Garden View Road and Town Center Place	29	93	294	931
	Between Town Center Place and El Camino Real	36	115	362	1,145

Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
		Distance To (feet)			
Roadway	Segment	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Mountain Vista Drive	Between El Camino Real and Wandering Road	14	45	141	446
	Between Wandering Road and Village Park Way	9	27	87	275
Lone Jack Drive	Between Rancho Santa Fe Road and northern terminus	6	18	57	182
El Camino Del Norte	Between Rancho Santa Fe Road and San Dieguito CPA boundary	5	17	55	173
	Between San Dieguito CPA boundary to Via De Fortuna	5	17	52	166
Encinitas Blvd	Between Highway 101 and Vulcan Avenue	17	55	173	548
	Between Vulcan Avenue and Days Inn traffic signal	25	79	251	792
	Between Days Inn traffic signal and I-5 SB Ramps	25	79	251	792
	Between I-5 SB Ramps and I-5 NB Ramps	29	91	288	910
	Between I-5 NB Ramps and Saxony Road	30	95	301	953
	Between Saxony Road and Calle Magdalena	26	83	262	830
	Between Calle Magdalena and Encinitas Town Country traffic signal	29	93	294	931
	Between Encinitas Town Country traffic signal and Quail Gardens Drive	27	85	269	849
	Between Quails Garden Drive and Delphinium Street	37	117	371	1,172
	Between Delphinium Street and Balour Drive	37	117	371	1,172
	Between Balour Drive and Via Cantebria	46	144	456	1,442
	Between Via Cantebria and El Camino Real	29	91	288	910
	Between El Camino Real and Village Square Drive	28	89	281	889
	Between Village Square Drive and Turner Avenue	28	89	281	889
	Between Turner Avenue and Cerro Street	28	89	281	889
	Between Cerro Street and Village Park Way	29	93	294	931
	Between Village Park Way to Willowspring Drive	27	87	275	869
	Between Willowspring Drive to Rancho Santa Fe Road	23	72	229	723
S Rancho Santa Fe Road	Between Manchester Avenue and 770 feet east of Manchester Avenue	19	59	186	587
	Between 770 feet east of Manchester Avenue and San Dieguito CPA boundary	19	59	186	587
F Street/Requeza Street	Between Vulcan Avenue and Cornish Drive	2	6	18	57
	Between Cornish Drive and San Dieguito Drive	2	6	19	60
	Between San Dieguito Drive and Stratford Drive	2	6	19	60
	Between Stratford Drive and Regal Road	2	6	20	63
	Between Regal Road and West Lake Drive	2	6	18	57
	Between West Lake Drive and Nardo Drive	1	4	14	45

Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Santa Fe Drive	Between Vulcan Avenue and Cornish Drive	5	15	47	148
	Between Cornish Drive and Summit Avenue	5	16	50	158
	Between Summit Avenue and Devonshire	5	17	54	169
	Between Devonshire Drive and Driveway	8	26	81	256
	Between Driveway and I-5 SB Ramps	8	26	81	256
	Between I-5 SB Ramps and I-5 NB Ramps	12	38	120	379
	Between I-5 NB Ramps and Regal Road	9	27	87	275
	Between Regal Road and Gardena Road	9	27	87	275
	Between Gardena Road and Nardo Road	9	27	87	275
	Between Nardo Road and Windsor Road/Bonita Drive	10	30	95	301
	Between Windsor Road/Bonita Drive and Balour Drive	10	30	95	301
	Between Balour Drive and Lake Drive	10	32	100	315
	Between Lake Drive and Crest Drive	10	30	95	301
	Between Crest Drive and El Camino Real	10	30	95	301
Birmingham Drive	Between San Elijo Avenue and Newcastle Avenue	6	20	64	204
	Between Newcastle Avenue and Manchester Avenue	6	20	64	204
	Between Manchester Avenue and Montgomery Avenue	6	20	64	204
	Between Montgomery Avenue and Cambridge Avenue	6	20	64	204
	Between Cambridge Avenue and MacKinnon Avenue	6	20	64	204
	Between MacKinnon Avenue and Carol View Drive	6	19	60	190
	Between Carol View Drive and I-5 SB Ramps	6	19	60	190
	Between I-5 SB Ramps and I-5 NB Ramps	15	48	151	477
	Between I-5 NB Ramps and Villa Cardiff Drive	10	30	95	301
	Between Villa Cardiff Drive and Playa Rivera	6	19	62	195
	Between Playa Rivera and Freda Lane	7	22	69	218
	Between Freda Lane and Lake Drive	5	14	46	144

Table 4.9-20 Housing Strategy 3 (MMUP) Future Vehicle Traffic Noise Contour Distances					
Roadway	Segment	Distance To (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
I-5	Between Palomar Airport Road and Poinsettia Lane	271	583	1,256	2,706
	Between Poinsettia Lane and La Costa Avenue	275	592	1,275	2,748
	Between La Costa Avenue and Leucadia Boulevard	271	583	1,256	2,706
	Between Leucadia Boulevard and Encinitas Boulevard	208	449	967	2,084
	Between Encinitas Boulevard and Santa Fe Drive	275	592	1,275	2,748
	Between Santa Fe Drive and Birmingham Drive	275	592	1,275	2,748
	Between Birmingham Drive and Manchester Avenue	283	610	1,315	2,833
	Between Manchester Avenue and Lomas Santa Fe Drive	330	712	1,533	3,303
	Between Lomas Santa Fe Drive and Via De La Valle	320	690	1,487	3,204

Image source: USDA FSA (flown June 2014)



City Limits

Housing Sites

Roads

Traffic Noise Contours

60

65

70

75

0 Miles 0.5

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FIGURE 4.9-4

Future Vehicle Traffic Noise Contours – Housing Strategy 1 (RM)

Image source: USDA FSA (flown June 2014)



City Limits

Housing Sites

Roads

Traffic Noise Contours

60

65

70

75

0 Miles 0.5

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FIGURE 4.9-5

Future Vehicle Traffic Noise Contours – Housing Strategy 2 (BYO)

Image source: USDA FSA (flown June 2014)



City Limits

Housing Sites

Roads

Traffic Noise Contours

60

65

70

75

0 Miles 0.5

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FIGURE 4.9-6

Future Vehicle Traffic Noise Contours – Housing Strategy 3 (MMUP)

It should be noted that at any specific location the actual existing noise would depend upon not only the source noise level but also the nature of the path from the source to the sensitive receptor. Buildings, walls, dense vegetation, and other barriers would block the direct line of sight and reduce noise levels at the receptor. As an example, a first row of buildings would reduce traffic noise levels at receptors by 3 to 5 dB(A) behind those structures depending on the building-to-gap ratio. Large continuous structures can provide substantially greater attenuation of traffic noise.

As shown in Figures 4.9-4 through 4.9-6, all of the housing sites are located adjacent to roadways or freeways that would generate noise levels greater than 60 L_{dn}. This is in excess of the City's normally acceptable exterior noise compatibility level. Additionally, the following housing sites are located adjacent to roadways or freeways that would generate noise levels greater than 70 L_{dn}: Alt-2, Alt-3, Alt-4, Alt-6, Alt-7, C-1, C-6, CBHMG-1, L-4, L-5, L-6, NE-1, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-2, OE-5, OE-7, and OE-8. This is in excess of the City's conditionally acceptable exterior noise compatibility level. Noise control measures such as site design, sound walls, and other measures could reduce noise to acceptable levels. Such measures cannot practically be designed at this time, because no specific projects have been designed and proposed at this time. Impacts would be potentially significant (Impact LU-3).

Depending on site design and building construction, interior noise levels could exceed the residential interior noise level standard of 45 L_{dn}. However, Title 24 of the CCR establishes an interior noise standard of 45 L_{dn} for all dwellings other than detached single-family dwellings, and requires that acoustical studies be prepared for proposed multi-family residential structures located where exterior noise levels exceed 60 L_{dn}. Feasible methods to achieve acceptable interior noise levels of 45 L_{dn} may include site design techniques (orienting buildings away from significant noise sources, locating windows and doors on building walls that are not adjacent to the noise source, etc.) and/or building design techniques (various STC rated sound dampening techniques such as the installation of STC-rated windows; or employing the use of double-leaf partitions, noise insulation materials and/or resilient wall channels). Future projects implemented under the HEU floating zone and located where exterior noise levels exceed 60 L_{dn} would be required to demonstrate compliance with Title 24 requirements as a part of the permitting process. Thus, interior noise impacts would be less than significant.

b. Housing Strategy Summaries

Impacts associated with exposure of persons to or generation of noise levels in excess of standards established in the local general plan would be significant under all three of the housing strategies. There would be no inherent difference in impacts among the housing strategies.

4.9.9.2 Significance of Impacts

All of the housing sites are located adjacent to roadways or freeways that would generate noise levels greater than the City's normally acceptable compatibility level of 60 L_{dn}.

Additionally, many of the housing sites are located adjacent to roadways or freeways that would generate noise levels greater than 70 L_{dn}. This is in excess of the City's conditionally acceptable exterior noise compatibility level. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required. Because no specific projects are proposed at this time, noise control measures cannot be practically designed, and impacts would be potentially significant (Impact LU-3).

Future projects implemented under the HEU floating zone and located where exterior noise levels exceed 60 L_{dn} would be required to demonstrate compliance with Title 24 requirements as a part of the permitting process. Thus, interior noise impacts would be less than significant.

4.9.9.3 Mitigation Framework

Applications for future development of housing sites consistent with the HEU floating zone program, wherein the City has determined a potential for noise impacts, shall be required to comply with the following mitigation framework:

LU-1: As part of the City's design review and entitlement process for housing sites, to the extent practicable, the City should avoid siting sensitive exterior areas associated with future residential uses within the 70 L_{dn} exterior traffic noise contour distances to the extent practicable and in consideration of other Zoning Standards and Design Guidelines. If sensitive receptors are to be located within the 70 L_{dn} exterior noise contour, outdoor activity areas shall be shielded from the noise source using site design measures such as building orientation or sound walls to maintain a 70 L_{dn} exterior noise level for noise sensitive exterior areas.

4.5.9.4 Significance after Mitigation

Implementation of mitigation framework LU-1 would reduce exterior noise levels to the standards established in the General Plan. Impacts would be reduced to a level less than significant.

4.10 Noise

This section evaluates potential noise impacts associated with construction and operation of the future development that could occur under the Housing Element Update (HEU) floating zone program. Specifically, this section addresses potential noise impacts related to exposing persons to noise in excess of applicable noise ordinance standards and to temporary and permanent increases in ambient noise levels. Complete noise modeling data are contained in Appendix O of this EIR. Impacts are assessed in accordance with standards established in the City of Encinitas Noise Element of the General Plan and the City's Municipal Code.

4.10.1 Existing Conditions

4.10.1.1 Fundamentals of Noise and Vibration

a. Fundamentals of Noise

Sound levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this study are the one-hour equivalent noise level (L_{eq}), the community noise equivalent level (CNEL), and the day-night equivalent level (L_{dn}).

- The **L_{eq}** is the level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1)}$ is the equivalent noise level over a 1-hour period and $L_{eq(8)}$ is the equivalent noise level over a 8-hour period. $L_{eq(8)}$ is a common metric for evaluating construction noise.

- The **CNEL** is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dB(A) penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and an additional 10 dB(A) penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times

are intended to account for the added sensitivity of humans to noise during the evening and night.

- The **L_{dn}** is also a 24-hour equivalent sound level that applies an additional 10 dB(A) to the sound levels occurring between 10:00 p.m. and 7:00 a.m. CNEL and L_{dn} noise levels usually agree within one decibel for the same noise. For all practical purposes, CNEL and L_{dn} can be considered synonymous.

Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. The movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The drop-off rate for a line source is 3 dB(A) for each doubling of distance.

Human perception of noise has no simple correlation with acoustical energy. A change in noise levels is generally perceived as follows: 3 dB(A) barely perceptible, 5 dB(A) readily perceptible, and 10 dB(A) perceived as a doubling or halving of noise (Caltrans 2013).

b. Fundamentals of Vibration

Vibration consists of energy waves transmitted through solid material (Federal Transit Administration [FTA] 2006). Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of 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). 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 (FTA 2006).

Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. Groundborne vibration is measured by its peak particle velocity (PPV). The PPV is normally described in inches per second (in/sec). PPV is appropriate for determining potential structure damage but does not evaluate human response to vibration. The ground motion caused by vibration may also be described in decibel notation (vibration decibels), referenced as VdB, which serves to compress the range of numbers required to describe vibration relative to human response. The general human response to different levels of groundborne vibration velocity levels is described in Table 4.10-1.

Table 4.10-1 Human Response to Different Levels of Groundborne Vibration	
Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.
SOURCE: FTA 2006.	

Groundborne vibration can be a concern for nearby residents along a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to groundborne noise, described below, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment.

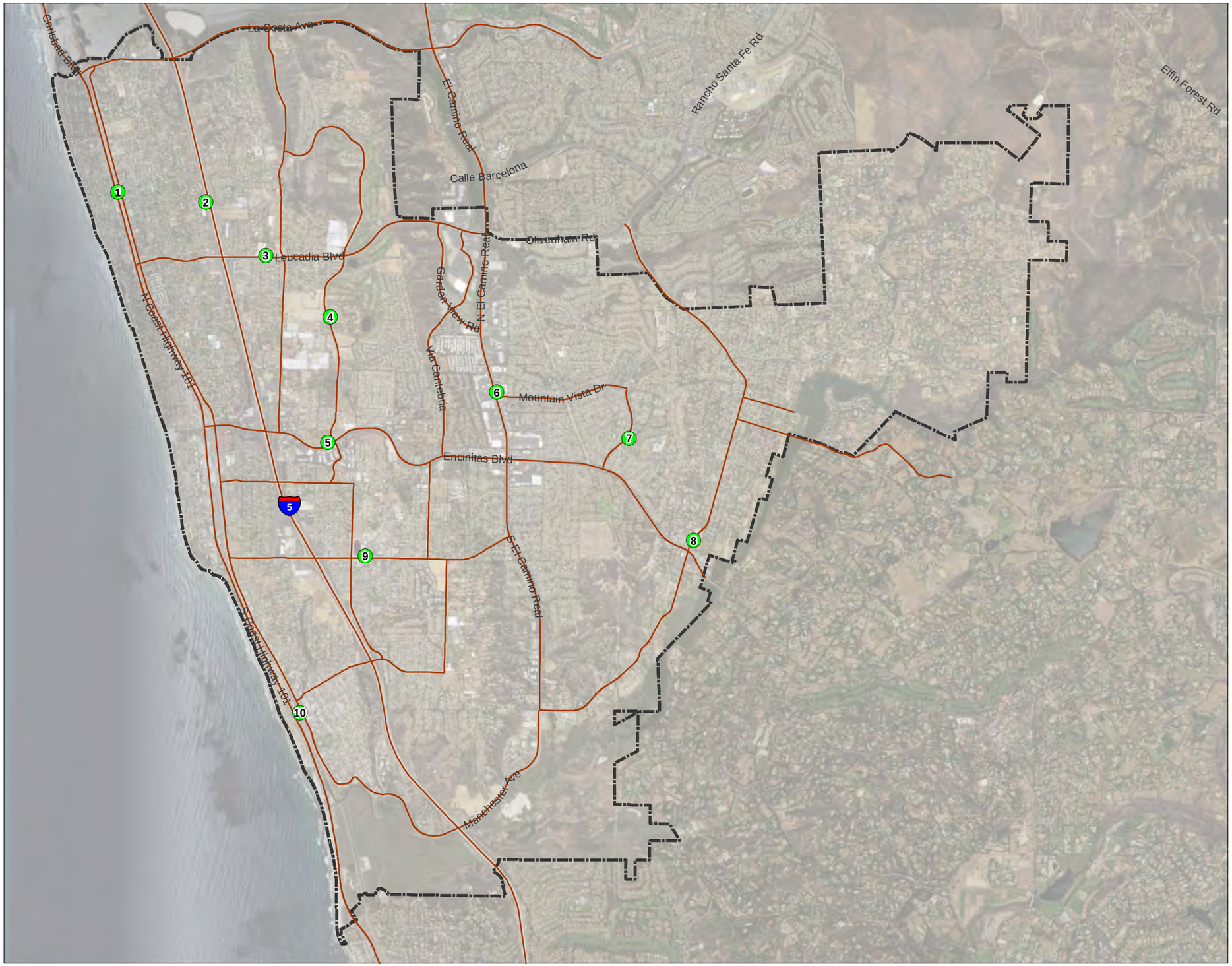
The rumbling sound caused by the vibration of building structures is referred to as groundborne noise. Like broadband noise, groundborne noise is usually characterized with the A-weighted sound level, which is intended to represent the normal frequency response of the human ear. However, there are potential problems when characterizing low-frequency noise using A-weighting, because human hearing causes sounds dominated by low-frequency components to seem louder than broadband sounds that have the same A-weighted level. This is accounted for by setting the limits for groundborne noise lower than would be the case for broadband noise. The sound level accompanying vibration is generally 25 to 40 dB(A) lower than the vibration velocity level in VdB. Groundborne vibration levels of 65 VdB can result in groundborne noise levels up to 40 dB(A), which can disturb sleep. Groundborne vibration levels of 85 VdB can result in groundborne noise levels up to 60 dB(A), which can be annoying to daytime noise-sensitive land uses such as schools (FTA 2006).

4.10.1.2 Environmental Setting

a. Existing Noise Levels

Ambient noise levels were measured in the City of Encinitas to provide a characterization of the variability of noise throughout the project area. Ten 15-minute, daytime noise level measurements were conducted. Noise measurements were taken with two Larson-Davis LxT Type 1 Integrating Sound Level Meters, serial numbers 3828 and 3829. Measurement locations are shown in Figure 4.10-1. A summary of the measurements is provided in Table 4.10-2. Based on the measurement data shown in Table 4.10-2, daytime noise levels in the project area range from 56.7 to 76.4 dB(A) L_{eq} and are typical of an urban environment.

Image source: USDA FSA (flown June 2014)



City Limits

Roads

Noise Measurement Locations

0 Miles 0.5

FIGURE 4.10-1

Noise Measurement Locations

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Table 4.10-2
Ambient Noise Measurements

Measurement	Location	Time	Noise Sources	Measured Noise Level [dB(A) L_{eq}]
1	25 feet east of Highway 101 and 25 feet west of railroad tracks, north of Jason Street	12:37p.m.–12:52 p.m.	Vehicle traffic on Highway 101, train passby and helicopter flyover	70.5
2	50 feet west of I-5, along east shoulder of Orpheus Avenue	3:41 p.m.–3:56 p.m.	Vehicle traffic on I-5 and Orpheus Avenue	76.4
3	25 feet north of Leucadia Boulevard, across from Del Riego Avenue	3:00 p.m.–3:15 p.m.	Vehicle traffic on Leucadia Boulevard	68.5
4	50 feet east of Quail Gardens Drive, north of Quail Gardens Lane	1:30 p.m.–1:45 p.m.	Vehicle traffic on Quail Gardens Drive	58.5
5	50 feet north of Encinitas Boulevard, west of Quail Gardens Drive/Westlake Street	2:04 p.m.–2:19 p.m.	Vehicle traffic on Encinitas Boulevard and Quail Gardens Drive/Westlake Street	71.0
6	25 feet east of El Camino Real, north of Mountain Vista Drive	3:07 p.m.–3:22 p.m.	Vehicle traffic on El Camino Real, parking lot activities	69.0
7	50 feet east of Village Park Way and 35 feet west of Countrywood Lane, north of Park Dale Lane	2:31 p.m.–2:46 p.m.	Vehicle traffic on Village Park Way and Countrywood Lane	59.3
8	50 feet east of Rancho Santa Fe Road, north of Encinitas Boulevard	1:27 p.m.–1:42 p.m.	Vehicle traffic on Rancho Santa Fe Road	61.2
9	50 feet north of Santa Fe Drive, in parking lot of San Diego Academy	12:46 p.m.–1:01 p.m.	Vehicle traffic on Santa Fe Drive and I-5	61.3
10	50 feet west of San Elijo Avenue, 105 feet east of railroad tracks and 175 feet east of Highway 101, north of Liverpool Drive	12:01 p.m.–12:16 p.m.	Vehicle traffic on San Elijo Drive and Highway 101	56.7

NOTE: I-5 = Interstate 5.

b. Sensitive Noise and Vibration Receptors

Noise sensitive land uses are land uses associated with indoor and/or outdoor human activities that may be subject to stress and/or significant interference from noise. They include residential (single and multi-family dwellings, mobile home parks, dormitories and similar uses); transient lodging (including hotels, motels and similar uses); hospitals, nursing homes, convalescent hospitals and other facilities for long-term medical care; and public or private educational facilities, libraries, churches and other places of public gathering.

4.10.2 Regulatory Framework

4.10.2.1 State

a. California Code of Regulations Title 24 Interior Noise Building Standards

Interior noise levels for dwellings other than detached single-family dwellings are regulated by Title 24 of the California Code of Regulations (CCR), California Noise Insulation Standards. Title 24, Chapter 12, Section 1207, of the California Building Code requires that interior noise levels, attributable to exterior sources, not exceed 45 CNEL in any habitable room within a residential structure. A habitable room in a building is used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces and similar areas are not considered habitable spaces.

Acoustical studies must be prepared for proposed residential structures located where the exterior noise level exceeds 60 CNEL. The studies must demonstrate that the design of the building would reduce interior noise to 45 CNEL in habitable rooms. If compliance requires windows to be inoperable or closed, the structure must include ventilation or air-conditioning (24 CCR 1207 2010).

4.10.2.2 Local

a. General Plan/Local Coastal Program

As discussed in Section 4.9, the City of Encinitas has established noise guidelines in the City's General Plan Noise Element (City of Encinitas 1989). These guidelines identify compatible exterior noise levels for various land use types. The HEU includes an amendment to the adopted General Plan Noise Element but would not change the exterior noise standards for residential uses. The noise element amendment is discussed in Chapter 3.0, and the noise compatibility levels are summarized in Table 4.9-6. As identified in Table 4.9-6, residential uses are normally acceptable up to 60 average sound level (L_{dn}). A land use located in an area with an acceptable exterior noise level indicates that standard construction methods would attenuate exterior noise to an acceptable indoor noise level and that people can carry out outdoor activities with minimal noise interference The Noise Element recognizes that there are residential areas where this level is exceeded, thus, residential uses are conditionally acceptable up to 70 L_{dn}, but normally unacceptable up to 75 L_{dn}, and clearly unacceptable above 75 L_{dn}. Any project which would be located in a normally unacceptable noise exposure area, based on the Land Use Compatibility Guidelines, shall require an acoustical analysis. Noise attenuation in the future shall be incorporated in the project as needed. The noise level criteria are applied where outdoor use is a major consideration (e.g., backyards of single family residences and common outdoor areas of multi-family developments). Interior noise levels are not to exceed an L_{dn} of 45 dB in accordance with Title 24.

Pertinent goals and policies related to noise as identified in the adopted Noise Element are listed below in Table 4.10-3.

Table 4.10-3 Goals and Policies Related to Noise	
Goal/Policy	Description
City of Encinitas General Plan Noise Element	
Goal 1	Provide an acceptable noise environment for existing and future residents of the City of Encinitas
1.1	Review actions or projects that may have noise generation potential to determine what impact they may have on existing land uses. If a project would cause an increase in traffic noise levels, the policy of the City of Encinitas is to accept an increase up to an L_{dn} of 55 dB in outdoor residential use areas without mitigation. If a project would increase the traffic noise level by more than 5 dB and the resulting L_{dn} would be over 55 dB, then mitigation measures must be evaluated. If the project, or action, would increase traffic noise levels by 3 dB or more and the resulting L_{dn} would exceed 60 dB in outdoor use areas in residential development, noise mitigation must be similarly evaluated. The impact of non-transportation projects must generally be evaluated on a case-by-case basis. The following guidelines will aid in evaluating the impacts of commercial and industrial projects. a) Performance Standards Adjacent to Residential Areas. New commercial construction adjacent to residential areas should not increase noise levels in a residential area by more than 3 dB (L_{dn}) or create noise impacts which would increase noise levels to more than an L_{dn} of 60 dB at the boundary of the nearest residential area, whichever is more restrictive. b) Performance Standards Adjacent to Commercial and Industrial Areas. New commercial projects should not increase noise levels in a commercial area by more than 5 dB (L_{dn}) or increase noise levels to an L_{dn} in excess of 70 dB (office buildings, business and professional) or an L_{dn} of 75 dB (industrial) at the property line of an adjacent commercial/industrial use, whichever is more restrictive. These criteria may be waived if, as determined by a noise analysis, there are mitigating circumstances (such as higher existing noise levels) and/or no uses would be adversely affected. Where conditions are unusual or where backgrounds are unusually low and the characteristics of a new noise source are not adequately described by using the L_{dn} noise descriptor, additional acoustical analysis is encouraged and the conclusions of such analysis will be considered by the City.
1.2	An L_{dn} of 60 dB is the maximum acceptable outdoor noise level in residential outdoor use areas. The City recognizes that there are residential areas in which existing noise levels exceed an acceptable level. The City will adopt a Noise Wall/Barrier Installation Policy for determining which areas should receive soundwalls along major street systems and to evaluate possible cost participation programs for constructing these soundwalls.
1.3	To further improve the noise environment in the City of Encinitas, the police department will enforce the provisions in Sections 27-150 and 27-151 of the California State Motor Vehicle Code. These sections require that all vehicles be equipped with a properly maintained muffler and that exhaust systems not be modified.
1.4	The City will limit truck traffic in residential and commercial areas to designated truck routes. Limit construction delivery, and through truck traffic to designated routes. Distribute maps of approved truck routes to City traffic officers.

Table 4.10-3 Goals and Policies Related to Noise	
Goal/Policy	Description
1.5	The City will establish and maintain coordination among City, County and State agencies involved in noise abatement and other agencies to reduce noise generated from sources outside the City's jurisdiction.
1.7	Apply Title 24 of the California Administrative Code, associated with noise insulation standards, to single-family dwellings.
1.8	Establish noise standards for all types of noise not already identified in the General Plan or governed by existing ordinances.
Goal 2	Require that new development be designed to provide acceptable indoor and outdoor noise environments.
2.1	The Noise and Land Use Compatibility Guidelines and the accompanying discussion set forth the criteria for siting new development in the City of Encinitas. Any project which would be located in a normally unacceptable noise exposure area, based on the Land Use Compatibility Guidelines, shall require an acoustical analysis. Noise mitigation in the future shall be incorporated in the project as needed. As a condition of approval of a project, the City may require post-construction noise monitoring and sign off by an acoustician to ensure that City requirements have been met.
Goal 3	Ensure that residents are protected from harmful and irritating noise sources to the greatest extent possible.
3.1	The City will adopt and enforce a quantitative noise ordinance to resolve neighborhood conflicts and to control unnecessary noise in the City of Encinitas. Examples of the types of noise sources that can be controlled through the use of a quantitative noise ordinance are barking dogs, noisy mechanical equipment such as swimming pool and hot tub pumps, amplified music in commercial establishments, etc.
Goal 4	Provide for measures to reduce noise impacts from stationary noise sources.
4.1	Ensure inclusion of noise mitigation measures in the design and operation of new and existing development.
SOURCE: City of Encinitas 1989, amended 2014.	

b. City of Encinitas Municipal Code

On-Site Generated Noise

The City's Municipal Code establishes noise criteria to prevent noise and vibration that may jeopardize the health or welfare of the City's citizens or degrade their quality of life. Chapter 9.32, Noise Abatement and Control Ordinance, and Chapter 30.40, Performance Standards, establish property line noise level limits. These limits apply to existing uses, but will also apply to future uses and are used for evaluating potential impacts of future on-site generated noise levels. The property line noise limits are summarized in Table 4.10-4. As stated in the Municipal Code:

1. Every use shall be so operated that the noise generated does not exceed the following levels at or beyond the lot line and does not exceed the limits of any adjacent zone.

Table 4.10-4
City of Encinitas Exterior Noise Limits

Adjacent Zone	Noise Level [dB(A)][1,2,3] 7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Rural Residential (RR), Rural Residential-1 (RR-1), Rural Residential-2 (RR-2), Residential-3 (R-3), Residential-5 (R-5), Residential-8 (R-8)	50	45
Residential-11 (R-11), Residential Single Family-11 (RS-11), Residential-15 (R-15), Residential-20 (R-20), Residential-25 (R-25), Mobile Home Park (MHP)	55	50
Office Professional (OP), Limited Local Commercial (LLC), Local Commercial (LC), General Commercial (GC), Limited Visitor Serving Commercial (L-VSC), Visitor Serving Commercial (VSC)	60	55
Light Industrial (L-I), Business Park (BP)	60	55
SOURCE: City of Encinitas Municipal Code Section 30.40.010		

2. ER/OS/PK will be governed by the limits applicable to the source of the complaint.

3. The interior noise level as required by the State of California Noise Insulation Standards must not exceed an L_{dn} of 45 dB in multi-family dwellings. This interior standard shall also be applied to single-family dwellings and offices in the City of Encinitas.

4. It shall be unlawful for any person on any property within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any other property to exceed the following:

    a. The noise standard for cumulative period of more than 30 minutes in any hour; or

    b. The noise standard plus five dB for a cumulative period of more than 15 minutes in any hour; or

    c. The noise standard plus up to 15 dB for a cumulative period of more than one minute in any hour; or

    d. The noise standard plus 20 dB for any period of time.

5. For the purpose of this chapter, the peak decibel reading for a noise with a fluctuating noise level (such as live or recorded music) shall be considered as the noise level for the entire cumulative period of the noise. Likewise, the time between repetitive intermittent noises (such as banging, pounding, or hammering) shall be included in the cumulative of the noise.

Construction Noise

Section 9.32.410 of the City's Municipal Code identifies construction noise level limits and states that:

Except for emergency work, it shall be unlawful for any person, including the City, to operate construction equipment at any construction site, except as outlined in subsections A and B of this section:

A. It shall be unlawful for any person, including the City, to operate construction equipment at any construction site on Sundays, and days appointed by the President, Governor or the City Council for a public fast, thanksgiving or holiday. Notwithstanding the above, a person may operate construction equipment on the above-specified days between the hours of 10:00 a.m. and 5:00 p.m. in compliance with the requirements of subsection B of this section at his or her residence or for the purpose of constructing a residence for him or herself, provided such operation of construction equipment is not carried on for profit or livelihood. In addition, it shall be unlawful for any person to operate construction equipment at any construction site on Mondays through Saturdays except between the hours of 7:00 a.m. and 7:00 p.m.

B. No such equipment, or combination of equipment regardless of age or date of acquisition, shall be operated so as to cause noise at a level in excess of 75 dB for more than 8 hours [dB(A) $L_{eq(8)}$] during any 24-hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes.

   In the event that lower noise limit standards are established for construction equipment pursuant to State or Federal law, said lower limits shall be used as a basis for revising and amending the noise level limits specified in this subsection.

Note that the metric used to evaluate construction noise is the 8-hour equivalent noise level [dB(A) $L_{eq(8)}$]. $L_{eq(8)}$ is useful for evaluating construction noise because equipment operated intermittently with brief periods of maximum power, varying load cycles, and breaks for the operators and for non-equipment tasks.

Vibration

Chapter 30.40 of the City's Municipal Code identifies vibration limits for vibration. The vibration limits are summarized in Table 4.10-5. As stated in the Municipal Code:

> Every use shall be so operated that the ground vibration generated at any time and measured at any point along the lot line of the lot on which the use is located shall not be perceptible and shall not exceed the following:

Table 4.10-5 City of Encinitas Vibration Limits		
	Vibration in Inches per Second	
Adjacent Zone	Impact	Steady-State
Residential	0.006	0.003
Commercial	0.010	0.005
Light Industrial	0.040	0.020
Public/Semi-Public	0.010	0.005
SOURCE: City of Encinitas Municipal Code Section 30.40.010		

4.10.3 Significance Determination Thresholds

Consistent with Appendix G of the California Environmental Quality Act Guidelines, impacts related to noise would be significant if the HEU project would:

1. Result in a substantial permanent increase in ambient traffic noise levels in the project vicinity above levels existing without the project;

2. Result in exposure of persons to or generation of noise levels in excess of limits established in the noise ordinance;

3. Result in a substantial temporary or periodic increase in ambient noise levels above levels existing without the project; or

4. Result in the generation of excessive groundborne vibration or groundborne noise levels in the project vicinity above levels existing without the project.

A noise/land use impact would also occur if the HEU would result in exposure of persons to noise levels in excess of standards established in the local General Plan. The City has established noise land use compatibility guidelines in the City's adopted General Plan Noise Element. Additionally, the project includes an amendment to the adopted General Plan Noise Element. The exterior noise standards for residential uses are the same in both the adopted Noise Element and the amendment to the Noise Element. Consistency with these standards are discussed in Section 4.9, Land Use and Planning. A discussion of compatibility with the City's interior standards as well as Title 24, which established interior noise standards for all dwellings other than detached single-family dwellings, is also provided in Section 4.9, Land Use and Planning.

4.10.4 Methodology

4.10.4.1 Ambient Traffic Noise

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Future buildout of the housing sites would increase traffic volumes on local roadways. Noise level increases would be greatest nearest the housing sites, which would represent

the greatest concentration of project-related traffic. Traffic noise is primarily a function of volume, vehicle mix, speed and proximity. For purposes of this evaluation, the vehicle mix, speed and proximity are assumed to remain constant in the future. Thus, the primary factor affecting noise levels would be increased traffic volumes. Existing and future traffic volumes and speeds were obtained from the traffic impact analysis prepared for the project.

Direct impacts were determined by comparing existing average daily traffic volumes with the existing condition plus the project (each housing strategy) at full buildout. Cumulative impacts were determined by comparing the future "with project" and "no project (adopted General Plan)" conditions and determining the project's contribution to the future cumulative noise levels.

4.10.4.2 On-Site Generated Noise

Stationary sources of noise include activities associated with a given land use. The noise sources associated with future development proposed under the HEU would be those typical of any residential development (vehicles arriving and leaving, children at play and landscape maintenance machinery). None of these noise sources are anticipated to violate the City's Municipal Code or result in a substantial permanent increase in existing noise levels.

Heating, ventilation, and air conditioning (HVAC) units with exterior fans or condensers mounted on the ground or roofs have the potential to produce noise in excess of the City's limits. Mixed use developments would also generate noise from commercial-related mechanical equipment, loading docks, deliveries, trash-hauling activities and customer and employee use of commercial facilities. Stationary noise sources such as these are considered "point sources" and attenuate over distance at a rate of 6 dB(A) for each doubling of distance.

4.10.4.3 Construction Noise and Vibration

a. Construction Noise

No specific construction or development is proposed under the HEU at this time, but construction would occur with future development of the housing sites. Future development could potentially result in temporary ambient noise increase due to construction activities.

Construction noise would be generated by diesel-powered construction equipment used for site preparation and grading, removal of existing structures and pavement, loading, unloading and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove the spoils from excavation.

Under load conditions, diesel engine noise levels may be 85 to 90 dB(A) at a distance of 50 feet from the equipment (Federal Highway Administration [FHWA] 2006). Occasional pavement breaking would be performed, which would generate noise levels of 90 dB(A) at 50 feet from the equipment (FHWA 2006). Construction equipment noise is considered a "point source" and attenuates over distance at a rate of 6 dB(A) for each doubling of

distance. Thus, a noise level of 85 dB(A) at 50 feet would be 79 dB(A) at 100 feet and 73 dB(A) at 200 feet from the source.

During excavating, grading and paving operations, equipment moves to different locations and goes through varying load cycles, and there are breaks for the operators and for non-equipment tasks. Although maximum noise levels may be 85 to 90 dB(A) at a distance of 50 feet during most construction activities, hourly average noise levels would be 82 dB(A) at 50 feet from the center of construction activity when assessing the loudest pieces of equipment working simultaneously.

b. Construction Vibration

Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Representative vibration source levels were obtained from the FTA (2006) and were evaluated at the nearest structure to the project site. Vibration perception would occur at structures, as people do not perceive vibrations without vibrating structures. The ground vibration levels associated with various types of construction equipment are summarized in Table 4.10-6.

Table 4.10-6
Representative Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 feet (in/sec)
Pile Drive (impacts)	Upper range – 1.518 Typical – 0.644
Pile Driver (sonic)	Upper range – 0.734 Typical – 0.170
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003
SOURCE: FTA 2006.	

4.10.4.4 Future Project Implementation

As noted previously in this chapter, the City has established noise guidelines and regulations in the City's General Plan Noise Element and the Municipal Code. Please note that the proposed amendments to the Noise Element do not alter noise performance standards and policy-based regulations. The City would review future project applications for compatibility, applicable requirements for noise, and require specific conditions as part of the approval process. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process. Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone.

The impact analysis describes the type and magnitude of the potential environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential to result in noise impacts.

The analysis in the following section identifies operational (mobile and stationary) and construction noise impacts, the significance of impacts and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts related to noise, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.10.5 Issue 1: Ambient Noise Levels

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

4.10.5.1 Impacts

A significant impact would occur if future development associated with the HEU floating zone program results in or creates a significant increase in ambient noise levels compared to the existing condition. Studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. A 10 dB(A) increase is subjectively heard as a doubling in loudness and would cause a community response.

As stated in the adopted Noise Element of the General Plan, if a project would increase the traffic noise level by more than 5 dB and the resulting L_{dn} would be over 55 dB, then mitigation measures must be evaluated. If the project, or action, would increase traffic noise levels by 3 dB or more and the resulting L_{dn} would exceed 60 dB in outdoor use areas in residential development, noise mitigation must be similarly evaluated. Therefore, based on these concepts of increase and perception, if buildout of the HEU would result in a traffic noise increase of 5 dB or more and a resulting noise level over 55 L_{dn} at a residential use, then the impact would be considered significant. Additionally, if buildout of the HEU would result in a traffic noise increase of 3 dB or more and a resulting noise level over 60 L_{dn} at a residential use, then the impact would be considered significant.

a. Housing Sites

Future development of the housing sites under the Floating Zone Program would result in increased traffic beyond the existing condition. As noted above, a traffic noise increase of 3 dB would occur when the traffic volume on a roadway doubles. Given the largely developed nature of the City, buildout of an individual housing site alone is not likely to double the traffic volume on a roadway. As discussed in subsection b, there would be an increase in existing ambient noise levels with or without buildout of the housing sites. This is due to the increase in regional growth that would occur with or without implementation of the HEU Floating Zone Program. Due to the nature of traffic modeling, future traffic volumes associated with buildout of the HEU are identified on a strategy-wide basis. Neither traffic

nor traffic noise impacts can be identified on a site-specific basis. Therefore, no analysis relative to the impacts associated with individual housing sites is feasible.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Table 4.10-7 summarizes the existing traffic volumes and noise levels, the future traffic volumes and noise levels without implementation of the HEU, and the future traffic volumes and noise levels associated with buildout of housing strategy 1 (RM). Impacts were assessed by comparing existing noise levels to future noise levels with implementation of the HEU housing strategy 1 (RM). When compared to the existing condition, a noise increase of 3 dB or greater would occur adjacent to Carlsbad Boulevard between Avenida Encinas and La Costa Avenue where the existing noise level is 70 CNEL and the future noise level is projected to be 73 CNEL, Village Park Way between Parkdale Drive and Encinitas Boulevard where the existing noise level is 65 CNEL and the future noise level is projected to be 68 CNEL, and Manchester Avenue between Encinitas Boulevard and El Camino Real where the existing noise level is 64 CNEL and the future noise level is projected to be 68 CNEL. There are existing sensitive land uses located adjacent to these roadway segments. However, this increase would be due to cumulative regional growth. To evaluate the HEU's contribution to the noise increase, future traffic volumes were compared to buildout of the no project condition (development under the adopted general plan). When compared to buildout of the no project condition, the increase in ambient noise attributed to housing strategy 1 (RM) would be less than 3 dB adjacent to all roadway segments. Impacts would be less than significant. It should also be noted that there would be an increase in existing ambient noise levels without buildout of housing strategy 1 (RM). This is due to the increase in regional growth that would occur with or without implementation of the proposed HEU.

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
Carlsbad Blvd.	Between Avenida Encinas and La Costa Ave.	12,160	70	25,300	73	25,500	73	3.2	0.0	NO
	Between Poinsettia Lane and Avenida Encinas	16,194	71	24,700	73	25,400	73	2.0	0.1	NO
Highway 101	Between La Costa Ave. and 600 feet south of La Costa Ave.	18,070	69	19,900	70	21,600	70	0.7	0.3	NO
	Between 600 feet south of La Costa Ave. and Leucadia Blvd	17,378	69	18,100	69	20,500	70	0.7	0.5	NO
	Between Leucadia Blvd. and Cadmus St.	19,145	69	19,900	70	20,900	70	0.4	0.2	NO
	Between Cadmus St. and Marcheta St.	19,145	69	19,900	70	20,900	70	0.4	0.2	NO
	Between Marcheta St. and 660 feet south of Marcheta St.	19,145	69	19,900	70	20,900	70	0.4	0.2	NO
	Between 660 feet south of Marcheta St. and Encinitas Blvd	19,145	69	19,900	70	19,300	69	0.1	-0.1	NO
	Between Encinitas Blvd. and D St.	18,746	67	19,400	67	19,200	67	0.1	-0.1	NO
	Between D St. and E St.	18,746	67	19,400	67	19,200	67	0.1	-0.1	NO
	Between E St. and F St.	18,746	67	19,400	67	19,200	67	0.1	-0.1	NO
	Between F St. and H St.	18,746	67	19,400	67	19,200	67	0.1	-0.1	NO
	Between H St. and J St.	20,337	67	21,100	67	20,800	67	0.1	-0.1	NO
	Between J St. and Swamis Ped Crossing	20,337	71	21,100	71	20,800	71	0.1	-0.1	NO
	Between Swami's Ped Crossing and San Elijo State Beach	20,550	71	21,300	71	21,000	71	0.1	-0.1	NO
	Between San Elijo State Beach and Chesterfield	20,682	71	21,300	71	21,500	71	0.1	0.0	NO
	Between Chesterfield and Cardiff State Beach	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Cardiff Beach State and Chart House	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Chart House and Las Olas Mexican Restaurant	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Las Olas Mexican Restaurant and Cardiff by the sea limits	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Cardiff by the sea limits and West Cliff St.	18,611	70	22,500	71	22,600	71	0.9	0.1	NO
	Between West Cliff and Lomas Santa Fe	18,611	70	25,000	72	25,100	72	1.3	0.0	NO
	Between Lomas Santa Fe Dr. and Via de la Valle	17,056	70	23,600	71	23,300	71	1.4	0.0	NO

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
Vulcan Ave.	Between La Costa Ave. and Leucadia Blvd.	3,621	61	7,000	64	7,200	64	2.9	0.1	NO
	Between Leucadia Blvd. and Encinitas Blvd.	6,221	63	7,500	64	7,700	64	0.9	0.1	NO
	Between Encinitas Blvd. and D St.	10,368	67	12,900	68	13,400	68	1.1	0.2	NO
	Between D St. and E St.	10,368	67	12,900	68	13,400	68	1.1	0.2	NO
	Between E St. and Santa Fe Dr.	10,486	67	13,100	68	13,600	68	1.1	0.1	NO
San Elijo	Between Santa Fe Dr. and Birmingham Dr.	9,332	65	10,100	65	10,000	65	0.3	0.0	NO
	Between Birmingham Dr. and Chesterfield Dr.	9,332	65	12,500	66	12,900	66	1.4	0.2	NO
	Between Chesterfield Dr. and Manchester Ave.	9,332	62	9,500	62	13,200	64	1.5	1.5	NO
Saxony Rd.	Between La Costa Ave. and Quail Gardens Dr.	3,137	63	4,600	64	4,700	64	1.7	0.1	NO
	Between Quail Gardens Dr. and Normandy Rd.	2,858	60	3,400	61	3,500	61	0.9	0.1	NO
	Between Normandy Rd. and Brittany Ave.	2,858	60	3,900	61	4,000	61	1.5	0.1	NO
	Between Brittany Ave. and Leucadia Blvd.	2,858	60	3,500	61	3,400	61	0.8	-0.1	NO
	Between Leucadia Blvd. and Silver Berry Place	8,973	66	11,800	67	11,800	67	1.2	0.0	NO
	Between Silver Berry Place and Encinitas Blvd.	8,973	66	13,800	68	13,900	68	1.9	0.0	NO
Quail Hollow Dr.	Between Swallow Tail Rd. and Saxony Rd.	3,235	58	5,000	60	5,000	60	1.9	0.0	NO
Quail Gardens Dr.	Between Swallow Tail Rd. and Lauren Court	3,235	62	4,900	63	4,900	63	1.8	0.0	NO
	Between Lauren Court and Leucadia Blvd.	3,235	62	5,300	64	5,300	64	2.1	0.0	NO
	Between Leucadia Blvd. and Paseo de las Flores	7,897	66	9,100	66	9,300	66	0.7	0.1	NO
	Between Paseo de las Flores and Paseo de las Verdes	7,897	66	8,900	66	9,000	66	0.5	0.0	NO
	Between Paseo de las Verdes and Encinitas Blvd.	7,897	66	8,200	66	8,500	66	0.3	0.2	NO
Westlake St.	Between Encinitas Blvd. and Requeza St.	9,688	64	11,800	65	11,900	65	0.9	0.1	NO
Nardo Dr.	Between Requeza St. and Melba Rd.	4,871	59	5,100	60	5,200	60	0.3	0.1	NO
	Between Melba Rd. and Santa Fe Dr.	4,871	59	5,100	60	5,200	60	0.3	0.1	NO
MacKinnon Ave.	Between Santa Fe Dr. and Villa Cardiff Dr.	5,413	63	6,200	63	6,300	63	0.7	0.1	NO
	Between MacKinnon Ave. and Windsor Rd.	5,413	63	6,500	63	6,600	63	0.9	0.1	NO
	Between Windsor Rd. and Birmingham Dr.	5,413	63	5,700	63	6,100	63	0.5	0.3	NO
Garden View Rd.	Between Leucadia Blvd. and Via Cantebria	10,722	67	11,500	67	11,400	67	0.3	0.0	NO
	Between Via Cantebria and El Camino Real	9,663	66	12,900	68	12,900	68	1.2	0.0	NO

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
Town Center Place	Between Leucadia Blvd. and Town Center Place	14,817	64	20,000	66	20,100	66	1.3	0.0	NO
	Between Town Center Place and Town Center Dr.	14,817	64	17,800	65	17,900	65	0.8	0.0	NO
Via Cantebria	Between Town Center Dr. and Garden View Rd.	8,524	62	15,800	65	15,900	65	2.7	0.0	NO
	Between Garden View Rd. and Forrest Bluff	13,715	68	14,900	68	14,900	68	0.3	0.0	NO
	Between Forrest Bluff and Via Montoro	13,715	68	15,200	68	15,300	68	0.5	0.1	NO
	Between Via Montoro and Via Molena	16,842	69	17,900	69	17,000	69	0.0	-0.2	NO
	Between Via Molena and Encinitas Blvd.	16,842	69	17,500	69	17,800	69	0.2	0.1	NO
Balour Dr.	Between Encinitas Blvd. and Melba Rd.	7,988	64	11,200	66	11,200	66	1.5	0.0	NO
	Between Melba Rd. and Santa Fe Dr.	7,988	62	10,700	63	11,000	63	1.4	0.1	NO
Lake Dr.	Between Santa Fe Dr. and Woodlake Dr.	6,565	63	6,600	63	6,600	63	0.1	0.0	NO
	Between Woodlake Dr. and Birmingham Dr.	6,565	63	6,600	63	6,600	63	0.1	0.0	NO
El Camino Real	Between Aviara Parkway and La Costa Ave.	43,934	76	54,300	77	54,500	77	0.9	0.0	NO
	Between La Costa Ave. and Calle Barcelona	34,929	75	38,400	76	38,400	76	0.4	0.0	NO
	Between Calle Barcelona and City of Carlsbad boundary	34,929	75	36,500	76	36,400	76	0.2	0.0	NO
	Between City of Carlsbad boundary and Leucadia Blvd.	43,939	76	46,700	77	46,500	77	0.2	-0.1	NO
	Between Leucadia Blvd. and Town Center Dr.	43,939	74	58,600	75	58,300	75	1.3	0.0	NO
	Between Town Center Dr. and Garden View Rd.	43,939	74	54,200	75	54,100	75	1.0	0.0	NO
	Between Garden View Rd. and 331-339 El Camino Real	39,969	71	42,900	72	43,000	72	0.3	0.0	NO
	Between 331-339 El Camino Real and Via Montoro	39,969	71	48,900	72	49,100	72	0.9	0.0	NO
	Between Via Montoro and Mountain Vista	39,969	71	44,300	72	44,600	72	0.5	0.1	NO
	Between Mountain Vista and Via Molena	41,968	71	47,000	72	46,700	72	0.5	0.0	NO
	Between Via Molena and Encinitas Blvd.	41,968	71	56,900	73	57,200	73	1.3	0.0	NO
	Between Encinitas Blvd. and 213 S El Camino Real	33,151	72	39,400	73	39,500	73	0.8	0.0	NO
	Between 213 S El Camino Real and Crest Dr.	33,151	72	33,800	72	33,800	72	0.1	0.0	NO
	Between Crest Dr. and Willowspring Dr.	33,151	72	36,200	72	35,400	72	0.3	-0.1	NO
	Between Willowspring Dr. and Santa Fe Dr.	33,151	72	37,500	72	36,800	72	0.5	0.0	NO
	Between Santa Fe Dr. and Sage Canyon Dr.	23,024	74	28,400	74	27,600	74	0.8	-0.1	NO
	Between Sage Canyon Dr. and Manchester Ave.	23,024	74	27,700	74	26,800	74	0.6	-0.2	NO

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
Village Park Way	Between Mountain Vista Dr. and Parkdale Dr.	6,341	65	10,900	67	11,000	67	2.4	0.0	NO
	Between Parkdale Dr. and Encinitas Blvd.	6,341	65	14,200	68	14,200	68	3.5	0.0	NO
Rancho Santa Fe Rd.	Between Olivenhain Rd. and Calle Acervo	17,363	70	17,400	70	17,400	70	0.0	0.0	NO
	Between Calle Acervo/Avenida La Posta and Olive Crest Dr.	14,901	68	15,900	69	16,400	69	0.5	0.2	NO
	Between Olive Crest Dr. and 13th St.	14,901	68	15,800	69	16,300	69	0.4	0.1	NO
	Between 13th St. and 11th St.	14,901	68	15,700	69	16,200	69	0.4	0.1	NO
	Between 11th St. and El Camino Del Norte	15,146	68	15,800	69	16,300	69	0.3	0.1	NO
	Between El Camino Del Norte and 9th St.	13,236	68	13,300	68	13,700	68	0.2	0.2	NO
	Between 9th St. and 8th St.	13,236	68	13,500	68	13,800	68	0.2	0.1	NO
	Between 8th St. and 7th St.	13,236	68	13,900	68	14,300	68	0.4	0.2	NO
	Between 7th St. and Encinitas Blvd.	13,236	68	15,200	68	18,300	69	1.4	0.8	NO
Manchester Ave.	Between Manchester Ave. and Mira Costa College	19,595	72	35,400	74	35,200	74	2.5	0.0	NO
	Between Mira Costa College and I-5 NB On-Ramp	19,595	72	35,700	74	35,400	74	2.5	-0.1	NO
	Between I-5 NB Ramps and I-5 SB Ramps	26,567	71	40,200	73	40,000	73	1.8	0.0	NO
	Between I-5 SB Ramps and Ocean Cove Dr.	7,598	65	11,900	67	11,800	67	1.9	-0.1	NO
	Between Ocean Cove Dr. and Seaside Cardiff-by-the-sea residential area Driveway	7,598	65	11,900	67	11,700	67	1.9	-0.1	NO
	Between Seaside Cardiff-by-the-sea residential area Driveway and San Elijo Water Reclamation Facility Driveway	7,598	65	11,900	67	11,700	67	1.9	-0.1	NO
	Between San Elijo Water Reclamation Facility Driveway and Manchester Ave.	7,598	65	11,800	67	11,600	67	1.8	-0.1	NO
	Between Encinitas Blvd. and El Camino Real	5,989	64	12,300	67	13,200	68	3.4	0.3	NO

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
La Costa Ave.	Between Highway 101 and Vulcan Ave.	11,888	67	16,400	69	17,500	69	1.6	0.2	NO
	Between Vulcan Ave. and Sheridan Rd.	14,258	68	16,300	69	17,300	69	0.9	0.3	NO
	Between Sheridan Rd. and I-5 SB Ramps	14,258	68	22,000	70	22,800	70	2.1	0.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	25,817	71	29,300	71	29,900	71	0.7	0.1	NO
	Between I-5 NB Ramps and Piraeus St.	36,550	76	39,500	76	39,600	76	0.3	0.0	NO
	Between Piraeus St. and Saxony Rd.	36,550	76	39,600	76	39,700	76	0.4	0.1	NO
	Between Saxony Rd. and El Camino Real	37,683	76	42,000	76	42,100	76	0.5	0.0	NO
	Between El Camino Real and La Costa Towne Center traffic signal	15,999	69	20,700	70	20,800	70	1.2	0.0	NO
	Between La Costa Towne Center traffic signal and Fairway Lane	15,999	69	20,900	70	21,000	70	1.2	0.0	NO
	Between Fairway Lane and Calle Madero	15,999	69	20,700	70	20,800	70	1.2	0.0	NO
Leucadia Blvd	Between Highway 101 and Vulcan Ave.	12,188	66	14,300	67	15,900	67	1.2	0.5	NO
	Between Vulcan Ave. and Hermes Ave.	14,933	67	16,300	67	17,500	68	0.7	0.3	NO
	Between Hermes Ave. and Hygeia Ave.	14,933	67	15,700	67	16,900	68	0.6	0.4	NO
	Between Hygeia Ave. and Hymettus Ave.	14,933	67	17,400	68	15,000	67	0.0	-0.7	NO
	Between HymettusAve. and Orpheus Ave.	14,933	67	19,200	68	20,400	68	1.4	0.3	NO
	Between Orpheus Ave. and I-5 SB Ramps	14,933	68	17,700	69	15,300	68	0.2	-0.6	NO
	Between I-5 SB Ramps and I-5 NB Ramps	22,721	68	28,600	69	29,600	69	1.1	0.1	NO
	Between Piraeus St. and Urania Ave.	38,099	72	44,100	73	45,000	73	0.7	0.1	NO
	Between Urania Ave. and Saxony Rd.	38,099	72	44,100	73	45,000	73	0.7	0.1	NO
	Between Saxony Rd. and Sidonia St.	40,117	73	42,400	73	42,500	73	0.3	0.0	NO
	Between Sidonia St. and Quail Gardens Dr.	40,117	73	42,400	73	42,500	73	0.3	0.0	NO
	Between Quail Gardens Dr. and Garden View Rd.	43,786	74	47,100	74	47,200	75	0.4	0.1	NO
	Between Garden View Rd. and Town Center Place	31,439	73	34,700	73	31,900	73	0.1	-0.3	NO
	Between Town Center Place and El Camino Real	34,214	73	39,000	74	39,400	74	0.6	0.1	NO
Mountain Vista Dr.	Between El Camino Real and Wandering Rd.	11,478	68	15,000	70	15,100	70	1.2	0.0	NO
	Between Wandering Rd. and Village Park Way	7,093	66	9,300	67	9,300	67	1.2	0.0	NO
Lone Jack Dr.	Between Rancho Santa Fe Rd. and northern terminus	6,745	65	8,400	66	8,200	66	0.8	-0.1	NO

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
El Camino Del Norte	Between Rancho Santa Fe Rd. and San Dieguito CPA boundary	6,915	65	7,900	66	7,800	65	0.5	-0.1	NO
	Between San Dieguito CPA boundary to Via De Fortuna	6,915	65	7,800	65	7,500	65	0.4	-0.1	NO
Encinitas Blvd	Between Highway 101 and Vulcan Ave.	21,095	70	22,300	70	23,600	70	0.5	0.2	NO
	Between Vulcan Ave. and Days Inn traffic signal	20,790	70	34,100	72	35,200	72	2.3	0.2	NO
	Between Days Inn traffic signal and I-5 SB Ramps	20,790	70	34,100	72	35,200	72	2.3	0.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	32,420	72	38,500	72	39,400	73	0.9	0.1	NO
	Between I-5 NB Ramps and Saxony Rd.	38,312	72	41,400	73	42,100	73	0.4	0.0	NO
	Between Saxony Rd. and Calle Magdalena	31,737	72	35,400	72	35,800	72	0.5	0.0	NO
	Between Calle Magdalena and Encinitas Town Country traffic signal	31,737	72	40,000	73	40,500	73	1.1	0.1	NO
	Between Encinitas Town Country traffic signal and Quail Gardens Dr.	31,737	72	36,000	72	36,600	72	0.6	0.0	NO
	Between Quails Garden Dr. and Delphinium St.	27,446	72	37,700	74	38,300	74	1.5	0.1	NO
	Between Delphinium St. and Balour Dr.	27,446	72	38,300	74	38,600	74	1.5	0.0	NO
	Between Balour Dr. and Via Cantebria	38,142	74	47,500	75	47,800	75	1.0	0.0	NO
	Between Via Cantebria and El Camino Real	26,806	72	29,400	72	29,500	72	0.4	0.0	NO
	Between El Camino Real and Village Square Dr.	28,841	72	31,000	73	31,300	73	0.4	0.1	NO
	Between Village Square Dr. and Turner Ave.	28,841	72	29,300	72	29,800	73	0.2	0.1	NO
	Between Turner Ave. and Cerro St.	28,841	72	29,300	72	29,800	73	0.2	0.1	NO
	Between Cerro St. and Village Park Way	28,841	72	29,700	72	30,300	73	0.2	0.1	NO
	Between Village Park Way to Willowspring Dr.	22,619	71	27,900	72	28,800	72	1.0	0.1	NO
	Between Willowspring Dr. to Rancho Santa Fe Rd.	22,619	71	22,700	71	23,700	72	0.2	0.2	NO
S Rancho Santa Fe Rd.	Between Manchester Ave. and 770 feet east of Manchester Ave.	18,476	70	18,600	70	19,400	71	0.2	0.2	NO
	Between 770 feet east of Manchester Ave. and San Dieguito CPA boundary	18,476	70	18,600	70	19,400	71	0.2	0.2	NO

Table 4.10-7
Housing Strategy 1 (RM) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 1 Buildout ADT	Housing Strategy 1 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 1 and Buildout of No Project Condition	Cumulative Impact?
F St./Requeza St.	Between Vulcan Ave. and Cornish Dr.	5,631	60	6,200	61	6,200	61	0.4	0.0	NO
	Between Cornish Dr. and San Dieguito Dr.	5,631	60	6,300	61	6,700	61	0.7	0.2	NO
	Between San Dieguito Dr. and Stratford Dr.	5,631	60	6,300	61	6,700	61	0.7	0.2	NO
	Between Stratford Dr. and Regal Rd.	5,631	60	6,800	61	7,200	61	1.0	0.2	NO
	Between Regal Rd. and West Lake Dr.	5,631	60	6,400	61	6,500	61	0.6	0.1	NO
	Between West Lake Dr. and Nardo Dr.	4,516	59	4,800	59	4,900	60	0.4	0.1	NO
Santa Fe Dr.	Between Vulcan Ave. and Cornish Dr.	8,554	65	9,000	65	8,800	65	0.1	-0.1	NO
	Between Cornish Dr. and Summit Ave.	8,554	65	9,000	65	9,500	65	0.4	0.2	NO
	Between Summit Ave. and Devonshire	8,554	65	10,100	65	10,400	65	0.8	0.1	NO
	Between Devonshire Dr. and Driveway	12,974	66	15,200	67	15,800	67	0.9	0.2	NO
	Between Driveway and I-5 SB Ramps	12,974	66	15,200	67	15,800	67	0.9	0.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	19,070	68	22,400	69	23,200	69	0.8	0.1	NO
	Between I-5 NB Ramps and Regal Rd.	13,743	67	16,100	67	16,700	67	0.8	0.2	NO
	Between Regal Rd. and Gardena Rd.	13,743	67	16,100	67	16,700	67	0.8	0.2	NO
	Between Gardena Rd. and Nardo Rd.	13,743	67	16,100	67	16,700	67	0.8	0.2	NO
	Between Nardo Rd. and Windsor Rd./Bonita Dr.	15,036	67	17,700	68	18,300	68	0.9	0.1	NO
	Between Windsor Rd./Bonita Dr. and Balour Dr.	15,036	67	17,700	68	18,300	68	0.9	0.1	NO
	Between Balour Dr. and Lake Dr.	15,817	67	18,600	68	19,200	68	0.8	0.1	NO
	Between Lake Dr. and Crest Dr.	15,107	67	17,700	68	18,400	68	0.8	0.1	NO
	Between Crest Dr. and El Camino Real	15,107	67	17,700	68	18,400	68	0.8	0.1	NO
Birmingham Dr.	Between San Elijo Ave. and Newcastle Ave.	14,588	66	15,500	66	15,400	66	0.2	0.0	NO
	Between Newcastle Ave. and Manchester Ave.	14,588	66	15,500	66	15,400	66	0.2	0.0	NO
	Between Manchester Ave. and Montgomery Ave.	14,588	66	15,500	66	15,400	66	0.2	0.0	NO
	Between Montgomery Ave. and Cambridge Ave.	14,588	66	14,600	66	15,400	66	0.2	0.2	NO
	Between Cambridge Ave. and MacKinnon Ave.	14,588	66	15,500	66	15,400	66	0.2	0.0	NO
	Between MacKinnon Ave. and Carol View Dr.	14,588	66	19,500	67	19,600	67	1.2	0.0	NO
	Between Carol View Dr. and I-5 SB Ramps	14,588	66	19,500	67	19,600	67	1.2	0.0	NO
	Between I-5 SB Ramps and I-5 NB Ramps	16,342	69	21,800	70	21,900	70	1.3	0.0	NO
	Between I-5 NB Ramps and Villa Cardiff Dr.	8,248	66	13,200	68	13,500	68	2.1	0.1	NO
	Between Villa Cardiff Dr. and Playa Rivera	8,248	64	11,600	66	11,600	66	1.5	0.0	NO
	Between Playa Rivera and Freda Lane	8,248	64	13,100	66	13,100	66	2.0	0.0	NO
	Between Freda Lane and Lake Dr.	8,248	64	8,700	65	8,600	65	0.2	-0.1	NO

Housing Strategy 2 – Build Your Own (BYO)

Table 4.10-8 summarizes the existing traffic volumes and noise levels, the future traffic volumes and noise levels without implementation of the HEU, and the future traffic volumes and noise levels associated with buildout of housing strategy 2 (BYO). When compared to the existing condition, a noise increase of 3 dB or greater would occur adjacent to Carlsbad Boulevard between Avenida Encinas and La Costa Avenue where the existing noise level is 70 CNEL and the future noise level is projected to be 73 CNEL, Village Park Way between Parkdale Drive and Encinitas Boulevard where the existing noise level is 65 CNEL and the future noise level is projected to be 68 CNEL, and Manchester Avenue between Encinitas Boulevard and El Camino Real where the existing noise level is 64 CNEL and the future noise level is projected to be 68 CNEL. There are existing sensitive land uses located adjacent to these roadway segments. However, this increase would be due to cumulative regional growth. To evaluate the HEU's contribution to the noise increase, future traffic volumes were compared to buildout of the no project condition (development under the adopted general plan). When compared to buildout of the no project condition, the increase in ambient noise attributed to housing strategy 2 (BYO) would be less than 3 dB adjacent to all roadway segments. Impacts would be less than significant. As with housing strategy 1 (RM), because of the increase in regional growth that would occur with or without implementation of the HEU, there would be an increase in existing ambient noise levels with or without buildout of housing strategy 2 (BYO).

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
Carlsbad Blvd.	Between Avenida Encinas and La Costa Ave.	12,160	70	25,300	73	25,400	73	3.2	0.0	NO
	Between Poinsettia Lane and Avenida Encinas	16,194	71	24,700	73	25,100	73	1.9	0.0	NO
Highway 101	Between La Costa Ave. and 600 feet south of La Costa Ave.	18,070	69	19,900	70	21,200	70	0.7	0.3	NO
	Between 600 feet south of La Costa Ave. and Leucadia Blvd	17,378	69	18,100	69	19,900	70	0.6	0.4	NO
	Between Leucadia Blvd. and Cadmus St.	19,145	69	19,900	70	20,500	70	0.3	0.1	NO
	Between Cadmus St. and Marcheta St.	19,145	69	19,900	70	20,500	70	0.3	0.1	NO
	Between Marcheta St. and 660 feet south of Marcheta St.	19,145	69	19,900	70	20,500	70	0.3	0.1	NO
	Between 660 feet south of Marcheta St. and Encinitas Blvd	19,145	69	19,900	70	19,200	69	0.0	-0.2	NO
	Between Encinitas Blvd. and D St.	18,746	67	19,400	67	19,100	67	0.1	-0.1	NO
	Between D St. and E St.	18,746	67	19,400	67	19,100	67	0.1	-0.1	NO
	Between E St. and F St.	18,746	67	19,400	67	19,100	67	0.1	-0.1	NO
	Between F St. and H St.	18,746	67	19,400	67	19,100	67	0.1	-0.1	NO
	Between H St. and J St.	20,337	67	21,100	67	20,700	67	0.1	-0.1	NO
	Between J St. and Swamis Ped Crossing	20,337	71	21,100	71	20,700	71	0.1	-0.1	NO
	Between Swami's Ped Crossing and San Elijo State Beach	20,550	71	21,300	71	20,900	71	0.1	-0.1	NO
	Between San Elijo State Beach and Chesterfield	20,682	71	21,300	71	21,400	71	0.1	0.0	NO
	Between Chesterfield and Cardiff State Beach	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Cardiff Beach State and Chart House	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Chart House and Las Olas Mexican Restaurant	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Las Olas Mexican Restaurant and Cardiff by the sea limits	20,682	71	23,200	71	23,300	71	0.5	0.0	NO
	Between Cardiff by the sea limits and West Cliff St.	18,611	70	22,500	71	22,700	71	0.9	0.1	NO
	Between West Cliff and Lomas Santa Fe	18,611	70	25,000	72	25,100	72	1.3	0.0	NO

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
	Between Lomas Santa Fe Dr. and Via de la Valle	17,056	70	23,600	71	23,600	71	1.4	0.0	NO
Vulcan Ave.	Between La Costa Ave. and Leucadia Blvd.	3,621	61	7,000	64	7,200	64	2.9	0.1	NO
	Between Leucadia Blvd. and Encinitas Blvd.	6,221	63	7,500	64	7,500	64	0.8	0.0	NO
	Between Encinitas Blvd. and D St.	10,368	67	12,900	68	13,300	68	1.0	0.1	NO
	Between D St. and E St.	10,368	67	12,900	68	13,300	68	1.0	0.1	NO
	Between E St. and Santa Fe Dr.	10,486	67	13,100	68	13,500	68	1.1	0.1	NO
San Elijo	Between Santa Fe Dr. and Birmingham Dr.	9,332	65	10,100	65	10,100	65	0.3	0.0	NO
	Between Birmingham Dr. and Chesterfield Dr.	9,332	65	12,500	66	12,600	66	1.3	0.1	NO
	Between Chesterfield Dr. and Manchester Ave.	9,332	62	9,500	62	9,500	62	0.0	0.0	NO
Saxony Rd.	Between La Costa Ave. and Quail Gardens Dr.	3,137	63	4,600	64	4,700	64	1.7	0.1	NO
	Between Quail Gardens Dr. and Normandy Rd.	2,858	60	3,400	61	3,500	61	0.9	0.1	NO
	Between Normandy Rd. and Brittany Ave.	2,858	60	3,900	61	3,900	61	1.4	0.0	NO
	Between Brittany Ave. and Leucadia Blvd.	2,858	60	3,500	61	3,500	61	0.9	0.0	NO
	Between Leucadia Blvd. and Silver Berry Place	8,973	66	11,800	67	11,900	67	1.3	0.1	NO
	Between Silver Berry Place and Encinitas Blvd.	8,973	66	13,800	68	14,800	68	2.2	0.3	NO
Quail Hollow Dr.	Between Swallow Tail Rd. and Saxony Rd.	3,235	58	5,000	60	5,000	60	1.9	0.0	NO
Quail Gardens Dr.	Between Swallow Tail Rd. and Lauren Court	3,235	62	4,900	63	4,900	63	1.8	0.0	NO
	Between Lauren Court and Leucadia Blvd.	3,235	62	5,300	64	5,300	64	2.1	0.0	NO
	Between Leucadia Blvd. and Paseo de las Flores	7,897	66	9,100	66	8,300	66	0.2	-0.4	NO
	Between Paseo de las Flores and Paseo de las Verdes	7,897	66	8,900	66	8,300	66	0.2	-0.3	NO
	Between Paseo de las Verdes and Encinitas Blvd.	7,897	66	8,200	66	8,700	66	0.4	0.3	NO
Westlake St.	Between Encinitas Blvd. and Requeza St.	9,688	64	11,800	65	16,300	66	2.2	1.4	NO
Nardo Dr.	Between Requeza St. and Melba Rd.	4,871	59	5,100	60	5,600	60	0.6	0.4	NO
	Between Melba Rd. and Santa Fe Dr.	4,871	59	5,100	60	4,900	60	0.1	-0.1	NO
MacKinnon Ave.	Between Santa Fe Dr. and Villa Cardiff Dr.	5,413	63	6,200	63	6,500	63	0.8	0.2	NO
	Between MacKinnon Ave. and Windsor Rd.	5,413	63	6,500	63	6,800	64	1.0	0.2	NO
	Between Windsor Rd. and Birmingham Dr.	5,413	63	5,700	63	6,200	63	0.6	0.4	NO
Garden View Rd.	Between Leucadia Blvd. and Via Cantebria	10,722	67	11,500	67	11,400	67	0.3	0.0	NO
	Between Via Cantebria and El Camino Real	9,663	66	12,900	68	12,600	68	1.1	-0.1	NO

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
Town Center Place	Between Leucadia Blvd. and Town Center Place	14,817	64	20,000	66	20,500	66	1.4	0.1	NO
	Between Town Center Place and Town Center Dr.	14,817	64	17,800	65	17,100	65	0.6	-0.2	NO
Via Cantebria	Between Town Center Dr. and Garden View Rd.	8,524	62	15,800	65	15,500	65	2.6	-0.1	NO
	Between Garden View Rd. and Forrest Bluff	13,715	68	14,900	68	15,000	68	0.4	0.1	NO
	Between Forrest Bluff and Via Montoro	13,715	68	15,200	68	15,400	68	0.5	0.1	NO
	Between Via Montoro and Via Molena	16,842	69	17,900	69	17,300	69	0.1	-0.1	NO
	Between Via Molena and Encinitas Blvd.	16,842	69	17,500	69	18,200	69	0.3	0.2	NO
Balour Dr.	Between Encinitas Blvd. and Melba Rd.	7,988	64	11,200	66	11,500	66	1.6	0.1	NO
	Between Melba Rd. and Santa Fe Dr.	7,988	62	10,700	63	10,700	63	1.3	0.0	NO
Lake Dr.	Between Santa Fe Dr. and Woodlake Dr.	6,565	63	6,600	63	6,600	63	0.1	0.0	NO
	Between Woodlake Dr. and Birmingham Dr.	6,565	63	6,600	63	6,600	63	0.1	0.0	NO
El Camino Real	Between Aviara Parkway and La Costa Ave.	43,934	76	54,300	77	54,700	77	0.9	0.0	NO
	Between La Costa Ave. and Calle Barcelona	34,929	75	38,400	76	38,300	76	0.4	0.0	NO
	Between Calle Barcelona and City of Carlsbad boundary	34,929	75	36,500	76	36,000	75	0.1	-0.1	NO
	Between City of Carlsbad boundary and Leucadia Blvd.	43,939	76	46,700	77	46,200	77	0.2	-0.1	NO
	Between Leucadia Blvd. and Town Center Dr.	43,939	74	58,600	75	58,700	75	1.3	0.0	NO
	Between Town Center Dr. and Garden View Rd.	43,939	74	54,200	75	54,000	75	0.9	-0.1	NO
	Between Garden View Rd. and 331-339 El Camino Real	39,969	71	42,900	72	42,800	72	0.3	0.0	NO
	Between 331-339 El Camino Real and Via Montoro	39,969	71	48,900	72	49,000	72	0.9	0.0	NO
	Between Via Montoro and Mountain Vista	39,969	71	44,300	72	44,400	72	0.4	0.0	NO
	Between Mountain Vista and Via Molena	41,968	71	47,000	72	47,000	72	0.5	0.0	NO
	Between Via Molena and Encinitas Blvd.	41,968	71	56,900	73	58,100	73	1.4	0.1	NO
	Between Encinitas Blvd. and 213 S El Camino Real	33,151	72	39,400	73	39,800	73	0.8	0.0	NO
	Between 213 S El Camino Real and Crest Dr.	33,151	72	33,800	72	33,800	72	0.1	0.0	NO
	Between Crest Dr. and Willowspring Dr.	33,151	72	36,200	72	36,100	72	0.4	0.0	NO
	Between Willowspring Dr. and Santa Fe Dr.	33,151	72	37,500	72	37,600	72	0.6	0.1	NO
	Between Santa Fe Dr. and Sage Canyon Dr.	23,024	74	28,400	74	29,300	75	1.0	0.1	NO
	Between Sage Canyon Dr. and Manchester Ave.	23,024	74	27,700	74	28,600	74	0.9	0.1	NO

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
Village Park Way	Between Mountain Vista Dr. and Parkdale Dr.	6,341	65	10,900	67	11,000	67	2.4	0.0	NO
	Between Parkdale Dr. and Encinitas Blvd.	6,341	65	14,200	68	14,400	68	3.6	0.1	NO
Rancho Santa Fe Rd.	Between Olivenhain Rd. and Calle Acervo	17,363	70	17,400	70	17,400	70	0.0	0.0	NO
	Between Calle Acervo/Avenida La Posta and Olive Crest Dr.	14,901	68	15,900	69	16,400	69	0.5	0.2	NO
	Between Olive Crest Dr. and 13th St.	14,901	68	15,800	69	16,200	69	0.4	0.1	NO
	Between 13th St. and 11th St.	14,901	68	15,700	69	16,100	69	0.4	0.1	NO
	Between 11th St. and El Camino Del Norte	15,146	68	15,800	69	16,300	69	0.3	0.1	NO
	Between El Camino Del Norte and 9th St.	13,236	68	13,300	68	13,800	68	0.2	0.2	NO
	Between 9th St. and 8th St.	13,236	68	13,500	68	14,000	68	0.3	0.2	NO
	Between 8th St. and 7th St.	13,236	68	13,900	68	14,400	68	0.4	0.2	NO
	Between 7th St. and Encinitas Blvd.	13,236	68	15,200	68	18,300	69	1.4	0.8	NO
Manchester Ave.	Between Manchester Ave. and Mira Costa College	19,595	72	35,400	74	36,700	75	2.7	0.2	NO
	Between Mira Costa College and I-5 NB On-Ramp	19,595	72	35,700	74	36,800	75	2.7	0.1	NO
	Between I-5 NB Ramps and I-5 SB Ramps	26,567	71	40,200	73	40,700	73	1.9	0.1	NO
	Between I-5 SB Ramps and Ocean Cove Dr.	7,598	65	11,900	67	12,000	67	2.0	0.0	NO
	Between Ocean Cove Dr. and Seaside Cardiff-by-the-sea residential area driveway	7,598	65	11,900	67	11,900	67	2.0	0.0	NO
	Between Seaside Cardiff-by-the-sea residential area driveway and San Elijo Water Reclamation Facility Driveway	7,598	65	11,900	67	11,900	67	2.0	0.0	NO
	Between San Elijo Water Reclamation Facility Driveway and Manchester Ave.	7,598	65	11,800	67	11,800	67	1.9	0.0	NO
Manchester Ave.	Between Encinitas Blvd. and El Camino Real	5,989	64	12,300	67	13,500	68	3.5	0.4	NO
La Costa Ave.	Between Highway 101 and Vulcan Ave.	11,888	67	16,400	69	17,100	69	1.5	0.1	NO
	Between Vulcan Ave. and Sheridan Rd.	14,258	68	16,300	69	17,000	69	0.8	0.2	NO
	Between Sheridan Rd. and I-5 SB Ramps	14,258	68	22,000	70	22,600	70	2.0	0.1	NO
	Between I-5 SB Ramps and I-5 NB Ramps	25,817	71	29,300	71	29,700	71	0.6	0.0	NO
	Between I-5 NB Ramps and Piraeus St.	36,550	76	39,500	76	39,700	76	0.4	0.1	NO
	Between Piraeus St. and Saxony Rd.	36,550	76	39,600	76	39,900	76	0.4	0.1	NO
	Between Saxony Rd. and El Camino Real	37,683	76	42,000	76	42,300	76	0.5	0.0	NO
	Between El Camino Real and La Costa Towne Center traffic signal	15,999	69	20,700	70	20,900	70	1.2	0.0	NO

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
	Between La Costa Towne Center traffic signal and Fairway Lane	15,999	69	20,900	70	21,000	70	1.2	0.0	NO
	Between Fairway Lane and Calle Madero	15,999	69	20,700	70	20,800	70	1.2	0.0	NO
Leucadia Blvd	Between Highway 101 and Vulcan Ave.	12,188	66	14,300	67	15,600	67	1.1	0.4	NO
	Between Vulcan Ave. and Hermes Ave.	14,933	67	16,300	67	17,200	68	0.6	0.2	NO
	Between Hermes Ave. and Hygeia Ave.	14,933	67	15,700	67	16,600	67	0.5	0.3	NO
	Between Hygeia Ave. and Hymettus Ave.	14,933	67	17,400	68	15,000	67	0.0	-0.7	NO
	Between Hymettus Ave. and Orpheus Ave.	14,933	67	19,200	68	20,000	68	1.3	0.2	NO
	Between Orpheus Ave. and I-5 SB Ramps	14,933	68	17,700	69	18,500	69	1.0	0.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	22,721	68	28,600	69	28,900	69	1.0	0.0	NO
	Between Piraeus St. and Urania Ave.	38,099	72	44,100	73	44,200	73	0.7	0.1	NO
	Between Urania Ave. and Saxony Rd.	38,099	72	44,100	73	44,200	73	0.7	0.1	NO
	Between Saxony Rd. and Sidonia St.	40,117	73	42,400	73	42,000	73	0.2	-0.1	NO
	Between Sidonia St. and Quail Gardens Dr.	40,117	73	42,400	73	42,100	73	0.2	-0.1	NO
	Between Quail Gardens Dr. and Garden View Rd.	43,786	74	47,100	74	47,600	75	0.4	0.1	NO
	Between Garden View Rd. and Town Center Place	31,439	73	34,700	73	32,000	73	0.1	-0.3	NO
	Between Town Center Place and El Camino Real	34,214	73	39,000	74	38,900	74	0.5	0.0	NO
Mountain Vista Dr.	Between El Camino Real and Wandering Rd.	11,478	68	15,000	70	15,000	70	1.2	0.0	NO
	Between Wandering Rd. and Village Park Way	7,093	66	9,300	67	9,300	67	1.2	0.0	NO
Lone Jack Dr.	Between Rancho Santa Fe Rd. and northern terminus	6,745	65	8,400	66	8,200	66	0.8	-0.1	NO
El Camino Del Norte	Between Rancho Santa Fe Rd. and San Dieguito CPA boundary	6,915	65	7,900	66	7,900	66	0.6	0.0	NO
	Between San Dieguito CPA boundary to Via De Fortuna	6,915	65	7,800	65	7,600	65	0.4	-0.1	NO
Encinitas Blvd	Between Highway 101 and Vulcan Ave.	21,095	70	22,300	70	22,700	70	0.4	0.1	NO
	Between Vulcan Ave. and Days Inn traffic signal	20,790	70	34,100	72	33,900	72	2.1	0.0	NO
	Between Days Inn traffic signal and I-5 SB Ramps	20,790	70	34,100	72	33,900	72	2.1	0.0	NO
	Between I-5 SB Ramps and I-5 NB Ramps	32,420	72	38,500	72	39,600	73	0.9	0.1	NO
	Between I-5 NB Ramps and Saxony Rd.	38,312	72	41,400	73	43,000	73	0.5	0.1	NO
	Between Saxony Rd. and Calle Magdalena	31,737	72	35,400	72	36,400	72	0.6	0.1	NO

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
	Between Calle Magdalena and Encinitas Town Country traffic signal	31,737	72	40,000	73	41,400	73	1.2	0.2	NO
	Between Encinitas Town Country traffic signal and Quail Gardens Dr.	31,737	72	36,000	72	38,400	72	0.8	0.2	NO
	Between Quails Garden Dr. and Delphinium St.	27,446	72	37,700	74	39,700	74	1.6	0.2	NO
	Between Delphinium St. and Balour Dr.	27,446	72	38,300	74	39,900	74	1.6	0.1	NO
	Between Balour Dr. and Via Cantebria	38,142	74	47,500	75	48,700	75	1.1	0.1	NO
	Between Via Cantebria and El Camino Real	26,806	72	29,400	72	30,400	73	0.5	0.1	NO
	Between El Camino Real and Village Square Dr.	28,841	72	31,000	73	30,900	73	0.3	0.0	NO
	Between Village Square Dr. and Turner Ave.	28,841	72	29,300	72	30,000	73	0.2	0.1	NO
	Between Turner Ave. and Cerro St.	28,841	72	29,300	72	30,000	73	0.2	0.1	NO
	Between Cerro St. and Village Park Way	28,841	72	29,700	72	30,700	73	0.3	0.2	NO
	Between Village Park Way to Willowspring Dr.	22,619	71	27,900	72	29,000	72	1.0	0.1	NO
	Between Willowspring Dr. to Rancho Santa Fe Rd.	22,619	71	22,700	71	23,900	72	0.2	0.2	NO
S Rancho Santa Fe Rd.	Between Manchester Ave. and 770 feet east of Manchester Ave.	18,476	70	18,600	70	19,500	71	0.2	0.2	NO
	Between 770 feet east of Manchester Ave. and San Dieguito CPA boundary	18,476	70	18,600	70	19,500	71	0.2	0.2	NO
F St./Requeza St.	Between Vulcan Ave. and Cornish Dr.	5,631	60	6,200	61	6,400	61	0.5	0.1	NO
	Between Cornish Dr. and San Dieguito Dr.	5,631	60	6,300	61	6,500	61	0.6	0.1	NO
	Between San Dieguito Dr. and Stratford Dr.	5,631	60	6,300	61	6,500	61	0.6	0.1	NO
	Between Stratford Dr. and Regal Rd.	5,631	60	6,800	61	7,000	61	0.9	0.1	NO
	Between Regal Rd. and West Lake Dr.	5,631	60	6,400	61	7,600	61	1.3	0.8	NO
	Between West Lake Dr. and Nardo Dr.	4,516	59	4,800	59	5,200	60	0.6	0.3	NO
Santa Fe Dr.	Between Vulcan Ave. and Cornish Dr.	8,554	65	9,000	65	9,000	65	0.2	0.0	NO
	Between Cornish Dr. and Summit Ave.	8,554	65	9,000	65	9,000	65	0.2	0.0	NO
	Between Summit Ave. and Devonshire	8,554	65	10,100	65	10,300	65	0.8	0.1	NO
	Between Devonshire Dr. and Dr.way	12,974	66	15,200	67	15,600	67	0.8	0.1	NO
	Between Dr.way and I-5 SB Ramps	12,974	66	15,200	67	15,600	67	0.8	0.1	NO
	Between I-5 SB Ramps and I-5 NB Ramps	19,070	68	22,400	69	22,900	69	0.8	0.1	NO
	Between I-5 NB Ramps and Regal Rd.	13,743	67	16,100	67	16,500	67	0.7	0.1	NO
	Between Regal Rd. and Gardena Rd.	13,743	67	16,100	67	16,500	67	0.7	0.1	NO
	Between Gardena Rd. and Nardo Rd.	13,743	67	16,100	67	16,500	67	0.7	0.1	NO

Table 4.10-8
Housing Strategy 2 (BYO) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 2 Buildout ADT	Housing Strategy 2 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 2 and No Project Condition	Cumulative Impact?
	Between Nardo Rd. and Windsor Rd./Bonita Dr.	15,036	67	17,700	68	18,100	68	0.8	0.0	NO
	Between Windsor Rd./Bonita Dr. and Balour Dr.	15,036	67	17,700	68	18,100	68	0.8	0.0	NO
	Between Balour Dr. and Lake Dr.	15,817	67	18,600	68	19,000	68	0.8	0.1	NO
	Between Lake Dr. and Crest Dr.	15,107	67	17,700	68	18,200	68	0.8	0.1	NO
	Between Crest Dr. and El Camino Real	15,107	67	17,700	68	18,200	68	0.8	0.1	NO
Birmingham Dr.	Between San Elijo Ave. and Newcastle Ave.	14,588	66	15,500	66	15,600	66	0.2	0.0	NO
	Between Newcastle Ave. and Manchester Ave.	14,588	66	15,500	66	15,600	66	0.2	0.0	NO
	Between Manchester Ave. and Montgomery Ave.	14,588	66	15,500	66	15,600	66	0.2	0.0	NO
	Between Montgomery Ave. and Cambridge Ave.	14,588	66	14,600	66	15,600	66	0.2	0.2	NO
	Between Cambridge Ave. and MacKinnon Ave.	14,588	66	15,500	66	15,600	66	0.2	0.0	NO
	Between MacKinnon Ave. and Carol View Dr.	14,588	66	19,500	67	19,700	67	1.3	0.1	NO
	Between Carol View Dr. and I-5 SB Ramps	14,588	66	19,500	67	19,700	67	1.3	0.1	NO
	Between I-5 SB Ramps and I-5 NB Ramps	16,342	69	21,800	70	22,100	70	1.3	0.0	NO
	Between I-5 NB Ramps and Villa Cardiff Dr.	8,248	66	13,200	68	13,500	68	2.1	0.1	NO
	Between Villa Cardiff Dr. and Playa Rivera	8,248	64	11,600	66	11,600	66	1.5	0.0	NO
	Between Playa Rivera and Freda Lane	8,248	64	13,100	66	13,100	66	2.0	0.0	NO
	Between Freda Lane and Lake Dr.	8,248	64	8,700	65	8,700	65	0.3	0.0	NO

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Table 4.10-9 summarizes the existing traffic volumes and noise levels, the future traffic volumes and noise levels without implementation of the HEU, and the future traffic volumes and noise levels associated with buildout of housing strategy 3 (MMUP). When compared to the existing condition, a noise increase of 3 dB or greater would occur adjacent to Carlsbad Boulevard between Avenida Encinas and La Costa Avenue where the existing noise level is 70 CNEL and the future noise level is projected to be 73 CNEL, Vulcan Avenue between La Costa Avenue and Leucadia Boulevard where the existing noise level is 61 CNEL and the future noise level is projected to be 64 CNEL, Village Park Way between Parkdale Drive and Encinitas Boulevard where the existing noise level is 65 CNEL and the future noise level is projected to be 68 CNEL, and Manchester Avenue between Encinitas Boulevard and El Camino Real where the existing noise level is 64 CNEL and the future noise level is projected to be 68 CNEL. There are existing sensitive land uses located adjacent to these roadway segments. However, this increase would be due to cumulative regional growth. To evaluate the HEU's contribution to the noise increase, future traffic volumes were compared to buildout of the no project condition (development under the adopted general plan). When compared to buildout of the no project condition, the increase in ambient noise attributed to housing strategy 3 (MMUP) would be less than 3 dB adjacent to all roadway segments. Impacts would be less than significant. As with housing strategies 1 (RM) and 2 (BYO), because of the increase in regional growth that would occur with or without implementation of the HEU, there would be an increase in existing ambient noise levels with or without buildout of housing strategy 3 (MMUP).

4.10.5.2 Significance of Impacts

It should be noted that there would be an increase in existing ambient noise levels with or without buildout of the housing strategies. This is due to the increase in regional growth that would occur with or without implementation of the proposed HEU. Impacts were assessed by comparing future noise levels without implementation of the HEU and future noise levels with buildout of the three housing strategies. As shown, when compared to buildout of the no project condition, the increases in ambient noise would be less than 3 dB adjacent to all roadway segments. Impacts would be less than significant.

4.10.5.3 Mitigation Framework

Impacts would be less than significant. No mitigation is required.

Table 4.10-9
Housing Strategy 3 (MMUP) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
Carlsbad Blvd.	Between Avenida Encinas and La Costa Ave.	12,160	70	25,300	73	25,500	73	3.2	0.0	NO
	Between Poinsettia Lane and Avenida Encinas	16,194	71	24,700	73	25,400	73	2.0	0.1	NO
Highway 101	Between La Costa Ave. and 600 feet south of La Costa Ave.	18,070	69	19,900	70	21,800	70	0.8	0.4	NO
	Between 600 feet south of La Costa Ave. and Leucadia Blvd.	17,378	69	18,100	69	20,900	70	0.8	0.6	NO
	Between Leucadia Blvd. and Cadmus St.	19,145	69	19,900	70	21,300	70	0.5	0.3	NO
	Between Cadmus St. and Marcheta St.	19,145	69	19,900	70	21,300	70	0.5	0.3	NO
	Between Marcheta St. and 660 feet south of Marcheta St.	19,145	69	19,900	70	19,300	69	0.1	-0.1	NO
	Between 660 feet south of Marcheta St. and Encinitas Blvd.	19,145	69	19,900	70	19,600	69	0.1	-0.1	NO
	Between Encinitas Blvd. and D St.	18,746	67	19,400	67	19,300	67	0.2	0.0	NO
	Between D St. and E St.	18,746	67	19,400	67	19,300	67	0.2	0.0	NO
	Between E St. and F St.	18,746	67	19,400	67	19,300	67	0.2	0.0	NO
	Between F St. and H St.	18,746	67	19,400	67	19,300	67	0.2	0.0	NO
	Between H St. and J St.	20,337	67	21,100	67	20,900	67	0.1	-0.1	NO
	Between J St. and Swamis Ped Crossing	20,337	71	21,100	71	20,900	71	0.1	-0.1	NO
	Between Swami's Ped Crossing and San Elijo State Beach	20,550	71	21,300	71	21,100	71	0.2	0.0	NO
	Between San Elijo State Beach and Chesterfield	20,682	71	21,300	71	21,400	71	0.1	0.0	NO
	Between Chesterfield and Cardiff State Beach	20,682	71	23,200	71	23,200	71	0.5	0.0	NO
	Between Cardiff Beach State and Chart House	20,682	71	23,200	71	23,200	71	0.5	0.0	NO
	Between Chart House and Las Olas Mexican Restaurant	20,682	71	23,200	71	23,200	71	0.5	0.0	NO
	Between Las Olas Mexican Restaurant and Cardiff by the sea limits	20,682	71	23,200	71	23,200	71	0.5	0.0	NO
	Between Cardiff by the sea limits and West Cliff St.	18,611	70	22,500	71	22,600	71	0.9	0.1	NO
	Between West Cliff and Lomas Santa Fe	18,611	70	25,000	72	25,000	72	1.3	0.0	NO
	Between Lomas Santa Fe Dr. and Via de la Valle	17,056	70	23,600	71	23,600	71	1.4	0.0	NO
Vulcan Ave.	Between La Costa Ave. and Leucadia Blvd.	3,621	61	7,000	64	7,300	64	3.0	0.2	NO

Table 4.10-9
Housing Strategy 3 (MMUP) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
	Between Leucadia Blvd. and Encinitas Blvd.	6,221	63	7,500	64	7,600	64	0.9	0.1	NO
	Between Encinitas Blvd. and D St.	10,368	67	12,900	68	13,300	68	1.0	0.1	NO
	Between D St. and E St.	10,368	67	12,900	68	13,700	68	1.2	0.3	NO
	Between E St. and Santa Fe Dr.	10,486	67	13,100	68	14,200	68	1.3	0.3	NO
San Elijo	Between Santa Fe Dr. and Birmingham Dr.	9,332	65	10,100	65	10,200	65	0.4	0.1	NO
	Between Birmingham Dr. and Chesterfield Dr.	9,332	65	12,500	66	12,700	66	1.3	0.1	NO
	Between Chesterfield Dr. and Manchester Ave.	9,332	62	9,500	62	9,600	62	0.1	0.1	NO
Saxony Rd.	Between La Costa Ave. and Quail Gardens Dr.	3,137	63	4,600	64	4,600	64	1.6	0.0	NO
	Between Quail Gardens Dr. and Normandy Rd.	2,858	60	3,400	61	3,400	61	0.8	0.0	NO
	Between Normandy Rd. and Brittany Ave.	2,858	60	3,900	61	3,800	61	1.3	-0.1	NO
	Between Brittany Ave. and Leucadia Blvd.	2,858	60	3,500	61	3,400	61	0.8	-0.1	NO
	Between Leucadia Blvd. and Silver Berry Place	8,973	66	11,800	67	11,900	67	1.3	0.1	NO
	Between Silver Berry Place and Encinitas Blvd.	8,973	66	13,800	68	14,000	68	2.0	0.1	NO
Quail Hollow Dr.	Between Swallow Tail Rd. and Saxony Rd.	3,235	58	5,000	60	5,000	60	1.9	0.0	NO
Quail Gardens Dr.	Between Swallow Tail Rd. and Lauren Court	3,235	62	4,900	63	4,900	63	1.8	0.0	NO
	Between Lauren Court and Leucadia Blvd.	3,235	62	5,300	64	5,300	64	2.1	0.0	NO
	Between Leucadia Blvd. and Paseo de las Flores	7,897	66	9,100	66	9,200	66	0.6	0.0	NO
	Between Paseo de las Flores and Paseo de las Verdes	7,897	66	8,900	66	9,200	66	0.6	0.1	NO
	Between Paseo de las Verdes and Encinitas Blvd.	7,897	66	8,200	66	8,400	66	0.2	0.1	NO
Westlake St.	Between Encinitas Blvd. and Requeza St.	9,688	64	11,800	65	11,800	65	0.8	0.0	NO
Nardo Dr.	Between Requeza St. and Melba Rd.	4,871	59	5,100	60	5,200	60	0.3	0.1	NO
	Between Melba Rd. and Santa Fe Dr.	4,871	59	5,100	60	5,200	60	0.3	0.1	NO
MacKinnon Ave.	Between Santa Fe Dr. and Villa Cardiff Dr.	5,413	63	6,200	63	6,300	63	0.7	0.1	NO
	Between MacKinnon Ave. and Windsor Rd.	5,413	63	6,500	63	6,600	63	0.9	0.1	NO
	Between Windsor Rd. and Birmingham Dr.	5,413	63	5,700	63	5,800	63	0.3	0.1	NO
Garden View Rd.	Between Leucadia Blvd. and Via Cantebria	10,722	67	11,500	67	11,500	67	0.3	0.0	NO
	Between Via Cantebria and El Camino Real	9,663	66	12,900	68	12,800	68	1.2	0.0	NO
Town Center Place	Between Leucadia Blvd. and Town Center Place	14,817	64	20,000	66	20,500	66	1.4	0.1	NO
	Between Town Center Place and Town Center Dr.	14,817	64	17,800	65	17,200	65	0.6	-0.2	NO
Via Cantebria	Between Town Center Dr. and Garden View Rd.	8,524	62	15,800	65	15,700	65	2.6	-0.1	NO
	Between Garden View Rd. and Forrest Bluff	13,715	68	14,900	68	15,100	68	0.4	0.1	NO

Table 4.10-9
Housing Strategy 3 (MMUP) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
	Between Forrest Bluff and Via Montoro	13,715	68	15,200	68	15,400	68	0.5	0.1	NO
	Between Via Montoro and Via Molena	16,842	69	17,900	69	17,300	69	0.1	-0.1	NO
	Between Via Molena and Encinitas Blvd.	16,842	69	17,500	69	18,200	69	0.3	0.2	NO
Balour Dr.	Between Encinitas Blvd. and Melba Rd.	7,988	64	11,200	66	11,300	66	1.5	0.0	NO
	Between Melba Rd. and Santa Fe Dr.	7,988	62	10,700	63	11,100	63	1.4	0.1	NO
Lake Dr.	Between Santa Fe Dr. and Woodlake Dr.	6,565	63	6,600	63	6,600	63	0.1	0.0	NO
	Between Woodlake Dr. and Birmingham Dr.	6,565	63	6,600	63	6,600	63	0.1	0.0	NO
El Camino Real	Between Aviara Parkway and La Costa Ave.	43,934	76	54,300	77	54,400	77	0.9	0.0	NO
	Between La Costa Ave. and Calle Barcelona	34,929	75	38,400	76	38,700	76	0.4	0.0	NO
	Between Calle Barcelona and City of Carlsbad boundary	34,929	75	36,500	76	36,400	76	0.2	0.0	NO
	Between City of Carlsbad boundary and Leucadia Blvd.	43,939	76	46,700	77	46,500	77	0.2	-0.1	NO
	Between Leucadia Blvd. and Town Center Dr.	43,939	74	58,600	75	59,200	75	1.3	0.0	NO
	Between Town Center Dr. and Garden View Rd.	43,939	74	54,200	75	54,500	75	1.0	0.0	NO
	Between Garden View Rd. and 331-339 El Camino Real	39,969	71	42,900	72	43,100	72	0.3	0.0	NO
	Between 331-339 El Camino Real and Via Montoro	39,969	71	48,900	72	49,300	72	0.9	0.0	NO
	Between Via Montoro and Mountain Vista	39,969	71	44,300	72	44,900	72	0.5	0.1	NO
	Between Mountain Vista and Via Molena	41,968	71	47,000	72	47,400	72	0.5	0.0	NO
	Between Via Molena and Encinitas Blvd.	41,968	71	56,900	73	58,800	73	1.5	0.2	NO
	Between Encinitas Blvd. and 213 S El Camino Real	33,151	72	39,400	73	40,100	73	0.8	0.0	NO
	Between 213 S El Camino Real and Crest Dr.	33,151	72	33,800	72	33,800	72	0.1	0.0	NO
	Between Crest Dr. and Willowspring Dr.	33,151	72	36,200	72	36,400	72	0.4	0.0	NO
	Between Willowspring Dr. and Santa Fe Dr.	33,151	72	37,500	72	37,800	72	0.6	0.1	NO
	Between Santa Fe Dr. and Sage Canyon Dr.	23,024	74	28,400	74	29,500	75	1.1	0.2	NO
	Between Sage Canyon Dr. and Manchester Ave.	23,024	74	27,700	74	29,000	75	1.0	0.2	NO
Village Park Way	Between Mountain Vista Dr. and Parkdale Dr.	6,341	65	10,900	67	11,400	67	2.6	0.2	NO
	Between Parkdale Dr. and Encinitas Blvd.	6,341	65	14,200	68	14,700	68	3.7	0.2	NO
Rancho Santa Fe Rd.	Between Olivenhain Rd. and Calle Acervo	17,363	70	17,400	70	17,400	70	0.0	0.0	NO
	Between Calle Acervo/Avenida La Posta and Olive Crest Dr.	14,901	68	15,900	69	16,500	69	0.5	0.2	NO
	Between Olive Crest Dr. and 13th St.	14,901	68	15,800	69	16,300	69	0.4	0.1	NO

Table 4.10-9 Housing Strategy 3 (MMUP) Increases in Ambient Noise										
Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
	Between 13th St. and 11th St.	14,901	68	15,700	69	16,300	69	0.4	0.1	NO
	Between 11th St. and El Camino Del Norte	15,146	68	15,800	69	16,400	69	0.4	0.2	NO
	Between El Camino Del Norte and 9th St.	13,236	68	13,300	68	13,700	68	0.2	0.2	NO
	Between 9th St. and 8th St.	13,236	68	13,500	68	13,800	68	0.2	0.1	NO
	Between 8th St. and 7th St.	13,236	68	13,900	68	14,300	68	0.4	0.2	NO
	Between 7th St. and Encinitas Blvd.	13,236	68	15,200	68	18,800	69	1.5	0.9	NO
Manchester Ave.	Between Manchester Ave. and Mira Costa College	19,595	72	35,400	74	37,100	75	2.7	0.2	NO
	Between Mira Costa College and I-5 NB On-Ramp	19,595	72	35,700	74	37,400	75	2.8	0.2	NO
	Between I-5 NB Ramps and I-5 SB Ramps	26,567	71	40,200	73	40,800	73	1.9	0.1	NO
	Between I-5 SB Ramps and Ocean Cove Dr.	7,598	65	11,900	67	12,200	67	2.1	0.1	NO
	Between Ocean Cove Dr. and Seaside Cardiff-by-the-sea residential area driveway	7,598	65	11,900	67	12,100	67	2.0	0.0	NO
	Between Seaside Cardiff-by-the-sea residential area driveway and San Elijo Water Reclamation Facility Driveway	7,598	65	11,900	67	12,100	67	2.0	0.0	NO
	Between San Elijo Water Reclamation Facility Driveway and Manchester Ave.	7,598	65	11,800	67	12,000	67	2.0	0.1	NO
Manchester Ave.	Between Encinitas Blvd. and El Camino Real	5,989	64	12,300	67	14,000	68	3.7	0.6	NO
La Costa Ave.	Between Highway 101 and Vulcan Ave.	11,888	67	16,400	69	17,700	69	1.7	0.3	NO
	Between Vulcan Ave. and Sheridan Rd.	14,258	68	16,300	69	17,300	69	0.9	0.3	NO
	Between Sheridan Rd. and I-5 SB Ramps	14,258	68	22,000	70	22,900	70	2.1	0.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	25,817	71	29,300	71	30,000	71	0.7	0.1	NO
	Between I-5 NB Ramps and Piraeus St.	36,550	76	39,500	76	39,700	76	0.4	0.1	NO
	Between Piraeus St. and Saxony Rd.	36,550	76	39,600	76	39,800	76	0.4	0.1	NO
	Between Saxony Rd. and El Camino Real	37,683	76	42,000	76	42,100	76	0.5	0.0	NO
	Between El Camino Real and La Costa Towne Center traffic signal	15,999	69	20,700	70	21,000	70	1.2	0.0	NO
	Between La Costa Towne Center traffic signal and Fairway Lane	15,999	69	20,900	70	21,200	70	1.3	0.1	NO
	Between Fairway Lane and Calle Madero	15,999	69	20,700	70	20,800	70	1.2	0.0	NO
Leucadia Blvd.	Between Highway 101 and Vulcan Ave.	12,188	66	14,300	67	16,100	67	1.2	0.5	NO
	Between Vulcan Ave. and Hermes Ave.	14,933	67	16,300	67	17,700	68	0.8	0.4	NO
	Between Hermes Ave. and Hygeia Ave.	14,933	67	15,700	67	17,000	68	0.6	0.4	NO

Table 4.10-9 Housing Strategy 3 (MMUP) Increases in Ambient Noise										
Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
	Between Hygeia Ave. and Hymettus Ave.	14,933	67	17,400	68	15,000	67	0.0	-0.7	NO
	Between Hymettus Ave. and Orpheus Ave.	14,933	67	19,200	68	20,200	68	1.3	0.2	NO
	Between Orpheus Ave. and I-5 SB Ramps	14,933	68	17,700	69	15,200	68	0.1	-0.7	NO
	Between I-5 SB Ramps and I-5 NB Ramps	22,721	68	28,600	69	28,600	69	1.0	0.0	NO
	Between Piraeus St. and Urania Ave.	38,099	72	44,100	73	43,900	73	0.6	0.0	NO
	Between Urania Ave. and Saxony Rd.	38,099	72	44,100	73	43,900	73	0.6	0.0	NO
	Between Saxony Rd. and Sidonia St.	40,117	73	42,400	73	42,100	73	0.2	-0.1	NO
	Between Sidonia St. and Quail Gardens Dr.	40,117	73	42,400	73	42,100	73	0.2	-0.1	NO
	Between Quail Gardens Dr. and Garden View Rd.	43,786	74	47,100	74	47,000	74	0.3	0.0	NO
	Between Garden View Rd. and Town Center Place	31,439	73	34,700	73	31,700	73	0.0	-0.4	NO
	Between Town Center Place and El Camino Real	34,214	73	39,000	74	38,700	74	0.5	0.0	NO
Mountain Vista Dr.	Between El Camino Real and Wandering Rd.	11,478	68	15,000	70	15,100	70	1.2	0.0	NO
	Between Wandering Rd. and Village Park Way	7,093	66	9,300	67	9,300	67	1.2	0.0	NO
Lone Jack Dr.	Between Rancho Santa Fe Rd. and northern terminus	6,745	65	8,400	66	8,200	66	0.8	-0.1	NO
El Camino Del Norte	Between Rancho Santa Fe Rd. and San Dieguito CPA boundary	6,915	65	7,900	66	7,700	65	0.5	-0.1	NO
	Between San Dieguito CPA boundary to Via De Fortuna	6,915	65	7,800	65	7,400	65	0.3	-0.2	NO
Encinitas Blvd.	Between Highway 101 and Vulcan Ave.	21,095	70	22,300	70	24,300	70	0.7	0.4	NO
	Between Vulcan Ave. and Days Inn traffic signal	20,790	70	34,100	72	35,800	72	2.3	0.2	NO
	Between Days Inn traffic signal and I-5 SB Ramps	20,790	70	34,100	72	35,800	72	2.3	0.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	32,420	72	38,500	72	40,500	73	1.0	0.2	NO
	Between I-5 NB Ramps and Saxony Rd.	38,312	72	41,400	73	43,100	73	0.5	0.1	NO
	Between Saxony Rd. and Calle Magdalena	31,737	72	35,400	72	36,800	72	0.7	0.2	NO
	Between Calle Magdalena and Encinitas Town Country traffic signal	31,737	72	40,000	73	41,600	73	1.2	0.2	NO
	Between Encinitas Town Country traffic signal and Quail Gardens Dr.	31,737	72	36,000	72	38,000	72	0.8	0.2	NO
	Between Quails Garden Dr. and Delphinium St.	27,446	72	37,700	74	39,600	74	1.6	0.2	NO
	Between Delphinium St. and Balour Dr.	27,446	72	38,300	74	40,000	74	1.6	0.1	NO
	Between Balour Dr. and Via Cantebria	38,142	74	47,500	75	48,800	75	1.1	0.1	NO
	Between Via Cantebria and El Camino Real	26,806	72	29,400	72	30,500	73	0.6	0.2	NO
	Between El Camino Real and Village Square Dr.	28,841	72	31,000	73	30,000	73	0.2	-0.1	NO

Table 4.10-9
Housing Strategy 3 (MMUP) Increases in Ambient Noise

Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
	Between Village Square Dr. and Turner Ave.	28,841	72	29,300	72	30,400	73	0.2	0.1	NO
	Between Turner Ave. and Cerro St.	28,841	72	29,300	72	30,400	73	0.2	0.1	NO
	Between Cerro St. and Village Park Way	28,841	72	29,700	72	31,200	73	0.4	0.3	NO
	Between Village Park Way to Willowspring Dr.	22,619	71	27,900	72	29,400	72	1.1	0.2	NO
	Between Willowspring Dr. to Rancho Santa Fe Rd.	22,619	71	22,700	71	24,400	72	0.3	0.3	NO
S Rancho Santa Fe Rd.	Between Manchester Ave. and 770 feet east of Manchester Ave.	18,476	70	18,600	70	19,900	71	0.3	0.3	NO
	Between 770 feet east of Manchester Ave. and San Dieguito CPA boundary	18,476	70	18,600	70	19,900	71	0.3	0.3	NO
F St./Requeza St.	Between Vulcan Ave. and Cornish Dr.	5,631	60	6,200	61	6,400	61	0.5	0.1	NO
	Between Cornish Dr. and San Dieguito Dr.	5,631	60	6,300	61	6,700	61	0.7	0.2	NO
	Between San Dieguito Dr. and Stratford Dr.	5,631	60	6,300	61	6,700	61	0.7	0.2	NO
	Between Stratford Dr. and Regal Rd.	5,631	60	6,800	61	7,000	61	0.9	0.1	NO
	Between Regal Rd. and West Lake Dr.	5,631	60	6,400	61	6,400	61	0.5	0.0	NO
	Between West Lake Dr. and Nardo Dr.	4,516	59	4,800	59	4,900	60	0.4	0.1	NO
Santa Fe Dr.	Between Vulcan Ave. and Cornish Dr.	8,554	65	9,000	65	8,900	65	0.2	0.0	NO
	Between Cornish Dr. and Summit Ave.	8,554	65	9,000	65	9,700	65	0.5	0.3	NO
	Between Summit Ave. and Devonshire	8,554	65	10,100	65	10,300	65	0.8	0.1	NO
	Between Devonshire Dr. and Dr.way	12,974	66	15,200	67	15,700	67	0.8	0.1	NO
	Between Dr.way and I-5 SB Ramps	12,974	66	15,200	67	15,700	67	0.8	0.1	NO
	Between I-5 SB Ramps and I-5 NB Ramps	19,070	68	22,400	69	23,000	69	0.8	0.1	NO
	Between I-5 NB Ramps and Regal Rd.	13,743	67	16,100	67	16,600	67	0.8	0.2	NO
	Between Regal Rd. and Gardena Rd.	13,743	67	16,100	67	16,600	67	0.8	0.2	NO
	Between Gardena Rd. and Nardo Rd.	13,743	67	16,100	67	16,600	67	0.8	0.2	NO
	Between Nardo Rd. and Windsor Rd./Bonita Dr.	15,036	67	17,700	68	18,200	68	0.9	0.1	NO
	Between Windsor Rd./Bonita Dr. and Balour Dr.	15,036	67	17,700	68	18,200	68	0.9	0.1	NO
	Between Balour Dr. and Lake Dr.	15,817	67	18,600	68	19,100	68	0.8	0.1	NO
	Between Lake Dr. and Crest Dr.	15,107	67	17,700	68	18,200	68	0.8	0.1	NO
	Between Crest Dr. and El Camino Real	15,107	67	17,700	68	18,200	68	0.8	0.1	NO
Birmingham Dr.	Between San Elijo Ave. and Newcastle Ave.	14,588	66	15,500	66	15,800	66	0.3	0.1	NO
	Between Newcastle Ave. and Manchester Ave.	14,588	66	15,500	66	15,800	66	0.3	0.1	NO
	Between Manchester Ave. and Montgomery Ave.	14,588	66	15,500	66	15,800	66	0.3	0.1	NO
	Between Montgomery Ave. and Cambridge Ave.	14,588	66	14,600	66	15,800	66	0.3	0.3	NO

Table 4.10-9 Housing Strategy 3 (MMUP) Increases in Ambient Noise										
Roadway	Segment	Existing ADT	Existing Noise Level at 50 Feet (L_{dn})	No Project Buildout ADT	No Project Noise Level at 50 Feet (L_{dn})	Housing Strategy 3 Buildout ADT	Housing Strategy 3 Noise Level at 50 Feet (L_{dn})	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and Existing Condition	Change in Noise Levels (dB) between Buildout of Housing Strategy 3 and No Project Condition	Cumulative Impact?
	Between Cambridge Ave. and MacKinnon Ave.	14,588	66	15,500	66	15,800	66	0.3	0.1	NO
	Between MacKinnon Ave. and Carol View Dr.	14,588	66	19,500	67	14,700	66	0.0	-1.2	NO
	Between Carol View Dr. and I-5 SB Ramps	14,588	66	19,500	67	14,700	66	0.0	-1.2	NO
	Between I-5 SB Ramps and I-5 NB Ramps	16,342	69	21,800	70	21,400	70	1.2	-0.1	NO
	Between I-5 NB Ramps and Villa Cardiff Dr.	8,248	66	13,200	68	13,400	68	2.1	0.1	NO
	Between Villa Cardiff Dr. and Playa Rivera	8,248	64	11,600	66	11,700	66	1.6	0.1	NO
	Between Playa Rivera and Freda Lane	8,248	64	13,100	66	13,200	66	2.1	0.1	NO
	Between Freda Lane and Lake Dr.	8,248	64	8,700	65	8,800	65	0.3	0.0	NO

4.10.6 Issue 2: On-Site Generated Noise

Would the project result in exposure of persons to or generation of noise levels in excess of limits established in the noise ordinance?

4.10.6.1 Impacts

a. Housing Sites

A significant impact would occur if future development associated with the HEU Floating Zone Program would generate noise levels that would exceed the property line noise level limits established in the City's Noise Abatement and Control Ordinance. The applicable property line noise level limits for each housing site are summarized in Table 4.10-10. These limits apply to existing uses, but will also apply to future uses and are used for evaluating potential impacts of future on-site generated noise levels.

As discussed previously, stationary sources of noise include activities associated with a given land use. The noise sources associated with future development proposed under the HEU would be those typical of any residential development (vehicles arriving and leaving, children at play and landscape maintenance machinery). None of these noise sources are anticipated to violate the City's Municipal Code or result in a substantial permanent increase in existing noise levels. However, HVAC equipment with exterior fans or condensers mounted on the ground or roofs have the potential to produce noise in excess of the City's limits. Commercial and retail components of mixed-use developments would also generate noise from commercial-related mechanical equipment, loading docks, deliveries, trash-hauling activities and customer and employee use of commercial facilities.

It is not known at this time which manufacturer, brand, or model of unit or units would be selected for use at a housing site associated with the HEU. A typical HVAC unit can generate a noise level of 65 dB(A) L_{eq} at 3 feet. As shown in Table 4.10-4, the most restrictive property line noise level limit is 45 dB(A) L_{eq}. If this representative HVAC unit was located closer than 30 feet from a residential property line, noise levels could exceed the property line noise level limit of 45 dB(A) L_{eq}.

City policies in the General Plan and regulations in the Noise Abatement and Control Ordinance are in place to control noise and reduce on-site generated noise impacts between various land uses. However, without detailed operational data, it cannot be verified that future projects implemented in accordance with the HEU would be capable of reducing noise levels to comply with the City's Noise Ordinance property line standards. Impacts would be potentially significant (Impact NOS-1). Verification that City standards have been met would be required at the project-level

Table 4.10-10 Property Line Noise Level Limits				
Housing Site	Existing Site Zoning	Existing Zoning of Adjacent Properties	Daytime Noise Ordinance Limit [dB(A) Leq]	Nighttime Noise Ordinance Limit [dB(A) Leq]
ALT-2	Mixed Use (NCRM-1 and NCM-1)	Residential-11 (R-11)	50	45
		Limited Visitor Serving Commercial (LVSC)	60	55
		General Commercial (GC)	60	55
ALT-3	General Commercial (GC)	Residential-5 (R-5)	50	45
		Residential-8 (R-8)	50	45
		General Commercial (GC)	60	55
ALT-4	Rural Residential-2 (RR-2)	Rural Residential-2 (RR-2)	50	45
		Local Commercial (LC)	60	55
ALT-5	Residential-3 (R-3) Residential-5 (R-5)	Residential-3 (R-3)	50	45
		Residential-5 (R-5)	50	45
		Residential-11 (R-11)	55	50
		Office Professional (OP)	60	55
		Ecological Resource/Open Space/Park (ER/OS/PK)	ER/OS/PK will be governed by the limits applicable to the source of the complaint	
ALT-6	Transportation Corridor (TC)	Residential-15 (R-15)	55	50
		Civic Center (CC)	N/A	N/A
		Office Professional (OP)	60	55
		Commercial Mixed Use (CM-1)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
ALT-7	General Commercial Mixed Use (D-CM1)	Commercial Mixed Use (CM-1)	60	55
		Commercial Mixed Use (CM-2)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
		Visitor Commercial Mixed Use (VCM)	60	55
		Moonlight Beach Park (MBP)	N/A	N/A
C-1	General Commercial (GC)	Residential-3 (R-3)	50	45
		Office Professional (OP)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
C-2	Residential-8 (R-8)	Residential-8 (R-8)	50	45
		Public/Semi-public (P/SP)	N/A	N/A

Table 4.10-10 Property Line Noise Level Limits				
Housing Site	Existing Site Zoning	Existing Zoning of Adjacent Properties	Daytime Noise Ordinance Limit [dB(A) Leq]	Nighttime Noise Ordinance Limit [dB(A) Leq]
C-3	General Commercial (GC)	General Commercial (C-GC1)	60	55
		General Commercial (C-GC2)	60	55
		Commercial-Office Professional (C-OP)	60	55
C-6	Rural Residential-1 (RR-1)	Rural Residential (RR)	50	45
		Rural Residential-1 (RR-1)	50	45
		Public/Semi-public (P/SP)	N/A	N/A
C-7	General Commercial (GC)	General Commercial (C-GC1)	60	55
		General Commercial (C-GC2)	60	55
		Residential-11 (C-R11)	50	45
		Ecological Resource/Open Space/Park (ER/OS/PK)	ER/OS/PK will be governed by the limits applicable to the source of the complaint	
CBHMG-1	Public/Semi-public (P/SP)	Residential-8 (R-8)	50	45
		Residential-11 (R-11)	50	45
		Office Professional (OP)	60	55
		General Commercial (GC)	60	55
L-1	Mixed Use (NCRM-1)	Residential-11 (R-11)	50	45
		Commercial-Residential Mixed Use (CRM-1)	60	55
L-2	Mixed Use (NCRM-1)	Residential-11 (R-11)	50	45
		General Commercial (GC)	60	55
		Commercial-Residential Mixed Use (CRM-1)	60	55
		Commercial Mixed Use (CM-1)	60	55
L-4	Residential-3 (R-3)	Residential-3 (R-3)	50	45
		Visitor Serving Commercial (VSC)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
L-5	Residential-3 (R-3)	Residential-3 (R-3)	50	45
L-6	Residential-3 (R-3)	Rural Residential-2 (RR-2)	50	45
		Residential-3 (R-3)	50	45
L-7	Rural Residential-1 (RR-1)	Rural Residential-1 (RR-1)	50	45
NE-1	General Commercial (GC-Encinitas Ranch)	Commercial (C)	60	55
		Open Space (OS)	N/A	N/A

Table 4.10-10 Property Line Noise Level Limits				
Housing Site	Existing Site Zoning	Existing Zoning of Adjacent Properties	Daytime Noise Ordinance Limit [dB(A) Leq]	Nighttime Noise Ordinance Limit [dB(A) Leq]
NE-3	Public/Semi-public (P/SP)	Residential-8 (R-8)	50	45
		Residential-15 (R-15)	55	50
		General Commercial (GC)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
NE-4	General Commercial (GC)	Residential-8 (R-8)	50	45
		General Commercial (GC)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
NE-7	General Commercial (GC)	Residential-5 (R-5)	50	45
		General Commercial (GC)	60	55
O-2	Rural Residential-2 (RR-2)	Rural Residential-2 (RR-2)	50	45
		Office Professional (OP)	60	55
		Local Commercial (LC)	60	55
O-3	Limited Commercial (LC) Office Professional (OP)	Rural Residential-2 (RR-2)	50	45
		Office Professional (OP)	60	55
		Local Commercial (LC)	60	55
O-4	Rural Residential (RR)	Rural Residential (RR)	50	45
		Rural Residential-1 (RR-1)	50	45
		Rural Residential-3 (RR-3)	50	45
O-5	Rural Residential-3 (RR-3)	Rural Residential (RR)	50	45
		Rural Residential-1 (RR-1)	50	45
		Rural Residential-3 (RR-3)	50	45
O-6	Rural Residential-2 (RR-2)	Rural Residential-2 (RR-2)	50	45
		Local Commercial (LC)	60	55
OE-1	Visitor Serving Commercial (D-VSC)	Residential-15 (R-15)	55	50
		Commercial Mixed Use (CM-1)	60	55
		Commercial Mixed Use (CM-2)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
		Moonlight Beach Park (MBP)	N/A	N/A
OE-2	General Commercial (GC)	Residential-3 (R-3)	50	45
		Public/Semi-public (P/SP)	N/A	N/A
		Visitor Serving Commercial (VSC)	60	55

Table 4.10-10 Property Line Noise Level Limits				
Housing Site	Existing Site Zoning	Existing Zoning of Adjacent Properties	Daytime Noise Ordinance Limit [dB(A) Leq]	Nighttime Noise Ordinance Limit [dB(A) Leq]
OE-4	Civic Center	Residential-5 (R-5)	50	45
		Residential-11 (R-11)	50	45
		Residential-15 (R-15)	55	50
		Ecological Resource/Open Space/Park (ER/OS/PK)	ER/OS/PK will be governed by the limits applicable to the source of the complaint	
		Office Professional (OP)	60	55
		Civic Center (CC)	N/A	N/A
OE-5	General Commercial Mixed Use (D-CM1)	Commercial Mixed Use (CM-1)	60	55
		Commercial Mixed Use (CM-2)	60	55
		Public/Semi-public (P/SP)	N/A	N/A
OE-7	Office Professional (OP)	Residential-5 (R-5)	50	45
		Residential-20 (R-20)	55	50
		General Commercial (GC)	60	55
		Office Professional (OP)	60	55
		Business Park (BP)	60	55
OE-8	Business Park (BP)	Residential-3 (R-3)	50	45
		Residential-8 (R-8)	50	45
		Residential-11 (R-11)	50	45
		General Commercial (GC)	60	55
		Light Industrial (L-I)	60	55
		Business Park (BP)	60	55

b. Housing Strategy Summaries

Development of the housing sites in all three housing strategies has the potential to result in impacts associated with on-site generated noise (Impact NOS-1). Overall, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from all three housing strategies would be potentially significant.

4.10.6.2 Significance of Impacts

Stationary sources of noise include activities associated with a given land use. Future on-site generated noise sources have the potential to exceed to property line noise levels limits established in the City's Noise Ordinance. Without detailed operational data, it cannot be verified that future projects implemented in accordance with the HEU would be capable of reducing noise levels to comply with the City's Noise Ordinance property line standards. Impacts may be significant (Impact NOS-1).

4.10.6.3 Mitigation Framework

NOS-1: Prior to the issuance of any permit for future development consistent with the HEU Floating Zone Program, whereon residential development would be located adjacent to commercial uses, the City shall require site-specific noise studies to determine if on-site generated noise levels exceed the property line noise level limits in the Noise Ordinance and to present appropriate mitigation measures, which may include, but are not limited to the following:

- Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses and hours of delivery can be limited if determined as needed through the study.
- Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible.
- Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.

4.10.6.4 Significance After Mitigation

Significant impacts associated with on-site generated noise from future development associated with housing strategies 1 (RM), 2 (BYO), and 3 (MMUP) (Impact NOS-1) would be avoided through the application of measure NOS-1.

4.10.7 Issue 3: Temporary Noise

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?

4.10.7.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Future buildout of the housing sites could potentially result in temporary ambient noise increase due to construction activities. Due to the developed nature of the housing sites area, construction activities would take place adjacent to existing structures. Construction activities may include demolition of existing structures, site preparation work, excavation of parking and subfloors, foundation work, and building construction.

Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction (e.g., demolition/land clearing, grading and excavation, erection). Construction noise in any one particular area would be short-term and would include noise from activities such as site preparation, truck hauling of material, pouring of concrete, and use of power tools. Noise would also be generated by construction equipment, including earthmovers, material handlers, and portable generators, and could reach high levels for brief periods.

The City regulates noise associated with construction equipment and activities through its Municipal Code. Noise levels due to construction activities shall not exceed an 8-hour equivalent noise level of 75 dB(A) $L_{eq(8)}$ at a residential property line.

As noted above, construction equipment could generate maximum noise levels between 85 and 90 dB(A) at 50 feet from the source when in operation. Hourly average noise levels would be 82 dB(A) at 50 feet from the center of construction activity when assessing the loudest pieces of equipment working simultaneously. Noise levels would vary depending on the nature of the construction including the duration of specific activities, nature of the equipment involved, location of the particular receiver, and nature of intervening barriers. Construction noise levels of 82 dB(A) $L_{eq(8)}$ at 50 feet would attenuate to 75 dB(A) $L_{eq(8)}$ at 110 feet. Therefore, significant impacts would occur if residential land uses are located closer than 110 feet of construction activities. Potential construction noise impacts associated with each of the housing sites are discussed below and summarized in Table 4.10-11.

Based on the existing conditions, the existing residential land uses located adjacent to the following housing sites are located more than 110 feet from the acoustic center of construction activities: ALT-3, ALT-4, ALT-5, ALT-6, C-1, C-2, C-3, C-6, L-1, L-4, L-5, L-7, NE-1, NE-3, NE-4, NE-7, O-2, O-3, O-4, O-5, O-6, OE-1, OE-2, OE-4, OE-7 and OE-8. Thus, construction noise levels at the residential properties located adjacent to these housing sites

would not exceed 75 dB(A) $L_{eq(8)}$. Additionally, should new residential uses develop adjacent to the housing sites, construction noise levels at redeveloped site may also exceed 75 dB(A) $L_{eq(8)}$ depending on proximity to construction activity.

Although the existing adjacent residences near these housing sites would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would cease at the end of construction. Additionally, construction activities would occur during the hours specified in the City's Municipal Code. Because construction activities associated with these housing sites would comply with the applicable regulation for construction, temporary increases in noise levels from construction activities would be less than significant.

The residential land uses located adjacent to the following housing sites are located less than 110 feet from the acoustic center of construction activities as described below and construction noise would result in a potentially significant impact (Impact NOS-2). It should be noted that this is a conceptual construction noise analysis based on standard construction practices and maximum intensity permitted under the floating zone. Actual construction noise levels may vary, and a mechanism to demonstrate compliance with the Municipal Code is outlined in the mitigation framework below.

Table 4.10-11
Potential Construction Noise Impacts

Housing Site	Distance to Nearest Adjacent Residential Property Line (feet)*	Construction Noise Level at Nearest Adjacent Residential Property Line [dB(A) $L_{eq(8)}$]	Potential Construction Noise Impact?
ALT-2	50	82.0	Yes
ALT-3	267	67.4	No
ALT-4	165	71.6	No
ALT-5	130	73.7	No
ALT-6	128	73.8	No
ALT-7	45	82.9	Yes
C-1	358	64.9	No
C-2	134	73.4	No
C-3	142	72.9	No
C-6	163	71.7	No
C-7	53	81.5	Yes
CBHMG-1	65	79.7	Yes
L-1	125	74.0	No
L-2	45	82.9	Yes
L-4	220	69.1	No
L-5	128	73.8	No
L-6	38	84.4	Yes
L-7	153	72.3	No
NE-1	1,245	54.1	No
NE-3	323	65.8	No
NE-4	602	60.4	No
NE-7	321	65.8	No
O-2	169	71.4	No

Table 4.10-11
Potential Construction Noise Impacts

Housing Site	Distance to Nearest Adjacent Residential Property Line (feet)*	Construction Noise Level at Nearest Adjacent Residential Property Line [dB(A) $L_{eq(8)}$]	Potential Construction Noise Impact?
O-3	170	71.4	No
O-4	310	66.2	No
O-5	191	70.4	No
O-6	122	74.3	No
OE-1	163	71.7	No
OE-2	334	65.5	No
OE-4	252	68.0	No
OE-5	45	82.9	Yes
OE-7	141	73.0	No
OE-8	393	64.1	No

*As measured from the approximate center of construction activity at each housing site.

Site ALT-2

There are residential uses located adjacent to housing site ALT-2. Residential uses are as close as 50 feet from the center of construction activity. Average construction noise levels at this distance would be 82 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities at site ALT-2 would be potentially significant.

Site ALT-7

There are residential uses located adjacent to housing site ALT-7. Residential uses are as close as 45 feet from the center of construction activity. Average construction noise levels at this distance would be 83 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities at site ALT-7 would be potentially significant.

Site C-7

There are residential uses located adjacent to housing site C-7. Residential uses are as close as 53 feet from the center of construction activity. Average construction noise levels at this distance would be 82 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities at site C-7 would be potentially significant.

Site CBHMG-1

There are residential uses located adjacent to housing site CBHMG-1. Residential uses are as close as 65 feet from the center of construction activity. Average construction noise levels at this distance would be 80 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$

established in the City's Municipal Code. Temporary noise impacts due to construction activities at site CBHMG-1 would be potentially significant.

Site L-2

There are residential uses located adjacent to housing site L-2. Residential uses are as close as 45 feet from the center of construction activity. Average construction noise levels at this distance would be 83 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities at site L-2 would be potentially significant.

Site L-6

There are residential uses located adjacent to housing site L-6. Residential uses are as close as 38 feet from the center of construction activity. Average construction noise levels at this distance would be 84 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities at site L-6 would be potentially significant.

Site OE-5

There are residential uses located adjacent to housing site OE-5. Residential uses are as close as 45 feet from the center of construction activity. Average construction noise levels at this distance would be 83 dB(A) $L_{eq(8)}$, and would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities at site OE-5 would be potentially significant.

b. Housing Strategy Summaries

Housing Strategy 1 – Ready Made (RM)

Housing strategy 1 (RM) has potential to result in significant temporary noise impacts due to construction activities at the following housing sites: C-7, L-2, L-6, and OE-5 (Impact NOS-2).

Housing Strategy 2 – Build Your Own (BYO)

The residential land uses located adjacent to the housing sites associated with housing strategy 2 (BYO) are located more than 110 feet from the acoustic center of construction activities. Thus, construction noise levels at the residential properties located adjacent to these housing sites would not exceed 75 dB(A) $L_{eq(8)}$ (Impact NOS-2).

Housing Strategy 3 – Modified Mixed Use Places (MMUP)

Housing strategy 3 (MMUP) has potential to result in significant temporary noise impacts due to construction activities at the following housing sites: ALT-2, ALT-7, and CBHMG-1 (Impact NOS-2).

4.10.7.2 Significance of Impacts

Housing strategy 1 (RM) has the potential to result in significant temporary noise impacts due to construction activities at four housing sites (C-7, L-2, L-6, and OE-5) and housing strategy 3 (MMUP) has potential to result in significant temporary noise impacts due to construction activities at three housing sites (ALT-2, ALT-7, and CBHMG-1). Average construction noise levels at these housing sites would exceed the limit of 75 dB(A) $L_{eq(8)}$ established in the City's Municipal Code. Temporary noise impacts due to construction activities would be potentially significant (Impact NOS-2).

The residential land uses located adjacent to the housing sites associated with housing strategy 2 are located more than 110 feet from the acoustic center of construction activities. Thus, construction noise levels at the residential properties located adjacent to these housing sites would not exceed 75 dB(A) $L_{eq(8)}$.

4.10.7.3 Mitigation Framework

NOS-2: Prior to the issuance of future construction permits at the housing sites, a Construction Noise Control Plan shall be submitted to the City's Planning and Building Department for review and approval. The plan shall demonstrate that all construction activity shall be in compliance with noise standards provided in Section 9.32 of the City's Municipal Code. The construction noise control plan can include, but is not limited to, the following:

- Ensure that construction equipment is properly muffled according to industry standards and is in good working condition.
- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.
- Construction shall be limited to the hours of 7:00 A.M. to 7:00 P.M. Monday through Saturday. No construction is permitted on Sundays or legal holidays.
- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the County or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party.

- Project developers shall require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets to the extent feasible. Contract specifications shall be included in construction documents, which shall be reviewed by the City prior to issuance of a grading permit.

4.10.7.4 Significance After Mitigation

Implementation of the controls outlined in the above measures would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these controls, and the limited duration of the noise-generating construction period, the substantial temporary increase in ambient noise levels associated with housing sites C-7, L-2, L-6, and OE-5 under housing strategy 1 (RM) and housing sites ALT-2, ALT-7, and CBHMG-1 under housing strategy 3 (MMUP) would be less than significant.

4.10.8 Issue 4: Groundborne Noise and Vibration

Would the project result in the generation of excessive groundborne vibration or groundborne noise levels in the project vicinity above levels existing without the project?

4.10.8.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future development on housing sites would likely be located adjacent to existing structures. No operational components of the HEU include significant groundborne noise or vibration sources and no significant vibrations sources currently exist, or are planned, in the City. Thus, no significant groundborne noise or vibration impacts would occur with the operation of future projects implemented under the HEU.

Construction activities may include demolition of existing structures, site preparation work, excavation of parking and subfloors, foundation work, and building construction. Demolition for an individual site may last several weeks to months.

Ground vibrations in an outdoor environment are generally not perceptible (FTA 2006). The construction activities that generate excessive vibrations are blasting and impact pile driving. Projects implemented under the HEU would be constructed using typical construction techniques; no blasting is contemplated. Heavy construction equipment (e.g., bulldozer and excavator) would generate a limited amount of groundborne vibration during construction activities at short distances away from the source, and would not be a significant source of excessive vibration. The use of equipment would most likely be limited to a few hours spread over several days during demolition/grading activities. Non-pile driving or foundation work construction phases that have the highest potential of producing

vibration (such as jackhammering and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. Therefore, the project would not expose persons to excessive groundborne vibration, and as such, impacts would be less than significant.

b. Housing Strategy Summaries

As with the individual housing sites, no operational components of the housing strategies would include significant groundborne noise or vibration sources, and operational vibration impacts would be less than significant. Projects would be constructed using typical construction techniques. Heavy construction equipment (e.g., bulldozer and excavator) would generate a limited amount of groundborne vibration during construction activities at short distances away from the source, and would not be a significant source of excessive vibration. The project would not expose persons to excessive groundborne vibration, and as such, impacts would be less than significant. There would be no inherent difference in impacts among the housing strategies.

4.10.8.2 Significance of Impacts

No operational components of future development consistent with the HEU floating zone would include significant groundborne noise or vibration sources. Operational vibration impacts would be less than significant.

The construction activities that generate excessive vibrations are blasting and impact pile driving. Projects implemented under the HEU would be constructed using typical construction techniques; no blasting is contemplated. Heavy construction equipment (e.g., bulldozer and excavator) would generate a limited amount of groundborne vibration during construction activities at short distances away from the source, and would not be a significant source of excessive vibration. Non-pile driving or foundation work construction phases that have the highest potential of producing vibration (such as jackhammering and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. Therefore, the project would not expose persons to excessive ground-borne vibration, and as such, impacts would be less than significant.

4.10.8.3 Mitigation Framework

Impacts would be less than significant. No mitigation is required.

4.11 Population and Housing

This section of the EIR addresses potential population and housing impacts from future buildout of the Housing Element Update (HEU) housing sites. Data for this section was obtained from 2000 and 2010 Census Data (SANDAG 2015a); SANDAG estimates (SANDAG 2015b and 2015c); SANDAG Series 12 forecasts (SANDAG 2015e); as well as San Diego Forward (SANDAG 2015d) and the associated 2010–2020 Regional Housing Needs Assessment (RHNA; SANDAG 2011).

4.11.1 Existing Conditions

4.11.1.1 Population, Housing, and Employment Trends

SANDAG is the metropolitan planning organization (MPO) responsible for developing demographic projections, including population, household, and employment projections, for the19 jurisdictions in the County, including the City of Encinitas. SANDAG is required to update these forecasts every four years. The regional and City of Encinitas population and housing trends are discussed further below.

a. Population

Region

The current (2015) estimated population in the San Diego region is 3,227,496 people (Table 4.11-1; SANDAG 2015b). Per the SANDAG forecasts (SANDAG 2015e), the regional population is expected to increase to 3,535,000 by 2020 and to 4,026,131 by 2035. Thus, the regional population is expected to grow 19.8 percent over the next 20 years. This equates to a future growth rate of approximately 0.99 percent per year. The future forecasted growth rate is higher than the 0.91 percent per year growth rate experienced annually over the last 10 years.

City of Encinitas

As shown in Table 4.11-2, the City is currently estimated to have a population of 61,518 people, which is 2 percent of the regional population (SANDAG 2015c). The City's population is forecasted to increase by 12,750 to 74,268 people by the year 2035 (SANDAG 2015e). This 17.2 percent increase over 20 years equates to a growth rate of 0.86 percent per year. Compared to the growth between 2000 and 2010 (2.53 percent over 10 years; 0.25 percent per year); the future 2015 to 2035 City population growth rate is forecasted to more than triple (SANDAG 2015a, 2015c, and 2015e).

Table 4.11-1
Regional Population and Future Population Forecasts

Unit	Census		Change from 2000 to 2010		Estimated	Forecasted				Change from 2015 to 2035	
	2000	2010	Numeric	Percent	2015	2020	2025	2030	2035	Numeric	Percent
Total Population	**2,813,833**	**3,095,313**	**281,480**	**9.1%**	**3,227,496**	**3,535,000**	**3,703,824**	**3,870,000**	**4,026,131**	**798,635**	**19.8%**
Household	2,716,820	2,993,347	276,527	9.2%	3,120,296	3,405,068	3,567,068	3,725,900	3,873,175	752,879	19.4%
Group Quarters - Civilian	55,687	58,369	2,682	4.6%	64,786	76,336	83,160	90,504	99,360	34,574	34.8%
Group Quarters - Military	41,326	43,597	2,271	5.2%	42,414	53,596	53,596	53,596	53,596	11,182	20.9%
Total Housing Units	**1,040,149**	**1,158,076**	**117,927**	**10.2%**	**1,183,211**	**1,262,488**	**1,318,944**	**1,369,807**	**1,417,520**	**234,309**	**16.5%**
Single-Family	628,652	697,470	68,818	9.9%	711,646	728,566	740,960	750,022	755,477	43,831	5.8%
Multiple Family	364,636	417,965	53,329	12.8%	428,943	493,243	538,333	581,143	624,419	195,476	31.3%
Mobile Homes	46,861	42,641	-4,220	-9.9%	42,622	40,679	39,651	38,642	37,624	-4,998	-13.3%
Occupied Housing Units	**994,677**	**1,086,865**	**92,188**	**8.5%**	**1,126,873**	**1,200,966**	**1,257,010**	**1,309,474**	**1,357,084**	**230,211**	**17.0%**
Single-Family	605,810	662,928	57,118	8.6%	684,498	695,483	708,694	719,623	725,994	41,496	5.7%
Multiple Family	345,351	385,183	39,832	10.3%	403,451	467,321	511,037	553,415	595,559	192,108	32.3%
Mobile Homes	43,516	38,754	-4,762	-12.3%	38,924	38,162	37,279	36,436	35,531	-3,393	-9.5%
Overall Vacancy Rate	**16.1%**	**6.1%**	**-10.0%**	**-163.1%**	**4.8%**	**4.9%**	**4.7%**	**4.4%**	**4.3%**	**-0.5%**	**-11.7%**
Single-Family	3.6%	5.0%	1.4%	27.4%	5.5%	4.5%	4.4%	4.1%	3.9%	-1.6%	-40.9%
Multiple Family	5.3%	7.8%	2.5%	32.3%	6.2%	5.3%	5.1%	4.8%	4.6%	-1.6%	-34.1%
Mobile Homes	7.1%	9.1%	2.0%	21.5%	7.1%	6.2%	6.0%	5.7%	5.6%	-1.5%	-27.6%
Persons per Household	**2.73**	**2.75**	**0.02**	**0.8%**	2.77	**2.84**	**2.84**	**2.85**	**2.85**	**0.09**	**3.0%**

SOURCE: SANDAG Census Data (SANDAG 2015a), SANDAG Forecasts (SANDAG 2015b), and SANDAG Series 12 Model (SANDAG 2015e).

Table 4.11-2 City of Encinitas Population and Future Population Forecasts											
Unit	Census		Change from 2000 to 2010		Estimated	Forecasted				Change from 2015 to 2035	
	2000	2010	Numeric	Percent	2015	2020	2025	2030	2035	Numeric	Percent
Total Population	**58,014**	**59,518**	**1,504**	**2.53%**	**61,518**	**68,551**	**71,219**	**73,153**	**74,268**	**12,750**	**17.2%**
Household	57,455	58,990	1,535	2.60%	60,990	67,829	70,356	72,098	73,012	12,022	16.5%
Group Quarters	559	528	-31	-5.87%	528	722	863	1,055	1,256	728	58.0%
Total Housing Units	**23,843**	**25,481**	**1,638**	**6.43%**	**25,818**	**26,331**	**27,339**	**27,895**	**28,135**	**2,317**	**8.2%**
Single-Family	17,713	20,685	2,972	14.37%	20,998	21,326	21,536	21,753	21,897	899	4.1%
Multiple Family	5,358	4,020	-1,338	-33.28%	4,081	4,251	5,053	5,390	5,490	1,409	25.7%
Mobile Homes	772	776	4	0.52%	739	754	750	752	748	9	1.2%
Occupied Housing Units	**22,830**	**24,082**	**1,252**	**5.20%**	**24,792**	**25,288**	**26,292**	**26,877**	**27,120**	**2,328**	**8.6%**
Single-Family	7,018	19,577	2,559	13.07%	20,183	20,532	20,769	21,021	21,168	985	4.7%
Multiple Family	5,114	3,778	-1,336	-35.36%	3,907	4,064	4,833	5,161	5,258	1,351	25.7%
Mobile Homes	698	727	29	3.99%	702	692	690	695	694	-8	-1.2%
Overall Vacancy Rate	**4.44%**	**5.81%**	**1.37%**	**23.63%**	**3.97%**	**3.96%**	**3.83%**	**3.65%**	**3.60%**	**-0.37%**	**-10.4%**
Single-Family	3.92%	5.35%	1.43%	26.73%	3.88%	3.72%	3.56%	3.37%	3.33%	-0.55%	-16.6%
Multiple Family	4.55%	6.02%	1.47%	24.42%	4.26%	4.40%	4.35%	4.25%	4.23%	-0.03%	-0.8%
Mobile Homes	9.58%	6.31%	-3.27%	-51.82%	5.01%	8.22%	8.00%	7.58%	7.22%	2.21%	30.7%
Persons per Household	**2.52**	**2.45**	**-0.07**	**-2.72%**	**2.46**	**2.68**	**2.68**	**2.68**	**2.69**	**0.23**	**8.6%**
SOURCE: SANDAG Census (SANDAG 2015a), SANDAG Estimation (SANDAG 2015b), and SANDAG Series 12 Model (SANDAG 2015e).											

b. Housing

Region

The San Diego region is currently (2015) estimated to have 1,183,211 housing units, including 711,646 single-family (60 percent), 428,943 multi-family (36 percent), and 42,622 mobile homes (4 percent). The current regional vacancy rate is 4.8 percent. Considering the number of people living in a household and the number of occupied housing units, the persons per household regional average is 2.77 (SANDAG 2015b).

By 2035, the regional housing supply is forecasted to increase to 1,417,520, which would be 16.5 percent growth over 20 years or 0.83 percent increase per year (SANDAG 2015e). Compared to the 2000 to 2010 period when population increased 9.1 percent over 10 years (0.91 percent per year) (SANDAG 2015a), the future housing growth rate in the region is expected to decrease. Over the last 10 years, housing growth percentage rates were similar between single-family and multi-family units (SANDAG 2015a). However, the future 2035 anticipated housing unit growth is expected to involve a much higher percent increase in multi-family homes (32.3 percent increase of multi-family units between 2015 and 2035) than single-family homes (5.7 percent increase of single-family units between 2015 and 2035) (SANDAG 2015e). Overall, 83 percent of the new housing units in the region would be multi-family units.

City of Encinitas

The City currently (2015) is estimated to have approximately 25,818 housing units, consisting of 20,998 single-family (81 percent), 4,081 multi-family (16 percent), and 739 (3 percent) mobile homes. Compared to the region, the City has a higher percentage of single-family units and a lower percentage of multi-family units. The current overall vacancy rate is 3.97 percent. Based on the number of occupied units and the household populations, the number of people per household is currently estimated to be 2.46 (see Table 4.11-2; SANDAG 2015c).

4.11.2 Regulatory Framework

4.11.2.1 Senate Bill 375 and Assembly Bill 1233

Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act, was approved in 2008. SB 375 focuses on reducing greenhouse gas emissions, as discussed further in Section 4.6.2. As a part of this effort, this act requires that regional housing needs be addressed in conjunction with regional transportation in order to integrate housing, land use, and transportation planning together. In the San Diego Region, this unified regional planning effort is completed by SANDAG via San Diego Forward.

SB 375 also requires the RHNA be completed every eight years and, if a jurisdiction does not meet this requirement, penalties may be incurred in accordance with SB 375 and Assembly Bill 1233. As the City of Encinitas did not meet this requirement, the City must address its deficit for the previous housing element cycle (2005–2010). See the below RHNA discussion.

4.1.1.2.2 San Diego Forward

San Diego Forward (SANDAG 2015d) is a comprehensive regional planning document that sets the vision for the future of the San Diego Region and includes various planning document components to guide future improvements to meet that vision. As stated by SANDAG and in accordance with SB 375, the strategy set forth in San Diego Forward is to "focus housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all and implement the Plan through incentives and collaboration." In addition to transportation, greenhouse gas, sustainable communities strategy and other specific guidance, San Diego Forward addresses regional growth and housing needs utilizing regional growth forecast and the Regional Housing Needs Assessment. The regional SANDAG growth information[1] is included under Section 4.11.1.1 above, and the RHNA is discussed further below.

4.11.2.3 Regional Housing Needs Assessment

High housing cost and affordable housing is a known issue of the region as well as for the City. To respond to state population and household growth, and to ensure the availability of decent affordable housing for all income groups, the State enacted a law that requires SANDAG and other councils of governments to periodically distribute the State identified housing need for their regions. As discussed in Section 3.2, local jurisdictions are required by State law (Government Code Section 65580 et seq.) to plan for their fair share of projected housing reconstruction needs in their region over a specified planning period. Housing unit construction goals are set by the State Department of Housing and Community Development and allocated to cities through regional planning agencies. Housing and Community Development is responsible for determining this regional need, initiating the process by which each region must then distribute their share of statewide need to all jurisdictions within its region. Future regional housing needs are calculated in terms of the following three factors:

1. The number of units needed to accommodate forecast population growth;
2. The number of units needed to replace demolition due to attrition in the housing stock (i.e., fire damage, obsolescence, redevelopment, and conversion to non-housing uses); and
3. Maintenance of an ideal vacancy rate for a well-functioning housing market (i.e. vacancy allowance);

[1]Note that the SANDAG forecasts utilized in San Diego Forward were for the 2012 to 2050 period, and the SANDAG information above is based on the current 2015 estimate to the 2035 forecast. The time period utilized for this analysis is appropriate considering the 2015 estimate data is the most current available information for the existing conditions and that the proposed Housing Element is intended to address buildout through 2035. Thus, also note that the numeric values identified in the San Diego Forward discussions may differ, but the trends identified by both analyses are consistent.

After a RHNA Determination has been made, a regional RHNA Plan must be developed. State Housing Element law (Government Code Section 65584 (d)) states that the RHNA Plan shall be consistent with four objectives:

1. Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in all jurisdictions receiving an allocation of units for low and very low income households.

2. Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns.

3. Promoting an improved intraregional relationship between jobs and housing.

4. Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category.

SANDAG has developed a RHNA Plan to address the housing needs of the San Diego region. Future housing need is assessed by each City or County jurisdiction. The RHNA Plan is based on the land use pattern in the 2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) and the 2050 Regional Growth Forecast, in accordance with Senate Bill 375. This recent legislation, Senate Bill (SB) 375, as well as SB 575, affects the RHNA allocation process. The main changes in this cycle included not only the integration of the RHNA process with the RTP and SCS, but also the length of the housing element cycle. The fifth cycle for the San Diego region covers an eight-year time period from 2013 to 2021. Prior to SB 375, past housing elements were on a five-year cycle. Because a jurisdiction's Housing Element is required to be regularly revised pursuant to a statutory schedule and tied to the RHNA process, preparing updates to this document helps local agencies consider housing and land-use strategies that closely reflect changing local needs, resources, and conditions.

The Fifth Housing Element Cycle (2013–2021) RHNA (SANDAG 2011) identifies an additional 161,980 housing units will be needed within the San Diego region to provide adequate housing through 2050. This regional housing need includes 64,150 units of lower income housing. The City has been assigned a total of 2,353 of these units for the 2013 to 2021 period, distributed into the following income (MFI) categories:

Very Low income units	0–50 percent of Area MFI	587
Low income units:	51–80 percent of Area MFI	446
Moderate income units:	81–120 percent of Area MFI	413
Above Moderate income units:	> 120 percent of Area MFI	907

As the City does not have a State-approved Housing Element as required, the City is subject to a carryover penalty per Assembly Bill 1233 (see above). This penalty is 253 lower income units from the previous Housing Element cycle. Thus, the total very low income to low income units required is 1,283.

The City has capacity to accommodate moderate and above-moderate income category RHNA assignments. The City does not have an adequate residential lands inventory to meet the lower income category housing needs obligation.

4.11.2.4 Encinitas Housing Element

The Encinitas Housing Element, last adopted in 1992, identifies the housing goals and policies for the City, which are partially based on the 1990 RHNA and associated Series 7 forecasting. As indicated above, the City does not currently have a state-certified Housing Element. The goals of the currently adopted Housing Element are:

1. Providing a range of housing types for existing and future residences;
2. Providing safe housing for all people;
3. Preserving exiting housing stock and promoting quality workmanship; and
4. Providing affordable housing. In addition, the Housing Element identifies housing needs, housing opportunities sites, and housing challenges.

The adopted Housing Element identifies that the City has two main ways to provide an increase in residential units; development of vacant land, or adding residences to underdeveloped residential or mixed-use sites (also known as “recycling”).

4.11.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines and based on the initial project scoping, impacts related to population and housing would be significant if the HEU project would:

1. Unduly concentrate population growth to an area not capable of supporting it; or
2. Displace substantial numbers of existing housing or people through redevelopment, necessitating the construction of replacement housing elsewhere.

It is noted that growth inducement is discussed in Chapter 6 of this EIR.

4.11.4 Methodology

As discussed in the introduction, population and housing data was obtained from the 2000 and 2010 Census (SANDAG 2015a), SANDAG 2015 estimates (SANDAG 2015b and 2015c), SANDAG Final Series 12 – 2050 Regional Growth Forecast (SANDAG 2015e), as well as the most recent 2010–2020 RHNA (SANDAG 2011). This information was compared to the forecasted growth under the proposed project to determine the change in population and housing as a result of the project. To determine if this change was significant, the analysis then assesses if the potential population and housing change would result in physical environmental effects related to the area not being capable of supporting such growth or if the project would displace housing in a manner that would require replacement housing elsewhere.

4.11.5 Issue 1: Population Growth

Would the project unduly concentrate population growth to an area not capable of supporting it?

4.11.5.1 Impacts

As detailed in Chapter 3, Project Description, there are three Housing Element strategies that could be implemented; "*Ready Made*" (Strategy 1), "*Build Your Own*" (Strategy 2), and "*Modified Mixed Use Places*" (Strategy 3). Below is an analysis of each of those strategies.

a. Housing Strategy 1 - Ready Made (RM)

Housing strategy 1 (RM) would provide capacity for an additional 1,911 residential units within the City. Based on the 2020 forecasted 2.68 persons per household (SANDAG 2015e), the housing strategy 1 (RM) would result in a population increase of 5,121 people (Table 4.11-3). As illustrated in Figure 3-5a, housing strategy 1 (RM) would result in population growth mainly in the western area of the City, along the Interstate 5 corridor. Future development under housing strategy 1 (RM) would occur in urbanized locations in close proximity to existing infrastructure (roads, utilities) and served by fire and other emergency responders.

Table 4.11-3
Population Growth - Housing Strategy 1 (Ready Made)

Site	Parcel Area (Net)	Existing Residential Units	Existing Plan Yield	Proposed Residential Yield[1]	Increase in Units	Increase in Population[2]
C-2	10.57	1	89	317	316	847
C-3	4.87	-	-	97	97	260
C-7	0.55	-	-	11	11	29
L-1	5.21	6	65	126	120	322
L-2	2.15	-	27	43	43	115
L-4	1.89	-	6	57	57	153
L-5	1.69	1	5	51	50	134
L-6	5.45	4	16	164	160	429
NE-4	18.9	-	-	378	378	1,013
O-2	4.8	-	10	96	96	257
O-5	1.6	1	7	48	47	126
O-6	1.5	-	4	38	38	102
OE-1	2.31	5	43	46	41	110
OE-4	4	-	-	80	80	214
OE-5	12.17	-	183	243	243	651
OE-7	4.5	1	-	135	134	359
Totals	**82.16**	**19**	**455**	**1,930**	**1,911**	**5,121**

[1]The yield is based on maximum density allowed. As buildout density is expected to be lower than the maximum allowed, this number is considered conservative.
[2]Based on the 2020 forecasted 2.68 persons per household (SANDAG 2015e). As the Housing Element Update would include a variety of unit sizes and the forecasted persons per household rate is based primarily on larger single-family unit types, the persons per household rate of future development is expected to be less than the forecasted rate. Thus, this population increase estimate is considered conservative.

As addressed further in Section 4.12, Public Services and Facilities and Section 4.14 Public Utilities, future projects implemented in accordance with the HEU Strategy 1 would adhere to the General Plan goals and policies; pay development impact fees (e.g., sewer fees, fire mitigation fee, storm water fees), and comply with applicable development regulations that are intended to address the demand for public services and facilities that results from development. Ultimately, all future projects would be required to provide a will-serve letter from the service provider in conjunction with their application to ensure adequate services and utilities are available. Thus, the housing strategy 1 (RM) population growth would be within an area capable of supporting it.

b. Housing Strategy 2 - Build Your Own (BYO)

The housing strategy 2 (BYO) would provide capacity for an additional 1,844 residential units within the City. Based on the 2020 forecasted 2.68 persons per household, this increase in units would result in an increase of 4,942 people (Table 4.11-4). As indicated in Figure 3-5b, housing strategy 2 (BYO) would result in population growth mainly in the central area of the City (east of Interstate 5). Future development under housing strategy 2 (BYO) would occur in urbanized locations in close proximity to existing infrastructure (roads, utilities) and served by fire and other emergency responders.

Table 4.11-4
Population Growth - Housing Strategy 2 (Build Your Own)

Site	Parcel Area (Net)	Existing Residential Units	Existing Plan Yield[1]	Proposed Residential Yield	Increase in Units	Increase in Population[2]
C-2	10.57	1	89	317	316	847
L-1	5.21	6	65	126	120	322
L-7	7.50	0	7	60	60	161
NE-1	10.20	0	0	188	188	504
NE-3	10.00	0	0	300	300	804
NE-7	9.05	0	0	181	181	485
O-2	4.80	0	10	96	96	257
O-4	4.00	0	9	80	80	214
O-5	1.60	1	7	48	47	126
OE-2	7.25	0	0	145	145	389
OE-7	4.50	1	0	90	89	239
OE-8	11.09	0	0	222	222	595
Totals	**85.77**	**9**	**187**	**1,853**	**1,844**	**4,942**

[1]The yield is based on maximum density allowed. As buildout density is expected to be lower than the maximum allowed, this number is considered conservative.
[2]Based on the 2020 forecasted 2.68 persons per household (SANDAG 2015e). As the Housing Element Update would include a variety of unit sizes and the forecasted persons per household rate is based primarily on larger single-family unit types, the persons per household rate of future development is expected to be less than the forecasted rate. Thus, this population increase estimate is considered conservative.

As with the housing strategy 1 (RM), future projects implemented in accordance with housing strategy 2 (BYO) would adhere to the General Plan, provide required development impact fees, and comply with applicable development regulations intended to address the demand for public services and facilities that results from development. Ultimately, all future projects would be

required to provide a will-serve letter from the service provider in conjunction with their application to ensure adequate services and utilities are available. Thus, the housing strategy 2 (BYO) population growth would be within an area capable of supporting it.

c. Housing Strategy 3 (Modified Mixed Use Places)

The housing strategy 3 (MMUP) would provide capacity for an additional 3,166 residential units within the City. Based on the 2020 forecasted 2.68 persons per household (SANDAG 2015e), this increase in units would result in an increase of 8,485 people (Table 4.11-5). As indicated in Figure 3-5c, this housing strategy would result in population growth scattered throughout the City, with no particular areas of concentration. Future development under Housing Strategy 3 (MMUP) would occur in urbanized locations in close proximity to existing infrastructure (roads, utilities) and served by fire and other emergency responders.

Table 4.11-5
Population Growth - Housing Strategy 3 (Modified Mixed Use Places)

Site	Parcel Area (Net)	Existing Residential Units	Existing Plan Yield[1]	Proposed Residential Yield	Increase in Units	Increase in Population[2]
C-1	9.35		-	187	187	501
C-2	10.57	1	89	317	316	847
C-6	4.6	-	4	138	138	370
L-7	7.5	-	7	60	60	161
CBHMG-1	0.77	-	-	23	23	62
ALT 2	17.55	17	237	309	292	783
NE-1	10.2	-	-	188	188	504
NE-7	9.05	-	-	181	181	485
ALT 3	14.56	-	-	291	291	780
O-2	4.8	-	10	96	96	257
O-3	4.87	-	-	97	97	260
O-4	4	-	9	80	80	214
ALT 4	6.19	3	13	186	183	490
OE-1	2.31	5	43	46	41	110
OE-4	4	-	-	80	80	214
OE-7	4.5	1	-	135	134	359
ALT 5	11.27	3	54	338	335	898
ALT 6	3.1	-	-	93	93	249
ALT 7	21.02	65	342	416	351	941
Total	**150.21**	**95**	**808**	**3,261**	**3,166**	**8,485**

[1]The yield is based on maximum density allowed. As buildout density is expected to be lower than the maximum allowed, this number is considered conservative.
[2]Based on the 2020 forecasted 2.68 persons per household (SANDAG 2015e). As the Housing Element Update would include a variety of unit sizes and the forecasted persons per household rate is based primarily on larger single-family unit types, the persons per household rate of future development is expected to be less than the forecasted rate. Thus, this population increase estimate is considered conservative.

As with housing strategies 1 (RM) and 2 (BYO), future projects implemented in accordance with housing strategy 3 (MMUP) would adhere to the General Plan, provide required development impact fees, and comply with applicable development regulations intended to

address the demand for public services and facilities that results from development. Ultimately, all future projects would be required to provide a will-serve letter from the service provider in conjunction with their application to ensure adequate services and utilities are available. Thus, housing strategy 3 (MMUP) population growth would be within an area capable of supporting it.

4.11.5.2 Significance of Impacts

Future projects implemented in accordance with any of the HEU strategies would be required to adhere to the General Plan, provide required development impact fees, and comply with applicable development regulations. Ultimately, all future projects would be required to provide a will-serve letter from the service provider in conjunction with their application to ensure adequate services and utilities are available. Thus population growth associated with the HEU would be within an area capable of supporting it; impacts would be less than significant. Overall, there would be no inherent differences in impacts among the housing strategies.

4.11.6 Issue 2: Displacement of People

Would the project displace substantial numbers of existing housing or people through redevelopment, necessitating the construction of replacement housing elsewhere?

4.11.6.1 Impacts

Buildout of the housing sites would accommodate an increase in population over the existing condition. The majority of new development anticipated on housing sites is expected to intensify existing development and result in additional housing units. While people may be displaced during redevelopment, it would be temporary considering buildout of the housing sites would accommodate the projected population for the City through 2035. Therefore, displacement of people associated with implementation of the HEU would be less than significant.

4.11.6.2 Significance of Impacts

The HEU would result in an increase in housing units in the City. While a temporary loss of existing housing could occur during construction, it would not necessitate the construction of replacement housing elsewhere. Impacts would be less than significant. Overall, there would be no inherent differences in impacts among the housing strategies.

4.12 Public Services and Facilities

This section evaluates the effects associated with buildout of the Housing Element Update (HEU) on public services and facilities. Public services and facilities are those functions that serve residents, businesses, and community members. These functions include fire protection and emergency medical services, police protection, public schools, libraries, and parks and recreation. Public services information was acquired through consultation with the school districts serving the City, other service providers and City staff, along with the Final Existing Conditions Report (City of Encinitas 2010).

Specifically, this section addresses the potential for buildout of the HEU to result in substantial adverse physical impacts associated with construction of new or physically altered government facilities that might be needed to serve projected buildout of the housing sites. Potential impacts resulting from wildland fires are discussed in Section 4.7 (Hazards and Hazardous Materials), and potential impacts associated with storm water runoff are discussed in Section 4.8 (Hydrology and Water Quality). Public utilities, including water supply and service, wastewater treatment and conveyance, storm drains, and solid waste disposal are addressed in Section 4.14 (Public Utilities) of this EIR.

4.12.1 Existing Conditions

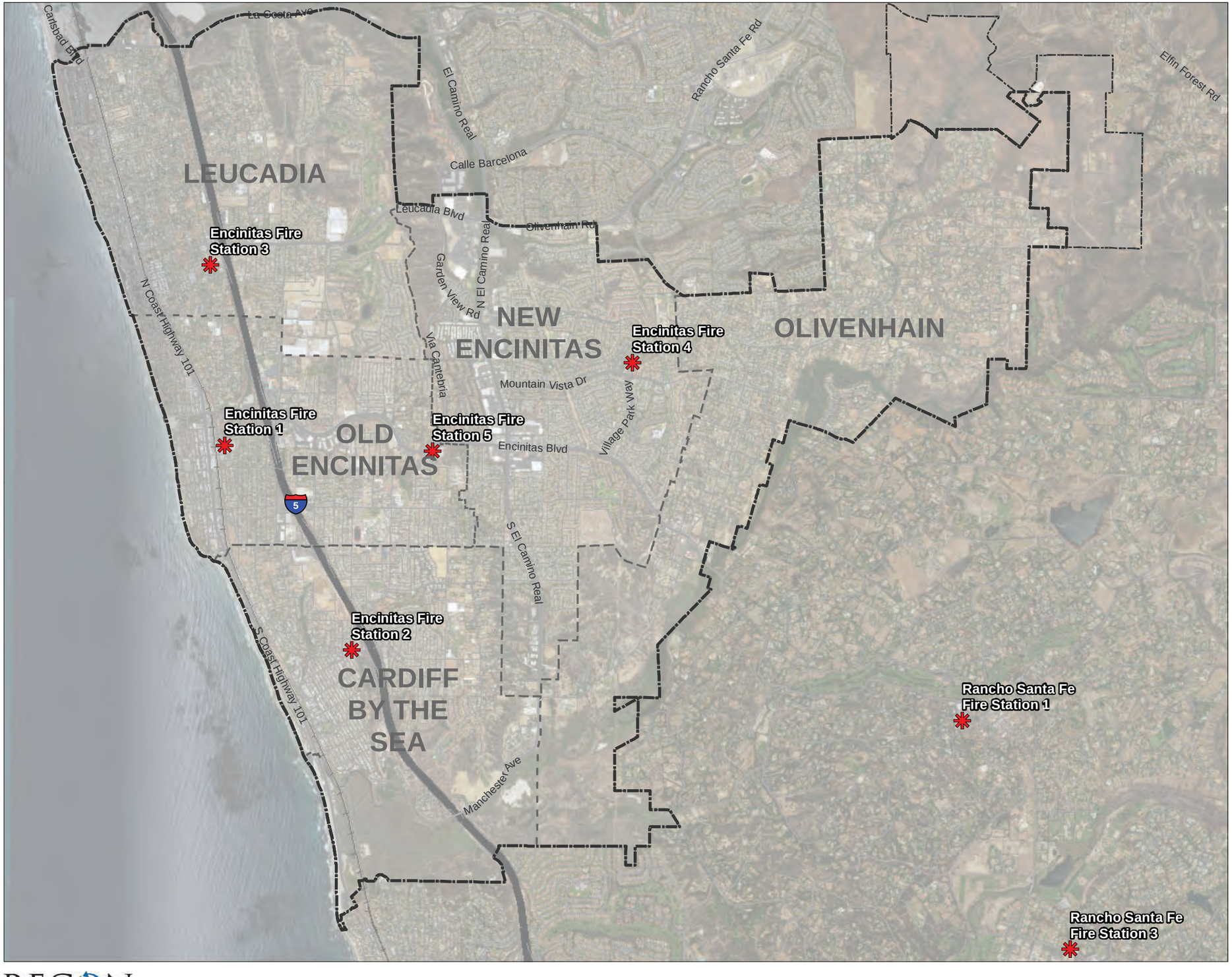
4.12.1.1 Fire and Emergency Medical Services

The Encinitas Fire Department (EFD) provides a wide array of public safety services. These services include fire protection, emergency response, medical aid, fire prevention, disaster preparedness, search and rescue, lifeguard services and community education programs. The EFD operates six fire stations, as shown in Figure 4.12-1, and has 51 full-time firefighters/paramedics on staff.[1] In 2014, the EFD responded to 5,866 incidents within the City limits.

The EFD is reevaluating its response time goal to align it with current industry standards. Pursuant with the EFD, the fire industry has been moving away from using average response times as standards. However, for comparative purposes, it is noted that the national standard adopted by the National Fire Protection Association (NFPA), otherwise known as Standard 1710, recommends that (to treat medical patients and control small

[1] A temporary fire station is located by the center of the Olivenhain community as of January 2016.

Image source: USDA FSA (flown June 2014)



City Limits
Sphere of Influence
Community Area Boundaries
Fire Stations

0 Miles 0.5

RECON

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FIGURE 4.12-1
Locations of Existing Fire Stations

fires) the first due unit should arrive within 6 minutes, 20 seconds from the receipt of a 911 call, 90 percent of the time. In 2014, the EFD's average response time for the City as a whole was 4 minutes and 35 seconds. The Department responded to 75 percent of all calls in under 5 minutes, 27 seconds and 90 percent of calls in under 6 minutes, 37 seconds.

EFD has automatic and mutual aid agreements with all of the surrounding cities and districts, including the City of Carlsbad to the north, the cities of Solana Beach and Del Mar to the south, and the Rancho Santa Fe Fire Prevention District to the east. These agencies have a "Boundary Drop" program in which the EFD dispatch center tracks all agencies' apparatuses and sends the closest engine to the incident regardless of City or district boundary.

The San Dieguito Ambulance District, also known as County Service Area 17 (CSA-17), was formed by the County Board of Supervisors in 1969 to provide ambulance services to several cities in North County, including Encinitas. In 1992, the service area was redesigned as an Emergency Medical Services (EMS) district. Within the 100-square-mile CSA-17 service area, local fire departments are responsible for providing first responder emergency medical services to residents. In Encinitas, fire engines with paramedics typically arrive on scene first, followed by an ambulance. The CSA-17 ambulance provider is required by the County to be at the patient's side within 9 minutes, 90 percent of the time. The ambulance provider reports their compliance with this requirement on a monthly basis to the County.

4.12.1.2 Police Services

The City contracts with the County of San Diego Sheriff's Department (Sheriff's Department) to provide police services. The Encinitas Sheriff's Station provides a wide range of municipal law enforcement services to the cities of Del Mar, Solana Beach, and Rancho Santa Fe, including helicopters, bomb/arson squad, special enforcement detail team, canine units, and modern crime lab facilities.

Divisions providing day-to-day law enforcement at the Encinitas Sheriff's Station include the following:

- Patrol Division: Patrol deputies are first responders, responding to crimes or emergencies in progress, calls for service. They conduct routine patrols, preliminary investigations, and apprehend law violators.

- Traffic Division: Traffic deputies focus on vehicle code enforcement, traffic collision investigations, and traffic control. The California Highway Patrol is the agency responsible for traffic enforcement in the unincorporated areas.

- Investigative Unit: This unit is responsible for investigating general crimes against people and property crimes. Follow-up investigations on specific crimes requiring specialized expertise may be conducted by the department's centralized units.

- Narcotics Investigations: Deputies respond to complaints originating from citizens who report suspicious activity and leads and/or arrests made by patrol deputies. Investigators focus on crimes involving the sale, possession, and distribution of illicit drugs and cases involving seizures of property.

- Community Oriented Policing Unit: Deputies target issues that can negatively impact the quality of life for citizens. Deputies tailor their enforcement to address problems they are specifically working on, allowing them to develop multifaceted responses to complex issues.

- Crime Prevention Unit: This unit focuses on community outreach regarding crime prevention techniques, current trends, and prevention education.

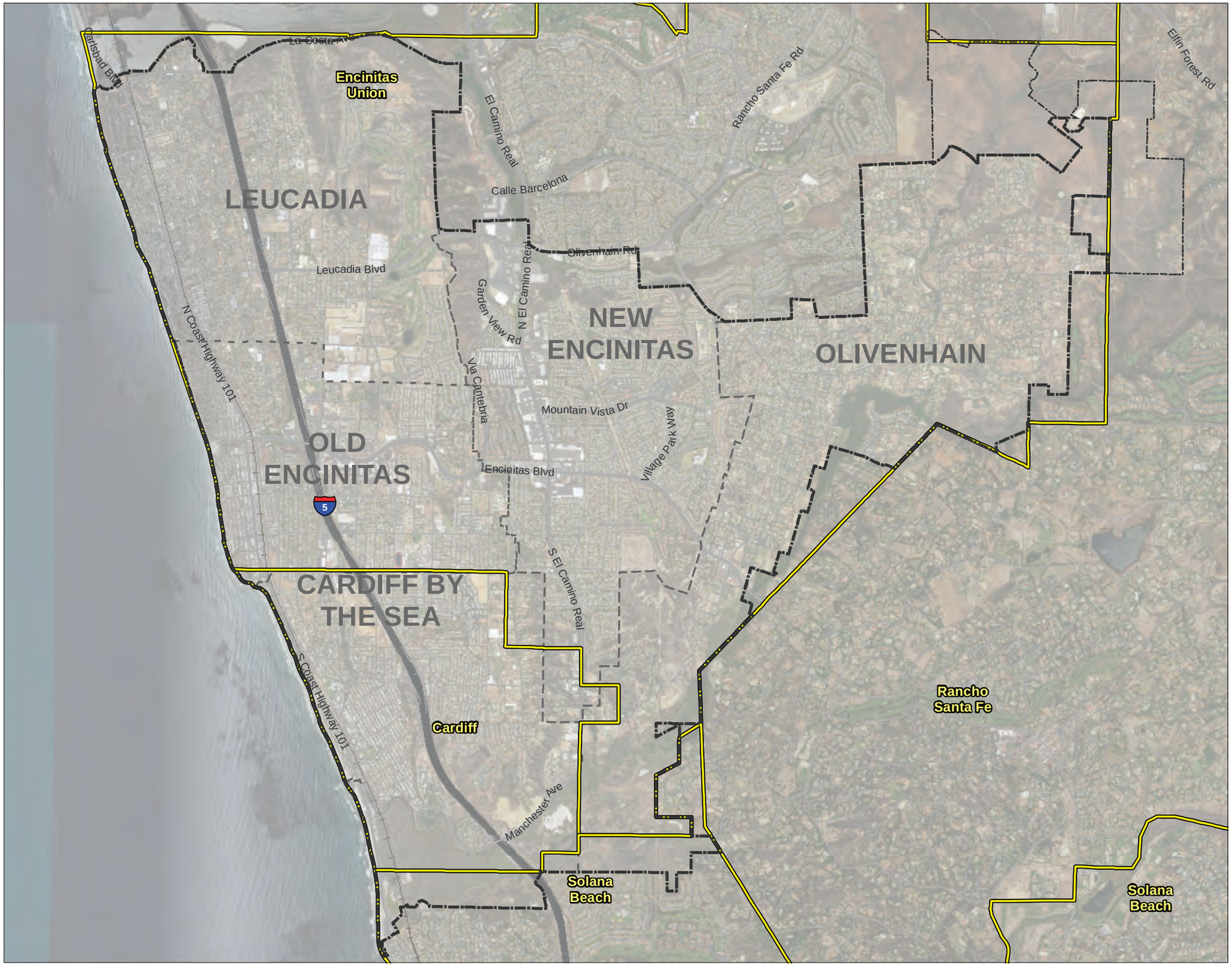
The Encinitas Station currently staffs 42 police officers and 12 additional personnel. The Encinitas Station has 15 patrol vehicles, 3 traffic enforcement vehicles, 4 detective vehicles, 4 Community Oriented Policing and Problem Solving (COPPS) vehicles, and 5 bicycles.

According to the Sheriff's Department, response time averages for the 2013/2014 fiscal year were as follows: Priority 1 - 6.0 minutes; Priority 2 - 10.9 minutes; Priority 3 - 16.1 minutes; Priority 4 - 45.8 minutes. Although population has increased in the City over the last 12 years, Sheriff Department staffing has remained the same. There are no current plans to increase staffing levels or construct new facilities within the City.

4.12.1.3 Schools

The Encinitas Unified School District (EUSD) consists of nine elementary schools, six of which are located within the jurisdictional boundary of the City. The nine elementary schools in EUSD feed into the secondary schools in the San Dieguito Union High School District (SDUHSD) which serves all middle and high school students from the City. The Cardiff School District (CSD) also services elementary school students. Figure 4.12-2 shows the boundary of the elementary school districts and Table 4.12-1 shows the enrollment capacity of the school districts within the City. Table 4.12-2 provides a list of the schools serving the City with enrollment in the 2014–2015 school year and enrollment capacity.

Image source: USDA FSA (flown June 2014)



City Limits
Sphere of Influence
Community Area Boundaries
Elementary School Districts

0 Miles 0.5

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FIGURE 4.12-2
Elementary School District Boundaries

Table 4.12-1
School Districts Serving the City of Encinitas

School District	2014/15 Enrollment	Total Maximum Enrollment Capacity
Encinitas Unified School District (EUSD)	5,544	6,655
Cardiff School District (CSD)	747	920
San Dieguito Unified High School District (SDUSD)	10,084	13,190

Table 4.12-2
Future Enrollment Capacity of Schools in Encinitas

School	School District	2014/15 Enrollment	Total Maximum Enrollment Capacity	Future Enrollment Capacity
Capri Elementary School	EUSD	705	770	65
El Camino Creek Elementary School	EUSD	705	1,051	346
Flora Vista Elementary School	EUSD	428	624	196
La Costa Heights Elementary School	EUSD	703	854	151
Mission Estancia Elementary School	EUSD	541	606	65
Ocean Knoll Elementary School	EUSD	590	674	84
Olivenhain Pioneer Elementary School	EUSD	667	805	138
Park Dale Lane Elementary School	EUSD	536	633	97
Paul Ecke Central Elementary School	EUSD	569	638	69
Cardiff Elementary School	CSD	366	400	34
Ada W. Harris Elementary School	CSD	381	520	139
Oak Crest Middle School	SDUHSD	849	1,140	291
Diegueño Middle School	SDUHSD	948	1,335	387
Canyon Crest Academy	SDUHSD	1,812	see below*	--
La Costa Canyon High School	SDUHSD	2,018	not available	--
San Dieguito High School Academy	SDUHSD	1,632	1,815	183

EUSD = Encinitas Unified School District
CSD = Cardiff School District
SDUHSD = San Dieguito Union High School District

The enrollment numbers for CSD were received from the superintendent of CSD, who also stated that the district has no plans or foreseeable need to expand facilities. Likewise, based on existing and future projected enrollment, EUSD does not have plans for new or expanded educational facilities within the City or serving residents of the City. *For SDUHSD, the Executive Director of Facility Planning Services indicated that Canyon Crest Academy most likely will be expanding its capacity to 2,716. It is unknown when construction would occur. Therefore, the total maximum enrollment capacity reflects the current status of each district's facilities and does not account for additional asset inventory capacity.

Based on the 2010 Final Existing Conditions Report, Chapter 8 Public Facilities and Services, EUSD has approximately 1,100 seats for future growth. In addition, EUSD has the title on a 10-acre parcel, which has interim improvements for ag-education. The potential number of students that can be accommodated at this site, based on acreage, is approximately 500 to 750 students. However, as also discussed in the Existing Conditions

Report and as reflected in SANDAG forecasts, student enrollment is projected to decline over the next five years.

4.12.1.4 Library Services

The County of San Diego operates 33 branches, two of which are within the City—the Cardiff branch and the Encinitas branch (Table 4.12-3). These branches provide computers, books, media, magazines, displays, programs, and events for diverse customers of all ages who use the library. The Encinitas Library community room and computer lab is maintained by the City. Both libraries use their community rooms to provide a variety of informative and free programs for visitors of all ages.

Table 4.12-3
Libraries Serving the City of Encinitas

Library	Square Footage	Number of Items	Service Area (square miles)	Hours of Operation
Encinitas Branch 540 Cornish Drive Encinitas, CA 92024	26,798	94,159	13.32	M-Th: 9:30-8 Fri-Sat: 9:30-5 Sun: Noon-5
Cardiff Branch 2081 Newcastle Avenue Cardiff, CA 92007	6,884	33,412	6.24	M-Tu: 9:30-6 W-Th: 9:30-8 F-Sat: 9:30-5 Sun: closed

The Cardiff branch was expanded in 2011 to include a children's area, community room, and an exterior patio. The library was expanded from 5,997 square-feet to 6,884 square feet. As shown in Table 4.12-3, there is currently a total of 33,682 square feet of library facilities serving the City.

4.12.1.5 Recreation Facilities

An ideal park and open space system is composed of different types of parks, each offering unique recreational opportunities. Separately, each type of park may serve only one function, but collectively the park system will serve the entire range of community needs. This section provides an overview of Encinitas' existing parks and open space system, including local, county, State and privately owned and maintained parks and open spaces.

The City's park system is composed of a variety of recreation amenities that provide opportunities for both passive and active recreation, including parks, beaches, open spaces, playgrounds, sports fields, a dog park, and community amenities such as the Encinitas Ranch Golf Course and the Encinitas Community and Senior Center. In addition, Encinitas has 40.5 miles of multi-use hiking, biking, and equestrian trails.

The City of Encinitas Parks and Recreation Department is comprised of two operating divisions: Parks and Beaches and Recreation. The Department is responsible for a wide range of services for the City including:

- Recreational, educational and sports programs and services for youth, teens, adults and senior citizens
- Citywide special events such as the Holiday Parade, Spring Egg Hunt, Pet Health Expo, Summer Concerts, Movies in the Park, and the Moonlight Beach Fest.
- Park, beach and recreational trail maintenance, and streetscape maintenance
- Animal control services

a. City Parks and Open Space System

Encinitas' system of parks and open spaces includes the following park categories.

Mini-Parks

Mini-parks are small, specialized park facilities that are often designed to serve a specific group, such as seniors or young children. Mini-park amenities may include park benches or small play lots. Encinitas' mini-parks include the Leucadia Roadside, Mildred MacPherson, and Wiro parks. Encinitas' existing mini-parks do not have parking facilities.

The Encinitas General Plan identifies mini-parks as those up to one acre in size. Mini-parks are intended to serve residents living within approximately a one-half mile of the park. The General Plan specifies that mini-parks should be located near higher density residential development in urbanized areas, where acquisition of larger park parcels is unlikely.

Neighborhood Parks

Neighborhood parks frequently include areas for active and passive recreational uses and include a variety of facilities such as play areas, picnic sites, and athletic fields. Encinitas' existing neighborhood parks are between approximately 2.5 and 4.5 acres in size, and are intended to provide convenient access to residents living within one mile of the park. Encinitas' neighborhood parks include Hawk View, Leucadia Oaks, Cottonwood Creek, Las Verdes, Encinitas Viewpoint, Glen, Orpheus, Scott Valley and Sun Vista parks. Encinitas Viewpoint, Orpheus, and Sun Vista parks have off-leash dog hours on certain days of the week.

Community Parks

Community parks support both active and passive recreation and provide an array of facilities and amenities. Existing community parks in Encinitas are between 5 and 15 acres in size. These parks are often more highly developed than neighborhood parks and suited for intense recreational uses such as citywide events and league and community sports practice and competition. Encinitas community parks include Oakcrest Park and Cardiff, Ecke, and Leo Mullen Sports Parks.

Special Use Parks

Special use parks are developed for a specific type of use, as opposed to neighborhood or community parks that support multiple uses. Special use parks often serve the entire community and enjoy regular, intensive use. Special use facilities include stand-alone recreation facilities not located within larger parks, such as golf courses, community centers, or sports complexes. Encinitas' special use parks include Encinitas Community Park; Encinitas Ranch Golf Course, which is owned by the City and privately operated and maintained; Little Oaks Equestrian Park in Olivenhain; Mountain Vista Trail/off-leash dog area; and the Encinitas Community and Senior Center at Oak Crest Park.

The Encinitas Community and Senior Center is an approximately 39,000-square-foot building that includes a banquet hall, kitchen, gymnasium/auditorium, and various activity and meeting rooms that support a range of activities offered for toddlers and young children, youth and teens, adults, seniors and multiple ages. Classes and activities include tiny tot arts and crafts, computer classes for seniors, dance lessons, competitive sports leagues, and daily open gym hours for youth, adults, and seniors.

City Beaches

The City of Encinitas owns or maintains a number of beaches, beach access areas, and related facilities. Beaches, leased from California State Parks, are operated and maintained by the City including Beacon's Beach, Grandview Beach, and Moonlight Beach. The City recently renewed its agreement with the State to lease and maintain these beaches through 2030. Encinitas' beaches operated and maintained by the State include San Elijo and Cardiff State beaches.

Open Space

The City owns and/or maintains approximately 81.52 acres of open space land. Open space areas include Indian Head Canyon and properties along Saxony Drive. Some areas have habitat value or have the potential to be managed for the benefit of wildlife. However, open space areas are used primarily for passive recreation and are currently managed to minimize fire hazard and the spread of invasive vegetative species.

b. Regional Parks and Beaches

Regional parks and beaches are developed parks, beaches, and natural open spaces that serve residents of Encinitas and surrounding communities, as well as visitors to the greater San Diego region. Regional parks and beaches are owned or managed by entities other than the City of Encinitas, including California State Parks, San Diego County, and/or private landholders. The sizes of regional parks vary, as do their location relative to major population centers. Regional parks and beaches in Encinitas include the San Elijo Lagoon Ecological Preserve; the San Diego Botanic Garden; San Elijo, Cardiff, and Seaside State Beaches; Magdalena Ecke County Park; and the Manchester Preserve, owned and managed as a habitat mitigation bank by the Center for Natural Lands Management.

The San Elijo Lagoon Ecological Preserve is one of the few remaining wetlands in San Diego County. The Preserve is an example of a natural area that is largely undeveloped and managed primarily for its natural resource value, and secondarily for recreational use. San Diego County maintains five miles of trails within the Preserve and a well-visited nature center located on the north side of the lagoon in Cardiff.

c. Recreational Trails

Greenbelts and trails are linear open spaces that provide trail corridors and/or green buffers within neighborhoods and communities. Greenbelts and trails typically follow features such as streets, abandoned railroad rights-of-way, power lines, or waterways. These corridors often contain hard-surfaced or soft-surfaced trails, along with amenities such as trailheads viewpoints, seating areas, and interpretive displays. They provide public access to natural features, preserve open space, and can support trail-related recreation and transportation. These corridors may serve specific neighborhoods, the entire City, and the North County region as well.

The City currently has 40.5 miles of developed trails and plans to develop an additional 40 miles of trails and pedestrian connections throughout the City. City trails provide pedestrian, bicycle, and/or equestrian access to undeveloped open spaces such as Indian Head Canyon and Manchester Preserve. The Olivenhain community enjoys an extensive network of trails relative to other parts of the City. The San Elijo Lagoon Ecological Preserve includes approximately five miles of trails managed by the County of San Diego, which serve City residents and visitors. In addition, Encinitas residents have access to Rancho Santa Fe's well-developed trail system.

d. Overall Parks and Recreation Facilities

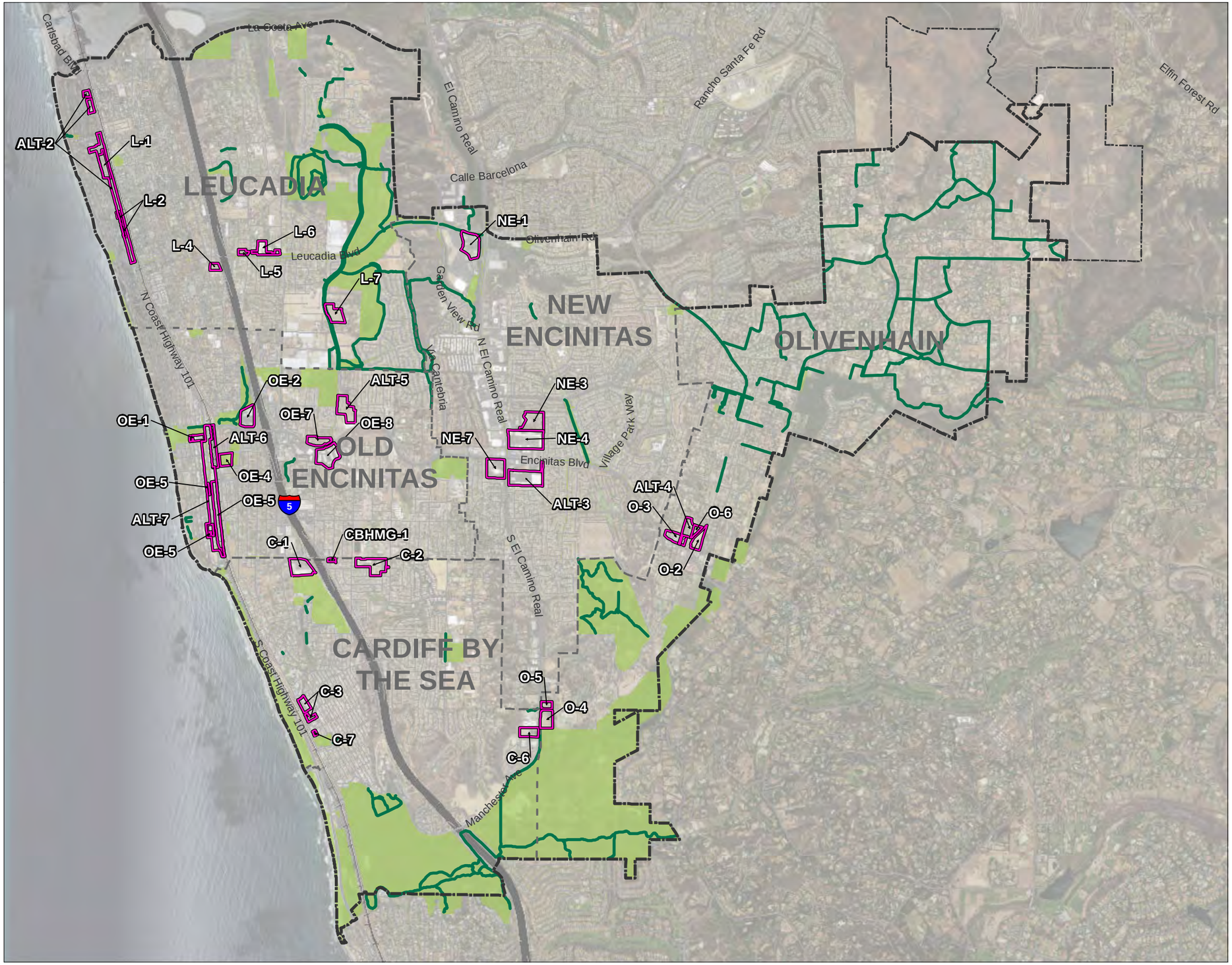
Figure 4.12-3 illustrates the City's existing parks, open space, and trails system. Table 4.12-4 includes detail of parks and open spaces throughout the City.

Table 4.12-4
City of Encinitas Existing Parks and Open Space

Category of Park/Open Space	Number of Sites	Total Acreage
Viewpoints	8	1.31
Mini-Parks	3	2.14
Neighborhood Parks	9	45.43
Community Parks	4	47.17
Special Use Parks	5	229.88
City Beaches	7	45.18
Open Space	3	81.52
Subtotal		**452.63**
State and County Lands		861.55
Total		**1,314.18**

SOURCE: City of Encinitas 2015e.

Image source: USDA FSA (flown June 2014)



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FIGURE 4.12-3

City of Encinitas Parks, Open Space and Trails System

As shown in Table 4.12-4, there is a total of 1,314.18 acres of parks throughout the City including those owned, operated, and maintained by San Diego County and California State Parks. General Plan Policy RE-1.5 requires a minimum of 15 acres of recreation land for each 1,000 population for the entire community. Based on the current 2014 U.S. Census estimated population of the City's 61,518 residents, a total of approximately 923 acres would be required to meet the standard. Thus, current recreational facilities meet the needs of the City.

4.12.2 Regulatory Framework

4.12.2.1 State

a. Fire Protection

The California Fire and Building Codes address general and specialized fire safety requirements for buildings. Topics addressed in the code include, but are not limited to, fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, and industrial processes.

b. Schools

Senate Bill (SB) 50 created various methods of generating revenue to pay for school construction and remodeling. These methods consist of State school bond funds, local school bonds, and developer fees. There are three levels of developer fees: Level I, Level II, and Level III. Level I fees are set by law, but can be adjusted for inflation. Level II fees require that developers pay for the entire local share of construction costs, which is 50 percent of total construction costs. Level II fees may be imposed by a school district on a yearly basis, but only if certain conditions are met. Level III fees require developers to pay for 100 percent of construction costs, and are imposed if the State is no longer allocating bond funds. SB 50 stipulates that if a school district conducts a School Facilities Needs Analysis and meets certain other requirements, it may impose a statutory developer fee that may be significantly higher than the previously permitted.

4.12.2.2 Local

a. General Plan/Local Coastal Program

Pertinent General Plan goals and policies related to the provision of adequate public services are listed below in Table 4.12-5.

Table 4.12-5 Goals and Policies Related to Public Services	
Goal/Policy	Description
City of Encinitas General Plan Public Safety Element	
Goal 1	Public health and safety will be considered in future Land Use Planning
1.8	New residential and commercial construction shall provide for smoke detector and fire sprinkler systems to reduce the impact of development on service levels.
1.9	Adequate safety service levels shall be maintained and provided for by new development.
1.10	The public safety program shall provide for a response plan that strives to reduce life and property losses through technology, education, training, facilities and equipment.
1.11	The public safety system shall provide standards and level of service guidelines that assure a quality of life and protection of life and property from preventable losses.
1.14	Where development creates the need for new public safety services and/ or equipment, that development shall be responsible for the cost of such services/equipment.
1.16	The City and its service districts and agencies shall maintain adequate levels of staffing, materials and equipment to assure timely response to demands for public safety services.
City of Encinitas General Plan Recreation Element	
Goal 1	The maintenance of the open space resources in the Planning Area will continue to be emphasized.
1.2	Consider the enactment of a "Quimby Ordinance" to insure that new residential development is provided with open space/recreational amenities. In addition, explore all other available funding resources and alternatives for acquisition and development of park and open space lands.
1.3	Enforce local laws regarding the vandalism of park property and incorporate citizen involvement into the program through the “neighborhood watch" programs and other community efforts.
1.5	Provide a minimum of 15 acres of local recreational area for each 1,000 populations for the entire community. This area should be devoted to neighborhood and other close- at-hand recreation facilities, community parks, and passive open space in undeveloped preserves and wilderness areas. This policy shall not be construed to reduce the minimum standards established under this Element for provision of mini, neighborhood, community, or other park land based on population or service distance.
1.6	Establish mini- parks and play lots in high density areas where larger parks are inaccessible or impractical to provide, and only when the provision of neighborhood parks to serve local neighborhood park needs is not possible.
1.7	Provide a neighborhood park within convenient, and where possible, walking distance for all urban area residents.
1.9	Develop parks in conjunction with. Schools wherever possible and encourage joint use of facilities.
1.11	Develop an open space program that will link the various communities together with parks, recreation/pedestrian access and natural visual corridors.
Goal 4	A citywide system of parks which combine established standards and community desires shall be established and maintained.
4.3	Neighborhood parks should be accessible by pedestrians living in the immediate area.

Table 4.12-5 Goals and Policies Related to Public Services	
Goal/Policy	Description
City of Encinitas General Plan Land Use Element	
Goal 2	The City should manage slow, orderly growth in accordance with a long-term plan which protects and enhances community values.
2.3	Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services.
2.10	Development shall not be allowed prematurely, in that access, utilities, and services shall be available prior to allowing development.
SOURCE: City of Encinitas 1989, amended 2014.	

b. Municipal Code

Fire Prevention (Title 10)

The City adopted the 2012 International Fire Code and the 2013 California Fire Code as the Fire Code of the City of Encinitas (Municipal Code Section 10.04.020).

Building and Construction (Title 23)

The City has adopted a Fire Mitigation Fee (Municipal Code Section 23.92) as a means to implement the goals of the Public Safety Element (PSE) of the City's General Plan. Specifically, fees are assessed and collected during the subdivision or building permit process to finance the cost of additional fire protection facilities or equipment necessitated by the new development (Municipal Code Section 23.92.010).

In order to meet the specifications of the City's recreational space and facilities standards and to implement the goals and objectives of the Recreation Element of the General Plan, new development is required to offer land dedication or pay in-lieu fees and park improvement fees for park and recreation purposes. The combined dedication/in-lieu fee and park improvement fee is referred to as the Parkland Acquisition and Improvement Fee (Municipal Code Section 23.98), which funds a variety of park programming needs.

4.12.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to public services would be significant if implementation of the HEU would result in any of the following:

1. Promote growth patterns resulting in the need for and/or provision of new or physically altered public facilities (i.e., fire protection/emergency services, police protection, schools, or libraries) in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts;

2. Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated; or

3. Necessitate the construction or expansion of recreational facilities in order to maintain performance objectives and thereby would result in an adverse physical effect on the environment?

4.12.4 Methodology

The impact analysis in the following subsections evaluates: (1) whether the proposed project would result in the need for substantial alterations or expansions to existing public services or facilities (e.g., new fire stations or parks) or the construction of new facilities; and (2) if the expansion or construction of new facilities necessitated by the project would result in environmental impacts.

4.12.4.1 Sources

Public services and recreation information was acquired through consultation with the school districts serving the City, other service providers, and City staff, along with secondary sources, such as the City of Encinitas Final Existing Conditions Report (2010).

4.12.4.2 Future Project Implementation

The adopted City of Encinitas General Plan contains goals and policies relative to the provision of adequate services and park and recreational facilities to serve future demand. Additionally, the Municipal Code requires the payment of fire mitigation and park fees by development. The City would continue to review project applications for service and facility availability, applicable requirements, and require specific conditions as part of the approval process. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process. Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone.

The impact analysis below describes the type and magnitude of the potential environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential result to impacts associated with increased demand for the provision of public services and facilities. The analysis in the following section identifies the potential need for increased services, the potential for impacts resulting from the construction of new facilities and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on public services, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.12.5 Issue 1a: Fire Service

Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered fire emergency facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?

4.12.5.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Buildout of the housing sites would result in higher density housing and new mixed-use development in certain areas of the City, resulting in higher population concentrations within these redeveloped neighborhoods.

Buildout of the housing sites is anticipated to occur over a 20+ year period. Future development projects would be required to adhere to General Plan goals and policies as well as applicable development regulations. Consistent with General Plan policies PSE 1.9, 1.11, 1.14, and 1.16, new development must assure that adequate levels of service are maintained. Additionally, Title 23 of the City's Municipal Code requires the payment of fire mitigation fees as a condition of approval of each individual development project. Fees are determined by the Fire Chief and once collected are used to provide capital facilities and equipment for fire prevention and control, to include station construction, station expansion and fire apparatus acquisition (Municipal Code Section 23.92.040).

While the HEU does not specifically propose the construction of new housing or other development, it can be assumed that future development of housing sites would increase the demand on existing fire and emergency services. All future projects would be required to provide a will-serve letter from the EFD in conjunction with their application to ensure adequate services and utilities are available at the time they are proposed. Therefore, at this program-level of review, the HEU would not result in a need for expanded or newly constructed facilities, and impacts associated with fire/emergency services would be less than significant. Should new facilities be required to be constructed in the future, each would undergo site-specific environmental analysis, as applicable.

b. Housing Strategy Summaries

Housing strategies 1 – Ready Made (RM), 2 – Build-Your-Own (BYO), or 3 – Modified Mixed-Use Place (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.12.5.2 Significance of Impacts

No new or expanded emergency response facilities are required in conjunction with the HEU. General Plan conformance, as well as the implementation of the regulatory fire mitigation fee pursuant to Title 23 of the City's Municipal Code assure that future projects maintain adequate levels of service. At this program-level, impacts would be less than significant.

4.12.6 Issue 1b: Police Service

Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered police protection facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?

4.12.6.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Buildout of the HEU would result in additional residents within the City, resulting in higher population concentrations within these redeveloped neighborhoods.

Buildout of the housing sites is anticipated to occur over a 20+ year period. Future development projects would be required to adhere to General Plan goals and policies as well as applicable development regulations. Consistent with General Plan policies PSE 1.9, 1.10, 1.11, 1.14, and 1.16, new development would be required to assure that adequate levels of service are maintained.

While the HEU does not specifically propose the construction of new housing or other development, it can be assumed that future development of housing sites would increase the demand on existing police services. Through compliance with General Plan policy, the City must assure that adequate police services are available to serve future development. At this program-level of review, the HEU would not result in a need for expanded or newly constructed facilities, and impacts associated with police services would be less than significant. Should new facilities be required to be constructed in the future, each would undergo site-specific environmental analysis, as applicable.

b. Housing Strategy Summaries

Housing strategies 1 (RM), 2 (BYO), or 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.12.6.2 Significance of Impacts

No new or expanded police facilities are required in conjunction with adoption of the HEU. General Plan conformance would assure adequate levels of service are available in conjunction with future development. At this program-level, impacts would be less than significant.

4.12.7 Issue 1c: Schools

Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered school facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?

4.12.7.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. The increase in residential uses associated with buildout of the housing sites would generate new students, and therefore, the HEU has the potential to increase demand on existing school facilities. Tables 4.12-6, 4.12-7, and 4.12-8 provide a breakdown of potential new student generation based on each housing strategy.

Table 4.12-6
Student Generation Within School Districts Serving the City of Encinitas
Housing Strategy 1 (RM)

Housing Site	Proposed Residential Yield	EUSD	SDUHSD	CSD	Proposed Student Generation[1] EUSD	SDUHSD	CSD
C-2	317		X	X		94.8	53.7
C-3	97		X	X		29.1	16.5
C-7	11	X	X		2.2	3.3	
L-1	126	X	X		25.2	36.0	
L-2	43	X	X		8.6	12.9	
L-4	57	X	X		11.4	17.1	
L-5	51	X	X		10.2	15.0	
L-6	164	X	X		32.8	48.0	
NE-4	378	X	X		75.6	113.4	
O-2	96	X	X		19.2	28.8	
O-5	48		X	X		14.1	8.0
O-6	38	X	X		7.6	11.4	
OE-1	46	X	X		9.2	12.3	
OE-4	80	X	X		16	24.0	
OE-5	243	X	X		48.6	72.9	
OE-7	135	X	X		27.0	40.2	
Total	**1,930**				**293.6**	**573.3**	**78.2**

[1]Generation rates: SDUHD = 0.3/dwelling unit; EUSD = 0.20/dwelling unit; CSD = 0.17/dwelling unit
EUSD = Encinitas Unified School District
SDUHSD = San Dieguito Union High School District
CSD = Cardiff School District

Table 4.12-7
Student Generation Within School Districts Serving the City of Encinitas
Housing Strategy 2 (BYO)

Housing Site	Proposed Residential Yield	EUSD	SDUHSD	CSD	Proposed Student Generation[1] EUSD	SDUHSD	CSD
C-2	317		X	X		95.1	53.9
L-1	126	X	X		25.2	37.8	
L-7	60	X	X		12.0	18.0	
NE-1	188	X	X		37.6	56.4	
NE-3	300	X	X		60.0	90.0	
NE-7	181	X	X		36.2	54.3	
O-2	96	X	X		19.2	28.8	
O-4	80	X	X		16.0	24.0	
O-5	48		X	X		14.4	8.2
OE-2	145	X	X		29.0	43.5	
OE-7	90	X	X		18.0	27.0	
OE-8	222	X	X		44.4	66.6	
Total	**1,853**				**297.6**	**555.9**	**62.1**

[1]Generation rates: SDUHD = 0.3/dwelling unit; EUSD = 0.20/dwelling unit; CSD = 0.17/dwelling unit
EUSD = Encinitas Unified School District
SDUHSD = San Dieguito Union High School District
CSD = Cardiff School District

Table 4.12-8
Student Generation Within School Districts Serving the City of Encinitas
Housing Strategy 3 (MMUP)

Housing Site	Proposed Residential Yield	EUSD	SDUHSD	CSD	Proposed Student Generation		
					EUSD	SDUHSD	CSD
C-1	187		X	X		56.1	31.8
C-2	317		X	X		95.1	53.9
C-6	138	X	X		27.6	41.4	
L-7	60	X	X		12.0	18.0	
CBHMG-1	23		X	X		6.9	3.9
ALT 2	309	X	X		61.8	92.7	
NE-1	188	X	X		37.6	56.4	
NE-7	181	X	X		36.2	54.3	
ALT 3	291	X	X		58.2	87.3	
O-2	96	X	X		19.2	28.8	
O-3	97	X	X		19.4	29.1	
O-4	80	X	X		16.0	24.0	
ALT 4	186	X	X		37.2	55.8	
OE-1	46	X	X		9.2	13.8	
OE-4	80	X	X		16.0	24.0	
OE-7	135	X	X		27.0	40.5	
ALT 5	338	X	X		67.6	101.4	
ALT 6	93	X	X		18.6	27.9	
ALT 7	416	X	X		83.6	124.8	
Total	**3,216**				**547.2**	**978.3**	**89.6**

[1]Generation rates: SDUHD = 0.3/dwelling unit; EUSD = 0.20/dwelling unit; CSD = 0.17/dwelling unit
EUSD = Encinitas Unified School District
SDUHSD = San Dieguito Union High School District
CSD = Cardiff School District

As shown in Tables 4.12-6 through 4.12-8, buildout of the housing sites under each strategy would result in an increase in students within each school district. Capacity availability of each school was calculated by subtracting total availability in the district by current enrollment (see Table 4.12-1) and would be as follows: EUSD - 1,111 students; CSD - 173 students; SDUHSD - 3,106 students. Therefore, the school districts would be able to accommodate student generation under any of the proposed strategies.

New development would be subject to school impact fees in accordance with the provisions of SB 50. Pursuant to Section 65995(3)(h) of the California Government Code (SB 50), "the payment of statutory fees is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use or development of real property . . . ." The availability of space at existing schools and through implementation of the statutory fees, future projects must ensure adequate school services are available. Therefore, at this program-level of review buildout of the HEU would not result in a need for expanded or newly constructed facilities, and impacts associated with schools would be less than significant. Should new facilities be required to be constructed in the future, each would undergo site-specific environmental analysis, as applicable.

b. Housing Strategy Summaries

Housing strategies 1 (RM), 2 (BYO), or 3 (MMUP) would not result in any need to construct new facilities. Although the number of students generated under each strategy may differ, there would be no inherent differences in impacts among the housing strategies.

4.12.7.2 Significance of Impacts

No new or expanded school facilities are required in conjunction with the HEU. With payment of statutory fees, school impacts would be less than significant.

4.12.8 Issue 1d: Library Services

Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered library facilities in order to maintain service ratios, response times, or other performance objectives and the construction of which could cause significant environmental impacts?

4.12.8.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. The additional population from buildout of the HEU would increase the demand for library services.

Currently, the City has 33,682 square feet of library facilities (see Table 4.12-3) meeting its current needs. Buildout of any of the housing strategies could result in a need to construct additional library space to meet future demands. The County of San Diego would ultimately be responsible for improving the library system to accommodate growth within its service area. The San Diego County Library system has created a Strategic Plan that identifies goals and objectives of the Library System. Within this plan, goals are identified that involve financial management and fundraising strategies so that library facilities can be enhanced in the future. Additionally, though not a legally binding process or document, the Strategic Plan identifies the need to develop and implement a facilities plan, which would guide the construction of library facilities in the future. Therefore, at this program-level of review, the HEU would not result in a need for expanded or newly constructed facilities, and impacts associated with library services would be less than significant. Should new facilities be required to be constructed in the future, each would undergo site-specific environmental analysis, as applicable.

b. Housing Strategy Summaries

Housing strategies 1 (RM), 2 (BYO), or 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.12.8.2 Significance of Impacts

No new or expansion of library facilities are required in conjunction with the HEU. Impacts would be less than significant.

4.12.9 Issues 2 and 3: Recreation

Would the project have a substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered park and recreation facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives associated with recreation?

4.12.9.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Future development could contribute to the physical deterioration of community parks due to increased use from additional population generated by the buildout of the HEU, if adequate facilities are not available to serve the future demand.

Based on General Plan policy RE-1.5, there is a minimum requirement of 15 acres of recreation land for each 1,000 population for the entire community. Based on the current estimated 2015 City population, a total of 923acres of recreational land is required to serve existing residents. Under buildout of each of the strategies, the following total amounts of recreational land would be required: 1,000 acres (housing strategy 1 [RM]); 997acres (housing strategy 2 [BYO]); or 1,050 acres (housing strategy 3 [MMUP])[2]. Currently the City has 1,330.6 acres of parks and recreational space (see Table 4.12-4), which would meet the needs for all residents under any of the housing strategies.

In addition to the parkland standard, all new development must adhere to General Plan goals and policies and be required to provide parkland or in-lieu fees, as required by the Municipal Code. Consistent with General Plan policies RE 1.6, 1.7, and 4.3, all communities are required to assure adequate recreational opportunities to their residents. Therefore, the

[2]Assumes existing population + additional population of each housing strategy as stated in Tables 4.11-3 through 4.11-5.

HEU would not result in a need for expanded or newly constructed recreational facilities, and impacts would be less than significant.

b. Housing Strategy Summaries

Housing strategies 1 (RM), 2 (BYO), or 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.12.9.2 Significance of Impacts

No new or expansion of park/recreation facilities are required in conjunction with the HEU. Impacts would be less than significant.

4.13 Transportation/Traffic

The analysis in this section is based on the Traffic Impact Study Report for the City of Encinitas Housing Element. This report was prepared by Chen Ryan Associates in January 2016 and is included as Appendix N to this PEIR. The study area utilized in this analysis includes all of the Circulation Element roadways within the limits of the City, as well as certain roadways nearby within the cities of Carlsbad and Solana Beach, and unincorporated San Diego County.

4.13.1 Existing Conditions

4.13.1.1 Local Circulation System

In accordance with San Diego Traffic Engineers' Council and the Institute of Transportation Engineers (SANTEC/ITE) Guidelines (San Diego Regional Traffic Standards Task Force 2000), the study area includes all freeway segments, freeway ramp intersections, roadway segments, and intersections in which the proposed project would add 50 or more peak hour trips in either direction. City staff also requested additional intersections be added based on their knowledge of the current traffic operations throughout the City. The study area is shown in Figure 4.13-1, and includes the City as well as adjacent areas within the cities of Carlsbad and Solana Beach, and unincorporated San Diego County. Below is a brief description of the freeway facilities and each roadway within the study area. Refer to Appendix N for additional roadway characteristic details and intersection configurations.

a. Interstate 5

Interstate 5 (I-5) is a major north-south regional facility and provides access between the coastal cities of Oceanside, Carlsbad, Encinitas, Solana Beach, Del Mar, San Diego, as well as to Orange and Los Angeles counties to the north. Within the study area, I-5 has eight mixed-flow/general purpose lanes (four in each direction).[1] Two auxiliary lanes traverse between Manchester Avenue and Via de la Valle (one in each direction), one carpool lane between Via de la Valle and Manchester Avenue (NB direction) and one carpool lane between Lomas Santa Fe and Via de la Valle (SB direction). Access to Encinitas is provided via interchanges at La Costa Avenue, Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue.

[1]Although the segment between Manchester Avenue and Lomas Santa Fe is identified as having seven mixed-flow general purpose lanes, this freeway segment functions as an eight-lane segment due to the carpool lane terminating approximately 800 feet prior to the northbound off-ramp at Manchester Avenue as well as the auxiliary lane not being striped as such for approximately 1,800 feet north of Lomas Santa Fe.

Map Source: Chen Ryan

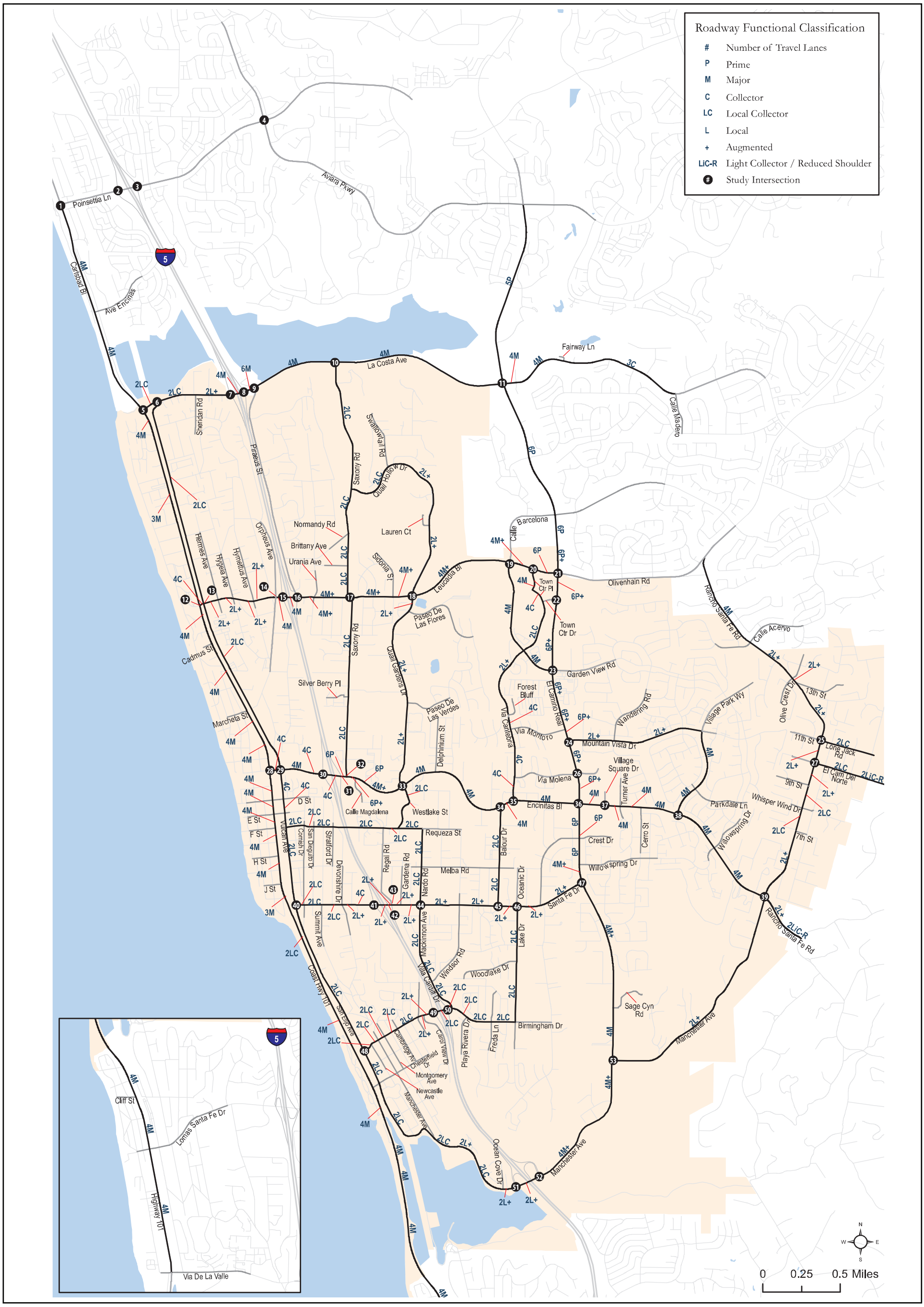


FIGURE 4.13-1

Existing Roadway Network

RECON

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b. North-South Roadways

North Coast Highway 101 extends from La Costa Avenue to Encinitas Boulevard. The majority of this roadway is a four-lane Major Roadway, with a brief three-lane (one northbound, two southbound lanes) Major Roadway segment just south of La Costa Avenue to Leucadia Boulevard. The median is raised from La Costa Avenue south to Leucadia Boulevard, then there is a two-way center left-turn lane from Leucadia Boulevard to Marcheta Street, and it is undivided south of Marcheta Street. The speed limit is 35 miles per hour (mph) and it includes a Class II bike lane and III (shared lane markings).

South Coast Highway 101 is a continuation of North Coast Highway 101, and extends from Encinitas Boulevard south to the City of Solana Beach boundary. This portion of Highway 101 is also primarily a four-lane Major Roadway, with a brief three-lane (two northbound lanes and one southbound lane) Major Roadway segment from West J to Swami's parking lot and a two-lane Collector segment from Swami's to San Elijo State Beach. The median varies, and the speed limit varies from 30 to 45 mph. A Class II bike lane is provided in parts with Class II (shared lanes) in the downtown area. Sidewalks vary from substantial in the downtown core to intermittent to southbound only.

North Highway 101 is a continuation of South Coast Highway 101, and extends from the City of Solana Beach limits south to Via de la Valle, and is a four-lane Major Arterial. This portion of Highway 101 is wholly within the City of Solana Beach. From the City of Solana Beach limit to Ocean Street, North Highway 101 has a painted median, sidewalk, and a 45 mph speed limit. From Ocean Street to Estrella Street, it has a raised median, sidewalks on both sides, and a 35 mph speed limit. A Class II bike lane is provided. Southbound transitions from Class II bike lanes to Class III (shared lanes) at Cliff Street. Sidewalks vary, with segments to include sidewalks on both sides, intermittently, southbound only and no sidewalks.

Vulcan Avenue is a two-lane undivided roadway between La Costa Avenue and Encinitas Boulevard. South of Encinitas Boulevard, Vulcan Avenue becomes a four-lane roadway with a painted median until reaching E Street. South of E Street, Vulcan Avenue transitions back to a two-lane undivided roadway until reaching its southern terminus at Santa Fe Drive. The posted speed limit along this roadway is 40 mph. Pedestrian facilities are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted intermittently on both sides of the roadway. Informal parking in the NCTD right-of-way exists adjacent to Vulcan Avenue in areas of Cardiff.

San Elijo Avenue is a two-lane undivided roadway with a 35 mph speed limit between Santa Fe Drive and Chesterfield Drive and a posted speed limit of 25 mph between Chesterfield Drive and its southern terminus at Manchester Avenue. Sidewalks are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking along San Elijo Avenue is permitted intermittently.

Saxony Road is a two-lane undivided roadway with a posted speed limit of 45 mph between La Costa Avenue and Quails Hollow Drive, and 30 mph between Quails Hollow Drive and Leucadia Boulevard. South of Leucadia Boulevard, Saxony Road is a two-lane

undivided roadway with a posted speed limit of 40 mph until reaching Silver Berry Place, where the posted speed limit becomes 25 mph until reaching Encinitas Boulevard. Sidewalks are present intermittently on both sides of the roadway but bicycle lanes are not present on either side.

Quail Hollow Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between Saxony Road and Quail Gardens Drive. Sidewalks are present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Quail Gardens Drive is a two-lane roadway with a landscaped raised median and posted speed limits of 35 and 40 mph between Quail Hollow Drive and Leucadia Boulevard, and Leucadia Boulevard and Encinitas Boulevard, respectively. Sidewalks are present on both sides of Quail Gardens Drive, between Quail Hollow Drive and Encinitas Boulevard. Parking is prohibited on both sides of the roadway and Class II bicycle lanes are present along both sides of the entire extent of Quail Gardens Drive, between Quail Hollow Drive and Encinitas Boulevard.

Westlake Drive is a two-lane undivided roadway with a posted speed limit of 25 mph along its entire extent between Encinitas Boulevard and Requeza Street. Sidewalks are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking is also intermittently permitted on both sides of the roadway.

Nardo Road is a two-lane undivided roadway with a posted speed limit of 25 mph between Requeza Street and Santa Fe Drive. Sidewalks are continuous on the east side of the roadway but intermittent on the west side. Signs indicating that Nardo Road is a bike route are present along the roadway. There are no bicycle facilities on either side but signs indicating that Nardo Road is a bike route are present along the roadway. Parking is intermittently permitted on both sides of the roadway.

MacKinnon Avenue is a two-lane undivided roadway with a posted speed limit of 35 mph, between Santa Fe Drive and Villa Cardiff Drive. Sidewalks are present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Villa Cardiff Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between MacKinnon Avenue and Birmingham Drive. Sidewalks are present only on the east side of the roadway but are not present on the west side roadway. Parking is permitted intermittently on both sides of the roadway, and no bike lanes are present.

Balour Drive is a two-lane undivided roadway with posted speed limits of 30 mph in the study area. Sidewalks are intermittently present on both sides of the roadway but bicycle lanes are not present on either side. Parking is intermittently present on both sides of the roadway.

Lake Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between Santa Fe Drive and Birmingham Drive. Sidewalks are present intermittently on both sides

of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Garden View Road is a four-lane roadway with a landscaped raised median and a posted speed limit of 40 mph between Leucadia Boulevard and El Camino Real. Sidewalks are present on the east side of the roadway but are intermittently present on the west side, between Leucadia Boulevard and Via Cantebria; however, south of Via Cantebria, sidewalks are present on both sides of the roadway. Class II bicycle facilities are present on both sides of the roadway between Leucadia Boulevard and El Camino Real. Parking is prohibited on both sides of the roadway along the entire extent of Garden View Road, between Leucadia Boulevard and El Camino Real.

Via Cantebria is a three-lane roadway (two-lane southbound, one-lane northbound) with a continuous-left-turn-lane median and a posted speed limit of 40 mph from Garden View Road to Forrest Bluff. The roadway transitions into a four-lane roadway with a continuous-left-turn-lane median between Forrest Bluff and Encinitas Boulevard. Sidewalks and Class II bicycle facilities are intermittently present on both sides of the roadway. Parking is prohibited on both sides of the roadway along the entire extent of Via Cantebria, between Garden View Road and Encinitas Boulevard.

El Camino Real is a six-lane roadway with a landscaped raised median between the City of Carlsbad boundary and Leucadia Boulevard. South of Leucadia Boulevard, El Camino Real is an eight-lane roadway with a landscaped raised median and a posted speed limit of 45 mph until reaching Garden View Road. South of Garden View Road, El Camino Real is a six-lane roadway with a landscaped raised median and a posted speed limit of 35 mph until reaching Encinitas Boulevard. South of Encinitas Boulevard, El Camino Real maintains the six-lane configuration, but the posted speed limit increases to 40 mph until reaching Santa Fe Drive. South of Santa Fe Drive, El Camino Real is a five-lane roadway (three-lane northbound, two-lane southbound) with a continuous-left-turn-lane median and a posted speed limit of 55 mph until reaching Sage Canyon Drive. South of Sage Canyon Drive, El Camino Real is a four-lane roadway with a continuous-left-turn-lane median and a posted speed limit of 55 mph until reaching its southern terminus at Manchester Avenue. Sidewalks are present intermittently on both sides of the roadway, within the study area. Class II bicycle lanes are present on both sides of the roadway and parking is prohibited on both sides.

Village Park Way is a four-lane roadway with a landscaped raised median and a posted speed limit of 40 mph between Mountain Vista Drive and Encinitas Boulevard. Sidewalks are present on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted on both sides of the roadway.

Rancho Santa Fe Road is a two-lane undivided roadway with a posted speed limit of 40 mph between Calle Acervo and Lone Jack Road. South of Lone Jack Road, Rancho Santa Fe Road continues as a two-lane roadway with a posted speed limit of 40 mph, but its median varies between a raised median, a continuous-left-turn-lane median, and an absence of median until reaching its terminus at Encinitas Boulevard. Sidewalks and

Class II bicycle lanes are intermittently present on both sides of the roadway, within the study area. Parking is prohibited on both sides of the roadway.

Manchester Avenue is a two-lane roadway with a continuous-left-turn-lane median and a posted speed limit of 40 mph between Encinitas Boulevard and approximately 160 feet before reaching Denk Lane. South of Denk Lane, Manchester Avenue is a two-lane undivided roadway with a posted speed limit of 40 mph until reaching El Camino Real. South of El Camino Real, Manchester Avenue curves and its orientation becomes east to west. Manchester Avenue, south of El Camino Real is a four-lane roadway with a painted median and a posted speed limit of 45 mph until reaching the I-5 NB on-ramp. West of the I-5 NB on-ramp, Manchester Avenue becomes a three-lane (one-lane eastbound, two-lane westbound) undivided roadway until reaching the I-5 SB off-ramp. West of the I-5 SB off-ramp, Manchester Avenue is a two-lane roadway with an intermittent continuous-left-turn-lane median until reaching its terminus at San Elijo Avenue. Sidewalks and Class II bicycle lanes are present intermittently on both sides of the roadway. Parking is permitted intermittently along Manchester Avenue within the study area.

c. East-West Roadways

La Costa Avenue is a two-lane undivided roadway with a posted speed limit of 40 mph between North Coast Highway 101 and I-5 SB on-off ramps. East of the I-5 SB on-off ramps, La Costa Avenue is a four-lane roadway with a painted median and no posted speed limit signs present until reaching the I-5 NB on-off ramps. East of the I-5 on-off ramps, La Costa Avenue is a four-lane roadway with a raised median and a posted speed limit of 55 mph until reaching El Camino Real. Sidewalks are present intermittently between North Coast Highway 101 and El Camino Real. Class II bicycle lanes are present on both sides of the roadway between North Coast Highway 101 and El Camino Real. Parking is prohibited along the entire extent of La Costa Avenue, within the study area.

Leucadia Boulevard is a two-lane roadway with a raised and continuous-left-turn lane median and a posted speed limit of 30 mph between North Coast Highway 101 and Orpheus Avenue. East of Orpheus Avenue, Leucadia Boulevard is a four-lane roadway until reaching the I-5 NB on-off ramps. East of the I-5 NB on-off ramps, Leucadia Boulevard is a five-lane (two-lane eastbound, three-lane westbound) roadway with a landscaped raised median and a posted speed limit of 40 mph until reaching Urania Avenue. East of Urania Avenue, Leucadia Boulevard changes from a five-lane roadway with a landscaped raised median to a four-lane roadway with a landscaped raised median but it keeps the same posted speed limit of 40 mph until reaching Quail Gardens Drive. East of Quail Gardens Drive, Leucadia Boulevard is a four-lane roadway with a landscaped raised median and a posted speed limit of 45 mph until reaching Town Center Place. East of Town Center Place, Leucadia Boulevard is a six-lane roadway with a raised median and a posted speed limit of 45 mph until reaching its terminus at El Camino Real. Sidewalks are present on both sides of the roadway as well as Class II bicycle lanes. Parking is prohibited on both sides of the roadway along the entire extent of Leucadia Boulevard.

Mountain Vista Drive is a three-lane roadway with a continuous-left-turn-lane and a painted median, as well as a posted speed limit of 45 mph between El Camino Real and Wandering Road. East of Wandering Road, Mountain Vista Drive is a two-lane roadway with a painted median that transitions into a continuous-left-turn-lane median until reaching Village Park Way. Sidewalks and Class II bicycle lanes are present on both sides of the roadway between El Camino Real and Village Park Way. Parking is permitted intermittently along Mountain Vista Drive between El Camino Real and Village Park Way.

Encinitas Boulevard is a four-lane roadway with an intermittent continuous-left-turn-lane and painted median until reaching Saxony Road. East of Saxony Road, Encinitas Boulevard is a six-lane roadway with a raised median until reaching the signalized intersection at Encinitas Town Country Shopping Center driveway. East of the Encinitas Town Country Shopping Center driveway, Encinitas Boulevard is a four-lane roadway with a continuous-left-turn-lane until reaching Quail Gardens Drive, where the roadway keeps the same lane configuration but the median changes intermittently between a continuous-left-turn-lane, a landscaped raised median, and a painted median. The posted speed limit is 40 mph from North Coast Highway 101 to Quail Gardens Drive, 45 mph from Quail Gardens Drive to Village Park Way, and 50 mph from Village Park Way to Rancho Santa Fe Road. This roadway has Class II bike lanes and parking is prohibited. Sidewalks are provided on both sides of the majority of this roadway, but there are intermittent gaps.

F Street is a two-lane undivided roadway with a posted speed limit of 25 mph between Vulcan Avenue and Cornish Drive. East of Cornish Drive, F Street becomes Requeza Street but it keeps the same two-lane undivided roadway configuration as well as the same posted speed limit of 25 mph until reaching Nardo Road. Sidewalks are not present on either side of the roadway along F Street but are intermittently present on both sides of the roadway along Requeza Street. Bicycle lanes are not present on either side of the roadway and parking is permitted intermittently on both sides of the roadway.

Santa Fe Drive is a two-lane undivided roadway with a posted speed limit of 35 mph between Vulcan Avenue and Rubenstein Avenue. East of Rubenstein Avenue, Santa Fe Drive varies between a two-lane and a three-lane (one-lane eastbound, two-lane westbound) roadway with a raised median and a posted speed limit of 35 mph until reaching the I-5 NB on-off ramps. East of the I-5 NB on-off ramps, Santa Fe Drive is a two-lane roadway with a continuous-left-turn-lane median and a posted speed limit of 35 mph until reaching its terminus at El Camino Real. Sidewalks and Class II bicycle lanes are present intermittently on both sides of the roadway. Parking is permitted intermittently on both sides of the roadway.

Birmingham Drive is a two-lane undivided roadway with posted speed limits of 30 and 35 mph between San Elijo Avenue and Playa Riviera, and between Playa Riviera and Lake Drive, respectively. Sidewalks are present intermittently on both sides of the roadway but bicycle lanes are not present on either side. Parking is permitted intermittently along Birmingham Drive within the study area.

Lone Jack Road is a two-lane undivided roadway with a posted speed limit of 40 mph between Rancho Santa Fe Road and its northern terminus at Lone Hill Lane. While

sidewalks and bike lanes are not present, a trail is located along a portion of this roadway. Parking is prohibited on both sides of the roadway.

El Camino Del Norte is a two-lane undivided roadway with a posted speed limit of 40 mph between Rancho Santa Fe Road and the County of San Diego boundary. Sidewalks and bicycle lanes are not present on either side of the roadway. Parking is prohibited on both sides of the roadway.

4.13.1.2 Existing Traffic Volumes and Level of Service

Roadway segment volumes and intersection turning movements were determined based on traffic counts taken in June 2015. To determine the current operations of roadway segments, intersections, freeway segments, freeway intersection capacity, and ramp meter conditions, the standards and thresholds of the overseeing jurisdiction were utilized.

The County of San Diego utilizes the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements - Transportation and Traffic (2011) to analyze traffic operations. The study area only includes roadway segments within the County and does not include intersections. Intersection operations are evaluated based on a Level of Service (LOS) analysis. The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and the motorist's perception of operations. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. The segments LOS is based on the average daily traffic (ADT).

The cities of Encinitas, Solana Beach, and Carlsbad as well as Caltrans utilize the SANTEC/ITE Guidelines. This analysis utilizes a LOS analysis to assess roadway segments, intersections, and freeway segments operations. As part of determining the LOS on area roadways, a volume to capacity (v/c) ratio is used that considers the ADT and capacity of each segment within the study area. The capacity is based on the roadway standards set by the jurisdiction. The minimum acceptable operating condition for freeway segments, roadway segments, and intersections is LOS D. For freeway ramp meters, Caltrans has established 15 minutes or less of delay per vehicle as the minimum acceptable operating condition. Below is additional information on the analysis of each type of roadway facility. Signalized freeway ramp intersections Intersecting Lane Volume (ILV) information is required to be completed per Caltrans procedures (Topic 406 of the Caltrans *Highway Design Manual).* The ILV analysis is included below for informational purposes and is not intended to be utilized in determining the significance of project impacts. Additional information regarding operating levels is provided below.

Roadways

The analysis of roadway segment level of service is based on the functional classification of the roadway, maximum capacity, roadway geometrics, and existing or forecasted ADT volumes. Standards for ascertaining roadway level of service vary by jurisdiction. The cities of Carlsbad and Solana Beach utilize the roadway segment LOS standards and thresholds from the SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego

Region. The unincorporated County of San Diego LOS standards are based on the County of San Diego Public Road Standards (County of San Diego 2012) and the City of Encinitas level of service analysis was performed by utilizing the City of Encinitas Public Road Standards (1991). The City aims to achieve LOS C based on the Encinitas Circulation Element Goal 1.2, but LOS D is considered acceptable for Circulation Element roadway segments in all jurisdictions within the project study area (see Appendix M for Circulation Element policy consistency analysis). Typically, the performance and level of service of a roadway segment is heavily influenced by the ability of the arterial intersections to accommodate peak hour volumes.

Intersections

The intersection analysis was completed for the highest traffic-generating housing strategy, which is housing strategy 3 - Modified Mixed Uses Places (MMUP). The intersection analysis was completed for both signalized and unsignalized intersections based on the HCM 2010 methods, which defines intersection level of service as a function of intersection control delay in terms of seconds per vehicle (sec/veh). For signalized intersections, the "average stopped delay per vehicle" is utilized. The stop-controlled unsignalized intersection analysis utilizes "average control delay." The delay for each of these analyses corresponds to a LOS rating. Similar to the roadway analysis, LOS A to LOS D represent acceptable levels and LOS E or LOS F represent unacceptable traffic flow.

Freeway Segments

Freeway level of service analysis is based upon procedures developed by Caltrans. The procedure for calculating freeway level of service involves estimating a peak hour V/C ratio. The V/C ratio corresponds to a LOS rating, again with LOS A to LOS D representing acceptable levels and LOS E to LOS F representing unacceptable traffic flow.

Freeway Ramp Intersection Capacity

Caltrans also requires a ramp intersection capacity analysis utilizing the ILV procedures as described in Topic 406 of the Caltrans *Highway Design Manual* (HDM). This analysis determines if the intersection would be under capacity, at capacity, or over capacity based on lane volume rates alone. This analysis does not consider the adjacent area operations affecting the ramp intersection and is just an additional validation tool. This analysis is just for informational purposes and is not utilized by either the City or Caltrans in determining impact significance (see Caltrans procedures identified in Topic 406 of the Caltrans *Highway Design Manual).*

Ramp Meters

Caltrans utilizes ramp meters to control the volume of traffic entering the freeway. Similar to intersection analysis, the analysis is based on the delay per vehicle at the ramp meter. However, the delay per vehicle is measured in minutes. Ramp metering delay represents how long the peak hour (ramp metering) would need to be extended in order to

accommodate the excess vehicles. A delay above 15 minutes at a ramp is considered unacceptable.

a. Roadway Segment Conditions

Existing roadway segment operations are summarized in Table 4.13-1 and shown in Figure 4.13-1. As summarized in Table 4.13-1, the following 19 roadway segments within the project study area currently operate at substandard level of service E or F, with 11 segments located in Encinitas, 2 located in Carlsbad, and 1 located in the unincorporated County of San Diego:

City of Encinitas

- South Coast Highway 101, between Swami's Parking and San Elijo State Beach – LOS F;
- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS E;
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS E;
- Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps – LOS F;
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F;
- Leucadia Boulevard, between Quail Gardens Drive and Garden View Road – LOS E;
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F;
- Encinitas Boulevard, between I-5 NB Ramps and Saxony Road – LOS F;
- Encinitas Boulevard, between Balour Drive and Via Cantebria – LOS F;
- South Rancho Santa Fe Road, between Manchester Avenue and City of Encinitas Limits – LOS E; and
- Birmingham Drive, between I-5 SB Ramps and I-5 NB Ramps – LOS F.

City of Carlsbad

- La Costa Avenue, between Piraeus Street and Saxony Road – LOS E; and
- La Costa Avenue, between Saxony Road and El Camino Real – LOS E.

County of San Diego

- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F.

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Carlsbad Blvd.	Poinsettia Lane to Avenida Encinas	4-Lane Major Arterial	Carlsbad	12,160	40,000	0.304	A
	Avenida Encinas to La Costa Avenue	4-Lane Major Arterial	Carlsbad	16,194	40,000	0.405	B
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	4-Lane Major Roadway	Encinitas	18,070	35,200	0.513	C or better
	600 feet south of La Costa Avenue to Leucadia Blvd	3-Lane Major Roadway (1 NB 2 SB)	Encinitas	17,378	26,400	0.658	C or better
	Leucadia Blvd to Cadmus Street	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
	Cadmus Street to Marcheta Street	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
	Marcheta Street to 660 feet south of Marcheta Street	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
	660 feet south of Marcheta Street to Encinitas Blvd	4-Lane Major Roadway	Encinitas	19,145	35,200	0.544	C or better
South Coast Highway 101	Encinitas Blvd to West D Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West D Street to West E Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West E Street to West F Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West F Street to West H Street	4-Lane Major Roadway	Encinitas	18,746	35,200	0.533	C or better
	West H Street to West J Street	4-Lane Major Roadway	Encinitas	20,337	35,200	0.578	C or better
	West J Street to Swami's Parking	3-Lane Major Roadway (2 NB 1 SB)	Encinitas	20,337	26,400	0.770	C or better
	Swami's Parking to San Elijo State Beach	2-Lane Local Roadway	Encinitas	20,550	14,000	1.468	**F**
	San Elijo State Beach to Chesterfield	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Chesterfield to Cardiff State Beach traffic signal	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Cardiff Beach State to Chart House traffic signal	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better
	Las Olas Mexican Restaurant to Solana Beach boundary	4-Lane Major Roadway	Encinitas	20,682	35,200	0.588	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
North Highway 101	Solana Beach boundary to West Cliff Street	4-Lane Major Arterial	Solana Beach	18,611	40,000	0.465	B
	West Cliff to Lomas Santa Fe	4-Lane Major Arterial	Solana Beach	18,611	40,000	0.465	B
	Lomas Santa Fe Drive to Via De La Valle	4-Lane Major Arterial	Solana Beach	17,056	40,000	0.426	B
Vulcan Avenue	La Costa Avenue to Leucadia Boulevard	2-Lane Local Roadway	Encinitas	3,621	14,000	0.259	C or better
	Leucadia Blvd to Encinitas Boulevard	2-Lane Local Roadway	Encinitas	6,221	14,000	0.444	C or better
	Encinitas Boulevard to D Street	4-Lane Collector	Encinitas	10,368	32,400	0.320	C or better
	D Street to E Street	4-Lane Collector	Encinitas	10,368	32,400	0.320	C or better
	E Street to Santa Fe Drive	2-Lane Local Roadway - Augmented	Encinitas	10,486	20,000	0.524	C or better
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	2-Lane Local Roadway	Encinitas	9,332	14,000	0.667	C or better
	Birmingham Drive to Chesterfield Drive	2-Lane Local Roadway - Augmented	Encinitas	9,332	20,000	0.467	C or better
	Chesterfield Drive to Manchester Avenue	2-Lane Local Roadway - Augmented	Encinitas	9,332	20,000	0.467	C or better
Saxony Road	La Costa Avenue to Quail Gardens Drive	2-Lane Local Roadway	Encinitas	3,137	14,000	0.224	C or better
	Quail Hollow Drive to Normtoy Road	2-Lane Local Roadway	Encinitas	2,858	14,000	0.204	C or better
	Normtoy Road to Brittany Avenue	2-Lane Local Roadway	Encinitas	2,858	14,000	0.204	C or better
	Brittany Avenue to Leucadia Boulevard	2-Lane Local Roadway	Encinitas	2,858	14,000	0.204	C or better
	Leucadia Boulevard to Silver Berry Place	2-Lane Local Roadway	Encinitas	8,973	14,000	0.641	C or better
	Silver Berry Place to Encinitas Boulevard	2-Lane Local Roadway - Augmented	Encinitas	8,973	20,000	0.449	C or better
Quail Hollow Drive	Swallow Tail Road to Saxony Road	2-Lane Local Roadway	Encinitas	3,235	14,000	0.231	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Quail Gardens Drive	Swallow Tail Road to Lauren Court	2-Lane Local Roadway - Augmented	Encinitas	3,235	20,000	0.162	C or better
	Lauren Court to Leucadia Boulevard	2-Lane Local Roadway - Augmented	Encinitas	3,235	20,000	0.162	C or better
	Leucadia Boulevard to Paseo De Las Flores	2-Lane Local Roadway - Augmented	Encinitas	7,897	20,000	0.395	C or better
	Paseo De Las Flores to Paseo De Las Verdes	2-Lane Local Roadway - Augmented	Encinitas	7,897	20,000	0.395	C or better
	Paseo De Las Verdes to Encinitas Boulevard	2-Lane Local Roadway - Augmented	Encinitas	7,897	20,000	0.395	C or better
Westlake Street	Encinitas Boulevard to Requeza Street	2-Lane Local Roadway - Augmented	Encinitas	9,688	20,000	0.484	C or better
Nardo Drive	Requeza Street to Melba Road	2-Lane Local Roadway	Encinitas	4,871	14,000	0.348	C or better
	Melba Road to Santa Fe Drive	2-Lane Local Roadway	Encinitas	4,871	14,000	0.348	C or better
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	2-Lane Local Roadway	Encinitas	5,413	14,000	0.387	C or better
Villa Cardiff Drive	MacKinnon Avenue to Windsor Road	2-Lane Local Roadway	Encinitas	5,413	14,000	0.387	C or better
	Windsor Road to Birmingham Drive	2-Lane Local Roadway	Encinitas	5,413	14,000	0.387	C or better
Garden View Road	Leucadia Boulevard to Via Cantebria	4-Lane Major Roadway	Encinitas	10,722	35,200	0.305	C or better
	Via Cantebria to El Camino Real	4-Lane Major Roadway	Encinitas	9,663	35,200	0.275	C or better
Town Center Place	Leucadia Boulevard to Town Center Place	4-Lane Collector (Not a CE)	Encinitas	14,817	32,400	0.457	C or better
	Town Center Place to Town Center Drive	4-Lane Collector (Not a CE)	Encinitas	14,817	32,400	0.457	C or better
Via Cantebria	Town Center Drive to Garden View Road	2-Lane Local Collector (Not a CE)	Encinitas	8,524	14,000	0.608	C or better
	Garden View Road to Forrest Bluff	3-Lane Collector (1 NB 2 SB)	Encinitas	13,715	24,300	0.564	C or better
	Forrest Bluff to Via Montoro	4-Lane Collector	Encinitas	13,715	32,400	0.423	C or better
	Via Montoro to Via Molena	4-Lane Collector	Encinitas	16,842	32,400	0.520	C or better
	Via Molena to Encinitas Boulevard	4-Lane Collector	Encinitas	16,842	32,400	0.520	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Balour Drive	Encinitas Boulevard to Melba Road	2-Lane Local Roadway	Encinitas	7,988	14,000	0.571	C or better
	Melba Road to Santa Fe Drive	2-Lane Local Roadway	Encinitas	7,988	14,000	0.571	C or better
Lake Drive	Santa Fe Drive to Woodlake Drive	2-Lane Local Roadway	Encinitas	6,565	14,000	0.469	C or better
	Woodlake Drive to Birmingham Drive	2-Lane Local Roadway	Encinitas	6,565	14,000	0.469	C or better
El Camino Real	Aviara Parkway to La Costa Avenue	5-Lane Prime Arterial (3 NB 2 SB)	Carlsbad	43,934	50,000	0.879	D
	La Costa Avenue to Calle Barcelona	6-Lane Prime Arterial	Carlsbad	34,929	60,000	0.582	B
	Calle Barcelona to Carlsbad boundary	6-Lane Prime Arterial	Carlsbad	34,929	60,000	0.582	B
	Carlsbad boundary to Leucadia Boulevard	6-Lane Prime Arterial – Augmented (3 NB 4 SB)	Encinitas	43,939	66,000	0.666	C or better
	Leucadia Boulevard to Town Center Drive	6-Lane Prime Arterial - Augmented	Encinitas	43,939	66,000	0.666	C or better
	Town Center Drive to Garden View Road	6-Lane Prime Arterial - Augmented	Encinitas	43,939	66,000	0.666	C or better
	Garden View Road to 331-339 El Camino Real	6-Lane Prime Arterial - Augmented	Encinitas	39,969	66,000	0.606	C or better
	331-339 El Camino Real to Via Montoro	6-Lane Prime Arterial - Augmented	Encinitas	39,969	66,000	0.606	C or better
	Via Montoro to Mountain Vista	6-Lane Prime Arterial - Augmented	Encinitas	39,969	66,000	0.606	C or better
	Mountain Vista to Via Molena	6-Lane Prime Arterial - Augmented	Encinitas	41,968	66,000	0.636	C or better
	Via Molena to Encinitas Boulevard	6-Lane Prime Arterial - Augmented	Encinitas	41,968	66,000	0.636	C or better
	Encinitas Blvd. to 213 S El Camino Real	6-Lane Prime Arterial	Encinitas	33,151	57,000	0.582	C or better
	213 S El Camino Real to Crest Drive	6-Lane Prime Arterial	Encinitas	33,151	57,000	0.582	C or better
	Crest Drive to Willowspring Drive	6-Lane Prime Arterial	Encinitas	33,151	57,000	0.582	C or better
	Willowspring Drive to Santa Fe Drive	4 Lane Major Roadway-Augmented	Encinitas	33,151	45,400	0.730	C or better
	Santa Fe Drive to Sage Canyon Drive	4 Lane Major Roadway-Augmented (3 NB 2 SB)	Encinitas	23,024	45,400	0.507	C or better
	Sage Canyon Drive to Manchester Avenue	4-Lane Major Roadway	Encinitas	23,024	35,200	0.654	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Village Park Way	Mountain Vista Drive to Parkdale Drive	4-Lane Major Roadway	Encinitas	6,341	35,200	0.180	C or better
	Parkdale Drive to Encinitas Boulevard	4-Lane Major Roadway	Encinitas	6,341	35,200	0.180	C or better
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	4-Lane Major Arterial	Carlsbad	17,363	40,000	0.434	B
	Calle Acervo/Avenida La Posta to Olive Crest Drive	2-Lane Local Roadway – Augmented	Encinitas	14,901	20,000	0.745	C or better
	Olive Crest Drive to 13th Street	2-Lane Local Roadway – Augmented	Encinitas	14,901	20,000	0.745	C or better
	13th Street to 11th Street	2-Lane Local Roadway - Augmented	Encinitas	14,901	20,000	0.745	C or better
	11th Street to El Camino Del Norte	2-Lane Local Roadway - Augmented	Encinitas	15,146	20,000	0.757	C or better
	El Camino Del Norte to 9th Street	2-Lane Local Roadway - Augmented	Encinitas	13,236	20,000	0.662	C or better
	9th Street to 8th Street	2-Lane Local Roadway	Encinitas	13,236	14,000	0.945	E
	8th Street to 7th Street	2-Lane Local Roadway	Encinitas	13,236	14,000	0.945	E
	7th Street to Encinitas Boulevard	2-Lane Local Roadway	Encinitas	13,236	20,000	0.662	C or better
Manchester Avenue	Manchester Avenue to Mira Costa College	4 Lane Major Roadway- Augmented	Encinitas	19,595	45,400	0.432	C or better
	Mira Costa College to I-5 NB On-Ramp	4 Lane Major Roadway- Augmented	Encinitas	19,595	45,400	0.432	C or better
	I-5 NB Ramps to I-5 SB Ramps	2-Lane Local Roadway - Augmented	Encinitas	26,567	20,000	1.328	F
	I-5 SB Ramps to Ocean Cove Drive	2-Lane Local Roadway - Augmented	Encinitas	7,598	20,000	0.380	C or better
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	2-Lane Local Collector	Encinitas	7,598	14,000	0.543	C or better
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	2-Lane Local Roadway - Augmented	Encinitas	7,598	20,000	0.380	C or better
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	2-Lane Local Collector	Encinitas	7,598	14,000	0.543	C or better
	Encinitas Boulevard to El Camino Real	2-Lane Local Collector – Augmented	Encinitas	5,989	20,000	0.299	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	2-Lane Local Roadway	Encinitas	11,888	14,000	0.850	D
	Vulcan Avenue to Sheridan Road	2-Lane Local Roadway	Encinitas	14,258	14,000	1.018	F
	Sheridan Road to I-5 SB Ramps	2-Lane Local Roadway	Encinitas	14,258	20,000	0.713	C or better
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Arterial	Carlsbad	25,817	40,000	0.645	C
	I-5 NB Ramps to Piraeus Street	5-Lane Major Arterial (2 EB 3 WB)	Carlsbad	36,550	41,667	0.877	D
	Piraeus Street to Saxony Road	4-Lane Major Arterial	Carlsbad	36,550	40,000	0.914	E
	Saxony Road to El Camino Real	4-Lane Major Arterial	Carlsbad	37,683	40,000	0.942	E
	El Camino Real to La Costa Towne Center traffic signal	4-Lane Major Arterial	Carlsbad	15,999	40,000	0.400	B
	La Costa Towne Center traffic signal to Fairway Lane	4-Lane Major Arterial	Carlsbad	15,999	40,000	0.400	B
	Fairway Lane to Calle Madero	3-Lane Collector6	Carlsbad	15,999	22,500	0.711	D

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Leucadia Blvd	North Coast Highway 101 to Vulcan Avenue	4-Lane Collector	Encinitas	12,188	32,400	0.376	C or better
	Vulcan Avenue to Hermes Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Hermes Avenue to Hygeia Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Hygeia Avenue to Hymettus Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Hymettus Avenue to Orpheus Avenue	2-Lane Local Roadway - Augmented	Encinitas	14,933	20,000	0.747	C or better
	Orpheus Avenue to I-5 SB Ramps	4-Lane Major Roadway	Encinitas	14,933	35,200	0.424	C or better
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway (2 EB 3 WB)	Encinitas	22,721	35,200	0.645	C or better
	Piraeus Street to Urania Avenue	4 Lane Major Roadway-Augmented	Encinitas	38,099	45,400	0.839	D
	Urania Avenue to Saxony Road	4 Lane Major Roadway-Augmented	Encinitas	38,099	45,400	0.839	D
	Saxony Road to Sidonia Street	4 Lane Major Roadway-Augmented	Encinitas	40,117	45,400	0.884	D
	Sidonia Street to Quail Gardens Drive	4 Lane Major Roadway-Augmented	Encinitas	40,117	45,400	0.884	D
	Quail Gardens Drive to Garden View Road	4 Lane Major Roadway-Augmented	Encinitas	43,786	45,400	0.964	E
	Garden View Road to Town Center Place	4 Lane Major Roadway-Augmented (3 EB 2 WB)	Encinitas	31,439	45,400	0.692	C or better
	Town Center Place to El Camino Real	6-Lane Prime Arterial	Encinitas	34,214	57,000	0.600	C or better
Mountain Vista Drive	El Camino Real to Wandering Road	2-Lane Local Roadway - Augmented (2 EB 1 WB)	Encinitas	11,478	20,000	0.574	C or better
	Wandering Road to Village Park Way	2-Lane Local Roadway - Augmented	Encinitas	7,093	20,000	0.355	C or better
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	2-Lane Local Roadway	Encinitas	6,745	14,000	0.482	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	2-Lane Local Roadway	Encinitas	6,915	14,000	0.494	C or better
	San Dieguito CPA boundary to Via De Fortuna	2-Lane Light Collector with Reduced Shoulder	County	6,915	9,700	0.713	C
Encinitas Blvd	North Coast Highway 101 to Vulcan Avenue	4-Lane Collector	Encinitas	21,095	32,400	0.651	C or better
	Vulcan Avenue to I-5 SB Ramps	4-Lane Major Roadway - Augmented	Encinitas	20,790	45,400	0.458	C or better
	I-5 SB Ramps to I-5 NB Ramps	4-Lane Major Roadway	Encinitas	32,420	35,200	0.921	E
	I-5 NB Ramps to Saxony Road	4-Lane Major Roadway	Encinitas	38,312	35,200	1.088	F
	Saxony Road to Calle Magdalena	6-Lane Prime Arterial - Augmented	Encinitas	31,737	66,000	0.481	C or better
	Calle Magdalena to Encinitas Town Country traffic signal	6-Lane Prime Arterial	Encinitas	31,737	57,000	0.557	C or better
	Encinitas Town Country traffic signal to Quail Gardens Drive	4-Lane Major Roadway- Augmented (3 EB 2 WB)	Encinitas	31,737	45,400	0.699	C or better
	Quails Garden Drive to Delphinium Street	4-Lane Major Roadway	Encinitas	27,446	35,200	0.780	C or better
	Delphinium Street to Balour Drive	4-Lane Major Roadway	Encinitas	27,446	35,200	0.780	C or better
	Balour Drive to Via Cantebria	4-Lane Major Roadway	Encinitas	38,142	35,200	1.084	F
	Via Cantebria to El Camino Real	4-Lane Major Roadway	Encinitas	26,806	35,200	0.762	C or better
	El Camino Real to Village Square Drive	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Village Square Drive to Turner Avenue	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Turner Avenue to Cerro Street	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Cerro Street to Village Park Way	4-Lane Major Roadway	Encinitas	28,841	35,200	0.819	D
	Village Park Way to Willowspring Drive	4-Lane Major Roadway	Encinitas	22,619	35,200	0.643	C or better
	Willowspring Drive to Rancho Santa Fe Road	4-Lane Major Roadway	Encinitas	22,619	35,200	0.643	C or better
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	2-Lane Local Roadway - Augmented	Encinitas	18,476	20,000	0.924	E
	Encinitas Limits to El Mirlo	2-Lane Light Collector with Reduced Shoulder	County	18,476	9,700	1.905	F

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
F Street	Vulcan Avenue to Cornish Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
Requeza Street	Cornish Drive to San Dieguito Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	San Dieguito Drive to Stratford Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	Stratford Drive to Regal Road	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	Regal Road to West Lake Drive	2-Lane Local Roadway	Encinitas	5,631	14,000	0.402	C or better
	West Lake Drive to Nardo Drive	2-Lane Local Roadway	Encinitas	4,516	14,000	0.323	C or better
Santa Fe Drive	Vulcan Avenue to Cornish Drive	2-Lane Local Roadway	Encinitas	8,554	14,000	0.611	C or better
	Cornish Drive to Summit Avenue	2-Lane Local Roadway	Encinitas	8,554	14,000	0.611	C or better
	Summit Avenue to Devonshire	2-Lane Local Roadway	Encinitas	8,554	14,000	0.611	C or better
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	2-Lane Local Roadway - Augmented	Encinitas	12,974	20,000	0.649	C or better
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	4-Lane Collector	Encinitas	12,974	32,400	0.400	C or better
	I-5 SB Ramps to I-5 NB Ramps	3-Lane Major Roadway (1 EB 2 WB)	Encinitas	19,070	26,400	0.722	C or better
	I-5 NB Ramps to Regal Road	2-Lane Local Roadway - Augmented	Encinitas	13,743	20,000	0.687	C or better
	Regal Road to Gardena Road	2-Lane Local Roadway - Augmented	Encinitas	13,743	20,000	0.687	C or better
	Gardena Road to Nardo Road	2-Lane Local Roadway - Augmented	Encinitas	13,743	20,000	0.687	C or better
	Nardo Road to Windsor Road/Bonita Drive	2-Lane Local Roadway - Augmented	Encinitas	15,036	20,000	0.752	C or better
	Windsor Road/Bonita Drive to Balour Drive	2-Lane Local Roadway - Augmented	Encinitas	15,036	20,000	0.752	C or better
	Balour Drive to Lake Drive	2-Lane Local Roadway - Augmented	Encinitas	15,817	20,000	0.791	C or better
	Lake Drive to Crest Drive	2-Lane Local Roadway	Encinitas	15,107	20,000	0.755	C or better
	Crest Drive to El Camino Real	2-Lane Local Roadway - Augmented	Encinitas	15,107	20,000	0.755	C or better

Table 4.13-1 Existing Roadway Segment Level of Service							
Roadway	Segment	Functional Classification[1]	Jurisdiction	ADT	Capacity (LOS E)	V/C	LOS
Birmingham Drive	**San Elijo Avenue to Newcastle Avenue**	2-Lane Local Roadway - Augmented	Encinitas	14,588	20,000	0.729	C or better
	Newcastle Avenue to Manchester Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	Manchester Avenue to Montgomery Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	Montgomery Avenue to Cambridge Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	Cambridge Avenue to MacKinnon Avenue	2-Lane Local Collector	Encinitas	14,588	14,000	1.042	F
	MacKinnon Avenue to Carol View Drive	2-Lane Local Roadway - Augmented	Encinitas	14,588	20,000	0.729	C or better
	Carol View Drive to I-5 SB Ramps	2-Lane Local Roadway - Augmented	Encinitas	14,588	20,000	0.729	C or better
	I-5 SB Ramps to I-5 NB Ramps	2-Lane Local Local Roadway	Encinitas	16,342	14,000	1.167	F
	I-5 NB Ramps to Villa Cardiff Drive	2-Lane Local Local Roadway	Encinitas	8,248	14,000	0.589	C or better
	Villa Cardiff Drive to Playa Rivera	2-Lane Local Local Roadway	Encinitas	8,248	14,000	0.589	C or better
	Playa Rivera to Freda Lane	2-Lane Local Local Roadway	Encinitas	8,248	14,000	0.589	C or better
	Freda Lane to Lake Drive	2-Lane Local Local Roadway (1 EB 2 WB)	Encinitas	8,248	14,000	0.589	C or better

SOURCE: Appendix N.
Bolding represents a facility operating at substandard LOS E or F.

b. Intersection Conditions

A total of 53 intersections were studied, including nine within the City of Carlsbad. As shown in Table 4.13-2, all intersections in the study area operate at an acceptable LOS D or better with the exception of the following 11 intersections, including 9 in the City of Encinitas and 2 in the City of Carlsbad:

City of Encinitas

- Garden View Road & Leucadia Boulevard – LOS F during PM peak hour;
- Town Center Place & Leucadia Boulevard – LOS E during PM peak hour;
- El Camino Real & Leucadia Boulevard – LOS E during AM peak hour;
- Rancho Santa Fe Road & Lone Jack Road – LOS E during both AM and PM peak hours;
- El Camino Real & Encinitas Boulevard – LOS E during PM peak hour;
- San Elijo Avenue & Santa Fe Drive – LOS E during AM peak hour;
- I-5 SB Ramps & Birmingham Drive (Caltrans) – LOS F during AM peak hour;
- I-5 NB Ramps & Birmingham Drive (Caltrans) – LOS E during both AM and PM peak hours; and
- I-5 SB Ramps & Manchester Avenue (Caltrans) – LOS E during AM peak hour.

City of Carlsbad

- I-5 SB Ramps & La Costa Avenue (Caltrans) – LOS E during AM peak hour;
- El Camino Real & La Costa Avenue – LOS E during both AM and PM peak hour.

Table 4.13-2
Existing Intersection Level of Service

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction
			Average Delay (Seconds)	LOS	Average Delay (Seconds)	LOS	
1	Carlsbad Boulevard & Poinsettia Lane	Signalized	7.6	A	20.9	C	Carlsbad
2	I-5 SB Ramps & Poinsettia Lane	Signalized	14.4	B	19.7	B	Caltrans
3	I-5 NB Ramps & Poinsettia Lane	Signalized	21.2	C	23.1	C	Caltrans
4	Aviara Parkway & Poinsettia Lane	Signalized	27.2	C	28.0	C	Carlsbad
5	North Coast Highway 101 & La Costa Avenue	Signalized	15.0	B	14.7	B	Encinitas
6	Vulcan Avenue & La Costa Avenue	SSSC	24.6	C	31.0	D	Encinitas
7	**I-5 SB Ramps & La Costa Avenue**	Signalized	65.3	**E**	36.2	D	Caltrans
8	I-5 NB Ramps & La Costa Avenue	Signalized	32.0	C	53.3	D	Caltrans
9	Piraeus Street & La Costa Avenue	Signalized	13.2	B	7.7	A	Caltrans
10	Saxony Road & La Costa Avenue	Signalized	13.6	B	21.4	C	Carlsbad
11	**El Camino Real & La Costa Avenue**	Signalized	58.6	**E**	59.8	**E**	Carlsbad
12	North Coast Highway 101 & Leucadia Boulevard	Signalized	27.0	C	24.8	C	Encinitas
13	Vulcan Avenue & Leucadia Boulevard	Signalized	10.6	B	9.6	A	Encinitas
14	Orpheus Avenue & Leucadia Boulevard	Signalized	14.8	B	13.8	B	Caltrans
15	I-5 SB Ramps & Leucadia Boulevard	Signalized	12.8	B	14.0	B	Caltrans
16	I-5 NB Ramps & Leucadia Boulevard	Signalized	11.8	B	34.2	C	Caltrans
17	Saxony Road & Leucadia Boulevard	Signalized	34.3	C	40.3	D	Encinitas
18	Quail Gardens Drive & Leucadia Boulevard	Signalized	22.9	C	26.6	C	Encinitas
19	**Garden View Road & Leucadia Boulevard**	Signalized	45.6	D	124.5	**F**	Encinitas
20	**Town Center Place & Leucadia Boulevard**	Signalized	20.9	C	78.9	**E**	Encinitas
21	**El Camino Real & Leucadia Boulevard**	Signalized	57.5	**E**	54.9	D	Encinitas
22	El Camino Real & Town Center Drive	Signalized	12.8	B	21.0	C	Encinitas
23	El Camino Real & Garden View Road	Signalized	22.6	C	36.3	D	Encinitas
24	El Camino Real & Mountain Vista Drive	Signalized	20.8	C	30.0	C	Encinitas
25	**Rancho Santa Fe Road & Lone Jack Road**	AWSC	37.2	**E**	37.6	**E**	Encinitas

Table 4.13-2
Existing Intersection Level of Service

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction
			Average Delay (Seconds)	LOS	Average Delay (Seconds)	LOS	
26	El Camino Real & Via Molena	Signalized	15.1	B	26.6	C	Encinitas
27	Rancho Santa Fe Road & El Camino Del Norte	AWSC	33.2	D	29.6	D	Encinitas
28	North Coast Highway 101 & Encinitas Boulevard	Signalized	29.1	C	27.8	C	Encinitas
29	S Vulcan Avenue & Encinitas Boulevard	Signalized	25.7	C	24.4	C	Encinitas
30	I-5 SB Ramps & Encinitas Boulevard	Signalized	32.1	C	29.1	C	Caltrans
31	I-5 NB Ramps & Encinitas Boulevard	Signalized	16.5	B	48.5	D	Caltrans
32	Saxony Road & Encinitas Boulevard	Signalized	19.6	B	26.8	C	Caltrans
33	Quail Gardens Drive & Encinitas Boulevard	Signalized	39.4	D	42.7	D	Encinitas
34	Balour Drive & Encinitas Boulevard	Signalized	9.5	A	16.9	B	Encinitas
35	Via Cantebria & Encinitas Boulevard	Signalized	7.7	A	31.5	C	Encinitas
36	**El Camino Real & Encinitas Boulevard**	Signalized	48.0	D	77.2	**E**	Encinitas
37	Village Square Drive & Encinitas Boulevard	Signalized	13.3	B	40.2	D	Encinitas
38	Village Park Way & Encinitas Boulevard	Signalized	18.1	B	20.7	C	Encinitas
39	Rancho Santa Fe Road & Encinitas Boulevard	Signalized	48.6	D	40.7	D	Encinitas
40	**San Elijo Avenue & Santa Fe Drive**	AWSC	35.9	**E**	14.9	B	Encinitas
41	I-5 SB Ramps & Santa Fe Drive	Signalized	18.2	B	30.9	C	Caltrans
42	I-5 NB On-Ramp & Santa Fe Drive	Signalized	5.3	A	19.2	B	Caltrans
43	I-5 NB Off-Ramp/Regal Road & Santa Fe Drive	Signalized	28.2	C	52.8	D	Caltrans
44	MacKinnon Avenue & Santa Fe Drive	Signalized	18.3	B	13.4	B	Encinitas
45	Balour Drive & Santa Fe Drive	SSSC	28.4	D	18.9	C	Encinitas
46	Lake Drive & Santa Fe Drive	Signalized	6.8	A	7.2	A	Encinitas
47	El Camino Real & Santa Fe Drive	Signalized	13.5	B	12.8	B	Encinitas
48	San Elijo Avenue & Birmingham Drive	Signalized	10.2	B	13.5	B	Encinitas
49	**I-5 SB Ramps & Birmingham Drive**	SSSC	133.3	**F**	34.4	D	Caltrans
50	**I-5 NB Ramps & Birmingham Drive**	AWSC	41.7	**E**	38.7	**E**	Caltrans

Table 4.13-2
Existing Intersection Level of Service

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction
			Average Delay (Seconds)	LOS	Average Delay (Seconds)	LOS	
51	**I-5 SB Ramps & Manchester Avenue**	AWSC	40.5	**E**	22.9	C	Caltrans
52	I-5 NB Ramps & Manchester Avenue	Signalized	22.1	C	20.0	C	Caltrans
53	El Camino Real & Manchester Avenue	Signalized	23.2	C	16.9	B	Encinitas

SOURCE: Appendix N.
LOS = level of service
AWSC = all-way stop controlled
SSSC = side street stop controlled
Bolding represents a facility operating at substandard LOS E or F.

c. Freeway Segment Conditions

Table 4.13-3 includes the I-5 LOS analysis. Year 2013 freeway annual average daily traffic (AADT) volumes were obtained from Caltrans' 2013 Traffic Volumes on California State Highways. Refer to Appendix N for additional methodology information. As shown in Table 4.13-3, all freeway segments within the study area currently operate at LOS D or better during the peak hour with the exception of the following two segments:

- I-5, between Leucadia Boulevard and Encinitas Boulevard – LOS E in the NB direction; and
- I-5, between Manchester Avenue and Lomas Santa Fe Drive – LOS E in the NB direction.

Table 4.13-3
Existing Freeway Segment Level of Service

Freeway	Segment	AADT	Direction	# of Lanes	Capacity	Peak Hour Volume	V/C	LOS
I-5	Palomar Airport Road and Poinsettia Lane	201,000	NB	4M	9,400	8,500	0.90	D
			SB	4M	9,400	8,400	0.89	D
	Poinsettia Lane and La Costa Avenue	204,000	NB	4M	9,400	8,600	0.91	D
			SB	4M	9,400	8,500	0.90	D
	La Costa Avenue and Leucadia Boulevard	208,000	NB	4M	9,400	8,600	0.91	D
			SB	4M	9,400	7,900	0.84	D
	Leucadia Boulevard and Encinitas Boulevard	211,000	**NB**	**4M**	**9,400**	**8,700**	**0.93**	**E**
			SB	4M	9,400	8,000	0.85	D
	Encinitas Boulevard and Santa Fe Drive	210,000	NB	4M	9,400	8,500	0.90	D
			SB	4M	9,400	8,000	0.85	D
	Santa Fe Drive and Birmingham Drive	201,000	NB	4M	9,400	8,100	0.86	D
			SB	4M	9,400	7,700	0.82	D
	Birmingham Drive and Manchester Avenue	203,000	NB	4M	9,400	8,200	0.87	D
			SB	4M	9,400	7,800	0.83	D
	Manchester Avenue and Lomas Santa Fe Drive	215,970*	**NB**	**3M+1A**	**8,460**	**8,200**	**0.97**	**E**
			SB	4M+1A	10,810	8,900	0.82	D
	Lomas Santa Fe Drive and Via De La Valle	208,844*	NB	4M+1A	10,810	8,200	0.76	D
			SB	4M+1A	10,810	8,400	0.78	D

SOURCE: Appendix N.
*Volume was adjusted by subtracting the estimated HOV volume. Bold letter indicates substandard LOS E or F.
AADT = annual average daily traffic.
NB = northbound; SB = southbound.
M = mainline; A = auxiliary lane.
V/C = volume to capacity.
LOS = level of service.

d. Freeway Intersection Capacity Analysis

Ramp meter analysis was conducted at the freeway interchanges in accordance with ILV procedures, and the results are shown in Table 4.13-4. As shown in the table, all of the signalized ramp intersections are currently operating at "Under Capacity" or "At Capacity" conditions during both the AM and PM peak hours. Note that the ILV analysis is provided for informational purposes only per Caltrans procedures and is not utilized to determine impacts.

Table 4.13-4
Existing Ramp Intersection Capacity Analysis

#	Ramp Intersection	Peak Hour	ILV/Hour	Description
2	I-5 SB Ramps / Poinsettia Lane	AM	711	Under Capacity
		PM	963	Under Capacity
3	I-5 NB Ramps / Poinsettia Lane	AM	898	Under Capacity
		PM	931	Under Capacity
7	I-5 SB Ramps / La Costa Avenue	AM	1,062	Under Capacity
		PM	1,015	Under Capacity
8	I-5 NB Ramps / La Costa Avenue	AM	1,080	Under Capacity
		PM	1,003	Under Capacity
15	I-5 SB Ramps / Leucadia Boulevard	AM	712	Under Capacity
		PM	697	Under Capacity
16	I-5 NB Ramps / Leucadia Boulevard	AM	1,051	Under Capacity
		PM	1,353	At Capacity
30	I-5 SB Ramps / Encinitas Boulevard	AM	1,206	At Capacity
		PM	1,414	At Capacity
31	I-5 NB Ramps / Encinitas Boulevard	AM	1,042	Under Capacity
		PM	1,170	Under Capacity
41	I-5 SB Ramps / Santa Fe Drive	AM	1,018	Under Capacity
		PM	1,004	Under Capacity
42	I-5 NB On-Ramp / Santa Fe Drive	AM	641	Under Capacity
		PM	620	Under Capacity
43	I-5 NB Off-Ramp / Regal Road	AM	852	Under Capacity
		PM	924	Under Capacity
52	I-5 NB Ramps / Manchester Avenue	AM	1,091	Under Capacity
		PM	996	Under Capacity

SOURCE: Appendix N.

e. Ramp Meter Conditions

Ramp metering analysis was conducted at the I-5 on-ramps at Poinsettia Lane, La Costa Avenue, Leucadia Boulevard, Encinitas Boulevard, Santa Fe Drive, Birmingham Drive, and Manchester Avenue. As indicated above and described further under Section 4.13.4, Methodology, ramp meter operations analysis is based on the amount of delay experienced per vehicle per hour. Ramp metering delay represents how long the peak hour (ramp metering) would need to be extended in order to accommodate the excess vehicles. Delays of 15 minutes or less are considered acceptable by Caltrans, while delays exceeding

15 minutes are considered unacceptable. As shown in Table 4.13-5, I-5 on-ramps within the study area have an acceptable less than a 15-minute delay except the following two:

- I-5 NB On-Ramp at Leucadia Boulevard – 17.5 minutes during the PM peak hour; and
- I-5 SB On-Ramp at Santa Fe Drive – 20.0 minutes during the AM peak hour.

Table 4.13-5
Existing Ramp Metering Analysis

Location	Peak Hour	Demand[1] (veh/hr)	Estimated SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)
I-5 NB On-Ramp at Poinsettia Lane	AM	568	488	488	Not Metered	0	0	0
	PM	428	330	330	720	0	0	0
I-5 SB On-Ramp at Poinsettia Lane	AM	544	479	239	720	0	0	0
	PM	944	812	406	720	0	0	0
I-5 NB On-Ramp at La Costa Avenue	AM	787	740	740	Not Metered	0	0	0
	PM	573	441	441	720	0	0	0
I-5 SB On-Ramp at La Costa Avenue	AM	708	623	312	720	0	0	0
	PM	870	748	374	720	0	0	0
I-5 NB On-Ramp at Leucadia Boulevard	AM	491	450	450	Not Metered	0	0	0
	PM	652	465	465	360	105	**17.5**	3,050
I-5 SB On-Ramp at Leucadia Boulevard	AM	772	679	340	360	0	0	0
	PM	624	537	268	360	0	0	0
I-5 NB On-Ramp at Encinitas Boulevard	AM	493	468	468	Not Metered	0	0	0
	PM	613	368	368	360	8	1.5	225
I-5 SB On-Ramp at Encinitas Boulevard	AM	713	627	627	720	0	0	0
	PM	617	531	531	720	0	0	0
I-5 NB On-Ramp at Santa Fe Drive	AM	515	515	515	Not Metered	0	0	0
	PM	566	566	566	720	0	0	0
I-5 SB On-Ramp at Santa Fe Drive	**AM**	543	478	478	360	118	**20.0**	3,425
	PM	381	328	328	Not Metered	0	0	0
I-5 NB On-Ramp at Birmingham Drive	AM	391	358	358	Not Metered	0	0	0
	PM	344	245	245	360	0	0	0
I-5 SB On-Ramp at Birmingham Drive	AM	1017	1,017	509	720	0	0	0
	PM	317	317	159	720	0	0	0

Table 4.13-5
Existing Ramp Metering Analysis

Location	Peak Hour	Demand[1] (veh/hr)	Estimated SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)
I-5 NB On-Ramp at Manchester Avenue	AM	45	45	45	Not Metered	0	0	0
	PM	68	68	68	360	0	0	0
I-5 SB On-Ramp at Manchester Avenue	AM	1,606	1,606	803	720	83	7.0	2,400
	PM	796	796	398	720	0	0	0

SOURCE: Appendix N.
Bold number represents a delay above the 15-minute threshold.
Veh/hr/ln = vehicles per hour per lane.
Min. = minutes; ft = feet.
[1]Demand is the peak hour demand expected to use the on-ramp.
[2]HOV volumes was deducted from total demand volumes. SOV = single occupancy vehicle.
[3]Meter rate is the peak hour capacity expected to be processed through the ramp meter. This value was obtained from Caltrans. The lowest rate within range was utilized for a more conservative calculation.
[4]Excess Demand = (Demand) – (Meter Rate) or zero, whichever is greater.
[5]Delay beyond Peak Hour = (Excess Demand / Meter Rate) X 60 min/hr. This delay represents how long the peak hour would need to be extended in order to accommodate the excess demand
[6]Queue = (Excess Demand) X 29 ft/veh.

4.14.1.3 Other Mobility Systems

a. Public Transit

Public transit in the City of Encinitas is provided by the North County Transit District (NCTD) with both commuter train (Coaster) and bus services.

Three bus routes (Routes 101, 304, and 309) provide service for the City of Encinitas with headways that vary between 30 and 60 minutes. These bus routes run through main corridors within the City, such as North Coast Highway 101, South Coast Highway 101, Leucadia Boulevard, Encinitas Boulevard, and El Camino Real.

The COASTER commuter train runs north-south connecting eight stations along the San Diego coast between Oceanside and Downtown San Diego. The COASTER stops at the Encinitas Transit Station, located at East D Street, and operates between 5:13 a.m. and 12:15 p.m. during weekdays, between 6:28 a.m. and 7:37 p.m. during Saturdays, and between 8:36 a.m. and 6:17 p.m. during Sundays and holidays. The COASTER operates with approximately 90-minute headways during weekdays and approximately 3-hour headways during weekends and holidays.

b. Bicycle

The Circulation Element of the adopted City of Encinitas General Plan identifies the following three types of bikeway system facilities:

- Bike Path (Class I) – A bike path provides for exclusive bicycle travel separated from vehicular travel.
- Bike Lane (Class II) – Bike lanes consist of a paved roadway lane marked for bicycle use.
- Shared Route (Class III) – A shared route is a conventional street where bike routes are identified by signage only and bicycles share the roadway with vehicles.

The City includes bicycle facilities along Highway 101 and several major roadways. The Highway 101 corridor is one of the most heavily used bicycle corridors in the county, and includes Class II and Class III facilities. Roadways that include Class II bicycle facilities are Carlsbad Boulevard, Quail Gardens Drive, Nardo Road, Garden View Road, Via Cantebria, El Camino Real, Rancho Santa Fe Road, Manchester Avenue, La Costa Avenue, Leucadia Boulevard, Mountain Vista Drive, Encinitas Boulevard, and Santa Fe Drive. For additional details regarding the existing bike routes, refer to the City's Bikeway Master Plan (2005).

c. Pedestrian

The City's planned pedestrian circulation system consists of connecting sidewalks along roadways as well as recreational trails. These designated pedestrian walkways would provide separation from vehicular traffic. The City recognizes the varying pedestrian needs between the urban and rural areas, safe routes to school, as well as pedestrian access to the coastal zone. As such, the City adopted the Let's Move Encinitas Pedestrian Travel & Safe Routes to School Plan in March 2015 to plan for safe pedestrian routes throughout the City. This plan identifies potential improvement locations based on the need for pedestrian facilities and existing safety issues.

4.13.2 Regulatory Framework

Several existing regulations provide transportation and traffic guidance, including Federal, State, regional, and local programs and regulations. Applicable regulations are discussed below and include the Highway Capacity Manual (HCM), San Diego Forward, State Transportation Improvement Program (STIP), Regional Transportation Improvement Program, the City General Plan/Local Costal Program, and the City Roadway Standards.

4.13.2.1 Federal

2010 Highway Capacity Manual

Prepared by the Transportation Research Board, the 2010 HCM is a joint effort between the Transportation Research Board, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials to provide concepts, guidelines, and computational procedures for calculating capacity and quality of service for highway facilities, including freeways, intersections (signalized and unsignalized), and rural highways. In addition, the 2010 HCM addresses the effects of transit, pedestrians, and bicycles on transportation system performance.

4.13.2.2 State

a. Senate Bill 375 Sustainable Communities and Climate Protection Act

Senate Bill 375 (SB 375) (2008) reduces greenhouse gas (GHG) emissions from passenger vehicles through an integrated approach to regional transportation and land use planning. Local governments have an important role to play in reducing GHG emissions since cities and counties are required to update the housing elements of their general plans to implement their share of their Regional Housing Needs Assessment (RHNA) allocation, which, in areas with Metropolitan Planning Organizations (MPOs), must be consistent with the Sustainable Communities Strategy (SCS) of the regional transportation plans.

There is a strong link between land use, housing location decisions, and strategies to reduce emissions from the transportation sector. Within urbanized areas, residential development accounts for the largest share of land area, constituting a major influence on regional development footprints and travel patterns. As such, integrating transportation and residential land use is one of the most impactful strategies for reducing GHG emissions, as well as other forms of air pollution, for the transportation system. Governmental actions supporting the location, variety and availability of housing are critical to implementing GHG emissions reduction policies. This can support the integration of transportation and housing development, offering more varied and efficient consumer choices. Infill development patterns that emphasizes proximity and connectivity to public transit, walkable areas, employment and service centers and amenities can increase the effectiveness of these relationships.

b. Assembly Bill 1358 Complete Streets Act

Assembly Bill 1358 (AB 1358) (2008) requires all cities and counties, upon the next update of their circulation element, to plan for the development of multimodal transportation networks. AB 1358 places the planning, designing, and building of complete streets into the larger planning framework of the general plan by requiring jurisdictions to amend their circulation elements to plan for multimodal transportation networks. These networks

should allow for all users to effectively travel by motor vehicle, foot, bicycle, and transit to reach key destinations within their community and the larger region.

c. SB 743 Environmental Quality

SB 743 (2013) created a process to change the way projects analyze transportation impacts pursuant to CEQA. Currently, environmental review of transportation impacts focuses on the delay that vehicles experience at intersections and on roadway segments. That delay is often measured using a metric known as "level of service," or LOS. Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks and promotion of a mix of land uses. SB 743 requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service for evaluating transportation impacts. The alternative criteria must promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses (OPR 2014). According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

4.13.2.3 Regional

a. San Diego Forward: The Regional Plan (San Diego Forward) October 2015 (Regional Transportation Plan, Regional Comprehensive Plan and Sustainable Communities Strategy)

San Diego Forward was adopted by the SANDAG Board of Directors on October 9, 2015. San Diego Forward combines and updates the region's two regional planning documents: the Regional Comprehensive Plan (2004) and the Regional Transportation Plan/Sustainable Communities Strategy (2011). San Diego Forward provides a vision for the region's growth through the year 2050. The Plan reflects a strategy for a more sustainable future which includes investing in a transportation network that will provide people more travel choices, protects the environment, creates healthy communities, and stimulates economic growth (SANDAG 2015). San Diego Forward includes a detailed blueprint for how we will invest in our transportation system in ways over the next 35 years. The Regional Plan outlines the investment of nearly $204 billion in year-of expenditure dollars in local, State, and Federal dollars to build a comprehensive, interconnected transportation system that provides choices.

San Diego Forward is discussed more in Chapter 4.6, along with the City's compliance with SB 375. As detailed therein, the main goal of the Plan is to develop an overarching plan for future growth in the County based upon the principles of sustainability and smart growth. The intent of SB 375 is to use the RTP/SCS to integrate regional land use, RHNA, environmental, and transportation planning to ensure efficient regional planning in the future that leads to reduced greenhouse gas emissions from land and transportation uses.

The SCS focuses on "housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all, and implement the plan through incentives and collaboration." The SCS includes four building blocks: (1) a land use component that accommodates the RHNA and includes the protection of sensitive resources, including areas protected under habitat conservation plans; (2) transportation networks including highways, transit, and local streets and roads; (3) transportation demand management strategies; and (4) transportation system management programs and policies.

As a result of SB 375, preparation of local RHNA Plans are required to be coordinated and consistent with the RTP and SCS for the length of the housing element cycle. Local governments play a large role in helping to develop the transportation and land use scenarios used in the SCS development process. Land use authority remains within the purview of the local governments.

From land use planning, building codes, and zoning ordinances, to funding and operating regional transit systems, to air quality regulation, regional and local governments and agencies have considerable control and influence over GHG emissions. Many of these local and regional efforts not only benefit climate and air quality outcomes, but also positively impact resource conservation, quality of life, public health measures, economic indicators, and social equity.

b. State Transportation Improvement Program

The California STIP is an intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes, metropolitan plans, and Title 23 of the Code of Federal Regulations. The STIP was first prepared in 2006, and is added to every two years by the California Department of Transportation (Caltrans) in cooperation with the Metropolitan Planning Organizations (MPOs) and the regional transportation planning agencies. The most recent STIP Guidelines were adopted on August 27, 2015. In San Diego County, the MPO and regional transportation planning agency is SANDAG. The STIP contains all capital and non-capital transportation projects or identified phases of transportation projects for funding under the Federal Transit Act and Title 23 of the U.S. Code, including federally funded projects.

c. Regional Transportation Improvement Program

The Regional Transportation Improvement Program (RTIP) is also a multi-year program that includes all proposed major highway, arterial, transit, and non-motorized projects in the region. The 2014 RTIP was adopted in September 2014 by the SANDAG Board of Directors, received federal approval in December 2014, and eight RTIP amendments have been approved as of December 2, 2015.

4.13.2.4 Local

a. City of Encinitas General Plan/Local Coastal Program

The General Plan Circulation Element contains policies related to transportation/traffic. Pertinent goals and policies related to transportation and traffic are listed below in Table 4.13-6.

Table 4.13-6
General Plan Goals and Policies Related to Transportation/Traffic

Goal/Policy	Description
City of Encinitas Circulation Element	
Goal 1	Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character. (Coastal Act/30252)
1.2	Endeavor to maintain Level of Service C as a basic design guideline for the local system of roadways understanding that the guideline may not be attainable in all cases.
1.3	Prohibit development which results in Level of Service E or F at any intersection unless no alternatives exist and an overriding public need can be demonstrated.
1.6	Minimize freeway, prime arterial, major, collector, and augmented local access to encourage their use as throughways rather than as access to adjacent properties.
1.7	Encourage adjacent properties to use common access points to access prime arterials, major roads, collectors and augmented local streets.
1.9	Minimize private driveway access onto both major and collector roads.
1.10	Encourage the design of roads and traffic controls to optimize safe traffic flow by minimizing turning, curb parking, uncontrolled access, and frequent stops.
1.15	The City will actively support an integrated transportation program that encourages and provides for mass transit, bicycle transportation, pedestrians, equestrians, and carpooling. (Coastal Act/30252)
1.17	Standards shall be established and implemented to provide for adequate levels of street lighting, based on criteria of safety and related to volumes of vehicular, pedestrian and bicycle activity and potential points of conflict. Such standards shall be designed to respect different community and neighborhood needs for lighting, different community standards for design and special attention given to preservation of dark sky.
Goal 2	The City will make every effort to develop a varied transportation system that is capable of serving both the existing population and future residents while preserving community values and character. (Coastal Act/30252/30253)
2.2	Require new residential development to have roadways constructed to City standards before the roads can be dedicated to the City.
2.10	Establish landscaping buffer and building setback requirements along all roads which are local augmented status or larger, except where inappropriate. (Coastal Act 30252)
2.12	Encourage unique characteristic community design standards for traffic signals and intersection signing and other street improvements, structures and furniture.
2.13	Encourage landscaped medians and parkways on all roadways where practical
2.19	Minimize road widths in rural and semi-rural areas. (Rural defined as ½ acre and above; and semi-rural defined as having a feeling of country even if lot sizes are less than ½ acre)

Table 4.13-6 General Plan Goals and Policies Related to Transportation/Traffic	
Goal/Policy	Description
Goal 3	The City of Encinitas will promote the use of other modes of transport to reduce the dependence on the personal automobile. (Coastal Act/30252)
3.1	The needs of the handicapped will be considered in new development plans including handicapped parking, loading, etc.
3.2	Continue to assist in expanding public transportation and emphasize public transportation in future development with preference given to cost effective alternatives. (Coastal Act/30252)
3.3	Create a safe and convenient circulation system for pedestrians. (Coastal Act/30252)
3.4	Cooperate with San Diego County, SANDAG, and other jurisdictions to help plan and implement a regional multi modal transportation system that is accessible to residents in the City. (Coastal Act/30252)
4.14	Where feasible, minimize the dependence on private motor vehicles. (Coastal Act/30252)
Goal 7	Every effort will be made to have new development, both in the City and in the region, provide for all costs of the incremental expansion of the circulation system necessary to accommodate that development. Costs include, but are not limited to, costs of right of way and construction, including costs of moving utilities and structures, and costs for landscaping and intersection improvement.

b. City of Encinitas Roadway Standards

The City of Encinitas has established roadway standards through the *City of Encinitas Public Road Standards, April 1991* (roadway standards). The roadway standards identify roadway classifications, level of service standards, roadway features for each classification, allowed deviations to the roadway classifications, design standards, and drainage improvements. Future roadway improvements within the City are subject to these roadway standards. When a property is being developed adjacent to an existing roadway that is substandard, the adjacent development is required to provide frontage improvements and any associated right-of-way necessary to bring the roadway up to the roadway standards adjacent to the site.

4.13.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to transportation and traffic would be significant if the Housing Element Update (HEU) project would:

1. Result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements);

2. Conflict with other standards establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant

components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

3. Conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.);

4. Result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians; or

5. Result in inadequate emergency access.

In October 2009, the San Diego region elected to be exempt from the State Congestion Management Plan and, since this decision, SANDAG has been abiding by 23 Code of Federal Regulations 450.320 to ensure the region's continued compliance with the federal congestion management process. Thus, the CEQA Guidelines Appendix G question regarding Congestion Management Plan compliance is not applicable, and further analysis not included herein.

4.13.4 Methodology

4.13.4.1 Impact Analysis

This traffic section analyzes operating levels, alternative transportation policy consistency, traffic hazards, and emergency access to determine potential impacts of the HEU. As the HEU includes three separate housing strategies and each strategy generates different amounts of traffic with differing distribution patterns, each strategy is analyzed separately under the operating levels analysis. However, due to the nature of traffic modeling, future traffic volumes and impacts associated with buildout of the HEU are identified on a strategy-wide basis and not on a housing site-specific basis. In addition, the HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Therefore, no analysis relative to the impacts associated with individual housing sites is feasible. Since each strategy would include similar alternative transportation, design, and emergency access requirements, the analysis of those issues is completed for just the HEU as a whole and not by each strategy.

As the HEO has a long-term buildout horizon, this traffic analysis considers how traffic increases associated with buildout of each housing strategy would affect the existing circulation network, along with the funded Capital Improvement Projects (CIP) improvements. The Caltrans' I-5 North Coast Corridor project was also included as a CIP project used in this analysis. This freeway widening project will ultimately improve I-5, from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside, to eight all-purpose lanes and four express lanes.

To determine the circulation system capacity and operations traffic impact of each housing strategy, the traffic volumes associated with buildout of each strategy were calculated by identifying the buildout traffic conditions and subtracting ambient growth (growth that would occur without the HEU). This is considered an appropriate method of analyzing the HEU impacts as it takes into consideration the buildout condition with the highest trip generation anticipated over the 20-year horizon of the HEU. However, to determine the impacts specific to the HEU, it is necessary to subtract the planned growth in accordance with the General Plan. These HEU traffic volumes are then related to the existing plus CIP network to determine impacts of the HEU.

In summary, the HEU buildout condition includes:

- Buildout of the proposed land uses for each of the housing sites.
- Forecast land uses for non-housing sites within the City of Encinitas based on land use information provided by City staff.
- Year 2035 land uses outside of the City of Encinitas.
- Existing roadway network plus improvements from reasonably foreseeable improvement projects.

Jurisdictions establish their own standards for ascertaining transportation/traffic impacts. As determined appropriate by the City, the analysis utilizes the thresholds and standards established by the agency with jurisdiction over the roadway facility. The cities within the study area utilize the SANTEC/ITE Guidelines, while the County of San Diego utilizes the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements - Transportation and Traffic (2011). The impact determination methodology utilized in this analysis is described further below.

a. SANTEC/ITE Thresholds (Cities of Encinitas, Solana Beach and Carlsbad)

As indicated under the existing conditions Section 4.13.1.2, the cities of Encinitas, Carlsbad, and Solana Beach utilize the SANTEC/ITE Guidelines for traffic analysis. As detailed in Section 4.13-2.1, roadway segments, freeway segments, and intersection operating from LOS A to LOS D are considered acceptable while operations of LOS E or F are considered unacceptable.

To determine if a project would have a significant impact, the change from the baseline conditions to the baseline plus project conditions is analyzed. The allowable change for facilities under the jurisdiction of the cities of Encinitas, Carlsbad, and Solana Beach as well as Caltrans is identified in Table 4.13-7 below. As shown, a project would have a significant impact if it would add more than 0.01 V/C to a freeway segment operating at unacceptable LOS E or F, add more than 0.02 V/C to a City roadway segment operating at unacceptable LOS E or F, or add more than 2 seconds of delay to a City intersection operating at unacceptable LOS E or F. Project ramp meter delays would be significant if the project would add more than 2 minutes of delay to a ramp meter operating with an

unacceptable delay (i.e., delay exceeding 15 minutes). In addition, a project would result in a significant impact per SANTEC/ITE Guidelines if it caused a roadway segment, freeway segment, intersection or freeway ramp to drop from an acceptable operating level to an unacceptable operating level.

Table 4.13-7
SANTEC/ITE Measure of Significant Project Traffic Impacts

Level of Service with Project	Allowable Change Due to Impact					
E & F (or ramp meter delays above 15 min.)	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min.)
	0.01	1	0.02	1	2	2
SOURCE: Appendix N						

b. County of San Diego

As indicated above, the County of San Diego utilizes the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements - Transportation and Traffic (2011) to analyze traffic impacts. The study area only includes roadway segments within the County and does not include intersections and, therefore, this methodology discussion focuses on the County's roadway segment methodology.

Traffic volume increases from public or private projects that result in one or more of the following criteria will have a significant traffic volume or level of service traffic impact on a road segment, unless specific facts show that there are other circumstances that mitigate or avoid such impacts:

- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a Mobility Element Road or State Highway currently operating at LOS E or LOS F as identified in Table 4.13-8, or will cause a Mobility Element Road or State Highway to operate at LOS E or LOS F as a result of the proposed project; or

- The additional or redistributed ADT generated by the proposed project will cause a residential street to exceed its design capacity.

Table 4.13-8
County Measures of Significant Project Impacts to Road Segments

Level of Service	Two-Lane Road	Four-Lane Road	Six-Lane Road
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

SOURCE: Appendix N.
LOS = level of service; ADT = average daily traffic.
NOTE:
By adding proposed project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

4.13.4.2 Future Project Implementation

As noted previously in this chapter, the City has established roadway design standards and roadway operating standards in the City's General Plan and Public Road Standards manual. The City would review all future projects for any necessary roadway frontage improvements and General Plan compliance. Future projects within the HEU floating zone program also would be reviewed for consistency with this PEIR and identified mitigation measures pursuant to CEQA Guidelines Section 15168(c). More specifically, all future projects would need to be screened via a checklist for consistency with the PEIR and relevant measures in the Mitigation Monitoring and Reporting Program. Subsequent "by right" development within the new floating zone district created through the HEU that is consistent with the PEIR and relevant MMRP measures would not be subject to further CEQA review to analyze project-level impacts related to traffic, unless otherwise noted. Consistent with the SANTEC Guidelines, future projects that would generate over 1,000 ADT or 100 peak-hour trips would be required to prepare a traffic impact study regardless of consistency with the HEU to identify their direct project impacts and appropriate mitigation.

Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to reduce the potential for significant impacts associated with implementation of the HEU. Ultimately, redevelopment of any of the housing sites may occur with or without implementation of the HEU but the process would not be as streamlined and additional traffic analysis of each development may be required at the City's discretion.

4.13.5 Issues 1 and 2: Circulation System Capacity and Operations

Would the project result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system (with the addition of funded CIP improvements)?

Would the project conflict with other standards establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

4.13.5.1 Impacts

a. Trip Generation and Vehicle Miles Traveled

In order to develop the existing plus project conditions, the trips generated by each strategy must be determined. These additional trips generated by the HEU are then distributed onto the existing transportation network to determine the change in traffic conditions due to the project at each roadway segment and freeway segment. As noted previously, the intersection analysis and freeway ramp analysis was only done for the highest trip-generating strategy, which is housing strategy 3. This additional traffic due to the HEU is then evaluated against the significance thresholds to determine if the change in traffic is significant.

The trip generation for each housing strategy was calculated based on the land use maps and buildout assumptions provided by the City and trip generation rates from SANDAG's Guide to Vehicular Traffic Generation Rates for the San Diego Region (2002). Figures 4.13-2 to 4.13-4 illustrate the year 2035 roadway ADT and LOS for each of the three housing strategies. Trip generation is shown in Table 4.13-9 for each strategy. As shown, housing strategy 3 (MMUP) would result in the largest increase in ADT (30,149 ADT), followed by housing strategy 2 (Build Your Own [BYO]) (24,566 ADT) and housing strategy 1 (Ready Made [RM]) (16,361 ADT).

Table 4.13-9
Trip Generation and VMT Summary

Housing Strategy	Daily Trip Generation	ADT Change from No Project	Citywide VMT (miles)	VMT Change from No Project
No-Project	696,144	-	1,165,329	-
Housing Strategy 1 (RM)	712,505	16,361	1,185,279	19,950
Housing Strategy 2 (BYO)	720,710	24,566	1,200,486	35,157
Housing Strategy 3 (MMUP)	726,293	30,149	1,199,428	34,099

SOURCE: Appendix N.
VMT = vehicle miles travelled
RM = Ready Mead
BYO = Build Your Own
MMUP = Modified Mixed Use Places

Vehicle miles travelled (VMT) is also identified in Table 4.13-9. SB 743 encourages reducing VMT, as reducing VMT also assists in achieving the statewide goals related to promoting infill development and reduction of greenhouse gas emissions. VMT information provided by SANDAG for the HEU was based upon methods recommended by the SB 375 Regional Targets Advisory Committee. As shown above, housing strategy 3 (MMUP) would result in the largest increase in ADT, followed by housing strategy 2 (BYO) and housing strategy 1 (RM). However, the VMT analysis shows housing strategy 2 (BYO) would result in the highest VMT change (35,157 VMT), followed subsequently by housing strategy 3 (MMUP) 34,099 VMT) and housing strategy 1 (RM) (19,950 VMT). As the amount of growth varies per strategy, an analysis that assesses which strategy has the least VMT generated per the amount of growth was completed. While housing strategy 3 (MMUP) would result in the highest trip generation change (4.33 percent), this strategy would have the most efficient trips because the trips generated per land use growth would be the shortest distance (0.676 VMT/trip), as shown in Table 4.13-10. Housing strategy 1 (RM) (0.728 VMT/trip) would have the next most efficient trip generation, followed by housing strategy 2 (BYO) (0.855 VMT/trip).

Table 4.13-10
VMT to Trip Generation Efficiency – HEU Growth in Land Use Only

Housing Strategy	Change in Daily Trip Generation	Change in VMT	VMT/Trip Generation Ratio (HEU Growth Only)	Efficiency Ranking
No-Project	0.0%	0.0%	1.000	4
Housing Strategy 1 (RM)	2.35%	1.71%	0.728	2
Housing Strategy 2 (BYO)	3.53%	3.02%	0.855	3
Housing Strategy 3 (MMUP)	4.33%	2.93%	0.676	1

SOURCE: Appendix N.
RM = Ready Mead
BYO = Build Your Own
MMUP = Modified Mixed Use Places

Refer to Appendix N for additional trip generation and VMT details.

b. Housing Strategy 1 – Ready Made (RM)

As identified in Table 4.13-9, the buildout of housing strategy 1 (RM) would generate 712,505 trips and would result in 1,185,279 citywide VMT. In addition, Figure 4.13-2 illustrates the year 2035 with housing strategy 1 (RM) conditions.

Map Source: Chen Ryan

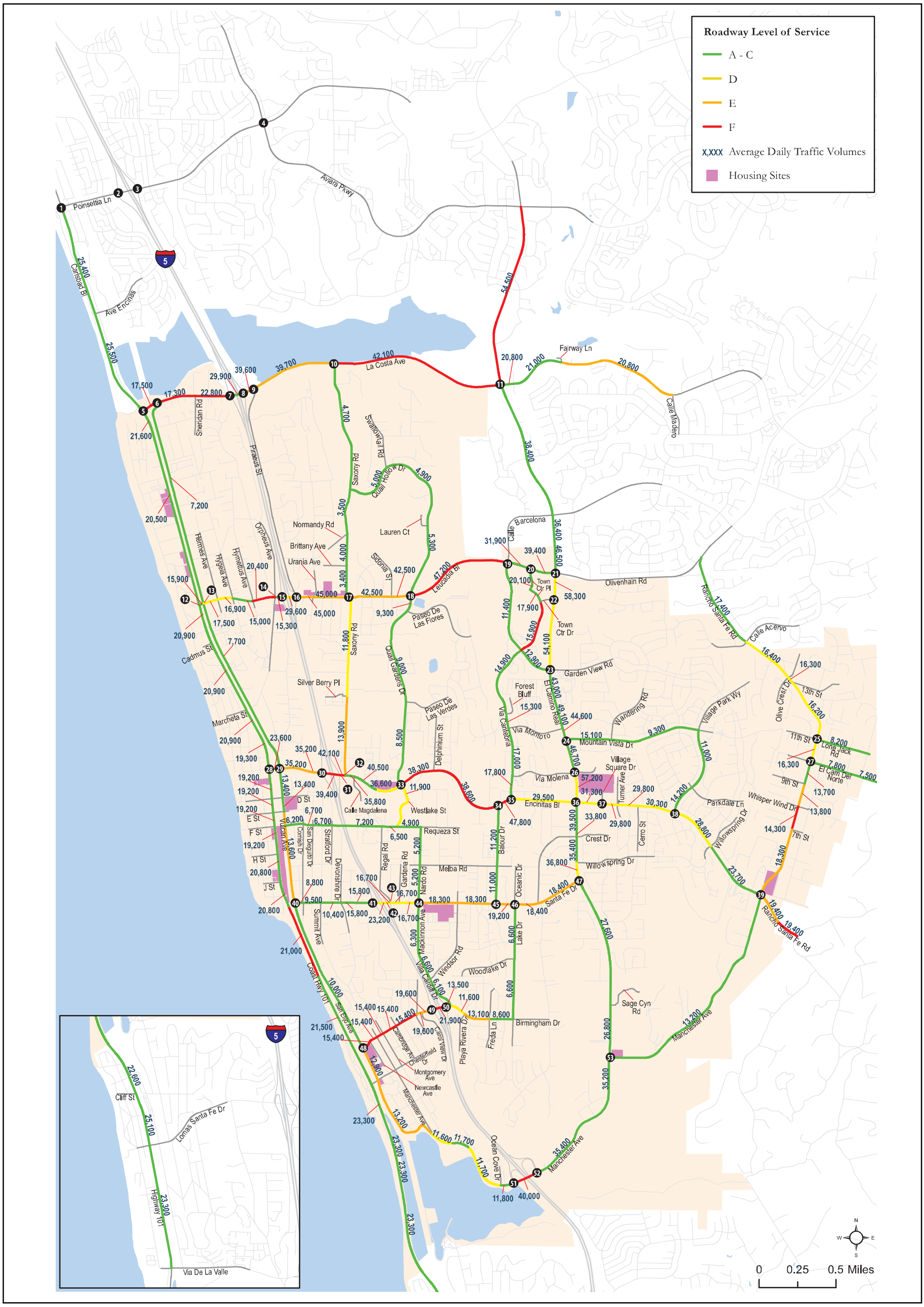


FIGURE 4.13-2

Year 2035 + Housing Strategy 1 (RM) - Roadway LOS

RECON

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Map Source: Chen Ryan

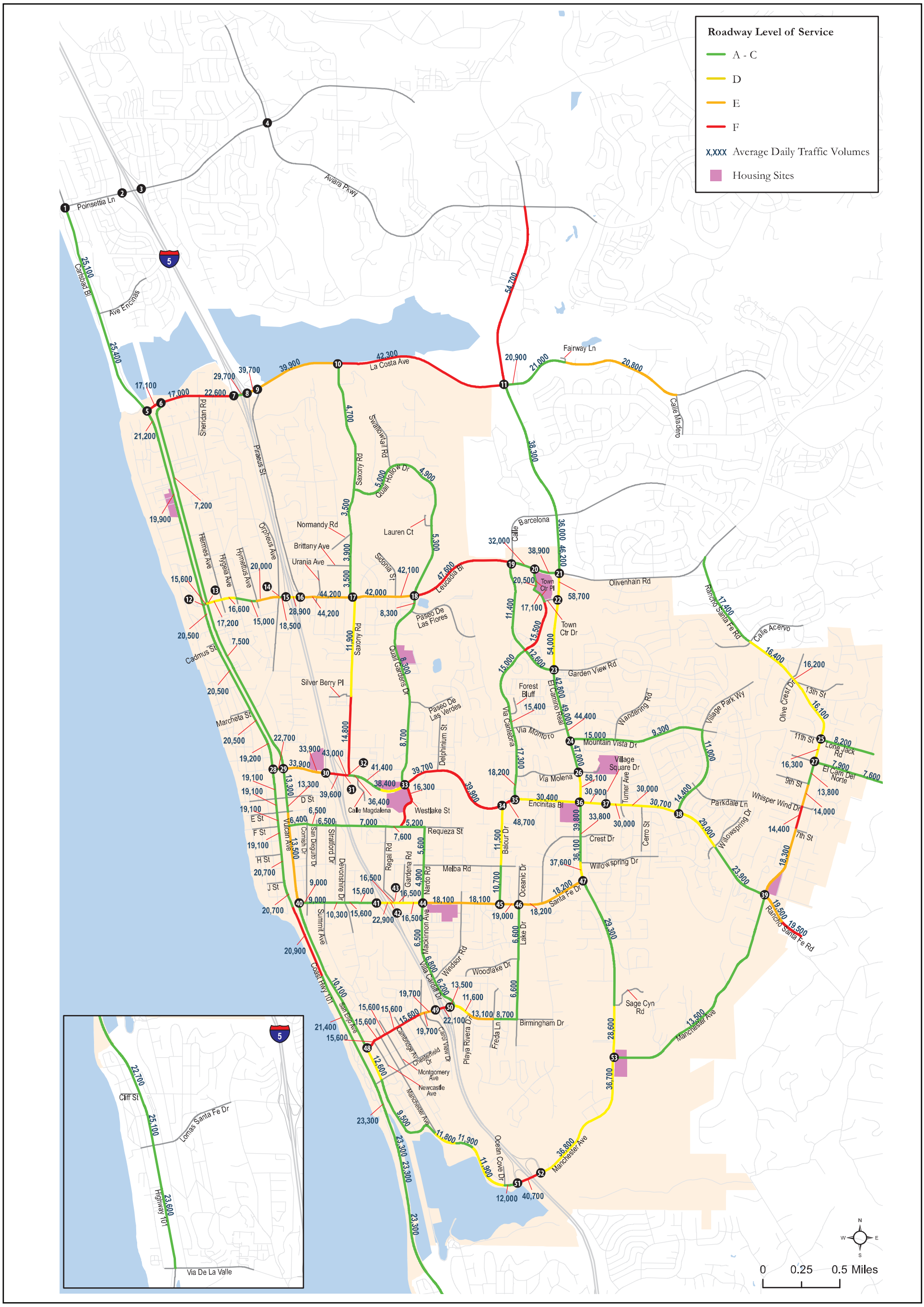


FIGURE 4.13-3

Year 2035 + Housing Strategy 2 (BYO) - Roadway LOS

RECON

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Map Source: Chen Ryan



FIGURE 4.13-4

Year 2035 + Housing Strategy 3 (MMUP) - Roadway LOS

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Roadway Segment Analysis

As shown in Table 4.13-11, 33 roadway segments within the project study area would operate at substandard LOS E or F under the housing strategy 1 (RM), with 27 located in Encinitas, 5 located in Carlsbad, and 1 located in the County of San Diego (see Figure 4.13-2). Although 33 roadway segments operate unacceptably, the additional traffic generated by housing strategy 1 (RM) would only result in the exceedance of the significance criteria at the following 15 segments.

- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS E (Impact TRF-1);
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS F (Impact TRF-2);
- Rancho Santa Fe Road, between 7th Street and Encinitas Boulevard – LOS E (Impact TRF-3);
- La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue – LOS F (Impact TRF-4);
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F (Impact TRF-5);
- La Costa Avenue, between Sheridan Road and I-5 SB Ramps – LOS F (Impact TRF-6);
- Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue – LOS F (Impact TRF-7);
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-8);
- South Rancho Santa Fe Road, between Manchester Avenue and City Limits– LOS E (Impact TRF-9);
- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F (Impact TRF-10);
- Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive – LOS E (Impact TRF-11);
- Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive – LOS E (Impact TRF-12);
- Santa Fe Drive, between Balour Drive and Lake Drive – LOS E (Impact TRF-13);
- Santa Fe Drive, between Lake Drive and Crest Drive – LOS E (Impact TRF-14); and
- Santa Fe Drive, between Crest Drive and El Camino Real – LOS E (Impact TRF-15).

Freeway Segment Analysis

The I-5 freeway segment mainline analysis for the buildout of housing strategy 1 (RM) is shown in Table 4.13-12. As shown in the table, all freeway segments within the study area would operate at LOS D or better under the future year 2035 housing strategy 1 (RM) conditions. As all freeways would operate acceptably with the addition of housing strategy 1 (RM), impacts would be less than significant.

Table 4.13-11 Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis											
Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Carlsbad Blvd	Poinsettia Lane to Avenida Encinas	40,000	Carlsbad	25,300	0.633	C	25,500	0.638	C	0.004	No
	Avenida Encinas to La Costa Avenue	40,000	Carlsbad	24,700	0.618	C	25,400	0.635	C	0.017	No
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	35,200	Encinitas	19,900	0.565	C ≤	21,600	0.614	C ≤	0.049	No
	600 feet south of La Costa Avenue to Leucadia Blvd	26,400	Encinitas	18,100	0.686	C ≤	20,500	0.777	C ≤	0.091	No
	Leucadia Blvd to Cadmus Street	35,200	Encinitas	19,900	0.565	C ≤	20,900	0.594	C ≤	0.029	No
	Cadmus Street to Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,900	0.594	C ≤	0.029	No
	Marcheta Street to 660 feet south of Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,900	0.594	C ≤	0.029	No
	660 feet south of Marcheta Street to Encinitas Blvd	35,200	Encinitas	19,900	0.565	C ≤	19,300	0.548	C ≤	-0.017	No
South Coast Highway 101	Encinitas Blvd to West D Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West D Street to West E Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West E Street to West F Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West F Street to West H Street	35,200	Encinitas	19,400	0.551	C ≤	19,200	0.545	C ≤	-0.006	No
	West H Street to West J Street	35,200	Encinitas	21,100	0.599	C ≤	20,800	0.591	C ≤	-0.008	No
	West J Street to Swami's Parking	26,400	Encinitas	21,100	0.799	C ≤	20,800	0.788	C ≤	-0.011	No
	Swami's Parking to San Elijo State Beach	14,000	Encinitas	21,300	1.521	**F**	21,000	1.500	**F**	-0.021	No
	San Elijo State Beach to Chesterfield	35,200	Encinitas	21,300	0.605	C ≤	21,500	0.611	C ≤	0.006	No
	Chesterfield to Cardiff State Beach traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Cardiff Beach State to Chart House traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Las Olas Mexican Restaurant to Solana Beach boundary	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
North Highway 101	Solana Beach boundary to West Cliff Street	40,000	Solana Beach	22,500	0.563	C	22,600	0.565	C	0.002	No
	West Cliff to Lomas Santa Fe	40,000	Solana Beach	25,000	0.625	C	25,100	0.628	C	0.002	No
	Lomas Santa Fe Drive to Via De La Valle	40,000	Solana Beach	23,600	0.590	C	23,300	0.583	C	-0.007	No
Vulcan Avenue	La Costa Avenue to Leucadia Boulevard	14,000	Encinitas	7,000	0.500	C ≤	7,200	0.514	C ≤	0.014	No
	Leucadia Blvd to Encinitas Boulevard	14,000	Encinitas	7,500	0.536	C ≤	7,700	0.550	C ≤	0.014	No
	Encinitas Boulevard to D Street	32,400	Encinitas	12,900	0.398	C ≤	13,400	0.414	C ≤	0.016	No
	D Street to E Street	32,400	Encinitas	12,900	0.398	C ≤	13,400	0.414	C ≤	0.016	No
	E Street to Santa Fe Drive	20,000	Encinitas	13,100	0.655	C ≤	13,600	0.680	C ≤	0.025	No

Table 4.13-11 Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis											
Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	14,000	Encinitas	10,100	0.721	C ≤	10,000	0.714	C ≤	-0.007	No
	Birmingham Drive to Chesterfield Drive	20,000	Encinitas	12,500	0.625	C ≤	12,900	0.645	C ≤	0.020	No
	Chesterfield Drive to Manchester Avenue	20,000	Encinitas	9,500	0.475	C ≤	13,200	0.660	C ≤	0.185	No
Saxony Road	La Costa Avenue to Quail Gardens Drive	14,000	Encinitas	4,600	0.329	C ≤	4,700	0.336	C ≤	0.007	No
	Quail Hollow Drive to Normtoy Road	14,000	Encinitas	3,400	0.243	C ≤	3,500	0.250	C ≤	0.007	No
	Normtoy Road to Brittany Avenue	14,000	Encinitas	3,900	0.279	C ≤	4,000	0.286	C ≤	0.007	No
	Brittany Avenue to Leucadia Boulevard	14,000	Encinitas	3,500	0.250	C ≤	3,400	0.243	C ≤	-0.007	No
	Leucadia Boulevard to Silver Berry Place	14,000	Encinitas	11,800	0.843	D	11,800	0.843	D	0.000	No
	Silver Berry Place to Encinitas Boulevard	20,000	Encinitas	13,800	0.690	C ≤	13,900	0.695	C ≤	0.005	No
Quail Hollow Drive	Swallow Tail Road to Saxony Road	14,000	Encinitas	5,000	0.357	C ≤	5,000	0.357	C ≤	0.000	No
Quail Gardens Drive	Swallow Tail Road to Lauren Court	20,000	Encinitas	4,900	0.245	C ≤	4,900	0.245	C ≤	0.000	No
	Lauren Court to Leucadia Boulevard	20,000	Encinitas	5,300	0.265	C ≤	5,300	0.265	C ≤	0.000	No
	Leucadia Boulevard to Paseo De Las Flores	20,000	Encinitas	9,100	0.455	C ≤	9,300	0.465	C ≤	0.010	No
	Paseo De Las Flores to Paseo De Las Verdes	20,000	Encinitas	8,900	0.445	C ≤	9,000	0.450	C ≤	0.005	No
	Paseo De Las Verdes to Encinitas Boulevard	20,000	Encinitas	8,200	0.410	C ≤	8,500	0.425	C ≤	0.015	No
Westlake Street	Encinitas Boulevard to Requeza Street	20,000	Encinitas	11,800	0.590	C ≤	11,900	0.595	C ≤	0.005	No
Nardo Drive	Requeza Street to Melba Road	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	14,000	Encinitas	6,200	0.443	C ≤	6,300	0.450	C ≤	0.007	No
	MacKinnon Avenue to Windsor Road	14,000	Encinitas	6,500	0.464	C ≤	6,600	0.471	C ≤	0.007	No
	Windsor Road to Birmingham Drive	14,000	Encinitas	5,700	0.407	C ≤	6,100	0.436	C ≤	0.029	No
Garden View Road	Leucadia Boulevard to Via Cantebria	35,200	Encinitas	11,500	0.327	C ≤	11,400	0.324	C ≤	-0.003	No
	Via Cantebria to El Camino Real	35,200	Encinitas	12,900	0.366	C ≤	12,900	0.366	C ≤	0.000	No
Town Center Place	Leucadia Boulevard to Town Center Place	32,400	Encinitas	20,000	0.617	C ≤	20,100	0.620	C ≤	0.003	No
	Town Center Place to Town Center Drive	32,400	Encinitas	17,800	0.549	C ≤	17,900	0.552	C ≤	0.003	No
Via Cantebria	Town Center Drive to Garden View Road	14,000	Encinitas	15,800	1.129	**F**	15,900	1.136	**F**	0.007	No
	Garden View Road to Forrest Bluff	24,300	Encinitas	14,900	0.613	C ≤	14,900	0.613	C ≤	0.000	No
	Forrest Bluff to Via Montoro	32,400	Encinitas	15,200	0.469	C ≤	15,300	0.472	C ≤	0.003	No
	Via Montoro to Via Molena	32,400	Encinitas	17,900	0.552	C ≤	17,000	0.525	C ≤	-0.027	No
	Via Molena to Encinitas Boulevard	32,400	Encinitas	17,500	0.540	C ≤	17,800	0.549	C ≤	0.009	No
Balour Drive	Encinitas Boulevard to Melba Road	14,000	Encinitas	11,200	0.800	C ≤	11,200	0.800	C ≤	0.000	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	10,700	0.764	C ≤	11,000	0.786	C ≤	0.022	No

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Lake Drive	Santa Fe Drive to Woodlake Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
	Woodlake Drive to Birmingham Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
El Camino Real	Aviara Parkway to La Costa Avenue	50,000	Carlsbad	54,300	1.086	**F**	54,500	1.090	**F**	0.004	No
	La Costa Avenue to Calle Barcelona	60,000	Carlsbad	38,400	0.640	C	38,400	0.640	C	0.000	No
	Calle Barcelona to Carlsbad boundary	60,000	Carlsbad	36,500	0.608	C	36,400	0.607	C	-0.001	No
	Carlsbad boundary to Leucadia Blvd.	66,000	Encinitas	46,700	0.708	C ≤	46,500	0.705	C ≤	-0.003	No
	Leucadia Boulevard to Town Center Dr.	66,000	Encinitas	58,600	0.888	D	58,300	0.883	D	-0.005	No
	Town Center Drive to Garden View Road	66,000	Encinitas	54,200	0.821	D	54,100	0.820	D	-0.001	No
	Garden View Road to 331-339 El Camino Real	66,000	Encinitas	42,900	0.650	C ≤	43,000	0.652	C ≤	0.002	No
	331-339 El Camino Real to Via Montoro	66,000	Encinitas	48,900	0.741	C ≤	49,100	0.744	C ≤	0.003	No
	Via Montoro to Mountain Vista	66,000	Encinitas	44,300	0.671	C ≤	44,600	0.676	C ≤	0.005	No
	Mountain Vista to Via Molena	66,000	Encinitas	47,000	0.712	C ≤	46,700	0.708	C ≤	-0.004	No
	Via Molena to Encinitas Boulevard	66,000	Encinitas	56,900	0.862	D	57,200	0.867	D	0.005	No
	Encinitas Blvd. to 213 S El Camino Real	57,000	Encinitas	39,400	0.691	C ≤	39,500	0.693	C ≤	0.002	No
	213 S El Camino Real to Crest Drive	57,000	Encinitas	33,800	0.593	C ≤	33,800	0.593	C ≤	0.000	No
	Crest Drive to Willowspring Drive	57,000	Encinitas	36,200	0.635	C ≤	35,400	0.621	C ≤	-0.014	No
	Willowspring Drive to Santa Fe Drive	45,400	Encinitas	37,500	0.826	D	36,800	0.811	D	-0.015	No
	Santa Fe Drive to Sage Canyon Drive	45,400	Encinitas	28,400	0.626	C ≤	27,600	0.608	C ≤	-0.018	No
	Sage Canyon Drive to Manchester Avenue	35,200	Encinitas	27,700	0.787	C ≤	26,800	0.761	C ≤	-0.026	No
Village Park Way	Mountain Vista Drive to Parkdale Drive	35,200	Encinitas	10,900	0.310	C ≤	11,000	0.313	C ≤	0.003	No
	Parkdale Drive to Encinitas Boulevard	35,200	Encinitas	14,200	0.403	C ≤	14,200	0.403	C ≤	0.000	No
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	40,000	Carlsbad	17,400	0.435	B	17,400	0.435	B	0.000	No
	Calle Acervo/Avenida La Posta to Olive Crest Drive	20,000	Encinitas	15,900	0.795	C ≤	16,400	0.820	D	0.025	No
	Olive Crest Drive to 13th Street	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	13th Street to 11th Street	20,000	Encinitas	15,700	0.785	C ≤	16,200	0.810	D	0.025	No
	11th Street to El Camino Del Norte	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	El Camino Del Norte to 9th Street	20,000	Encinitas	13,300	0.665	C ≤	13,700	0.685	C ≤	0.020	No
	9th Street to 8th Street	14,000	Encinitas	13,500	0.964	**E**	13,800	0.986	**E**	0.022	Yes (TRF-1)
	8th Street to 7th Street	14,000	Encinitas	13,900	0.993	**E**	14,300	1.021	**F**	0.028	Yes (TRF-2)
	7th Street to Encinitas Boulevard	20,000	Encinitas	15,200	0.760	C ≤	18,300	0.915	**E**	0.155	Yes (TRF-3)

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Manchester Avenue	Manchester Avenue to Mira Costa College	45,400	Encinitas	35,400	0.780	C ≤	35,200	0.775	C ≤	-0.005	No
	Mira Costa College to I-5 NB On-Ramp	45,400	Encinitas	35,700	0.786	C ≤	35,400	0.780	C ≤	-0.006	No
	I-5 NB Ramps to I-5 SB Ramps	20,000	Encinitas	40,200	2.010	**F**	40,000	2.000	**F**	-0.010	No
	I-5 SB Ramps to Ocean Cove Drive	20,000	Encinitas	11,900	0.595	C ≤	11,800	0.590	C ≤	-0.005	No
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	14,000	Encinitas	11,900	0.850	D	11,700	0.836	D	-0.014	No
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	20,000	Encinitas	11,900	0.595	C ≤	11,700	0.585	C ≤	-0.010	No
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	14,000	Encinitas	11,800	0.843	D	11,600	0.829	D	-0.014	No
	Encinitas Boulevard to El Camino Real	20,000	Encinitas	12,300	0.615	C ≤	13,200	0.660	C ≤	0.045	No
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	14,000	Encinitas	16,400	1.164	**F**	17,500	1.250	**F**	0.079	Yes (TRF-4)
	Vulcan Avenue to Sheridan Road	14,000	Encinitas	16,300	1.164	**F**	17,300	1.236	**F**	0.072	Yes (TRF-5)
	Sheridan Road to I-5 SB Ramps	20,000	Encinitas	22,000	1.100	**F**	22,800	1.140	**F**	0.040	Yes (TRF-6)
	I-5 SB Ramps to I-5 NB Ramps	40,000	Carlsbad	29,300	0.733	C	29,900	0.748	C	0.015	No
	I-5 NB Ramps to Piraeus Street	41,667	Carlsbad	39,500	0.948	**E**	39,600	0.950	**E**	0.002	No
	Piraeus Street to Saxony Road	40,000	Carlsbad	39,600	0.990	**E**	39,700	0.993	**E**	0.003	No
	Saxony Road to El Camino Real	40,000	Carlsbad	42,000	1.050	**F**	42,100	1.053	**F**	0.002	No
	El Camino Real to La Costa Towne Center traffic signal	40,000	Carlsbad	20,700	0.518	B	20,800	0.520	B	0.002	No
	La Costa Towne Center traffic signal to Fairway Lane	40,000	Carlsbad	20,900	0.523	B	21,000	0.525	B	0.002	No
	Fairway Lane to Calle Madero	22,500	Carlsbad	20,700	0.920	**E**	20,800	0.924	**E**	0.004	No

Table 4.13-11 Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis											
Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Leucadia Blvd	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	14,300	0.441	C ≤	15,900	0.491	C ≤	0.050	No
	Vulcan Avenue to Hermes Avenue	20,000	Encinitas	16,300	0.815	D	17,500	0.875	D	0.060	No
	Hermes Avenue to Hygeia Avenue	20,000	Encinitas	15,700	0.785	C ≤	16,900	0.845	D	0.060	No
	Hygeia Avenue to Hymettus Avenue	20,000	Encinitas	17,400	0.870	D	15,000	0.750	C	-0.120	No
	Hymettus Avenue to Orpheus Avenue	20,000	Encinitas	19,200	0.960	**E**	20,400	1.020	**F**	0.060	Yes (TRF-7)
	Orpheus Avenue to I-5 SB Ramps	35,200	Encinitas	17,700	0.503	C ≤	15,300	0.435	C ≤	-0.068	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	28,600	0.813	D	29,600	0.841	D	0.028	No
	Piraeus Street to Urania Avenue	45,400	Encinitas	44,100	0.971	**E**	45,000	0.991	**E**	0.020	No
	Urania Avenue to Saxony Road	45,400	Encinitas	44,100	0.971	**E**	45,000	0.991	**E**	0.020	No
	Saxony Road to Sidonia Street	45,400	Encinitas	42,400	0.934	**E**	42,500	0.936	**E**	0.002	No
	Sidonia Street to Quail Gardens Drive	45,400	Encinitas	42,400	0.934	E	42,500	0.936	E	0.002	No
	Quail Gardens Drive to Garden View Road	45,400	Encinitas	47,100	1.037	F	47,200	1.040	F	0.003	No
	Garden View Road to Town Center Place	45,400	Encinitas	34,700	0.764	C ≤	33,900	0.746	C ≤	0.018	No
	Town Center Place to El Camino Real	57,000	Encinitas	39,000	0.684	C ≤	39,000	0.684	C ≤	0.000	No
Mountain Vista Drive	El Camino Real to Wandering Road	20,000	Encinitas	15,000	0.750	C ≤	15,100	0.755	C ≤	0.005	No
	Wandering Road to Village Park Way	20,000	Encinitas	9,300	0.465	C ≤	9,300	0.465	C ≤	0.000	No
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	14,000	Encinitas	8,400	0.600	C ≤	8,200	0.586	C ≤	-0.014	No
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	14,000	Encinitas	7,900	0.564	C ≤	7,800	0.557	C ≤	-0.007	No
	San Dieguito CPA boundary to Via De Fortuna	9,700	County	7,800	0.804	D	7,500	0.773	C ≤	-0.031	No

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Encinitas Blvd	North Coast Highway 101 to Vulcan Ave.	32,400	Encinitas	22,300	0.688	C ≤	23,600	0.728	C ≤	0.040	No
	Vulcan Avenue to I-5 SB Ramps	45,400	Encinitas	34,100	0.751	C ≤	45,400	0.775	C ≤	0.024	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	38,500	1.094	**F**	39,400	1.119	**F**	0.025	Yes (TRF-8)
	I-5 NB Ramps to Saxony Road	35,200	Encinitas	41,400	1.176	**F**	42,100	1.196	**F**	0.020	No
	Saxony Road to Calle Magdalena	66,000	Encinitas	35,400	0.536	C ≤	35,800	0.542	C ≤	0.006	No
	Calle Magdalena to Encinitas Town Country traffic signal	57,000	Encinitas	40,000	0.702	C ≤	40,500	0.711	C ≤	0.009	No
	Encinitas Town Country traffic signal to Quail Gardens Drive	45,400	Encinitas	36,000	0.793	C ≤	36,600	0.806	D	0.013	No
	Quails Garden Drive to Delphinium Street	35,200	Encinitas	37,700	1.071	**F**	38,300	1.088	**F**	0.017	No
	Delphinium Street to Balour Drive	35,200	Encinitas	38,300	1.088	**F**	38,600	1.097	**F**	0.009	No
	Balour Drive to Via Cantebria	35,200	Encinitas	47,500	1.349	**F**	47,800	1.358	**F**	0.009	No
	Via Cantebria to El Camino Real	35,200	Encinitas	29,400	0.835	D	29,500	0.838	D	0.003	No
	El Camino Real to Village Square Drive	35,200	Encinitas	31,000	0.881	D	31,300	0.889	D	0.008	No
	Village Square Drive to Turner Avenue	35,200	Encinitas	29,300	0.832	D	29,800	0.847	D	0.015	No
	Turner Avenue to Cerro Street	35,200	Encinitas	29,300	0.832	D	29,800	0.847	D	0.015	No
	Cerro Street to Village Park Way	35,200	Encinitas	29,700	0.844	D	30,300	0.861	D	0.017	No
	Village Park Way to Willowspring Drive	35,200	Encinitas	27,900	0.793	C ≤	28,800	0.818	D	0.025	No
	Willowspring Drive to Rancho Santa Fe Road	35,200	Encinitas	22,700	0.645	C ≤	23,700	0.673	C ≤	0.028	No
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	20,000	Encinitas	18,580	0.930	**E**	19,400	0.970	**E**	0.040	Yes (TRF-9)
	Encinitas Limits to El Mirlo	9,700	County	18,580	1.915	**F**	19,400	2.000	**F**	0.085	Yes (TRF-10)
F Street	Vulcan Avenue to Cornish Drive	14,000	Encinitas	6,200	0.443	C ≤	6,200	0.443	C ≤	0.000	No
Requeza Street	Cornish Drive to San Dieguito Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.479	C ≤	0.029	No
	San Dieguito Drive to Stratford Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.479	C ≤	0.029	No
	Stratford Drive to Regal Road	14,000	Encinitas	6,800	0.486	C ≤	7,200	0.514	C ≤	0.028	No
	Regal Road to West Lake Drive	14,000	Encinitas	6,400	0.457	C ≤	6,500	0.464	C ≤	0.007	No
	West Lake Drive to Nardo Drive	14,000	Encinitas	4,800	0.343	C ≤	4,900	0.350	C ≤	0.007	No

Table 4.13-11
Housing Strategy 1 (Ready Made) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Housing Strategy 1 (Ready Made)			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Santa Fe Drive	Vulcan Avenue to Cornish Drive	14,000	Encinitas	9,000	0.643	C ≤	8,800	0.629	C ≤	-0.014	No
	Cornish Drive to Summit Avenue	14,000	Encinitas	9,000	0.643	C ≤	9,500	0.679	C ≤	0.036	No
	Summit Avenue to Devonshire	14,000	Encinitas	10,100	0.721	C ≤	10,400	0.743	C ≤	0.022	No
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	20,000	Encinitas	15,200	0.760	C ≤	15,800	0.790	C ≤	0.030	No
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	32,400	Encinitas	15,200	0.469	C ≤	15,800	0.488	C ≤	0.019	No
	I-5 SB Ramps to I-5 NB Ramps	26,400	Encinitas	22,400	0.848	D	23,200	0.879	D	0.031	No
	I-5 NB Ramps to Regal Road	20,000	Encinitas	16,100	0.805	D	16,700	0.835	D	0.030	No
	Regal Road to Gardena Road	20,000	Encinitas	16,100	0.805	D	16,700	0.835	D	0.030	No
	Gardena Road to Nardo Road	20,000	Encinitas	16,100	0.805	D	16,700	0.835	D	0.030	No
	Nardo Road to Windsor Road/Bonita Drive	20,000	Encinitas	17,700	0.885	D	18,300	0.915	**E**	0.030	Yes (TRF-11)
	Windsor Road/Bonita Drive to Balour Drive	20,000	Encinitas	17,700	0.885	D	18,300	0.915	**E**	0.030	Yes (TRF-12)
	Balour Drive to Lake Drive	20,000	Encinitas	18,600	0.930	**E**	19,200	0.960	**E**	0.030	Yes (TRF-13)
	Lake Drive to Crest Drive	20,000	Encinitas	17,700	0.885	D	18,400	0.920	**E**	0.035	Yes (TRF-14)
	Crest Drive to El Camino Real	20,000	Encinitas	17,700	0.885	D	18,400	0.920	**E**	0.035	Yes (TRF-15)
Birmingham Drive	**San Elijo Avenue to MacKinnon**	20,000	Encinitas	15,500	0.775	C ≤	15,500	0.775	C ≤	0.000	No
	MacKinnon Avenue to Carol View Drive	20,000	Encinitas	19,500	0.775	C ≤	15,500	0.775	C ≤	0.000	No
	Carol View Drive to I-5 SB Ramps	20,000	Encinitas	19,500	0.775	C ≤	15,500	0.775	C ≤	0.000	No
	I-5 SB Ramps to I-5 NB Ramps	14,000	Encinitas	21,800	1.243	**F**	17,400	1.243	**F**	0.000	No
	I-5 NB Ramps to Villa Cardiff Drive	14,000	Encinitas	13,200	0.629	C ≤	8,800	0.629	C ≤	0.000	No
	Villa Cardiff Drive to Playa Rivera	14,000	Encinitas	11,600	0.629	C ≤	8,800	0.629	C ≤	0.000	No
	Playa Rivera to Freda Lane	14,000	Encinitas	13,100	0.629	C ≤	8,800	0.629	C ≤	0.000	No
	Freda Lane to Lake Drive	14,000	Encinitas	8,700	0.629	C ≤	8,800	0.629	C ≤	0.000	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.

Table 4.13-12
Housing Strategy 1 (Ready Made) - Future Year 2035 Freeway Segment Level of Service

Freeway	Segment	Direction	Year 2035					Year 2035 + Housing Strategy 1					Δ V/C	Significant Impact?
			ADT	Capacity	Peak Hour Volume	V/C	LOS	ADT	Peak Hour Volume	Capacity	V/C	LOS		
I-5	Palomar Airport Rd. and Poinsettia Ln.	NB	201,000	10,810	8,500	0.69	C	202,000	7,500	10,810	0.69	C	0.0	No
		SB		10,810	8,400	0.78	C		8,400	10,810	0.78	C	0.0	No
	Poinsettia Ln. and La Costa Ave.	NB	204,000	9,400	8,600	0.81	D	200,200	7,600	9,400	0.81	D	0.0	No
		SB		9,400	8,500	0.88	D		8,300	9,400	0.88	D	0.0	No
	La Costa Ave. and Leucadia Blvd.	NB	208,000	9,400	8,600	0.81	D	196,900	7,600	9,400	0.81	D	0.0	No
		SB		10,810	7,900	0.69	C		7,500	10,810	0.69	C	0.0	No
	Leucadia Blvd. and Encinitas Blvd.	NB	211,000	10,810	8,700	0.71	C	117,600	7,700	10,810	0.71	C	0.0	No
		SB		9,400	8,000	0.47	B		4,500	9,400	0.48	B	0.01	No
	Encinitas Blvd. and Santa Fe Dr.	NB	210,000	9,400	8,500	0.80	D	197,300	7,500	9,400	0.80	D	0.0	No
		SB		10,810	8,000	0.69	C		7,600	10,810	0.70	C	0.01	No
	Santa Fe Dr. and Birmingham Dr.	NB	201,000	10,810	8,100	0.71	C	197,100	7,700	10,810	0.71	C	0.0	No
		SB		10,810	7,700	0.69	C		7,600	10,810	0.70	C	0.01	No
	Birmingham Dr. and Manchester Ave.	NB	203,000	10,810	8,200	0.74	C	198,900	8,000	10,810	0.74	C	0.0	No
		SB		10,810	7,800	0.70	C		7,600	10,810	0.70	C	0.0	No
	Manchester Ave. and Lomas Santa Fe Dr.	NB	215,970*	8,460	8,200	0.860	D	247,300	9,300	10,810	0.860	D	0.0	No
		SB		10,810	8,900	0.880	D		9,500	10,810	0.880	D	0.0	No
	Lomas Santa Fe Dr. and Via De La Valle	NB	208,844*	10,810	8,200	0.870	D	248,600	9,400	10,810	0.870	D	0.0	No
		SB		10,810	8,400	0.89	D		9,500	10,810	0.880	D	-0.01	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F. Shading represents a significant impact.
*Reduction of estimated HOV volume was applied to the ADT.

d. Housing Strategy 2 – Build Your Own (BYO)

The buildout of housing strategy 2 (BYO) would generate 720,710 trips and would result in 1,200,486 citywide VMT, as shown in Tables 4.13-9 and 4.13-10. Also, Figure 4.13-3 illustrates the year 2035 with housing strategy 2 (BYO) roadway segment conditions.

Roadway Segment Analysis

As shown in Table 4.13-13, 33 roadway segments within the project study area would operate at substandard level of service E or F under housing strategy 2 (BYO) buildout conditions, with 27 located in Encinitas, 5 located in Carlsbad, and 1 located in the County of San Diego (see Figure 4.13-3). Although 33 roadway segments operate unacceptably, the additional traffic generated by housing strategy 2 (BYO) would only result in the exceedance of the significance criteria at the following 20 segments (19 in Encinitas and 1 in the County):

- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS F (Impact TRF-1);
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS F (Impact TRF-2);
- Rancho Santa Fe Road, between 7th Street and Encinitas Boulevard – LOS E (Impact TRF-3);
- Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps – LOS F (Impact TRF-16);
- La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue – LOS F (Impact TRF-4);
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F (Impact TRF-5);
- La Costa Avenue, between Sheridan Road and I-5 SB Ramps – LOS F (Impact TRF-6);
- Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue – LOS E (Impact TRF-7);
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-8);
- Encinitas Boulevard, between I-5 NB Ramps and Saxony Road – LOS F (Impact TRF-17);
- Encinitas Boulevard, between Quails Garden Drive and Delphinium Street – LOS F (Impact TRF-18);
- Encinitas Boulevard, between Delphinium Street and Balour Drive – LOS F (Impact TRF-19);
- Encinitas Boulevard, between Balour Drive and Via Cantebria – LOS F (Impact TRF-20);

- South Rancho Santa Fe Road, between Manchester Avenue and City of Encinitas Limits – LOS E (Impact TRF-9);
- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F (Impact TRF-10).
- Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive – LOS E (Impact TRF-11);
- Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive – LOS E (Impact TRF-12);
- Santa Fe Drive, between Lake Drive and Crest Drive – LOS E (Impact TRF-14);
- Santa Fe Drive, between Crest Drive and El Camino Real – LOS E (Impact TRF-15);
- Birmingham Drive, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-21); and

Freeway Segment Analysis

The I-5 freeway segment mainline analysis for housing strategy 2 (BYO) buildout is shown in Table 4.13-14. As shown in the table, all freeway segments within the study area would operate at LOS D or better under the future year 2035 housing strategy 2 (BYO) buildout conditions. As all freeways would operate acceptably with the addition of housing strategy 2 (BYO), impacts would be less than significant.

Table 4.13-13 Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis											
		Capacity		Year 2035 (No Project)			Year 2035 + Strategy 2				Significant
Roadway	Segment	(LOS E)	Jurisdiction	ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	Impact?
Carlsbad Blvd.	Poinsettia Lane to Avenida Encinas	40,000	Carlsbad	25,300	0.633	C	25,400	0.635	C	0.002	No
	Avenida Encinas to La Costa Avenue	40,000	Carlsbad	24,700	0.618	C	25,100	0.628	C	0.009	No
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	35,200	Encinitas	19,900	0.565	C ≤	21,200	0.602	C ≤	0.037	No
	600 feet south of La Costa Avenue to Leucadia Blvd	26,400	Encinitas	18,100	0.686	C ≤	19,900	0.754	C ≤	0.068	No
	Leucadia Blvd to Cadmus Street	35,200	Encinitas	19,900	0.565	C ≤	20,500	0.582	C ≤	0.017	No
	Cadmus Street to Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,500	0.582	C ≤	0.017	No
	Marcheta Street to 660 feet south of Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	20,500	0.582	C ≤	0.017	No
	660 feet south of Marcheta Street to Encinitas Blvd	35,200	Encinitas	19,900	0.565	C ≤	19,200	0.545	C ≤	-0.020	No
South Coast Highway 101	Encinitas Blvd to West D Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West D Street to West E Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West E Street to West F Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West F Street to West H Street	35,200	Encinitas	19,400	0.551	C ≤	19,100	0.543	C ≤	-0.008	No
	West H Street to West J Street	35,200	Encinitas	21,100	0.599	C ≤	20,700	0.588	C ≤	-0.011	No
	West J Street to Swami's Parking	26,400	Encinitas	21,100	0.799	C ≤	20,700	0.784	C ≤	-0.015	No
	Swami's Parking to San Elijo State Beach	14,000	Encinitas	21,300	1.521	**F**	20,900	1.493	**F**	-0.028	No
	San Elijo State Beach to Chesterfield	35,200	Encinitas	21,300	0.605	C ≤	21,400	0.608	C ≤	0.003	No
	Chesterfield to Cardiff State Beach traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Cardiff Beach State to Chart House traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
	Las Olas Mexican Restaurant to Solana Beach boundary	35,200	Encinitas	23,200	0.659	C ≤	23,300	0.662	C ≤	0.003	No
North Highway 101	Solana Beach boundary to West Cliff Street	40,000	Solana Beach	22,500	0.563	C	22,700	0.568	C	0.005	No
	West Cliff to Lomas Santa Fe	40,000	Solana Beach	25,000	0.625	C	25,100	0.628	C	0.002	No
	Lomas Santa Fe Drive to Via De La Valle	40,000	Solana Beach	23,600	0.590	C	23,600	0.590	C	0.000	No
Vulcan Avenue	La Costa Avenue to Leucadia Boulevard	14,000	Encinitas	7,000	0.500	C ≤	7,200	0.514	C ≤	0.014	No
	Leucadia Blvd to Encinitas Boulevard	14,000	Encinitas	7,500	0.536	C ≤	7,500	0.536	C ≤	0.000	No
	Encinitas Boulevard to D Street	32,400	Encinitas	12,900	0.398	C ≤	13,300	0.410	C ≤	0.012	No
	D Street to E Street	32,400	Encinitas	12,900	0.398	C ≤	13,300	0.410	C ≤	0.012	No
	E Street to Santa Fe Drive	20,000	Encinitas	13,100	0.655	C ≤	13,500	0.675	C ≤	0.020	No

Table 4.13-13 Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis											
		Capacity		Year 2035 (No Project)			Year 2035 + Strategy 2				Significant
Roadway	Segment	(LOS E)	Jurisdiction	ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	Impact?
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	14,000	Encinitas	10,100	0.721	C ≤	10,100	0.721	C ≤	0.000	No
	Birmingham Drive to Chesterfield Drive	20,000	Encinitas	12,500	0.625	C ≤	12,600	0.630	C ≤	0.005	No
	Chesterfield Drive to Manchester Avenue	20,000	Encinitas	9,500	0.475	C ≤	9,500	0.475	C ≤	0.000	No
Saxony Road	La Costa Avenue to Quail Gardens Drive	14,000	Encinitas	4,600	0.329	C ≤	4,700	0.336	C ≤	0.007	No
	Quail Hollow Drive to Normtoy Road	14,000	Encinitas	3,400	0.243	C ≤	3,500	0.250	C ≤	0.007	No
	Normtoy Road to Brittany Avenue	14,000	Encinitas	3,900	0.279	C ≤	3,900	0.279	C ≤	0.000	No
	Brittany Avenue to Leucadia Boulevard	14,000	Encinitas	3,500	0.250	C ≤	3,500	0.250	C ≤	0.000	No
	Leucadia Boulevard to Silver Berry Place	14,000	Encinitas	11,800	0.843	D	11,900	0.850	D	0.007	No
	Silver Berry Place to Encinitas Boulevard	20,000	Encinitas	13,800	0.690	C ≤	14,800	0.740	C ≤	0.050	No
Quail Hollow Drive	Swallow Tail Road to Saxony Road	14,000	Encinitas	5,000	0.357	C ≤	5,000	0.357	C ≤	0.000	No
Quail Gardens Drive	Swallow Tail Road to Lauren Court	20,000	Encinitas	4,900	0.245	C ≤	4,900	0.245	C ≤	0.000	No
	Lauren Court to Leucadia Boulevard	20,000	Encinitas	5,300	0.265	C ≤	5,300	0.265	C ≤	0.000	No
	Leucadia Boulevard to Paseo De Las Flores	20,000	Encinitas	9,100	0.455	C ≤	8,300	0.415	C ≤	-0.040	No
	Paseo De Las Flores to Paseo De Las Verdes	20,000	Encinitas	8,900	0.445	C ≤	8,300	0.415	C ≤	-0.030	No
	Paseo De Las Verdes to Encinitas Boulevard	20,000	Encinitas	8,200	0.410	C ≤	8,700	0.435	C ≤	0.025	No
Westlake Street	Encinitas Boulevard to Requeza Street	20,000	Encinitas	11,800	0.590	C ≤	16,300	0.815	D	0.225	No
Nardo Drive	Requeza Street to Melba Road	14,000	Encinitas	5,100	0.364	C ≤	5,600	0.400	C ≤	0.036	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	5,100	0.364	C ≤	4,900	0.350	C ≤	-0.014	No
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	14,000	Encinitas	6,200	0.443	C ≤	6,500	0.464	C ≤	0.021	No
Villa Cardiff Drive	MacKinnon Avenue to Windsor Road	14,000	Encinitas	6,500	0.464	C ≤	6,800	0.486	C ≤	0.022	No
	Windsor Road to Birmingham Drive	14,000	Encinitas	5,700	0.407	C ≤	6,200	0.443	C ≤	0.036	No
Garden View Road	Leucadia Boulevard to Via Cantebria	35,200	Encinitas	11,500	0.327	C ≤	11,400	0.324	C ≤	-0.003	No
	Via Cantebria to El Camino Real	35,200	Encinitas	12,900	0.366	C ≤	12,600	0.358	C ≤	-0.008	No
Town Center Place	Leucadia Boulevard to Town Center Place	32,400	Encinitas	20,000	0.617	C ≤	20,500	0.633	C ≤	0.016	No
	Town Center Place to Town Center Drive	32,400	Encinitas	17,800	0.549	C ≤	17,100	0.528	C ≤	-0.021	No
Via Cantebria	Town Center Drive to Garden View Road	14,000	Encinitas	15,800	1.129	**F**	15,500	1.107	**F**	-0.022	No
	Garden View Road to Forrest Bluff	24,300	Encinitas	14,900	0.613	C ≤	15,000	0.617	C ≤	0.004	No
	Forrest Bluff to Via Montoro	32,400	Encinitas	15,200	0.469	C ≤	15,400	0.475	C ≤	0.006	No
	Via Montoro to Via Molena	32,400	Encinitas	17,900	0.552	C ≤	17,300	0.534	C ≤	-0.018	No
	Via Molena to Encinitas Boulevard	32,400	Encinitas	17,500	0.540	C ≤	18,200	0.562	C ≤	0.022	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Balour Drive	Encinitas Boulevard to Melba Road	14,000	Encinitas	11,200	0.800	C ≤	11,500	0.821	D	0.021	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	10,700	0.764	C ≤	10,700	0.764	C ≤	0.000	No
Lake Drive	Santa Fe Drive to Woodlake Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
	Woodlake Drive to Birmingham Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
El Camino Real	Aviara Parkway to La Costa Avenue	50,000	Carlsbad	54,300	1.086	**F**	54,200	1.084	**F**	-0.002	No
	La Costa Avenue to Calle Barcelona	60,000	Carlsbad	38,400	0.640	C	38,300	0.638	C	-0.002	No
	Calle Barcelona to Carlsbad boundary	60,000	Carlsbad	36,500	0.608	C	36,000	0.600	C	-0.008	No
	Carlsbad boundary to Leucadia Boulevard	66,000	Encinitas	46,700	0.708	C ≤	46,200	0.700	C ≤	-0.008	No
	Leucadia Boulevard to Town Center Drive	66,000	Encinitas	58,600	0.888	D	58,700	0.889	D	0.001	No
	Town Center Drive to Garden View Road	66,000	Encinitas	54,200	0.821	D	54,000	0.818	D	-0.003	No
	Garden View Road to 331-339 El Camino Real	66,000	Encinitas	42,900	0.650	C ≤	42,800	0.648	C ≤	-0.002	No
	331-339 El Camino Real to Via Montoro	66,000	Encinitas	48,900	0.741	C ≤	49,000	0.742	C ≤	0.001	No
	Via Montoro to Mountain Vista	66,000	Encinitas	44,300	0.671	C ≤	44,400	0.673	C ≤	0.002	No
	Mountain Vista to Via Molena	66,000	Encinitas	47,000	0.712	C ≤	47,000	0.712	C ≤	0.000	No
	Via Molena to Encinitas Boulevard	66,000	Encinitas	56,900	0.862	D	58,100	0.880	D	0.018	No
	Encinitas Boulevard to 213 S El Camino Real	57,000	Encinitas	39,400	0.691	C ≤	39,800	0.698	C ≤	0.007	No
	213 S El Camino Real to Crest Drive	57,000	Encinitas	33,800	0.593	C ≤	33,800	0.593	C ≤	0.000	No
	Crest Drive to Willowspring Drive	57,000	Encinitas	36,200	0.635	C ≤	36,100	0.633	C ≤	-0.002	No
	Willowspring Drive to Santa Fe Drive	45,400	Encinitas	37,500	0.826	D	37,600	0.828	D	0.002	No
	Santa Fe Drive to Sage Canyon Drive	45,400	Encinitas	28,400	0.626	C ≤	29,300	0.645	C ≤	0.019	No
	Sage Canyon Drive to Manchester Avenue	35,200	Encinitas	27,700	0.787	C ≤	28,600	0.813	D	0.026	No
Village Park Way	Mountain Vista Drive to Parkdale Drive	35,200	Encinitas	10,900	0.310	C ≤	11,000	0.313	C ≤	0.003	No
	Parkdale Drive to Encinitas Boulevard	35,200	Encinitas	14,200	0.403	C ≤	14,400	0.409	C ≤	0.006	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	40,000	Carlsbad	17,400	0.435	B	17,400	0.435	B	0.000	No
	Calle Acervo/Avenida La Posta to Olive Crest Drive	20,000	Encinitas	15,900	0.795	C ≤	16,400	0.820	D	0.025	No
	Olive Crest Drive to 13th Street	20,000	Encinitas	15,800	0.790	C ≤	16,200	0.810	D	0.020	No
	13th Street to 11th Street	20,000	Encinitas	15,700	0.785	C ≤	16,100	0.805	D	0.020	No
	11th Street to El Camino Del Norte	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	El Camino Del Norte to 9th Street	20,000	Encinitas	13,300	0.665	C ≤	13,700	0.685	C ≤	0.020	No
	9th Street to 8th Street	14,000	Encinitas	13,500	0.964	**E**	14,000	1.000	**E**	0.036	**Yes (TRF-1)**
	8th Street to 7th Street	14,000	Encinitas	13,900	0.993	**E**	14,400	1.029	**F**	0.036	**Yes (TRF-2)**
	7th Street to Encinitas Boulevard	20,000	Encinitas	15,200	0.760	C ≤	18,300	0.915	**E**	0.155	**Yes (TRF-3)**
Manchester Avenue	Encinitas Boulevard to El Camino Real	20,000	Encinitas	12,300	0.615	C ≤	13,500	0.675	C ≤	0.060	No
	Manchester Avenue to Mira Costa College	45,400	Encinitas	35,400	0.780	C ≤	36,700	0.808	D	0.028	No
	Mira Costa College to I-5 NB On-Ramp	45,400	Encinitas	35,700	0.786	C ≤	36,800	0.811	D	0.025	No
	I-5 NB Ramps to I-5 SB Ramps	20,000	Encinitas	40,200	2.010	**F**	40,700	2.035	**F**	0.025	**Yes (TRF-16)**
	I-5 SB Ramps to Ocean Cove Drive	20,000	Encinitas	11,900	0.595	C ≤	12,000	0.600	C ≤	0.005	No
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	14,000	Encinitas	11,900	0.850	D	11,900	0.850	D	0.000	No
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	20,000	Encinitas	11,900	0.595	C ≤	11,900	0.595	C ≤	0.000	No
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	14,000	Encinitas	11,800	0.843	D	11,800	0.843	D	0.000	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	14,000	Encinitas	16,400	1.164	**F**	17,100	1.221	**F**	0.050	**Yes (TRF-4)**
	Vulcan Avenue to Sheridan Road	14,000	Encinitas	16,300	1.164	**F**	17,000	1.214	**F**	0.050	**Yes (TRF-5)**
	Sheridan Road to I-5 SB Ramps	20,000	Encinitas	22,000	1.100	**F**	22,600	1.130	**F**	0.030	**Yes (TRF-6)**
	I-5 SB Ramps to I-5 NB Ramps	40,000	Carlsbad	29,300	0.733	C	29,700	0.743	C	0.010	No
	I-5 NB Ramps to Piraeus Street	41,667	Carlsbad	39,500	0.948	**E**	39,700	0.953	**E**	0.005	No
	Piraeus Street to Saxony Road	40,000	Carlsbad	39,600	0.990	**E**	39,900	0.998	**E**	0.008	No
	Saxony Road to El Camino Real	40,000	Carlsbad	42,000	1.050	**F**	42,000	1.050	**F**	0.000	No
	El Camino Real to La Costa Towne Center traffic signal	40,000	Carlsbad	20,700	0.518	B	20,900	0.523	B	0.004	No
	La Costa Towne Center traffic signal to Fairway Lane	40,000	Carlsbad	20,900	0.523	B	21,000	0.525	B	0.002	No
	Fairway Lane to Calle Madero	22,500	Carlsbad	20,700	0.920	**E**	20,800	0.924	**E**	0.004	No
Leucadia Blvd	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	14,300	0.441	C ≤	15,600	0.481	C ≤	0.040	No
	Vulcan Avenue to Hermes Avenue	20,000	Encinitas	16,300	0.815	D	17,200	0.860	D	0.045	No
	Hermes Avenue to Hygeia Avenue	20,000	Encinitas	15,700	0.785	C ≤	16,600	0.830	D	0.045	No
	Hygeia Avenue to Hymettus Avenue	20,000	Encinitas	17,400	0.870	D	15,000	0.750	C ≤	-0.120	No
	Hymettus Avenue to Orpheus Avenue	20,000	Encinitas	19,200	0.960	**E**	20,000	1.000	**E**	0.040	**Yes (TRF-7)**
	Orpheus Avenue to I-5 SB Ramps	35,200	Encinitas	17,700	0.503	C ≤	18,500	0.526	C ≤	0.023	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	28,600	0.813	D	28,900	0.821	D	0.008	No
	Piraeus Street to Urania Avenue	45,400	Encinitas	44,100	0.971	**E**	44,200	0.974	**E**	0.003	No
	Urania Avenue to Saxony Road	45,400	Encinitas	44,100	0.971	**E**	44,000	0.969	**E**	-0.002	No
	Saxony Road to Sidonia Street	45,400	Encinitas	42,400	0.934	**E**	42,000	0.925	**E**	-0.009	No
	Sidonia Street to Quail Gardens Drive	45,400	Encinitas	42,400	0.934	E	42,100	0.927	**E**	-0.007	No
	Quail Gardens Drive to Garden View Road	45,400	Encinitas	47,100	1.037	F	47,100	1.037	**F**	0.000	No
	Garden View Road to Town Center Place	45,400	Encinitas	34,700	0.764	C ≤	32,000	0.705	C ≤	-0.059	No
	Town Center Place to El Camino Real	57,000	Encinitas	39,000	0.684	C ≤	38,900	0.682	C ≤	-0.002	No
Mountain Vista Drive	El Camino Real to Wandering Road	20,000	Encinitas	15,000	0.750	C ≤	15,000	0.750	C ≤	0.000	No
	Wandering Road to Village Park Way	20,000	Encinitas	9,300	0.465	C ≤	9,300	0.465	C ≤	0.000	No
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	14,000	Encinitas	8,400	0.600	C ≤	8,200	0.586	C ≤	-0.014	No
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	14,000	Encinitas	7,900	0.564	C ≤	7,800	0.557	C ≤	-0.007	No
	San Dieguito CPA boundary to Via De Fortuna	9,700	County	7,800	0.804	D	7,600	0.784	C ≤	-0.020	No

Table 4.13-13 Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis											
		Capacity		Year 2035 (No Project)			Year 2035 + Strategy 2				Significant
Roadway	Segment	(LOS E)	Jurisdiction	ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	Impact?
Encinitas Blvd.	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	22,300	0.688	C ≤	22,700	0.701	C ≤	0.013	No
	Vulcan Avenue to I-5 SB Ramps	45,400	Encinitas	34,100	0.751	C ≤	33,900	0.746	**E**	-0.005	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	38,500	1.094	**F**	39,600	1.125	**F**	0.031	**Yes (TRF-8)**
	I-5 NB Ramps to Saxony Road	35,200	Encinitas	41,400	1.176	**F**	43,000	1.222	**F**	0.046	**Yes (TRF-17)**
	Saxony Road to Calle Magdalena	66,000	Encinitas	35,400	0.536	C ≤	36,400	0.552	C ≤	0.016	No
	Calle Magdalena to Encinitas Town Country traffic signal	57,000	Encinitas	40,000	0.702	C ≤	41,400	0.726	C ≤	0.024	No
	Encinitas Town Country traffic signal to Quail Gardens Drive	45,400	Encinitas	36,000	0.793	C ≤	38,400	0.846	D	0.053	No
	Quails Garden Drive to Delphinium Street	35,200	Encinitas	37,700	1.071	**F**	39,700	1.128	**F**	0.057	**Yes (TRF-18)**
	Delphinium Street to Balour Drive	35,200	Encinitas	38,300	1.088	**F**	39,900	1.134	**F**	0.046	**Yes (TRF-19)**
	Balour Drive to Via Cantebria	35,200	Encinitas	47,500	1.349	**F**	48,700	1.384	**F**	0.035	**Yes (TRF-20)**
	Via Cantebria to El Camino Real	35,200	Encinitas	29,400	0.835	D	30,400	0.864	D	0.029	No
	El Camino Real to Village Square Drive	35,200	Encinitas	31,000	0.881	D	29,900	0.849	D	-0.032	No
	Village Square Drive to Turner Avenue	35,200	Encinitas	29,300	0.832	D	30,000	0.852	D	0.020	No
	Turner Avenue to Cerro Street	35,200	Encinitas	29,300	0.832	D	30,000	0.852	D	0.020	No
	Cerro Street to Village Park Way	35,200	Encinitas	29,700	0.844	D	30,700	0.872	D	0.028	No
	Village Park Way to Willowspring Drive	35,200	Encinitas	27,900	0.793	C ≤	29,000	0.824	D	0.031	No
	Willowspring Drive to Rancho Santa Fe Road	35,200	Encinitas	22,700	0.645	C ≤	23,900	0.679	C ≤	0.034	No
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	20,000	Encinitas	18,580	0.930	**E**	19,500	0.975	**E**	0.045	**Yes (TRF-9)**
	Encinitas Limits to El Mirlo	9,700	County	18,580	1.915	**F**	19,500	2.010	**F**	0.095	**Yes (TRF-10)**
F Street	Vulcan Avenue to Cornish Drive	14,000	Encinitas	6,200	0.443	C ≤	6,400	0.457	C ≤	0.014	No
Requeza Street	Cornish Drive to San Dieguito Drive	14,000	Encinitas	6,300	0.450	C ≤	6,500	0.464	C ≤	0.014	No
	San Dieguito Drive to Stratford Drive	14,000	Encinitas	6,300	0.450	C ≤	6,500	0.464	C ≤	0.014	No
	Stratford Drive to Regal Road	14,000	Encinitas	6,800	0.486	C ≤	7,000	0.500	C ≤	0.014	No
	Regal Road to West Lake Drive	14,000	Encinitas	6,400	0.457	C ≤	7,600	0.543	C ≤	0.086	No
	West Lake Drive to Nardo Drive	14,000	Encinitas	4,800	0.343	C ≤	5,200	0.371	C ≤	0.028	No

Table 4.13-13
Housing Strategy 2 (Build Your Own) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 2			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Santa Fe Drive	Vulcan Avenue to Cornish Drive	14,000	Encinitas	9,000	0.643	C ≤	9,000	0.643	C ≤	0.000	No
	Cornish Drive to Summit Avenue	14,000	Encinitas	9,000	0.643	C ≤	9,000	0.643	C ≤	0.000	No
	Summit Avenue to Devonshire	14,000	Encinitas	10,100	0.721	C ≤	10,300	0.736	C ≤	0.015	No
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	20,000	Encinitas	15,200	0.760	C ≤	15,600	0.780	C ≤	0.020	No
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	32,400	Encinitas	15,200	0.469	C ≤	15,600	0.481	C ≤	0.012	No
	I-5 SB Ramps to I-5 NB Ramps	26,400	Encinitas	22,400	0.848	D	22,900	0.867	D	0.019	No
	I-5 NB Ramps to Regal Road	20,000	Encinitas	16,100	0.805	D	16,500	0.825	D	0.020	No
	Regal Road to Gardena Road	20,000	Encinitas	16,100	0.805	D	16,500	0.825	D	0.020	No
	Gardena Road to Nardo Road	20,000	Encinitas	16,100	0.805	D	16,500	0.825	D	0.020	No
	Nardo Road to Windsor Road/Bonita Drive	20,000	Encinitas	17,700	0.885	D	18,100	0.905	**E**	0.020	**Yes (TRF-11)**
	Windsor Road/Bonita Drive to Balour Drive	20,000	Encinitas	17,700	0.885	D	18,100	0.905	**E**	0.020	**Yes (TRF-12)**
	Balour Drive to Lake Drive	20,000	Encinitas	18,600	0.930	**E**	19,000	0.950	**E**	0.020	No
	Lake Drive to Crest Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-14)**
	Crest Drive to El Camino Real	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-15)**
Birmingham Drive	**San Elijo Avenue to MacKinnon**	20,000	Encinitas	15,500	20,000	C ≤	15,500	0.775	**F**	0.000	No
	MacKinnon Avenue to Carol View Drive	20,000	Encinitas	15,500	20,000	C ≤	15,500	0.775	**E**	0.000	No
	Carol View Drive to I-5 SB Ramps	20,000	Encinitas	15,500	20,000	C ≤	15,500	0.775	**E**	0.000	No
	I-5 SB Ramps to I-5 NB Ramps	14,000	Encinitas	17,400	14,000	**F**	17,400	1.243	**F**	0.000	No
	I-5 NB Ramps to Villa Cardiff Drive	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	**E**	0.000	No
	Villa Cardiff Drive to Playa Rivera	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	D	0.000	No
	Playa Rivera to Freda Lane	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	**E**	0.000	No
	Freda Lane to Lake Drive	14,000	Encinitas	8,800	14,000	C ≤	8,800	0.629	C ≤	0.000	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.

Table 4.13-14
Housing Strategy 2 (Build Your Own) - Future Year 2035 Freeway Segment Level of Service

Freeway	Segment	Direction	Year 2035					Year 2035 + Housing Strategy 2					Δ V/C	Significant Impact?
			ADT	Capacity	Peak Hour Volume	V/C	LOS	ADT	Peak Hour Volume	Capacity	V/C	LOS		
I-5	Palomar Airport Rd. and Poinsettia Ln.	NB	201,000	10,810	8,500	0.69	C	202,000	7,500	10,810	0.69	C	0.0	No
		SB		10,810	8,400	0.78	C		8,400	10,810	0.78	C	0.0	No
	Poinsettia Ln. and La Costa Ave.	NB	204,000	9,400	8,600	0.81	D	200,200	7,600	9,400	0.810	D	0.0	No
		SB		9,400	8,500	0.88	D		8,300	9,400	0.880	D	0.0	No
	La Costa Ave. and Leucadia Blvd.	NB	208,000	9,400	8,600	0.81	D	196,900	7,600	9,400	0.810	D	0.0	No
		SB		10,810	7,900	0.69	C		7,500	10,810	0.69	C	0.0	No
	Leucadia Blvd. and Encinitas Blvd.	NB	211,000	10,810	8,700	0.71	C	117,600	7,600	10,810	0.70	C	-0.01	No
		SB		9,400	8,000	0.47	B		4,400	9,400	0.470	B	0.0	No
	Encinitas Blvd. and Santa Fe Dr.	NB	210,000	9,400	8,500	0.80	D	197,300	7,500	9,400	0.80	D	0.0	No
		SB		10,810	8,000	0.69	C		7,500	10,810	0.69	C	0.0	No
	Santa Fe Dr. and Birmingham Dr.	NB	201,000	10,810	8,100	0.71	C	197,100	7,700	10,810	0.71	C	0.0	No
		SB		10,810	7,700	0.69	C		7,600	10,810	0.70	C	0.01	No
	Birmingham Dr. and Manchester Ave.	NB	203,000	10,810	8,200	0.74	C	198,900	8,000	10,810	0.74	C	0.0	No
		SB		10,810	7,800	0.70	C		7,600	10,810	0.70	C	0.0	No
	Manchester Ave. and Lomas Santa Fe Dr.	NB	215,970*	8,460	8,200	0.860	D	247,300	9,300	10,810	0.860	D	0.0	No
		SB		10,810	8,900	0.880	D		9,600	10,810	0.890	D	0.01	No
	Lomas Santa Fe Dr. and Via De La Valle	NB	208,844*	10,810	8,200	0.870	D	248,600	9,400	10,810	0.870	D	0.0	No
		SB		10,810	8,400	0.89	D		9,500	10,810	0.880	D	-0.01	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.
*Reduction of estimated HOV volume was applied to the ADT.

e. Housing Strategy 3 – Modified Mixed Use Places (MMUP)

As shown in Figure 4.13-4 and identified in Tables 4.13-9 to 4.13-10, the buildout of housing strategy 3 (MMUP) would generate 726,293 trips and would result in 1,199,428 citywide VMT.

Roadway Segment Analysis

As shown in Table 4.13-15 and illustrated on Figure 4.13-4, the 35 roadway segments within the project study area would operate at substandard level of service E or F with the buildout of housing strategy 3 (MMUP), with 27 located in Encinitas, 5 located in Carlsbad, and 1 located in the County of San Diego. Although 35 roadway segments operate unacceptably, the additional traffic generated by housing strategy 2 (MMUP) would only result in the exceedance of the significance criteria at the following 20 segments (19 in Encinitas and 1 in the County):

- Rancho Santa Fe Road, between 9th Street and 8th Street – LOS E (Impact TRF-1);
- Rancho Santa Fe Road, between 8th Street and 7th Street – LOS F (Impact TRF-2);
- Rancho Santa Fe Road, between 7th Street and Encinitas Boulevard – LOS E (Impact TRF-3);
- Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps – LOS F (Impact TRF-16);
- La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue – LOS F (Impact TRF-4);
- La Costa Avenue, between Vulcan Avenue and Sheridan Road – LOS F (Impact TRF-5);
- La Costa Avenue, between Sheridan Road and I-5 SB Ramps – LOS F (Impact TRF-6);
- Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue – LOS F (Impact TRF-7);
- Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps – LOS F (Impact TRF-8);
- Encinitas Boulevard, between I-5 NB Ramps and Saxony Road – LOS F (Impact TRF-17);
- Encinitas Boulevard, between Quail Gardens Drive and Delphinium Street – LOS F (Impact TRF-18);
- Encinitas Boulevard, between Delphinium Street and Balour Drive – LOS F (Impact TRF-19);
- Encinitas Boulevard, between Balour Drive and Via Cantebria – LOS F (Impact TRF-20);
- South Rancho Santa Fe Road, between Manchester Avenue and City of Encinitas Limits – LOS E (Impact TRF-9);
- South Rancho Santa Fe Road, between City of Encinitas Limits and El Mirlo – LOS F (Impact TRF-10);

- Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive – LOS E (Impact TRF-11);
- Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive – LOS E (Impact TRF-12);
- Santa Fe Drive, between Balour Drive and Lake Drive – LOS E (Impact TRF-13);
- Santa Fe Drive, between Lake Drive and Crest Drive – LOS E (Impact TRF-14); and
- Santa Fe Drive, between Crest Drive and El Camino Real – LOS E (Impact TRF-15).

Freeway Segment Analysis

The I-5 freeway segment mainline analysis for the buildout of housing strategy 3 (MMUP) is shown in Table 4.13-16. As shown in the table, all freeway segments within the study area would operate at LOS D or better under the future year 2035 housing strategy 3 (MMUP) conditions. As all freeways would operate acceptably with the addition of housing strategy 3 (MMUP), impacts would be less than significant.

Intersection Analysis

As described above, the housing strategy 3 (MMUP) represents the highest trip-generating strategy and, therefore, an intersection analysis was completed for this strategy. Table 4.13-17 summarizes the level of service analysis results for the 53 key study area intersections under housing strategy 3 (MMUP) buildout conditions. As shown in the table, 14 intersections are projected to operate at an unacceptable LOS E or F, including 13 in the City of Encinitas and 1 in the City of Carlsbad under the year 2035 housing strategy 3 (MMUP) conditions. Although 14 intersections operate unacceptably, the additional traffic generated by housing strategy 3 (MMUP) would only result in the exceedance of the significance criteria at the following 2 intersections (both in the City of Encinitas):

- Vulcan Avenue & La Costa Avenue – LOS F during both AM and PM peak hours (Impact TRF-22); and
- Balour Drive & Santa Fe Drive – LOS F during both AM and PM peak hours (Impact TRF-23).

Ramp Intersection Capacity Analysis

A ramp intersection capacity analysis was completed to satisfy Caltrans requirements. This ramp intersection capacity analysis is for informational purposes only and is not utilized to determine project impacts under CEQA. As shown in Table 4.13-18, all of the signalized ramp intersections are projected to operate at "Under Capacity" or "At Capacity" conditions during both the AM and PM peak hours with the exception of the following:

- I-5 NB Ramps / Leucadia Boulevard – Over Capacity during PM peak hour; or
- I-5 SB Ramps / Encinitas Boulevard – Over Capacity during both AM and PM peak hour.

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Carlsbad Blvd	Poinsettia Lane to Avenida Encinas	40,000	Carlsbad	25,300	0.633	C	25,500	0.638	C	0.004	No
	Avenida Encinas to La Costa Avenue	40,000	Carlsbad	24,700	0.618	C	25,400	0.635	C	0.017	No
North Coast Highway 101	La Costa Avenue to 600 feet south of La Costa Avenue	35,200	Encinitas	19,900	0.565	C ≤	21,800	0.619	C ≤	0.054	No
	600 feet south of La Costa Avenue to Leucadia Blvd	26,400	Encinitas	18,100	0.686	C ≤	20,900	0.792	C ≤	0.106	No
	Leucadia Blvd to Cadmus Street	35,200	Encinitas	19,900	0.565	C ≤	21,300	0.605	C ≤	0.040	No
	Cadmus Street to Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	21,300	0.605	C ≤	0.040	No
	Marcheta Street to 660 feet south of Marcheta Street	35,200	Encinitas	19,900	0.565	C ≤	19,300	0.548	C ≤	-0.017	No
	660 feet south of Marcheta Street to Encinitas Blvd	35,200	Encinitas	19,900	0.565	C ≤	19,600	0.557	C ≤	-0.008	No
South Coast Highway 101	Encinitas Blvd to West D Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West D Street to West E Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West E Street to West F Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West F Street to West H Street	35,200	Encinitas	19,400	0.551	C ≤	19,300	0.548	C ≤	-0.003	No
	West H Street to West J Street	35,200	Encinitas	21,100	0.599	C ≤	20,900	0.594	C ≤	-0.005	No
	West J Street to Swami's Parking	26,400	Encinitas	21,100	0.799	C ≤	20,900	0.792	C ≤	-0.007	No
	Swami's Parking to San Elijo State Beach	14,000	Encinitas	21,300	1.521	**F**	21,100	1.507	**F**	-0.014	No
	San Elijo State Beach to Chesterfield	35,200	Encinitas	21,300	0.605	C ≤	21,400	0.608	C ≤	0.003	No
	Chesterfield to Cardiff State Beach traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
	Cardiff Beach State to Chart House traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
	Chart House traffic signal to Las Olas Mexican Restaurant traffic signal	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
	Las Olas Mexican Restaurant to Solana Beach boundary	35,200	Encinitas	23,200	0.659	C ≤	23,200	0.659	C ≤	0.000	No
North Highway 101	Solana Beach boundary to West Cliff Street	40,000	Solana Beach	22,500	0.563	C	22,600	0.565	C	0.002	No
	West Cliff to Lomas Santa Fe	40,000	Solana Beach	25,000	0.625	C	25,000	0.625	C	0.000	No
	Lomas Santa Fe Drive to Via De La Valle	40,000	Solana Beach	23,600	0.590	C	23,600	0.590	C	0.000	No
Vulcan Avenue	La Costa Avenue to Leucadia Blvd.	14,000	Encinitas	7,000	0.500	C ≤	7,300	0.521	C ≤	0.021	No
	Leucadia Blvd to Encinitas Blvd.	14,000	Encinitas	7,500	0.536	C ≤	7,600	0.543	C ≤	0.007	No
	Encinitas Boulevard to D Street	32,400	Encinitas	12,900	0.398	C ≤	13,300	0.410	C ≤	0.012	No
	D Street to E Street	32,400	Encinitas	12,900	0.398	C ≤	13,700	0.423	C ≤	0.025	No
	E Street to Santa Fe Drive	20,000	Encinitas	13,100	0.655	C ≤	14,200	0.710	C ≤	0.078	No
San Elijo Avenue	Santa Fe Drive to Birmingham Drive	14,000	Encinitas	10,100	0.721	C ≤	10,200	0.729	C ≤	0.008	No
	Birmingham Drive to Chesterfield Drive	20,000	Encinitas	12,500	0.625	C ≤	12,700	0.635	C ≤	0.014	No
	Chesterfield Drive to Manchester Avenue	20,000	Encinitas	9,500	0.475	C ≤	9,600	0.480	C ≤	0.007	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Saxony Road	La Costa Avenue to Quail Gardens Drive	14,000	Encinitas	4,600	0.329	C ≤	4,600	0.329	C ≤	0.000	No
	Quail Hollow Drive to Normtoy Road	14,000	Encinitas	3,400	0.243	C ≤	3,400	0.243	C ≤	0.000	No
	Normtoy Road to Brittany Avenue	14,000	Encinitas	3,900	0.279	C ≤	3,800	0.271	C ≤	-0.008	No
	Brittany Avenue to Leucadia Boulevard	14,000	Encinitas	3,500	0.250	C ≤	3,400	0.243	C ≤	-0.007	No
	Leucadia Boulevard to Silver Berry Place	14,000	Encinitas	11,800	0.843	D	11,900	0.850	D	0.007	No
	Silver Berry Place to Encinitas Boulevard	20,000	Encinitas	13,800	0.690	C ≤	14,000	0.700	C ≤	0.014	No
Quail Hollow Drive	Swallow Tail Road to Saxony Road	14,000	Encinitas	5,000	0.357	C ≤	5,000	0.357	C ≤	0.000	No
Quail Gardens Drive	Swallow Tail Road to Lauren Court	20,000	Encinitas	4,900	0.245	C ≤	4,900	0.245	C ≤	0.000	No
	Lauren Court to Leucadia Boulevard	20,000	Encinitas	5,300	0.265	C ≤	5,300	0.265	C ≤	0.000	No
	Leucadia Boulevard to Paseo De Las Flores	20,000	Encinitas	9,100	0.455	C ≤	9,200	0.460	C ≤	0.005	No
	Paseo De Las Flores to Paseo De Las Verdes	20,000	Encinitas	8,900	0.445	C ≤	9,200	0.460	C ≤	0.015	No
	Paseo De Las Verdes to Encinitas Boulevard	20,000	Encinitas	8,200	0.410	C ≤	8,400	0.420	C ≤	0.010	No
Westlake Street	Encinitas Boulevard to Requeza Street	20,000	Encinitas	11,800	0.590	C ≤	11,800	0.590	D	0.000	No
Nardo Drive	Requeza Street to Melba Road	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	5,100	0.364	C ≤	5,200	0.371	C ≤	0.007	No
MacKinnon Avenue	Santa Fe Drive to Villa Cardiff Drive	14,000	Encinitas	6,200	0.443	C ≤	6,300	0.450	C ≤	0.007	No
	MacKinnon Avenue to Windsor Road	14,000	Encinitas	6,500	0.464	C ≤	6,600	0.471	C ≤	0.007	No
	Windsor Road to Birmingham Drive	14,000	Encinitas	5,700	0.407	C ≤	5,800	0.414	C ≤	0.007	No
Garden View Road	Leucadia Boulevard to Via Cantebria	35,200	Encinitas	11,500	0.327	C ≤	11,500	0.327	C ≤	0.000	No
	Via Cantebria to El Camino Real	35,200	Encinitas	12,900	0.366	C ≤	12,800	0.364	C ≤	-0.002	No
Town Center Place	Leucadia Boulevard to Town Center Place	32,400	Encinitas	20,000	0.617	C ≤	20,500	0.633	C ≤	0.016	No
	Town Center Place to Town Center Drive	32,400	Encinitas	17,800	0.549	C ≤	17,200	0.531	C ≤	-0.018	No
Via Cantebria	Town Center Drive to Garden View Road	14,000	Encinitas	15,800	1.129	**F**	15,700	1.121	**F**	-0.008	No
	Garden View Road to Forrest Bluff	24,300	Encinitas	14,900	0.613	C ≤	15,100	0.621	C ≤	0.008	No
	Forrest Bluff to Via Montoro	32,400	Encinitas	15,200	0.469	C ≤	15,400	0.475	C ≤	0.006	No
	Via Montoro to Via Molena	32,400	Encinitas	17,900	0.552	C ≤	17,300	0.534	C ≤	-0.018	No
	Via Molena to Encinitas Boulevard	32,400	Encinitas	17,500	0.540	C ≤	18,200	0.562	C ≤	0.022	No
Balour Drive	Encinitas Boulevard to Melba Road	14,000	Encinitas	11,200	0.800	C ≤	11,300	0.807	D	0.007	No
	Melba Road to Santa Fe Drive	14,000	Encinitas	10,700	0.764	C ≤	11,100	0.793	C ≤	0.029	No
Lake Drive	Santa Fe Drive to Woodlake Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No
	Woodlake Drive to Birmingham Drive	14,000	Encinitas	6,600	0.471	C ≤	6,600	0.471	C ≤	0.000	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
El Camino Real	Aviara Parkway to La Costa Avenue	50,000	Carlsbad	54,300	1.086	**F**	54,400	1.088	**F**	0.002	No
	La Costa Avenue to Calle Barcelona	60,000	Carlsbad	38,400	0.640	C	38,700	0.645	C	0.005	No
	Calle Barcelona to Carlsbad boundary	60,000	Carlsbad	36,500	0.608	C	36,400	0.607	C	-0.001	No
	Carlsbad boundary to Leucadia Boulevard	66,000	Encinitas	46,700	0.708	C ≤	46,500	0.705	C ≤	-0.003	No
	Leucadia Boulevard to Town Center Drive	66,000	Encinitas	58,600	0.888	D	59,200	0.897	D	0.009	No
	Town Center Drive to Garden View Road	66,000	Encinitas	54,200	0.821	D	54,500	0.826	D	0.005	No
	Garden View Road to 331-339 El Camino Real	66,000	Encinitas	42,900	0.650	C ≤	43,100	0.653	C ≤	0.003	No
	331-339 El Camino Real to Via Montoro	66,000	Encinitas	48,900	0.741	C ≤	49,300	0.747	C ≤	0.006	No
	Via Montoro to Mountain Vista	66,000	Encinitas	44,300	0.671	C ≤	44,900	0.680	C ≤	0.009	No
	Mountain Vista to Via Molena	66,000	Encinitas	47,000	0.712	C ≤	47,400	0.718	C ≤	0.006	No
	Via Molena to Encinitas Boulevard	66,000	Encinitas	56,900	0.862	D	58,800	0.891	D	0.029	No
	Encinitas Boulevard to 213 S El Camino Real	57,000	Encinitas	39,400	0.691	C ≤	40,100	0.704	C ≤	0.013	No
	213 S El Camino Real to Crest Drive	57,000	Encinitas	33,800	0.593	C ≤	33,800	0.593	C ≤	0.000	No
	Crest Drive to Willowspring Drive	57,000	Encinitas	36,200	0.635	C ≤	36,400	0.639	C ≤	0.004	No
	Willowspring Drive to Santa Fe Drive	45,400	Encinitas	37,500	0.826	D	37,800	0.833	D	0.007	No
	Santa Fe Drive to Sage Canyon Drive	45,400	Encinitas	28,400	0.626	C ≤	29,500	0.650	C ≤	0.024	No
	Sage Canyon Drive to Manchester Avenue	35,200	Encinitas	27,700	0.787	C ≤	29,000	0.824	D	0.037	No
Village Park Way	Mountain Vista Drive to Parkdale Drive	35,200	Encinitas	10,900	0.310	C ≤	11,400	0.324	C ≤	0.014	No
	Parkdale Drive to Encinitas Boulevard	35,200	Encinitas	14,200	0.403	C ≤	14,700	0.418	C ≤	0.015	No
Rancho Santa Fe Road	Olivenhain Road to Calle Acervo	40,000	Carlsbad	17,400	0.435	B	17,400	0.435	B	0.000	No
	Calle Acervo/Avenida La Posta to Olive Crest Drive	20,000	Encinitas	15,900	0.795	C ≤	16,500	0.825	D	0.030	No
	Olive Crest Drive to 13th Street	20,000	Encinitas	15,800	0.790	C ≤	16,300	0.815	D	0.025	No
	13th Street to 11th Street	20,000	Encinitas	15,700	0.785	C ≤	16,300	0.815	D	0.030	No
	11th Street to El Camino Del Norte	20,000	Encinitas	15,800	0.790	C ≤	16,400	0.820	D	0.030	No
	El Camino Del Norte to 9th Street	20,000	Encinitas	13,300	0.665	C ≤	13,700	0.685	C ≤	0.020	No
	9th Street to 8th Street	14,000	Encinitas	13,500	0.964	**E**	13,800	0.986	**E**	0.022	**Yes (TRF-1)**
	8th Street to 7th Street	14,000	Encinitas	13,900	0.993	**E**	14,300	1.021	**F**	0.028	**Yes (TRF-2)**
	7th Street to Encinitas Boulevard	20,000	Encinitas	15,200	0.760	C ≤	18,800	0.940	**E**	0.180	**Yes (TRF-3)**

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Manchester Avenue	Manchester Avenue to Mira Costa College	45,400	Encinitas	35,400	0.780	C ≤	37,100	0.700	D	0.037	No
	Mira Costa College to I-5 NB On-Ramp	45,400	Encinitas	35,700	0.786	C ≤	37,400	0.817	D	0.038	No
	I-5 NB Ramps to I-5 SB Ramps	20,000	Encinitas	40,200	2.010	**F**	40,800	0.824	**F**	0.030	**Yes (TRF-16)**
	I-5 SB Ramps to Ocean Cove Drive	20,000	Encinitas	11,900	0.595	C ≤	12,200	2.040	C ≤	0.015	No
	Ocean Cove Drive to Seaside Cardiff-by-the-sea residential area driveway	14,000	Encinitas	11,900	0.850	D	12,100	0.610	D	0.014	No
	Seaside Cardiff-by-the-sea residential area driveway to San Elijo Water Reclamation Facility Driveway	20,000	Encinitas	11,900	0.595	C ≤	12,100	0.864	C ≤	0.010	No
	San Elijo Water Reclamation Facility Driveway to Manchester Avenue	14,000	Encinitas	11,800	0.843	D	12,000	0.605	D	0.014	No
	Encinitas Boulevard to El Camino Real	20,000	Encinitas	12,300	0.615	C ≤	14,000	0.857	C ≤	0.085	No
La Costa Avenue	North Coast Highway 101 to Vulcan Avenue	14,000	Encinitas	16,400	1.164	**F**	17,700	1.264	**F**	0.093	**Yes (TRF-4)**
	Vulcan Avenue to Sheridan Road	14,000	Encinitas	16,300	1.164	**F**	17,300	1.236	**F**	0.072	**Yes (TRF-5)**
	Sheridan Road to I-5 SB Ramps	20,000	Encinitas	22,000	1.100	**F**	22,900	1.145	**F**	0.045	**Yes (TRF-6)**
	I-5 SB Ramps to I-5 NB Ramps	40,000	Carlsbad	29,300	0.733	C	30,000	0.750	C ≤	0.017	No
	I-5 NB Ramps to Piraeus Street	41,667	Carlsbad	39,500	0.948	**E**	39,700	0.953	**E**	0.005	No
	Piraeus Street to Saxony Road	40,000	Carlsbad	39,600	0.990	**E**	39,800	0.995	**E**	0.005	No
	Saxony Road to El Camino Real	40,000	Carlsbad	42,000	1.050	**F**	42,100	1.053	**F**	0.002	No
	El Camino Real to La Costa Towne Center traffic signal	40,000	Carlsbad	20,700	0.518	B	21,000	0.525	B	0.007	No
	La Costa Towne Center traffic signal to Fairway Lane	40,000	Carlsbad	20,900	0.523	B	21,200	0.530	C	0.007	No
	Fairway Lane to Calle Madero	22,500	Carlsbad	20,700	0.920	**E**	20,800	0.924	**E**	0.004	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Leucadia Blvd.	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	14,300	0.441	C ≤	16,100	0.497	C ≤	0.056	No
	Vulcan Avenue to Hermes Avenue	20,000	Encinitas	16,300	0.815	D	17,700	0.885	D	0.070	No
	Hermes Avenue to Hygeia Avenue	20,000	Encinitas	15,700	0.785	C ≤	17,000	0.850	D	0.065	No
	Hygeia Avenue to Hymettus Avenue	20,000	Encinitas	17,400	0.870	D	15,000	0.750	C ≤	-0.120	No
	Hymettus Avenue to Orpheus Avenue	20,000	Encinitas	19,200	0.960	**E**	20,200	1.010	**F**	0.050	**Yes (TRF-7)**
	Orpheus Avenue to I-5 SB Ramps	35,200	Encinitas	17,700	0.503	C ≤	15,200	0.432	C ≤	-0.071	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	28,600	0.813	D	28,600	0.813	D	0.000	No
	Piraeus Street to Urania Avenue	45,400	Encinitas	44,100	0.971	**E**	43,900	0.967	**E**	-0.004	No
	Urania Avenue to Saxony Road	45,400	Encinitas	44,100	0.971	**E**	43,900	0.967	**E**	-0.004	No
	Saxony Road to Sidonia Street	45,400	Encinitas	42,400	0.934	**E**	42,100	0.927	**E**	-0.007	No
	Sidonia Street to Quail Gardens Drive	45,400	Encinitas	42,400	0.934	E	42,100	0.927	**E**	-0.007	No
	Quail Gardens Drive to Garden View Road	45,400	Encinitas	47,100	1.037	F	47,000	1.035	**F**	-0.002	No
	Garden View Road to Town Center Place	45,400	Encinitas	34,700	0.764	C ≤	31,700	0.698	C ≤	-0.066	No
	Town Center Place to El Camino Real	57,000	Encinitas	39,000	0.684	C ≤	38,700	0.679	C ≤	-0.005	No
Mountain Vista Drive	El Camino Real to Wandering Road	20,000	Encinitas	15,000	0.750	C ≤	15,100	0.755	C ≤	0.005	No
	Wandering Road to Village Park Way	20,000	Encinitas	9,300	0.465	C ≤	9,300	0.465	C ≤	0.000	No
Lone Jack Drive	Rancho Santa Fe Road to northern terminus	14,000	Encinitas	8,400	0.600	C ≤	8,200	0.586	C ≤	-0.014	No
El Camino Del Norte	Rancho Santa Fe Road to San Dieguito CPA boundary	14,000	Encinitas	7,900	0.564	C ≤	7,700	0.550	C ≤	-0.014	No
	San Dieguito CPA boundary to Via De Fortuna	9,700	County	7,800	0.804	D	7,400	0.763	C	-0.041	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Encinitas Blvd.	North Coast Highway 101 to Vulcan Avenue	32,400	Encinitas	22,300	0.688	C ≤	24,300	0.750	C ≤	0.062	No
	Vulcan Avenue to I-5 SB Ramps	45,400	Encinitas	34,100	0.751	C ≤	35,800	0.788	C ≤	0.048	No
	I-5 SB Ramps to I-5 NB Ramps	35,200	Encinitas	38,500	1.094	**F**	40,500	1.224	**F**	0.057	**Yes (TRF-8)**
	I-5 NB Ramps to Saxony Road	35,200	Encinitas	41,400	1.176	**F**	43,100	0.558	**F**	0.048	**Yes (TRF-17)**
	Saxony Road to Calle Magdalena	66,000	Encinitas	35,400	0.536	C ≤	36,800	0.730	C ≤	0.022	No
	Calle Magdalena to Encinitas Town Country traffic signal	57,000	Encinitas	40,000	0.702	C ≤	41,600	0.837	C ≤	0.028	No
	Encinitas Town Country traffic signal to Quail Gardens Drive	45,400	Encinitas	36,000	0.793	C ≤	38,000	1.125	D	0.044	No
	Quails Garden Drive to Delphinium Street	35,200	Encinitas	37,700	1.071	**F**	39,600	1.136	**F**	0.054	**Yes (TRF-18)**
	Delphinium Street to Balour Drive	35,200	Encinitas	38,300	1.088	**F**	40,000	1.386	**F**	0.048	**Yes (TRF-19)**
	Balour Drive to Via Cantebria	35,200	Encinitas	47,500	1.349	**F**	48,800	0.866	**F**	0.037	**Yes (TRF-20)**
	Via Cantebria to El Camino Real	35,200	Encinitas	29,400	0.835	D	30,500	0.852	D	0.031	No
	El Camino Real to Village Square Drive	35,200	Encinitas	31,000	0.881	D	30,000	0.864	D	-0.029	No
	Village Square Drive to Turner Avenue	35,200	Encinitas	29,300	0.832	D	30,400	0.864	D	0.032	No
	Turner Avenue to Cerro Street	35,200	Encinitas	29,300	0.832	D	30,400	0.886	D	0.032	No
	Cerro Street to Village Park Way	35,200	Encinitas	29,700	0.844	D	31,200	0.835	D	0.042	No
	Village Park Way to Willowspring Drive	35,200	Encinitas	27,900	0.793	C ≤	29,400	0.693	D	0.042	No
	Willowspring Drive to Rancho Santa Fe Road	35,200	Encinitas	22,700	0.645	C ≤	24,400	0.995	C ≤	0.048	No
South Rancho Santa Fe Road	**Manchester Avenue to Encinitas Limits**	20,000	Encinitas	18,580	0.930	**E**	19,900	2.052	**E**	0.065	**Yes (TRF-9)**
	Encinitas Limits to El Mirlo	9,700	County	18,580	1.915	**F**	19,900	0.457	**F**	0.137	**Yes (TRF-10)**
F Street	Vulcan Avenue to Cornish Drive	14,000	Encinitas	6,200	0.443	C ≤	6,400	0.479	C ≤	0.014	No
Requeza Street	Cornish Drive to San Dieguito Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.479	C ≤	0.029	No
	San Dieguito Drive to Stratford Drive	14,000	Encinitas	6,300	0.450	C ≤	6,700	0.500	C ≤	0.029	No
	Stratford Drive to Regal Road	14,000	Encinitas	6,800	0.486	C ≤	7,000	0.457	C ≤	0.014	No
	Regal Road to West Lake Drive	14,000	Encinitas	6,400	0.457	C ≤	6,400	0.350	C ≤	0.000	No
	West Lake Drive to Nardo Drive	14,000	Encinitas	4,800	0.343	C ≤	4,900	0.636	C ≤	0.007	No

Table 4.13-15
Housing Strategy 3 (Modified Mixed Uses Plan) - Future Year 2035 Roadway Segment Level of Service Analysis

Roadway	Segment	Capacity (LOS E)	Jurisdiction	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ V/C	Significant Impact?
				ADT	V/C	LOS	ADT	V/C	LOS		
Santa Fe Drive	Vulcan Avenue to Cornish Drive	14,000	Encinitas	9,000	0.643	C ≤	8,900	0.693	C ≤	-0.007	No
	Cornish Drive to Summit Avenue	14,000	Encinitas	9,000	0.643	C ≤	9,700	0.736	C ≤	0.050	No
	Summit Avenue to Devonshire	14,000	Encinitas	10,100	0.721	C ≤	10,300	0.785	C ≤	0.015	No
	Devonshire Drive to Scripps Memorial Hospital Encinitas traffic signal	20,000	Encinitas	15,200	0.760	C ≤	15,700	0.485	C ≤	0.025	No
	Scripps Memorial Hospital Encinitas traffic signal to I-5 SB Ramps	32,400	Encinitas	15,200	0.469	C ≤	15,700	0.871	C ≤	0.016	No
	I-5 SB Ramps to I-5 NB Ramps	26,400	Encinitas	22,400	0.848	D	23,000	0.830	D	0.023	No
	I-5 NB Ramps to Regal Road	20,000	Encinitas	16,100	0.805	D	16,600	0.830	D	0.025	No
	Regal Road to Gardena Road	20,000	Encinitas	16,100	0.805	D	16,600	0.830	D	0.025	No
	Gardena Road to Nardo Road	20,000	Encinitas	16,100	0.805	D	16,600	0.910	D	0.025	No
	Nardo Road to Windsor Road/Bonita Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-11)**
	Windsor Road/Bonita Drive to Balour Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.955	**E**	0.025	**Yes (TRF-12)**
	Balour Drive to Lake Drive	20,000	Encinitas	18,600	0.930	**E**	19,100	0.910	**E**	0.025	**Yes (TRF-13)**
	Lake Drive to Crest Drive	20,000	Encinitas	17,700	0.885	D	18,200	0.910	**E**	0.025	**Yes (TRF-14)**
	Crest Drive to El Camino Real	20,000	Encinitas	17,700	0.885	D	18,200	0.775	C ≤	0.025	**Yes (TRF-15)**
Birmingham Drive	**San Elijo Avenue to MacKinnon**	20,000	Encinitas	15,500	0.775	C ≤	15,800	1.129	C ≤	0.022	No
	MacKinnon Avenue to Carol View Drive	20,000	Encinitas	19,500	0.775	C ≤	14,700	0.775	C ≤	-0.240	No
	Carol View Drive to I-5 SB Ramps	20,000	Encinitas	19,500	0.775	C ≤	14,700	1.243	C ≤	-0.240	No
	I-5 SB Ramps to I-5 NB Ramps	14,000	Encinitas	21,800	1.243	**F**	21,400	0.629	C ≤	-0.028	No
	I-5 NB Ramps to Villa Cardiff Drive	14,000	Encinitas	13,200	0.629	C ≤	13,400	0.629	C ≤	0.014	No
	Villa Cardiff Drive to Playa Rivera	14,000	Encinitas	11,600	0.629	C ≤	11,700	0.629	C ≤	0.007	No
	Playa Rivera to Freda Lane	14,000	Encinitas	13,100	0.629	C ≤	13,200	0.629	C ≤	0.007	No
	Freda Lane to Lake Drive	14,000	Encinitas	8,700	0.629	C ≤	8,800	0.629	C ≤	0.008	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.

Table 4.13-16
Housing Strategy 3 (Modified Mixed Use Places) - Future Year 2035 Freeway Segment Level of Service

Freeway	Segment	Direction	Year 2035					Year 2035 + Housing Strategy 1					Δ V/C	Significant Impact?
			ADT	Capacity	Peak Hour Volume	V/C	LOS	ADT	Peak Hour Volume	Capacity	V/C	LOS		
I-5	Palomar Airport Rd. and Poinsettia Ln.	NB	201,000	10,810	8,500	0.69	C	202,200	7,600	10,810	0.70	C	0.01	No
		SB		10,810	8,400	0.78	C		8,400	10,810	0.78	C	0.0	No
	Poinsettia Ln. and La Costa Ave.	NB	204,000	9,400	8,600	0.81	D	199,900	7,600	9,400	0.81	D	0.0	No
		SB		9,400	8,500	0.88	D		8,300	9,400	0.88	D	0.0	No
	La Costa Ave. and Leucadia Blvd.	NB	208,000	9,400	8,600	0.81	D	196,700	7,600	9,400	0.81	D	0.0	No
		SB		10,810	7,900	0.69	C		7,500	10,810	0.69	C	0.0	No
	Leucadia Blvd. and Encinitas Blvd.	NB	211,000	10,810	8,700	0.71	C	117,500	7,700	10,810	0.71	C	0.0	No
		SB		9,400	8,000	0.47	B		4,500	9,400	0.48	B	0.01	No
	Encinitas Blvd. and Santa Fe Dr.	NB	210,000	9,400	8,500	0.80	D	196,200	7,500	9,400	0.80	D	0.0	No
		SB		10,810	8,000	0.69	C		7,500	10,810	0.69	C	0.0	No
	Santa Fe Dr. and Birmingham Dr.	NB	201,000	10,810	8,100	0.71	C	196,100	7,700	10,810	0.71	C	0.0	No
		SB		10,810	7,700	0.69	C		7,500	10,810	0.69	C	0.0	No
	Birmingham Dr. and Manchester Ave.	NB	203,000	10,810	8,200	0.74	C	198,600	8,000	10,810	0.74	C	0.0	No
		SB		10,810	7,800	0.70	C		7,600	10,810	0.70	C	0.0	No
	Manchester Ave. and Lomas Santa Fe Dr.	NB	215,970*	8,460	8,200	0.860	D	247,700	9,300	10,810	0.860	D	0.0	No
		SB		10,810	8,900	0.880	D		9,500	10,810	0.880	D	0.0	No
	Lomas Santa Fe Dr. and Via De La Valle	NB	208,844*	10,810	8,200	0.870	D	247,500	9,300	10,810	0.860	D	-0.01	No
		SB		10,810	8,400	0.89	D		9,500	10,810	0.88	D	-0.01	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.
*Reduction of estimated HOV volume was applied to the ADT.

Table 4.13-17
Housing Strategy 3 (Modified Mixed Use Plan) - Future Year 2035 Intersection Level of Service

Intersection	Jurisdiction	Control	Year 2035 (No Project) AM Avg. Delay (sec)	AM LOS	PM Avg. Delay (sec)	PM LOS	Year 2030 + Strategy 3 AM Avg. Delay (sec)	AM LOS	PM Avg. Delay (sec)	PM LOS	Δ in Delay (sec)	Significant Impact?
Carlsbad Blvd & Poinsettia Lane	Carlsbad	Signalized	11.7	10.6	B	B	11.7	B	10.8	B	0.0 / 0.2	No
I-5 SB Ramps & Poinsettia Lane	Caltrans	Signalized	15.2	21.6	B	C	15.2	B	21.6	C	0.0 / 0.0	No
I-5 NB Ramps & Poinsettia Lane	Caltrans	Signalized	32.4	29.7	C	C	32.4	C	34.8	C	0.0 / 5.1	No
Aviara Parkway & Poinsettia Lane	Carlsbad	Signalized	29.1	30.8	C	C	29.1	C	30.8	C	0.0 / 0.0	No
North Coast Highway 101 & La Costa Ave	Encinitas	Signalized	18.8	16.8	B	B	19.6	B	18.2	B	0.8 / 1.4	No
Vulcan Ave & La Costa Ave	Encinitas	SSSC	45.2	96.4	**E**	**F**	60.2	**F**	161.4	**F**	15.0 / 65.0	**Yes (TRF-22)**
I-5 SB Ramps & La Costa Ave	Caltrans	Signalized	44.3	34.1	D	C	44.8	D	34.7	C	0.5 / 0.6	No
I-5 NB Ramps & La Costa Ave	Caltrans	Signalized	28.2	31.2	C	C	28.5	C	31.8	C	0.3 / 0.6	No
Piraeus Street & La Costa Ave	Caltrans	Signalized	22.4	34.9	C	C	22.4	C	34.9	C	0.0 / 0.0	No
Saxony Road & La Costa Ave	Carlsbad	Signalized	19.2	28.3	B	C	19.2	B	28.7	C	0.0 / 0.4	No
El Camino Real & La Costa Ave	Carlsbad	Signalized	51.7	58.3	D	**E**	51.7	D	58.8	**E**	0.0 / 0.5	No
North Coast Highway 101 & Leucadia Blvd	Encinitas	Signalized	30.1	35.3	C	D	36.0	D	43.8	D	5.9 / 8.5	No
Vulcan Ave & Leucadia Blvd	Encinitas	Signalized	12.5	11.9	B	B	13.5	B	12.5	B	1.0 / 0.6	No
Orpheus Ave & Leucadia Blvd	Caltrans	Signalized	17.1	16.5	B	B	16.8	B	16.7	B	-0.3 / 0.2	No
I-5 SB Ramps & Leucadia Blvd	Caltrans	Signalized	14.5	16.3	B	B	14.1	B	15.7	B	-0.4 / -0.6	No
I-5 NB Ramps & Leucadia Blvd	Caltrans	Signalized	13.3	36.4	B	D	13.3	B	34.2	C	0.0 / -2.2	No
Saxony Road & Leucadia Blvd	Encinitas	Signalized	60.8	79.4	**E**	**E**	55.0	**E**	75.3	**E**	-5.8 / -4.1	No
Quail Gardens Dr & Leucadia Blvd	Encinitas	Signalized	31.8	42.8	C	D	30.4	C	40.7	D	-1.4 / -2.1	No
Garden View Road & Leucadia Blvd	Encinitas	Signalized	47.1	53.7	D	D	43.6	D	52.1	D	-3.5 / -1.6	No
Town Center Place & Leucadia Blvd	Encinitas	Signalized	24.6	43.9	C	D	24.8	C	42.2	D	0.2 / -1.7	No
El Camino Real & Leucadia Blvd	Encinitas	Signalized	48.7	67.3	D	**E**	47.8	D	61.9	**E**	-0.9 / -5.4	No
El Camino Real & Town Center Dr	Encinitas	Signalized	11.6	23.5	B	C	11.7	B	23.5	C	0.1 / 0.0	No
El Camino Real & Garden View Road	Encinitas	Signalized	27.7	49.6	C	D	27.8	C	49.7	D	0.1 / 0.1	No
El Camino Real & Mountain Vista Dr	Encinitas	Signalized	49.4	30.9	D	C	53.5	D	31.0	C	4.1 / 0.1	No
Rancho Santa Fe Road & Lone Jack Road	Encinitas	AWSC	40.1	41.1	**E**	**E**	41.2	**E**	42.7	**E**	1.1 / 1.6	No
El Camino Real & Via Molena	Encinitas	Signalized	27.0	35.1	C	D	27.3	C	36.0	D	0.3 / 0.9	No
Rancho Santa Fe Road & El Camino Del Norte	Encinitas	AWSC	34.6	41.9	D	**E**	34.9	D	43.8	**E**	0.3 / 1.9	No

Table 4.13-17
Housing Strategy 3 (Modified Mixed Use Plan) - Future Year 2035 Intersection Level of Service

Intersection	Jurisdiction	Control	Year 2035 (No Project) AM Avg. Delay (sec)	AM LOS	Year 2035 (No Project) PM Avg. Delay (sec)	PM LOS	Year 2030 + Strategy 3 AM Avg. Delay (sec)	AM LOS	Year 2030 + Strategy 3 PM Avg. Delay (sec)	PM LOS	Δ in Delay (sec)	Significant Impact?
North Coast Highway 101 & Encinitas Blvd	Encinitas	Signalized	35.3	34	D	C	35.8	D	34.4	C	0.5 / 0.4	No
S Vulcan Ave & Encinitas Blvd	Encinitas	Signalized	39.1	32.3	D	C	44.2	D	34.6	C	5.1 / 2.3	No
I-5 SB Ramps & Encinitas Blvd	Caltrans	Signalized	29.1	47.8	C	D	30.7	C	51.5	D	1.6 / 3.7	No
I-5 NB Ramps & Encinitas Blvd	Caltrans	Signalized	20.9	27.5	C	C	21.2	C	29.6	C	0.3 / 2.1	No
Saxony Road & Encinitas Blvd	Caltrans	Signalized	32.0	17.3	C	B	31.6	C	17.9	B	-0.4 / 0.6	No
Quail Gardens Dr & Encinitas Blvd	Encinitas	Signalized	32.2	53.9	C	D	32.3	C	54.1	D	0.1 / 0.2	No
Balour Dr & Encinitas Blvd	Encinitas	Signalized	12.1	17.7	B	B	12.5	B	21.1	C	0.4 / 3.4	No
Via Cantebria & Encinitas Blvd	Encinitas	Signalized	21.5	20.7	C	C	18.9	B	25.2	C	-2.6 / 4.5	No
El Camino Real & Encinitas Blvd	Encinitas	Signalized	50.7	70.4	D	**E**	48.6	D	71.3	**E**	-2.1 / 0.9	No
Village Square Dr & Encinitas Blvd	Encinitas	Signalized	18.4	44.5	B	D	17.8	B	42.8	D	-0.6 / -1.7	No
Village Park Way & Encinitas Blvd	Encinitas	Signalized	26.0	44.8	C	D	29.0	C	53.9	D	3.0 / 9.1	No
Rancho Santa Fe Road & Encinitas Blvd	Encinitas	Signalized	77.1	48	**E**	D	77.9	**E**	54.7	D	0.8 / 6.7	No
San Elijo Ave & Santa Fe Dr	Encinitas	AWSC	37.0	18.8	**E**	C	36.7	**E**	18.7	C	-0.3 / -0.1	No
I-5 SB Ramps & Santa Fe Dr	Caltrans	Signalized	24.3	30.7	C	C	25.7	C	29.9	C	1.4 / -0.8	No
I-5 NB On-Ramp & Santa Fe Dr	Caltrans	Signalized	5.5	4.1	A	A	5.6	A	4.1	A	0.1 / 0.0	No
I-5 NB Off-Ramp/Regal Road & Santa Fe Dr	Caltrans	Signalized	38.5	42.9	D	D	39.2	D	42.6	D	0.7 / -0.3	No
MacKinnon Ave & Santa Fe Dr	Encinitas	Signalized	28.5	20.1	C	C	30.7	C	21.0	C	2.2 / 0.9	No
Balour Dr & Santa Fe Dr	Encinitas	SSSC	84.7	51.7	**F**	**F**	108.6	**F**	56.9	**F**	23.9 / 5.2	**Yes (TRF-23)**
Lake Dr & Santa Fe Dr	Encinitas	Signalized	9.3	8.9	A	A	9.6	A	8.7	A	0.3 / -0.2	No
El Camino Real & Santa Fe Dr	Encinitas	Signalized	20.0	23.4	B	C	21.0	C	28.5	C	1.0 / 5.1	No
San Elijo Ave & Birmingham Dr	Encinitas	Signalized	13.0	24.2	B	C	13.4	B	25.0	C	0.4 / 0.8	No
I-5 SB Ramps & Birmingham Dr	Caltrans	SSSC	250.6	47.5	**F**	**E**	250.6	**F**	47.5	**E**	0.0 / -0.0	No
I-5 NB Ramps & Birmingham Dr	Caltrans	AWSC	45.5	41.1	**E**	**E**	45.5	**E**	41.1	**E**	0.0 / 0.0	No
I-5 SB Ramps & Manchester Ave	Caltrans	AWSC	54.5	35.5	**F**	**E**	54.5	**F**	35.7	**E**	0.0 / 0.2	No
I-5 NB Ramps & Manchester Ave	Caltrans	Signalized	57.5	45	**E**	D	58.8	**E**	45.6	D	1.3 / 0.6	No
El Camino Real & Manchester Ave	Encinitas	Signalized	36.2	38.8	D	D	40.4	D	42.7	D	4.2 / 3.9	No

SOURCE: Appendix N.
Bold letter indicates substandard LOS E or F.
Shading represents a significant impact.
sec = seconds

Table 4.13-18
Housing Strategy 3 (Modified Mixed Use Plan) –
Future Year 2035 Ramp Intersection Capacity Analysis

#	Ramp Intersection	Peak Hour	Year 2035 (No Project)		Modified Mixed Use Plan	
			ILV/Hour	Description	ILV/Hour	Description
2	I-5 SB Ramps / Poinsettia Lane	AM	740	Under Capacity	740	Under Capacity
		PM	1,030	Under Capacity	1,030	Under Capacity
3	I-5 NB Ramps / Poinsettia Lane	AM	1,000	Under Capacity	1,000	Under Capacity
		PM	1,044	Under Capacity	1,034	Under Capacity
7	I-5 SB Ramps / La Costa Avenue	AM	1,275	At Capacity	1,350	At Capacity
		PM	1,220	At Capacity	1,240	At Capacity
8	I-5 NB Ramps / La Costa Avenue	AM	1,205	At Capacity	1,205	At Capacity
		PM	1,125	Under Capacity	1,135	Under Capacity
15	I-5 SB Ramps / Leucadia Boulevard	AM	805	Under Capacity	780	Under Capacity
		PM	850	Under Capacity	830	Under Capacity
16	**I-5 NB Ramps / Leucadia Boulevard**	AM	1,225	At Capacity	1,212	At Capacity
		PM	1,531	**Over Capacity**	1,497	At Capacity
30	**I-5 SB Ramps / Encinitas Boulevard**	AM	1,595	**Over Capacity**	1,640	**Over Capacity**
		PM	1,900	**Over Capacity**	1,950	**Over Capacity**
31	I-5 NB Ramps / Encinitas Boulevard	AM	1,240	At Capacity	1,260	At Capacity
		PM	1,425	At Capacity	1,455	At Capacity
41	I-5 SB Ramps / Santa Fe Drive	AM	1,140	Under Capacity	1,160	Under Capacity
		PM	1,135	Under Capacity	1,150	Under Capacity
42	I-5 NB On-Ramp / Santa Fe Drive	AM	715	Under Capacity	735	Under Capacity
		PM	710	Under Capacity	725	Under Capacity
43	I-5 NB Off-Ramp / Regal Road	AM	1062	Under Capacity	1075	Under Capacity
		PM	1,150	Under Capacity	1155	Under Capacity
52	I-5 NB Ramps / Manchester Avenue	AM	1,460	At Capacity	1,475	At Capacity
		PM	1,340	At Capacity	1,345	At Capacity

SOURCE: Appendix N.
Bolding represents intersection is over capacity.

Ramp Metering Analysis

Ramp metering analysis is shown in Table 4.13-19. As shown, all ramp meters would operate acceptably in the year 2035 housing strategy 3 (MMUP) buildout conditions except the five ramp locations where delays would exceed the 15-minute threshold. Out of those five ramps operating unacceptably, the project would result in a delay increase over the allowable 2-minute increase at the following three:

- I-5 NB On-Ramp at Encinitas Boulevard (Impact TRF-24) – 20.0 minutes during PM peak hour;
- I-5 SB On-Ramp at Encinitas Boulevard (Impact TRF-25) – 17.0 minutes during AM peak hour; or
- I-5 SB On-Ramp at Santa Fe Drive(Impact TRF-26) – 34.0 minutes during AM peak hour.

Table 4.13-19
Ramp Metering Analysis – Future Year 2035 Strategy 3 (Modified Mixed Use Plan)

Location	Peak Hour	Demand[1] (veh/hr)	SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ in Delay (min)	Significant Impact?
						Excess Demand[4] (veh/hr)	Delay[5] (min)	Queue[6] (ft)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)		
I-5 NB On-Ramp at Poinsettia Lane	AM	615	529	529	NA	0	0	0	0	0	0	-	No
	PM	485	373	373	720	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Poinsettia Lane	AM	585	515	257	720	0	0	0	0	0	0	-	No
	PM	1005	864	432	720	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at La Costa Avenue	AM	905	851	851	NA	0	0	0	0	0	0	-	No
	PM	685	527	527	720	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at La Costa Avenue	AM	905	796	398	720	0	0	0	0	0	0	-	No
	PM	1035	890	445	720	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Leucadia Boulevard	AM	418	383	383	NA	0	0	0	0	0	0	-	No
	PM	664	474	474	360	114	**19.0**	3,300	114	**19.0**	3,300	-	No
I-5 SB On-Ramp at Leucadia Boulevard	AM	825	726	363	360	25	4.5	725	3	0.5	75	-	No
	PM	720	619	310	360	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Encinitas Boulevard	AM	640	608	608	NA	0	0	0	0	0	0		No
	PM	800	480	480	360	96	**16.0**	2,775	120	**20.0**	3,475	4	Yes (TRF-24)
I-5 SB On-Ramp at Encinitas Boulevard	AM	1045	920	920	720	164	14.0	4,750	200	**17.0**	5,800	3	Yes (TRF-25)
	PM	1000	860	860	720	106	9.0	3,075	140	12.0	4,050	3	No
I-5 NB On-Ramp at Santa Fe Drive	AM	560	560	560	NA	0	0	0	0	0	0	-	No
	PM	710	710	710	720	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Santa Fe Drive	AM	640	563	563	360	177	**30.0**	5,125	203	34.0	5,875	4	Yes (TRF-26)
	PM	515	443	443	NA	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Birmingham Drive	AM	570	523	523	NA	0	0	0	0	0	0	-	No
	PM	485	346	346	360	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Birmingham Drive	AM	1080	1,080	540	720	0	0	0	0	0	0	-	No
	PM	395	395	198	720	0	0	0	0	0	0	-	No
I-5 NB On-Ramp at Manchester Ave.	AM	420	420	420	NA	0	0	0	0	0	0	-	No
	PM	280	280	280	360	0	0	0	0	0	0	-	No
I-5 SB On-Ramp at Manchester Ave.	AM	2040	2,040	1020	720	295	**25.0**	8,550	300	25.0	8,700	-	No
	PM	1070	1,070	535	720	0	0	0	0	0	0	-	No

Table 4.13-19
Ramp Metering Analysis – Future Year 2035 Strategy 3 (Modified Mixed Use Plan)

Location	Peak Hour	Demand[1] (veh/hr)	SOV Demand[2] (veh/hr)	Demand per Lane (veh/hr/ln)	Meter Rate[3] (veh/hr/ln)	Year 2035 (No Project)			Year 2035 + Strategy 3			Δ in Delay (min)	Significant Impact?
						Excess Demand[4] (veh/hr)	Delay[5] (min)	Queue[6] (ft)	Excess Demand[4] (veh/hr)	Delay Beyond Peak Hour[5] (min)	Queue[6] (ft)		

SOURCE: Appendix N.
Bold indicated a ramp meter delay above the 15-minute threshold
Shading represents a significant impact.
NA= not applicable
[1]Demand is the peak hour demand expected to use the on-ramp.
[2]HOV volumes was deducted from total demand volumes. SOV = Single Occupancy Vehicle.
[3]Meter Rate is the peak hour capacity expected to be processed through the ramp meter. This value was obtained from Caltrans. The lowest rate within range was utilized for a more conservative calculation.
[4]Excess Demand = (Demand) – (Meter Rate) or zero, whichever is greater.
[5]Delay beyond Peak Hour = (Excess Demand / Meter Rate) X 60 min/hr. This delay represents how long the peak hour would need to be extended in order to accommodate the excess demand
[6]Queue = (Excess Demand) X 29 ft/veh.

4.13.5.2 Significance of Impacts

As indicated above, there are several transportation facilities that operate at unacceptable levels under the Year 2035 + Project conditions. However, the project would only result in significant impacts at these locations if the addition of project traffic would cause the significance thresholds identified in Section 4.13.4.1 to be exceeded. The significant HEU operational traffic impacts are identified in Table 4.13-20 below. As shown, housing strategy 1 (RM) would result in 15 significant roadway segment impacts, housing strategy 2 (BYO) would result in 20 significant roadway segment impacts, and housing strategy 3 (MMUP) would result in 20 significant roadway segment impacts. All three housing strategies would result in less than significant freeway segment impacts. Housing strategy 3 (MMUP) was utilized to determine the intersection and ramp metering impacts as housing strategy 3 (MMUP) would result in the highest number of trips generated. Based on housing strategy 3 (MMUP), the project would result in two significant intersection impacts and three significant ramp metering impacts.

Table 4.13-20
Operational Traffic Significant Impact Summary

Impact #	Location	Housing Strategy		
		1	2	3
TRF-1	Rancho Santa Fe Road - Between 9th Street and 8th Street	ü	ü	ü
TRF-2	Rancho Santa Fe Road - Between 8th Street and 7th Street	ü	ü	ü
TRF-3	Rancho Santa Fe Road - Between 7th Street and Encinitas Boulevard	ü	ü	ü
TRF-4	La Costa Avenue - Between North Coast Highway 101 and Vulcan Avenue	ü	ü	ü
TRF-5	La Costa Avenue - Between Vulcan Avenue and Sheridan Road	ü	ü	ü
TRF-6	La Costa Avenue - Between Sheridan Road and I-5 SB Ramps	ü	ü	ü
TRF-7	Leucadia Blvd - Between Hymettus Avenue and Orpheus Avenue	ü	ü	ü
TRF-8	Encinitas Blvd - Between I-5 SB Ramps and I-5 NB Ramps	ü	ü	ü
TRF-9	South Rancho Santa Fe Road - Between Manchester Avenue and Encinitas Limits	ü	ü	ü
TRF-10	South Rancho Santa Fe Road - Between Encinitas Limits and El Mirlo (County of San Diego)	ü	ü	ü
TRF-11	Santa Fe Drive - Between Nardo Road and Windsor Road/Bonita Drive	ü	ü	ü
TRF-12	Santa Fe Drive - Between Windsor Road/Bonita Drive and Balour Drive	ü	ü	ü
TRF-13	Santa Fe Drive - Between Balour Drive and Lake Drive	ü		ü
TRF-14	Santa Fe Drive - Between Lake Drive and Crest Drive	ü	ü	ü
TRF-15	Santa Fe Drive - Between Crest Drive and El Camino Real	ü	ü	ü
TRF-16	Manchester Avenue - Between I-5 NB Ramps and I-5 SB Ramps		ü	ü
TRF-17	Encinitas Blvd - Between I-5 NB Ramps and Saxony Road		ü	ü
TRF-18	Encinitas Blvd - Between Quails Garden Drive and Delphinium Street		ü	ü
TRF-19	Encinitas Blvd - Delphinium Street and Balour Drive		ü	ü
TRF-20	Encinitas Blvd - Between Balour Drive and Via Cantebria		ü	ü
TRF-21	Birmingham Drive - Between I-5 SB Ramps and I-5 NB Ramps		ü	
TRF-22	Vulcan Avenue at La Costa Avenue (AM and PM)			ü
TRF-23	Balour Drive at Santa Fe Drive (AM and PM)			ü
TRF-24	I-5 NB On-Ramp at Encinitas Boulevard (PM) (Caltrans)			ü

Table 4.13-20 Operational Traffic Significant Impact Summary				
Impact #	Location	Housing Strategy		
		1	2	3
TRF-25	I-5 SB On-Ramp at Encinitas Boulevard (AM) (Caltrans)			ü
TRF-26	I-5 SB On-Ramp at Santa Fe Drive (AM) (Caltrans)			ü
SOURCE: Appendix N. Shading represents where analysis was only completed for the highest trip-generating strategy, which is housing strategy 3 (MMUP).				

a. Housing Strategy 1 (RM)

Housing strategy 1 would result in 15 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-15. Impacts to freeway segments would be less than significant.

b. Housing Strategy 2 (BYO)

Housing strategy 2 would result in 20 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-12, and TRF-14 to TRF-21. Impacts to freeway segments would be less than significant.

c. Housing Strategy 3 (MMUP)

Housing strategy 3 would result in 20 significant roadway segment impacts. As indicated in Table 4.13-20, these impacts are identified as Impacts TRF-1 to TRF-20. Impacts to freeway segments would be less than significant. Housing strategy 3 (MMUP) would have two significant intersection impacts (TRF-22 and TRF-23), as well as three ramp intersection impacts (TRF-24 to TRF-26).

4.13.5.3 Mitigation Framework

As demonstrated in the traffic analysis above, buildout of the HEU would result in significant impacts (Impacts TRF-1 through TRF-26) to roadway segments (all three strategies and intersections (as demonstrated by intersection analysis for Housing Strategy 3 (MMUP)). These are cumulative impacts of the HEU buildout that would potentially occur when buildout of the HEU is added to future growth in the surrounding area for the horizon year 2035. To reduce the potentially significant impacts, improvements to roadway segments and intersections would be required. Table 4.13-21 identifies the measures (TRF-1 through TRF-26) that would be required for each impacted roadway/intersection.

Table 4.13-21 Traffic Mitigation Improvements							
Impact #	Location*	Housing Strategy			Improvement	LOS After Mitigation	Feasibility
		1	2	3			
TRF-1	Rancho Santa Fe Road - Between 9th Street and 8th Street	✓	✓	✓	Provide intersection improvements and additional right-of-way as necessary and widen Rancho Santa Fe Road, between 9th Street and 8th Street, to a 2-Lane Local Roadway Augmented.	C or better	Feasible
TRF-2	Rancho Santa Fe Road - Between 8th Street and 7th Street	✓	✓	✓	Provide intersection improvements and additional right-of-way and widen Rancho Santa Fe Road, between 8th Street and 7th Street, to a 2-Lane Local Roadway Augmented.	C or better	Feasible
TRF-3	Rancho Santa Fe Road - Between 7th Street and Encinitas Boulevard	✓	✓	✓	Provide additional right-of-way and widen Rancho Santa Fe Road, between 7th Street and Encinitas Blvd., to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-4	La Costa Avenue - Between North Coast Highway 101 and Vulcan Avenue	✓	✓	✓	Provide additional right-of-way and widen La Costa Avenue, between North Coast Highway 101 and Vulcan Avenue, to a 4-Lane Collector.	C or better	Insufficient rights-of-way
TRF-5	La Costa Avenue - Between Vulcan Avenue and Sheridan Road	✓	✓	✓	Provide additional right-of-way and widen La Costa Avenue, between Vulcan Avenue and Sheridan Road, to a 4-Lane Collector.	C or better	Feasible
TRF-6	La Costa Avenue - Between Sheridan Road and I-5 SB Ramps	✓	✓	✓	Provide additional right-of-way and widen La Costa Avenue, between Sheridan Road and I-5 SB Ramps, to a 4-Lane Collector.	C or better	Feasible
TRF-7	Leucadia Blvd - Between Hymettus Avenue and Orpheus Avenue	✓	✓	✓	Provide additional right-of-way and widen Leucadia Boulevard, between Hymettus Avenue and Orpheus Avenue, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-8	Encinitas Blvd - Between I-5 SB Ramps and I-5 NB Ramps	✓	✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between I-5 SB Ramps and I-5 NB Ramps to a 4-Lane Major Roadway Augmented.	C or better	Feasible
TRF-9	South Rancho Santa Fe Road - Between Manchester Avenue and Encinitas Limits	✓	✓	✓	Strategy 1/3: Provide additional right-of-way and widen South Rancho Santa Fe Road, between Manchester Avenue and 770 feet east of Manchester Avenue, to a 4-Lane Major Roadway. Strategy 2: Provide additional right-of-way and widen South Rancho Santa Fe Road, between Manchester Avenue and 770 feet east of Manchester Avenue, to a 4-Lane Collector, which is consistent with the currently adopted Circulation Element.	C or Better	Feasible
TRF-10	South Rancho Santa Fe Road - Between Encinitas Limits and El Mirlo (County of San Diego)	✓	✓	✓	Provide additional right-of-way and widen South Rancho Santa Fe Road, City of Encinitas Limits and El Mirlo, to a 2-Lane Community Collector with Improvement Options.	D	**Infeasible** – exceeds County classification and is located within another jurisdiction

Table 4.13-21 Traffic Mitigation Improvements							
Impact #	Location*	Housing Strategy			Improvement	LOS After Mitigation	Feasibility
		1	2	3			
TRF-11	Santa Fe Drive - Between Nardo Road and Windsor Road/Bonita Drive	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Nardo Road and Windsor Road/Bonita Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-12	Santa Fe Drive - Between Windsor Road/Bonita Drive and Balour Drive	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Windsor Road/Bonita Drive and Balour Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-13	Santa Fe Drive - Between Balour Drive and Lake Drive	✓		✓	Provide additional right-of-way and widen Santa Fe Drive, between Balour Drive and Lake Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-14	Santa Fe Drive - Between Lake Drive and Crest Drive	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Lake Drive and Crest Drive, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-15	Santa Fe Drive - Between Crest Drive and El Camino Real	✓	✓	✓	Provide additional right-of-way and widen Santa Fe Drive, between Crest Drive and El Camino Real, to a 4-Lane Collector.	C or better	**Infeasible** – exceeds classification designation
TRF-16	Manchester Avenue - Between I-5 NB Ramps and I-5 SB Ramps		✓	✓	Provide additional right-of-way and widen Manchester Avenue, between I-5 NB Ramps and I-5 SB Ramps, to a 4-Lane Major Roadway Augmented.	Strategy 2: D Strategy 3: C or better	Feasible
TRF-17	Encinitas Blvd - Between I-5 NB Ramps and Saxony Road		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between I-5 NB Ramps and Saxony Road, to a 6-Lane Prime Arterial.	Strategy 2: D Strategy 3: C or better	Feasible
TRF-18	Encinitas Blvd - Between Quails Garden Drive and Delphinium Street		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between Quail Gardens Drive and Delphinium Street, to a 6-Lane Prime Arterial.	C or better	Feasible
TRF-19	Encinitas Blvd - Delphinium Street and Balour Drive		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between Delphinium Street and Balour Drive, to a 6-Lane Prime Arterial.	C or better	Feasible
TRF-20	Encinitas Blvd - Between Balour Drive and Via Cantebria		✓	✓	Provide additional right-of-way and widen Encinitas Boulevard, between Balour Drive and Via Cantebria, to a 6-Lane Prime Arterial.	D	Feasible
TRF-21	Birmingham Drive - Between I-5 SB Ramps and I-5 NB Ramps		✓		Provide additional right-of-way and widen Birmingham Drive, between I-5 SB Ramps and I-5 NB Ramps, to a 4-Lane Collector.	C or better	Feasible

Table 4.13-21 Traffic Mitigation Improvements							
Impact #	Location*	Housing Strategy			Improvement	LOS After Mitigation	Feasibility
		1	2	3			
TRF-22	Vulcan Avenue at La Costa Avenue (AM and PM)			✓	Signalize the Vulcan Avenue & La Costa Avenue intersection; or add roundabout or left turn lane as an alternative.	C/C	Feasible
TRF-23	Balour Drive at Santa Fe Drive (AM and PM)			✓	Signalization (CIP Project)	D/C	Feasible
TRF-24	I-5 NB On-Ramp at Encinitas Boulevard (PM) (Caltrans)			✓	The City of Encinitas shall work with Caltrans to adjust the ramp meter rate.	-	**Infeasible** - is located within another jurisdiction
TRF-25	I-5 SB On-Ramp at Encinitas Boulevard (AM) (Caltrans)			✓	The City of Encinitas shall work with Caltrans to adjust the ramp meter rate.	-	**Infeasible** - is located within another jurisdiction
TRF-26	I-5 SB On-Ramp at Santa Fe Drive (AM) (Caltrans)			✓	The City of Encinitas shall work with Caltrans to adjust the ramp meter rate.	-	**Infeasible** - is located within another jurisdiction

SOURCE: Appendix N.
Shading represents where analysis for only the highest-trip generating strategy was completed, which was Strategy 3 (MMUP).
*Jurisdiction is the City of Encinitas unless otherwise identified under Location.

The City already has a citywide capital improvement program in place to address traffic improvements needed for future buildout under the adopted General Plan. Since the HEU would result in additional impacts beyond buildout of the General Plan, a program specifically related to the future development consistent with the HEU floating zone program is required to fund improvements described in Table 4.13-21. Such a program would be applied as future projects are processed. Mitigation measure TRF-27 is designed to establish a program for funding improvements needed to address traffic impacts of the HEU. This program requires actions to be taken by both the City (establishment and implementation) as well as future projects.

TRF-27: Within 12 months of the public vote on the housing plan, the City shall complete a nexus study and adopt a floating zone fee mitigation program, as follows:

a. To establish this mitigation program, the City shall identify the costs associated with feasible traffic improvements identified in Table 4.13-21. Once the costs are established, the City shall undertake a nexus study to identify how the funds will be collected on a per project basis (e.g., by trip generated, unit, etc.). Costs funded may include program administration, project administration and management, design and engineering, regulatory compliance, and construction.

b. Once the HEU traffic mitigation program is established, each project shall contribute its fair share of the traffic improvements as identified in the program prior to Certificate of Occupancy Permit.

c. The City shall deposit the funds in a specific account dedicated for the use of completing the improvements identified in the HEU traffic mitigation program.

d. The City shall complete an annual public report on the HEU traffic mitigation program within 180 days of the completion of the fiscal year pursuant to the Mitigation Fee Act (California Government Code Section 66000 et seq.).

As identified in TRF-27, this program would provide the City of Encinitas with a mechanism for financing the implementation of the identified improvements required to mitigate cumulative impacts of the HEU through future year 2035. The program would assign a fair-share transportation impact fee to development projects based on a nexus between the cost to implement all proposed circulation improvements and the number of net new trips. Such a program would be consistent with the City's General Plan Goal 2 to "make every effort to develop a varied transportation system that is capable of serving both the existing population and future residents while preserving community values and character" as well as Goal 7 that requires development to "provide for all costs of the incremental expansion of the circulation system necessary to accommodate that development."

4.13.5.4 Significance After Mitigation

Mitigation measures which are determined to be feasible improvements as indicated in Table 4.13-21, would reduce traffic impacts of the HEU to below a level of significance if these improvements can be assured at the time of future development. However, as the City has not yet approved a mitigation fee program for the HEU as identified in TRF-27, there is no assurance that funding will be available to construct these improvements at the time future development is proposed. Until such time as this program is implemented, impacts would remain significant and unmitigated.

In addition, the City has determined that certain mitigation measures/improvements as listed in Table 4.13-21 are infeasible for one or more of the following reasons: (1) the improvement would result in the roadway exceeding the General Plan classification; (2) insufficient right-of-way exists and the City/Community prefer to retain existing adjacent uses instead of exercising eminent domain and (3) the improvement conflicts with existing or planned multi-modal facilities or adopted City policies or program relative to the provision of multi-modal facilities (pedestrian, bicycle or transit). As such, these impacts would also remain significant and unmitigated.

4.13.6 Issue 3: Alternative Transportation Modes

Would the project conflict with the City's adopted General or Specific Plan policies supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?

4.13.6.1 Impacts

The City's adopted alternative transportation policies are identified in Table 4.13-6, and include Policy 1.15, Goal 3, and Policies 3.1 to 3.4. The future development consistent with the HEU floating zone program would be subject to these General Plan goals and policies. Thus, the HEU would not conflict with the City's implementing adopted General Plan goals related to alternative transportation, such as Goal 3 that states the City will promote the use of other modes of transport to reduce the dependence on the personal automobile. Future development would not conflict with the City's policies to encourage mass transit, bicycle transportation, pedestrians, equestrians, and carpooling. New infill development opportunities are located to both capitalize on existing infrastructure as well as to provide enhanced and/or convenient access to local serving uses by residents and visitors. Each of the three mapping strategies seek to combine, in general, a better mixture of land uses and activities dispersed in different areas of the City to encourage a variety of products types that appeal to all segments of the market and allows for more walkable residential, commercial, and mixed use districts. Also the project promotes the principle that streets have multiple users and encourages nodes of mixed use communities that maximize mobility and provide multiple opportunities for living, working and recreation, within safe and comfortable walking distances. In addition, the proposed Design Guidelines would encourage connectivity and accessibility (see Section 3.4.2.3).

As indicated in EIR Section 3.2.2, transit access was specifically considered as a criterion in the identification of housing sites. Most housing sites also were selected based on their proximity to transit and other alternative transportation (refer to EIR Section 3.2.2.3 and Appendix N). Overall, there would be no inherent differences in impacts among the housing strategies, as future development under each strategy would comply with the same alternative transportation policies. Impacts resulting from all three housing strategies would be less than significant.

4.13.6.2 Significance of Impacts

The future development allowed under the HEU floating zone program would be subject to the General Plan goals and policies regarding alternative transportation. Additionally, the Design Guidelines encourage access and connectivity be considered in the design of future projects. Thus, the HEU would not result in a conflict with the City's adopted General supporting alternative transportation modes. Impacts would be less than significant.

4.13.7 Issues 4 and 5: Traffic Hazards and Emergency Access

Would the project result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians?

Would the project result in inadequate emergency access?

4.13.7.1 Impacts

The future development consistent with the HEU floating zone program would be subject to the City's roadway design standards, City Municipal Code, and California Fire Code emergency access requirements, as well as the City General Plan goals and policies related to traffic safety.

The City of Encinitas Public Road Standards (1991) identifies design specifications for curves, sight distance, slopes, and other roadway features. The City's roadway standards are intended to provide for "service, health, welfare and safety of the public" (City of Encinitas 1991). Thus, compliance with the City's roadway standards would preclude traffic hazards.

The City of Encinitas has adopted the California Fire Code emergency access requirements as a part of their Municipal Code. This includes emergency access road dimensions, design, grades, gates, and other fire safety features. Additionally, the more stringent California Building Code (CBC) access standards also have been adopted by the City to address potential emergency access issues associated with earthquakes, flooding, climate/strong winds, topography, and water shortages. Future development consistent with the HEU would be required to comply with these regulations when designing emergency access relative to the future housing sites. Thus, compliance with the City Municipal Code would preclude inadequate emergency access issues.

The General Plan also includes several goals and policies regarding traffic safety. Goal 1 of the Circulation Element portion of the General Plan states "Encinitas should have a transportation system that is safe, convenient and efficient, and sensitive to and compatible with surrounding community character." Policies 1.6, 1.7, and 1.9 encourage safe roadways and driveways by limiting direct access on major roadways and encouraging properties to use common driveways to reduce access points. Policy 1.17 identifies the need to provide adequate street lighting for safety of all roadway users. Landscaped medians and buffers are recommended by City Policies 2.10 and 2.13 and would improve safety by separating directional traffic as well as separating traffic from buildings. Future development consistent with the HEU would be required to be in accordance with the General Plan goals and policies, including these goals and policies related to traffic safety; therefore, there would be no inherent differences in impacts among the housing strategies. Impacts resulting from all three housing strategies would be less than significant.

4.13.7.2 Significance of Impacts

Adherence to the City's roadway design standards, City Municipal Code and California Fire Code emergency access requirements, as well as the City General Plan Goals and policies related to traffic would avoid or reduce potentially significant traffic hazard or emergency access impacts to below a level of significance.

4.14 Public Utilities

This section evaluates potential impacts to public utilities (storm drain, wastewater, water, water supply, and solid waste disposal) that could result from the project. Public utility information was acquired through consultation with the City and review of public documents, including the San Diego County Water Authority Urban Water Management Plan (SDCWA UWMP), other relevant UWMPs, utility master plans, and the City General Plan and Municipal Code.

4.14.1 Existing Conditions

4.14.1.1 Storm Drain System

The City has an extensive storm drainage system that consists of 65 miles of underground storm drain pipe, 1,789 storm drain boxes, and over 90 miles of channels. These facilities intercept storm water runoff and convey it from the eastern part of the City to the west where it discharges into either the San Elijo Lagoon, south of the City, or Batiquitos Lagoon, north of the City. The coastal area of the City discharges through several outfalls to the ocean. The City's Public Works Department is responsible for maintaining the storm drain infrastructure. Presently, there is inadequate storm water capacity in north Leucadia near the Alt-2 housing site.

4.14.1.2 Wastewater System

The City is served by three sewer districts: Cardiff Sanitation District (CSD), Encinitas Sanitary Division (ESD), and Leucadia Wastewater District (LWD) as shown on Figure 4.14-1. The CSD and ESD are part of the City Public Works Department. The LWD is a separate agency that provides sewer services to residents in Leucadia and New Encinitas. The existing City wastewater collection system is also shown in Figure 4.14-1. Sewage is conveyed through 123 miles of sewer lines pipes, sized between 6 to 18 inches in diameter, for treatment and disposal to either the Encina Wastewater Authority (EWA) in Carlsbad, or the San Elijo Water Reclamation Facility (SEWRF) in Cardiff.

Map Source: Dudek

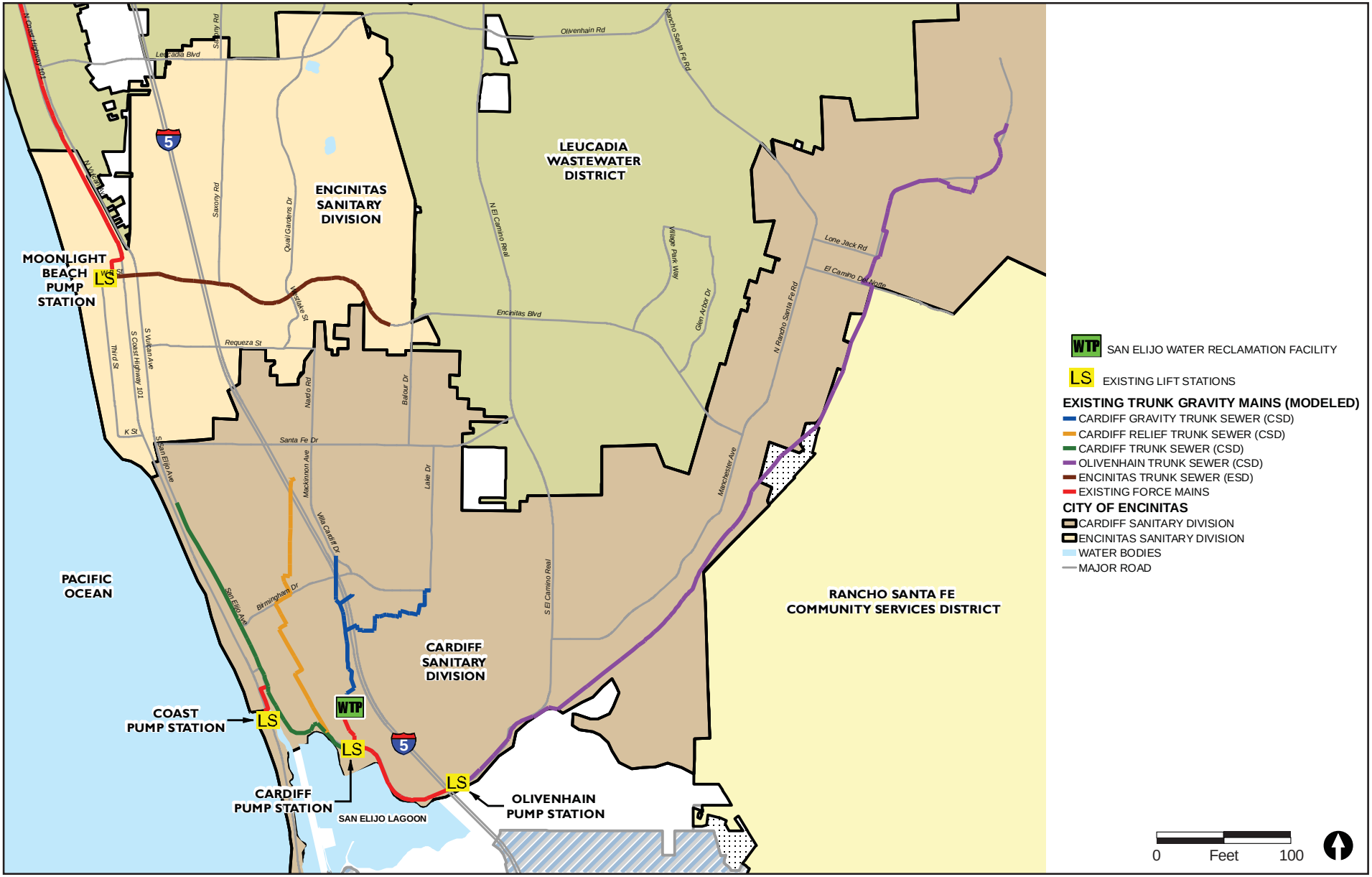


FIGURE 4.14-1
City of Encinitas Wastewater Collection System

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a. Sanitary Divisions/Districts

Encinitas Sanitary Division

The ESD serves a population of approximately 16,500 residents in a three-square-mile area in the westerly central portion of the City. All flow from the ESD drains into the Moonlight Pump Station, which is pumped through a force main to the Batiquitos Pump Station, a joint facility with LWD, and then pumped together with flow from LWD to the EWA.

Cardiff Sanitary Division

The CSD services a population of approximately 19,600 residents in a 12-square-mile area in the southern and easterly portions of the City. Flows generated within the CSD are collected in one of four trunk sewer systems and then pumped or conveyed by gravity to the SEWRF.

Leucadia Wastewater District

The LWD covers a total service area of 16 square miles which includes the northern portions of the City. The LWD provides wastewater collection, treatment, disposal and service to a total population of approximately 60,000. Flows generated in the LWD are ultimately pumped to the EWA.

b. Treatment and Disposal

Encina Wastewater Authority

The EWA operates the Encina Water Pollution Control Facility located in Carlsbad. The facility provides full secondary treatment, sludge handling, and disposal through a deep ocean outfall. The capacity rights for the City are 1.80 million gallons per day (mgd) average daily flow for treatment.

San Elijo Water Reclamation Facility

The SEWRF is owned and operated by the cities of Encinitas and Solana Beach and is comprised of a 5.25 mgd water reclamation facility and a 2.48 mgd water reclamation facility co-located on one property in Cardiff. The allocation of capacity rights for the City is 2.5 mgd average daily flow for treatment.

c. Wastewater Flow Generation and System Capacity

Wastewater flow projections based on future development through 2035 (buildout of the City's General Plan) are identified in the City's 2012 Sewer Master Plan. The calculation of projected wastewater flow is based on known planned development projects and buildout of vacant and underdeveloped parcels consistent with the General Plan. Additionally, the Sewer Master Plan considers that all current septic users would connect to the City's sewer

at buildout. The average daily flow for the ultimate wastewater system is projected to be approximately 1.25 mgd in the ESD and 1.99 mgd in the CSD (City of Encinitas 2012).

d. Treatment Capacity

As discussed in the Sewer Master Plan, the ESD projected average daily flow is 1.25 mgd, which results in a reserve capacity of 0.55 mgd or 55 percent. Therefore, at General Plan buildout it is projected that ESD would have excess capacity. The CSD projected average daily flow is 1.99 mgd, which is within the current capacity allocation. Although capacity appears adequate, capital improvements are proposed over the near-term (five years) and long term (10 years) to improve capacity conditions (City of Encinitas 2012).

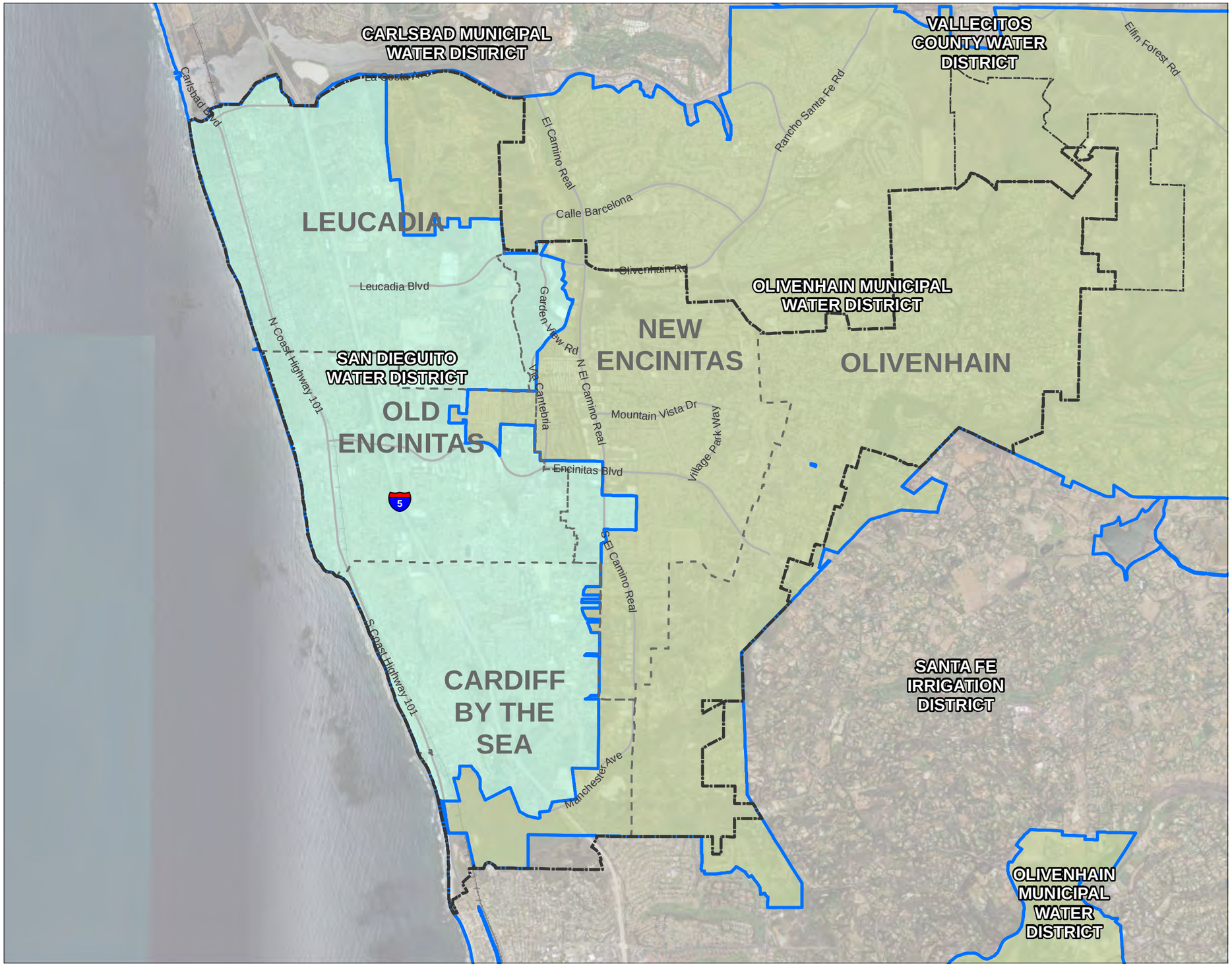
4.14.1.3 Water System

The San Dieguito Water District (SDWD) provides potable water to approximately 38,000 residents through roughly 11,000 meters in the communities of Old Encinitas, Cardiff-by-the-Sea, New Encinitas and Leucadia within the City of Encinitas. Based on projected buildout under the General Plan, the 2010 San Dieguito Water System Master Plan evaluates the water system requirements to determine its ability to adequately serve the estimated demands and recommend improvements.

A majority of the existing distribution system is adequately sized to accommodate future demand; however, within the existing system, there are a number of junctions that are currently unable to satisfy the District's pressure criteria. Pressure deficiencies are attributed to the geography of the area. There are capital improvement projects (CIP) detailed in the San Dieguito Water System Master Plan recommended to improve low flow rates, especially in those areas that cannot maintain adequate fire flow (500 gallons per minute [gpm]) (San Dieguito Water District 2010).

4.14.1.4 Water Supply

The City currently has three sources of water: raw water from the SDCWA through the State Water Project; treated water from the SDCWA; and runoff from the Lake Hodges watershed east of the City. Raw water from the SDCWA and Lake Hodges water are treated at the Badger Filtration Plant in Rancho Santa Fe. The SDWD provides potable (drinking) and recycled water to a majority of the City; the remainder is served by the Olivenhain Municipal Water District (OMWD). Figure 4.14-2 shows the boundaries of the water districts.



City Limits
Sphere of Influence
Community Area Boundaries
Olivenhain Municipal Water District
San Dieguito Water District

0 Miles 0.6

FIGURE 4.14-2
City of Encinitas -
Water District Boundaries

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a. Service Providers

San Dieguito Water District

The SDWD joined the SDCWA in 1948 to acquire the right to purchase and distribute imported water throughout its service area. SDCWA purchases the water from the Metropolitan Water District of Southern California (MWD). The SDWD is a subsidiary of the City and provides water to the approximate 38,000 residents in their service district. Approximately 30 percent of the SDWD water is from local sources and the remainder is imported.

The Urban Water Management Planning Act requires every urban water supplier to assess the reliability of its water supply for normal, single-dry and multiple-dry years. Single-dry and multiple-dry year conditions were based on the SDWD's historical water use records. Table 4.14-1 shows estimated water supply projections for the year 2035.

Table 4.14-1
San Dieguito Water District Projected Water Supply and Demand

	Projected Supplies[1] (afy[2]) Year 2030	Projected Demands (afy[2]) Year 2030	Difference
Normal Year	8,840	8,840	0
Single-Dry Year	9,740	9,740	0
Multiple-Dry Year (1st Year)	9,337	9,337	0
Multiple-Dry Year (2nd Year)	9,740	9,740	0
Multiple-Dry Year (1st Year)	9,971	9,971	0

SOURCE: San Dieguito Water District 2010 Urban Water Management Plan.
[1]Takes into account all sources of water supply including CWA, surface diversion from Lake Hodges, and recycled water.
[2]Acre-feet per year.

Based on continued commitment to conservation programs, maintaining current adjudicated surface water rights, additional imported water available when needed from SDCWA, and the supply of recycled water, the SDMWD anticipates sufficient water to meet its customers' needs through the year 2035 under average, single-dry and multiple-dry year scenarios.

Olivenhain Municipal Water District

The OMWD was incorporated on April 9, 1959, to develop an adequate water supply for landowners and residents. On June 14, 1960, residents of OMWD voted to become a member of the SDCWA, thus becoming eligible to purchase water transported into San Diego County via the SDCWA and its wholesaler, MWD. The OMWD currently serves a population of approximately 84,000 residents in northern San Diego County, including parts of the City.

To model future water supply and demands, OMWD equates historic water demand patterns to variables such as household income, consumer response to the price of water,

and weather, to predict future water demands. Table 4.14-2 shows estimated water supply projections for the year 2035.

Table 4.14-2
Olivenhain Municipal Water District Projected Water Supply and Demand

	Projected Supplies (afy[1]) Year 2030	Projected Demands (afy[1]) Year 2030	Difference (afy[1])
Normal Year	31,192	31,192	0
Single-Dry Year	31,192	31,192	0
Multiple-Dry Year (1st Year)	36,612	32,128	4,484
Multiple-Dry Year (2nd Year)	36,612	34,056	2,556
Multiple-Dry Year (1st Year)	36,612	36,099	513

SOURCE: Olivenhain Municipal Water District 2010 Urban Water Management Plan.
[1]Acre-feet per year.

If OMWD supplies are developed as planned, along with achievement of conservation targets, no shortages are anticipated within OMWD's service area under average, single-dry and multiple-dry year scenarios through the year 2035.

b. Water Reuse – Recycled Water

Recycled water is currently being produced at the EWA and also at the SEWRF. The SEWRF is permitted to discharge 2.48 million gallons of recycled water to its customers per day.

The recycled water infrastructure consists of a network of pipes in streets branching out from the treatment plants. The system also includes pump stations and reservoirs to convey the recycled water to local customers (Encinitas Ranch Golf Course, landscaped medians, homeowners associations, and parks) throughout the City. The City is enforcing an ordinance that requires new customers to hook up to existing recycled water infrastructure if the customer can feasibly connect to the recycled water line. There are no current plans to expand the recycled water treatment capacity at the EWA or SEWRF.

4.14.1.5 Solid Waste Disposal

The City has an exclusive franchise agreement with EDCO Waste and Recycling Services (EDCO) to provide solid waste collection services in the City for both residential and commercial customers. EDCO is the only authorized company that can haul solid waste in the City. Residential trash service includes curbside green waste collection and recyclable materials (mixed paper, glass, plastic, and aluminum cans) collection at no additional charge.

Residential recycling is collected once weekly. Commercial and industrial recycling is collected from one to six times per week, depending on the volume generated. According to the City Public Works Department, the State of California changed the reporting methodology in 2007 to a per capita waste generation. Official waste generation (pounds

per person per day, or ppd) as calculated by the State for the most recent year (2014) for residential was 6.1 ppd (State 50 percent goal was 7.5 ppd), which translates to approximately 59 percent diverted from landfill.

Landfill waste originating in Encinitas has declined from a high of 81,870 tons annually in 2005 to 67,772 tons in 2014. EDCO, the City's franchised waste hauler, anticipates that annual landfill waste disposal will stabilize in this range for the foreseeable future. Factors contributing to this are the implementation of AB 341 (mandatory commercial recycling) and AB 1826 (mandatory organics recycling).

4.14.2 Regulatory Framework

4.14.2.1 State

a. California Water Plan (Update 2013)

The California Water Plan is the State's strategic plan for managing and developing water resources statewide for current and future generations, as required by the California Water Code.

b. The Water Conservation Act of 2009

Senate Bill (SB) X7-7 was enacted in November 2009, requiring all water suppliers to increase water use efficiency. Specifically, the legislation sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. The State shall make incremental progress towards this goal by reducing per capita water use by at least 10 percent by December 31, 2015. Effective 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for State water grants or loans.

c. Water Conservation in Landscaping Act of 2006

This act requires cities, counties, charter cities, and charter counties, to have adopted landscape water conservation ordinances by January 1, 2010 (see also Section 4.14.2.2, Local, below).

d. California Senate Bill 1087: Sewer and Water Service Priority for Housing Affordable to Lower-Income Households (2006)

This statute requires local governments to provide a copy of the updated housing element to water and sewer providers immediately subsequent to adoption. Water and sewer providers must grant priority for service allocation to proposed development that includes housing units affordable to lower-income households. Additionally, Urban Water Management Plans are required to include projected water use for future lower-income households.

e. California State Senate Bill 221 and Senate Bill 610 (2002)

SB 610 requires water suppliers to prepare a Water Supply Assessment (WSA) report for inclusion by land use agencies within the CEQA process for new developments subject to SB 610. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are planned to be available prior to approval of large-scale subdivisions. As defined in SB 221 and SB 610, large-scale projects include residential development projects that include more than 500 residential units and/or shopping centers or business establishments resulting in a net increase of more than 1,000 employees or more than 500,000 square feet of floor space.

f. 2006 Waste Discharge Requirements Order

The State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for Sewer Systems (Order No. 2006-0003-DWQ). The intent of the order is to regulate all collections systems in the State in an effort to reduce or eliminate the number of Sanitary Sewer Overflows (SSOs) which, by their nature, pollute the environment. A SSO is any overflow, spill, release, discharge, or diversion of wastewater from a sewer system.

The order is applicable for all publicly owned sewage collection systems with more than one mile of sewer pipe. The City has more than one mile of sewer pipe, and therefore, is subject to this order. In response to the order, the City prepared their Sewer System Master Plan.

The plan addresses the City's plans, schedules, and programs to assure that all feasible steps are taken to contain and control effects that could occur in the event of a SSO. The Sewer System Master Plan dated November 2014 is discussed in subsection 4.14.2.2c.

g. California Integrated Waste Management Act of 1989 (as amended by Assembly Bill 341)

Originally, the Integrated Waste Management Plan mandated to divert 25 percent of their solid waste by 1995 and 50 percent by 2000. Assembly Bill (AB) 341 (introduced in 2011 by Assembly Member Chesbro) amends these requirements as follows: (1) CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the State to divert 75 percent of the solid waste generated in the State from disposal by January 1, 2020; (2) requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012; (3) streamlines the amendment process for non-disposal facility elements, by allowing changes without review and comment from a local task force; and (4) allows a solid waste facility to modify their existing permit, instead of having to undergo a permit revision, under specified circumstances.

4.14.2.2 Local

a. General Plan/Local Coastal Program

Pertinent General Plan goals and policies related to the provision of adequate public services are listed below in Table 4.14-3.

Table 4.14-3
Goals and Policies Related to Public Services

Goal/Policy	Description
City of Encinitas General Plan Land Use Element	
Goal 2	The City should manage slow, orderly growth in accordance with a long- term plan which protects and enhances community values.
2.3	Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services.
2.10	Development shall not be allowed prematurely, in that access, utilities, and services shall be available prior to allowing the development.
Goal 4a	The City will ensure that the rate of residential growth does not create a demand which exceeds the capability of available services and facilities.
City of Encinitas General Plan Resource Management Element	
Goal 1	The City will conserve, protect, and enhance the water resources in the Planning Area
1.1	Require new development to utilize measures designed to conserve water in their construction.
1.3	The City will implement a program for both the using and sale of treated wastewater from a new wastewater treatment facility. The City should attempt to use the treated wastewater for the landscaping of transportation corridors, parks and recreation areas, and other public uses.
1.7	Investigate ways to reduce the reliance of local water users on imported water. The City will seek reductions in per capita water consumption and will support reclaiming sewage effluent for re- use.
1.10	Promote the use of water efficient sprinkling and gardening systems to include ordinances and technology to encourage drought tolerant plants.
1.11	If a development can be connected to the sewer system, the system must have the capacity to handle the additional load of the proposed project.
Goal 6	The City will make every effort to reduce the amount of solid and liquid waste generated in the Planning Area and will identify ways to responsibly deal with these wastes.
6.1	The City will phase in all practical forms of mandatory recycling as soon as possible.
6.4	The City will cooperate with other cities in the region to site and operate both landfill and recycling facilities.
SOURCE: City of Encinitas 1989, amended 2014.	

b. Municipal Code

City of Encinitas Municipal Code Chapter 11.20 Solid Waste Management

The purpose of this chapter is to codify the City's requirement for the periodic collection of garbage, rubbish, and other refuse from all residences and places of business in the City.

Additionally, this chapter requires the diversion of designated recyclables from the City's waste stream by all residential, commercial, and industrial customers within the City.

City of Encinitas Municipal Code Title 18 - Sewer Regulations Ordinance

The purpose of this section of the Municipal Code is to identify the rules and regulations and set forth the terms and conditions under which the City will authorize connections and provide sewer service to customers.

City of Encinitas Municipal Code Chapter 23.26 - Water Efficient Landscape Regulations

As required by the Water Conservation in Landscaping Act, the City adopted a landscape water conservation ordinance. Pursuant to the act, this ordinance establishes water use standards for landscaping. Specifically, the requirements of this chapter of the Municipal Code reduce water use associated with irrigation of outdoor landscaping by setting a maximum amount of water to be applied to landscaping and by designing, installing and maintaining water-efficient landscapes consistent with the water allowance. A project that is subject to this chapter is required to use recycled water for irrigation. Per State law, an updated Municipal Water Efficient Landscape Ordinance will be adopted by the City in 2016.

c. Plans and Programs

Metropolitan Water District of Southern California

The MWD was formed in 1928 to develop, store, and distribute supplemental water in southern California for domestic and municipal purposes. The MWD is a wholesale supplier of water to its member agencies. It obtains supplies from local sources as well as the Colorado River via the Colorado River Aqueduct which it owns and operates, and the Sacramento-San Joaquin Delta via the State Water Project. Planning documents such as the Regional Urban Water Management Plan (RUWMP) and Integrated Water Resources Plan (IWRP) help ensure the reliability of water supplies and the infrastructure necessary to provide water to southern California. MWD's 2010 RUWMP documents the availability of these existing supplies and additional supplies necessary to meet future demands. The 2010 RUWMP includes the resource targets included in the IWRP and contains a water supply reliability assessment that includes a detailed evaluation of the supplies necessary to meet demands over a 25-year period in average, single-dry year and multiple-dry year periods. As part of this process, MWD also uses the San Diego Association of Governments (SANDAG) regional growth forecast in calculating regional water demands. In accordance with State law, the RUWMP is updated every five years.

MWD's IWRP identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The latest IWRP (2013) includes a planning buffer to mitigate against the risks associated with implementation of local and

imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. The planning buffer is intended to ensure that the southern California region, including the City of Encinitas, will have adequate water supplies to meet future demands.

San Diego County Water Authority

The SDCWA purchases water from the MWD that is delivered to the region through two aqueducts. The SDWCA also obtains water via long-term Colorado River water conservation and transfer agreements with agencies in the Coachella Valley and Imperial County. As retail member agencies of the SDCWA, both the SDWD and OMWD purchase water from the SDCWA for retail distribution within their service areas.

The SDCWA's 2010 UWMP, in accordance with State law and the RUWMP, contains a water supply reliability assessment that identified a diverse mix of imported and local supplies necessary to meet demands over the next 25 years in average, single-dry year and multiple-dry year periods. The UWMP is based on SANDAG's 2050 Regional Growth Forecast which has been refined to include an economic outlook that factors in the current recession and local jurisdictions' general/specific plan updates. The UWMP documents that no shortages are anticipated within its service area. The SDCWA also prepared an annual water supply report for use by its members that provides updated documentation on existing and projected water supplies.

Integrated Regional Water Management Program for the San Diego Region (2013)

The Integrated Regional Water Management (IRWM) program is a local water resources management approach preferred by the Governor, California Department of Water Resources (DWR), and State Water Resources Control Board. It is aimed at securing long-term water supply reliability within California by first recognizing the inter-connectivity of water supplies and the environment, and then pursuing projects yielding multiple benefits for water supplies, water quality, and natural resources.

The San Diego IRWM program is an interdisciplinary effort by water retailers, wastewater agencies, storm water and flood managers, watershed groups, the business community, tribes, agriculture, and regulatory agencies to coordinate water resource management efforts and to enable the San Diego region to apply for grants tied to DWR's IRWM program. The Regional Water Management Group (RWMG), which is the group responsible for administering and implementing the San Diego IRWM program, is comprised of the SDCWA, City of San Diego, and County of San Diego. A Regional Advisory Committee (RAC) serves to shape the IRWM program and upcoming planning and funding application(s). Additionally, broad stakeholder outreach engages members of the public and other interested parties in the IRWM planning process.

The IRWM Plan provides a mechanism for: (1) coordinating, refining, and integrating existing planning efforts within a comprehensive, regional context; (2) identifying specific regional and watershed-based priorities for implementation projects; and (3) providing

funding support for the plans, programs, projects, and priorities of existing agencies and stakeholders (San Diego Integrated Regional Water Management 2013).

Local Utility Districts

City of Encinitas Sewer System Management Plan (November 2014)

The Sewer System Master Plan was prepared in response to the State Water Resources Control Board's adoption of Order No. 2006-0003-DWQ, relating to the elimination of SSO. The plan is required to provide response processes for sewer overflow emergencies and to assure adequate facilities exist to support the needs of the City. The plan is required to be updated every five years.

Leucadia Wastewater District Asset Management Plan (January 2013)

The Asset Management Plan is used as the District's asset planning tool. The plan provides a comprehensive inventory of sewer facility assets and summarizes needed capital improvements to support the District's growth. The plan is updated every five years.

Olivenhain Municipal Water District Update of Potable and Recycled Water Master Plan Capital Improvement Program (March 2011)

The OMWD completed a comprehensive Potable Water Master Plan and Capital Improvement Program in 2000 and updated it in 2006. The Master Plan and Capital Improvement Program was last updated in 2011. The goal of the 2011 update was to further refine the CIP and estimate current and future development, population, and potable water demands to guide infrastructure planning. These are key ingredients of the District's capacity fees which were updated concurrently.

Cardiff and Encinitas Sewer Master Plan Update (April 2011)

The purpose of the Sewer Master Plan Update is to evaluate the City's existing and future sewer facility needs related to the Cardiff and Encinitas Sanitary Divisions, make recommendations and prepare a preliminary opinion of probable cost for each of the proposed improvements. The plan is intended to be updated every five years.

San Dieguito Water District 2010 Urban Water Management Plan (June 2011)

The UWMP provides an assessment of the existing water system conditions and demands. The plan concluded that the overall system is adequately sized to accommodate buildout under the adopted General Plan.

Olivenhain Municipal Water District 2010 Urban Water Management Plan (June 2011)

The 2010 UWMP was prepared to guide the OMWD's conservation and water resource management programs. The 2010 UWMP serves as the OMWD's long-term planning document to ensure a reliable water supply at the local level.

San Dieguito Water District Water System Master Plan (June 2010)

The San Dieguito Water District's Water System Master Plan analyzed the distribution system for reliability, water quality, adequacy of fire flow demands and storage requirements. The plan identifies and prioritizes capital improvement projects for the distribution system. The Master Plan identified areas for improvement that were then included into the future planning horizon (year 2030) CIP. These CIP includes pipeline system upgrades, valve replacement, meter replacement, and treatment plant upgrades. The City codified water utility specifications in Municipal Code Chapter 21. Municipal Code Chapter 21 includes water system regulations regarding service connections, extensions of water mains, and backflow.

4.14.3 Significance Determination Thresholds

Consistent with Appendix G of the CEQA Guidelines, impacts related to public utilities would be significant if implementation of the Housing Element Update (HEU) would:

1. Result in a need for new systems, or require substantial alterations to existing utilities, including storm water, wastewater, reclaimed water, or water infrastructure, the construction of which would create physical impacts;

2. Result in a demand for potable water supply such that purveyors have insufficient water supplies available to serve buildout of the project from existing entitlements and resources, and new or expanded entitlements are needed;

3. Result in a demand for wastewater treatment such that local wastewater treatment provider(s) have inadequate capacity to serve project buildout in addition to the provider's existing commitments and new or expanded facilities are needed; or

4. Require the construction of a new solid waste disposal facility.

4.14.4 Methodology

The impact analysis in the following subsections evaluates: (1) whether the proposed project would result in the need for substantial alterations or expansions to existing utility or solid waste facilities or the construction of new facilities; and (2) if the expansion or construction of new facilities necessitated by the project would result in environmental impacts.

4.14.4.1 Sources

Public utility information was acquired through consultation with the City and review of public documents, including the SDCWA UWMP, other relevant UWMPs, utility master plans, and the City General Plan and Municipal Code.

4.14.4.2 Future Project Implementation

The adopted City of Encinitas General Plan contains goals and policies relative to the provision of adequate utilities, water supply, and solid waste disposal to serve future demand. The City would continue to review project applications for the availability of utilities and water supply. Compliance with applicable requirements would be required and specific conditions would be administered as part of the approval process. Adoption of the HEU floating zone would not alter the City's adopted discretionary review process. Redevelopment of any of the housing sites may occur with or without implementation of the HEU floating zone.

The impact analysis below describes the type and magnitude of the potential environmental impacts of future development on the housing sites and how such impacts would affect the existing environment. Future development has the potential result to impacts associated with increased demand for utilities, water supply and waste disposal. The analysis in the following section identifies the potential need for increased capacity or supply, the potential for impacts resulting from the construction of new facilities and a mitigation framework for future projects. Subsequent "by right" development within the new floating zone district created through the HEU would not be subject to further CEQA review to analyze project-level impacts on utilities, unless otherwise noted. Compliance with development standards required for "by right" development as well as the mitigation framework identified in this PEIR would serve to minimize the potential for significant impacts associated with implementation of the HEU.

4.14.5 Issue 1a: Storm Water System

Would the project result in a need for new systems, or require substantial alterations to existing storm water infrastructure, the construction of which would create physical impacts?

4.14.5.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; it provides capacity for future development consistent with State Housing Element Law.

The existing storm water system generally has adequate capacity to serve existing development within the City. However, inadequate storm drain capacity has been identified specifically in north Leucadia near housing site ALT-2. Future development of the housing sites would primarily result in redevelopment of already developed sites. The overall drainage area as well as the drainage characteristics/patterns in the post-buildout condition would be similar to existing conditions. However, an increase in paved areas would result in an increase in impervious surfaces, thereby increasing storm water runoff to existing storm drain systems.

As discussed in Section 4.8, Hydrology and Water Quality, future development would conform to applicable Federal, State, and City regulatory standards to effectively avoid and/or address potentially significant impacts related to runoff rates and volumes. Additionally, Goals 2 and 4 of the City's General Plan Land Use Element (LUE) reinforce the requirement that the demands of growth do not exceed the capability of available services and facilities. Consistent with General Plan policies LUE 2.3 and 2.10, no development associated with the HEU would be allowed prematurely, in that all utilities are required to be available prior to allowing the development. Additionally, the City's Stormwater Manual requires future development to implement project-specific measures to control and reduce storm water runoff. Therefore, at this program-level of review, the HEU would not result in a need for expanded or newly constructed storm water facilities, and impacts would be less than significant. Should new facilities be required to be constructed in the future, each would undergo site-specific analysis to evaluate the storm water system, as needed.

b. Housing Strategy Summaries

Adoption of housing strategy 1 – Ready Made (RM), housing strategy 2 – Build Your Own (BYO), or housing strategy 3 - Modified Mixed Use Places (MMUP) would not result in any need to construct new storm water facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.5.2 Significance of Impacts

Since there is adequate capacity in the storm water system and future projects are required to assure that storm water is adequately handled on-site, no construction or expansion of storm water facilities is required in conjunction with the HEU. Impacts to the City's storm water system would be less than significant at the program-level.

4.14.6 Issue 1b and 3: Wastewater

Would the project:

- *Result in a need for new systems, or require substantial alterations to existing utilities, including wastewater, or reclaimed water infrastructure, the construction of which would create physical impacts?*
- *Result in a demand for wastewater treatment such that local wastewater treatment provider(s) have inadequate capacity to serve project buildout in addition to the provider's existing commitments and new or expanded facilities are needed?*

4.14.6.1 Impacts

a. Housing Sites

The Sewer Master Plans based their future assessments of growth on buildout of the General Plan. As previously noted, based on this anticipated growth both sewer districts are operating under capacity with pipelines currently adequate to support increased flow.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future buildout under the HEU would exceed projected buildout under the adopted General Plan. Ultimate buildout of the housing sites would therefore generate additional wastewater beyond that contemplated by the adopted General Plan.

The Sewer Master Plan identifies several projects that would be required to improve capacity and treatment throughout the City. The Master Plan is required to be updated every five years. Therefore, the 2012 plan would be updated in 2017, and would address potential deficiencies to assure adequate flow and treatment capacity to serve the growing needs of the City, including future buildout of the housing sites. Furthermore, pursuant to SB 1087, the sewer service provider is required to provide priority service for lower-income households.

In addition to improvements identified in the existing Sewer Master Plan, the City's General Plan goals and policies assure that adequate wastewater facilities would be available to serve new development. Specifically, as stated above, the City's General Plan LUE requires the assurance of available utilities prior to approval of future development. Applications for future development on any housing site would be required to provide documentation from the sewer district that adequate capacity is available to serve the project. Furthermore, the Leucadia Wastewater District levies capacity fees on new development. The District's capacity fee recovers the costs associated with providing wastewater facility capacity to new users and existing users requiring additional capacity. The capacity fee is designed to recover the cost for the additional capacity needed to accommodate the new connections. Therefore, at this program-level of review, the HEU would not result in a need for expanded or newly constructed wastewater facilities, and

impacts would be less than significant. The City currently has excess capacity at its facilities; however, should new facilities be required to be constructed in the future, each would undergo site-specific analysis to evaluate the wastewater system for improvements, as needed.

b. Housing Strategy Summaries

Adoption of Housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.6.2 Significance of Impacts

Sewer master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of storm water facilities is required in conjunction with the HEU. Impacts to the City's wastewater system would therefore be less than significant at the program-level.

4.14.7 Issue 1c: Water System

Would the project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

4.14.7.1 Impacts

a. Housing Sites

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future development consistent with the HEU could generate additional demand for water and recycled water infrastructure.

The housing sites are located within the water service area of either the SDWD or OMWD. The master plans for both water districts provide details for each district's foreseeable CIPs to maintain and improve water flow throughout the City. Water districts periodically update their master plans to evaluate the ability of the district's potable water distribution system to adequately meet existing and future system demands. Pursuant to SB 1087, water districts are required to provide priority service for lower-income households. Therefore, buildout of the HEU would be considered by the districts in subsequent master plan updates that would be used to estimate projected water demands for the City. Any needs for additional infrastructure would be addressed and accounted for in the updated plans.

Future development would be required to conform to City General Plan LUE Policy 2.3 (Growth will be managed in a manner that does not exceed the ability of the City, special districts and utilities to provide a desirable level of facilities and services), Policy 2.10

(Development shall not be allowed prematurely, in that access, utilities, and services shall be available prior to allowing the development), and Goal 4a (The City will ensure that the rate of residential growth does not create a demand which exceeds the capability of available services and facilities). Applications for future development on any housing site would be required to provide documentation from the water district that adequate facilities are available to serve the project. SDWD and OMWD provide and maintain adequate water infrastructure capacity for the City annually based on long-term projections in their master plans. Any future construction of infrastructure required to support future housing would require environmental review which is beyond the scope of this EIR.

b. Housing Strategy Summaries

Adoption of housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.7.2 Significance of Impacts

Water master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of water facilities is required in conjunction with adoption of the HEU. Impacts to the City's water system would therefore be less than significant at the program-level.

4.14.8 Issue 2: Water Supply

Would the project require or result in the need for new water supply entitlements and resources?

4.14.8.1 Impacts

a. Housing Sites

The housing sites are located within the water service area of either the SDWD or OMWD. The 2010 UWMPs for both districts provide estimates of the water supply and water demand during normal, single-dry, and multiple-dry years. Tables 4.14-2 and 14-3 show adequate supplies from both providers to support buildout under the City's adopted General Plan.

The HEU does not propose the construction of new housing or other development; rather, it provides capacity for future development consistent with State Housing Element Law. Future development consistent with the HEU would generate additional water demand. The additional development allowed by the HEU was not included in the current UWMP growth forecasts used to plan for future water supply demands. Therefore, buildout of the HEU would result in water demands that would exceed water supplies projected in the UWMPs.

UWMPs are required to be updated every five years and would therefore be subject to revision in 2015. Pursuant to SB 1087, the City shall provide the updated housing element to the service providers immediately after adoption for use in the Districts' water supply planning efforts. Furthermore, water districts are required to provide priority service for lower-income households. Any needs for additional supplies based on adoption of the HEU would be addressed and accounted for in the District's updated plans.

Additionally, future projects consistent with the HEU would be required to present service letters from either SDWD or OMWD assuring that adequate water supplies would be available. Individual development projects would also be required to assure adequate measures are proposed to meet all water conservation requirements. Specifically, compliance with General Plan Resource Management Element (RME) Policy 1.1 requires new development to utilize measures designed to conserve water in their construction, and Policy 1.10, which promotes the use of water efficient landscape equipment. Future projects would also be held to water use standards codified in the Water Conservation in Landscaping Act (City Municipal Code Section 23.26). Therefore, at this program-level of review the project would not result in a need for new water supply entitlements, and impacts would be less than significant. Currently, adequate water supply exists from SDWD and OMWD; however, should new facilities be required to be constructed in the future, each would undergo site-specific environmental analysis to evaluate water supply as needed.

b. Housing Strategy Summaries

Adoption of housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.8.2 Significance of Impacts

Plans for water supply are in place to assure adequate facilities would be available to serve new development and, no construction or expansion of water supply facilities is required in conjunction with adoption of the HEU. Impacts to the City's water supply would therefore be less than significant at the program-level.

4.14.9 Issue 4: Solid Waste Disposal

Would the project:

- *Be served by a landfill without sufficient permitted capacity to accommodate the project's waste disposal needs; or*
- *Not comply with the Federal, State, and local statutes and regulations regarding solid waste?*

4.14.9.1 Impacts

a. Housing Sites

Buildout of the proposed land uses associated with the housing strategies would result in an increased demand for solid waste disposal. Based on the most recent reporting data available through CalRycle, the Otay Landfill has a remaining capacity of 13 years and Sycamore landfill has a remaining capacity until 2042 (27 years) (CalRecycle 2015).

As previously stated, AB 341 requires cities and counties in California to implement recycling programs, reduce refuse at the source, and compost waste to achieve the established 75 percent diversion of solid waste from landfills. The City's recycling program helps the City meet State requirements. General Plan RME Policy 6.1 requires the City to phase in all practical forms of mandatory recycling as soon as possible. Additionally, City of Encinitas Municipal Code Chapter 11.20 sets the regulations for the collection of solid waste and requires the diversion of designated recyclables from the City's waste stream by all residential, commercial, and industrial customers within the City. Specifically, prior to issuance of a demolition or building permit applicants must prepare a Waste Management Plan for approval.

All future development would be required to participate in the above-mentioned programs and comply with City General Plan requirements and the solid waste and recycling ordinance. Doing so would avoid significant solid waste disposal impacts related to construction and operation of future development in accordance with the HEU. Therefore, at this program-level of review the project would not require increased landfill capacity, and impacts associated with solid waste would be less than significant. Should new solid waste facilities be required to be constructed in the future, each would undergo site specific analysis to evaluate solid waste disposal, as needed.

b. Housing Strategy Summaries

Adoption of housing strategy 1 (RM), housing strategy 2 (BYO), or housing strategy 3 (MMUP) would not result in any need to construct new facilities. Therefore, there would be no inherent differences in impacts among the housing strategies.

4.14.9.2 Significance of Impacts

Solid waste and landfill planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of landfill facilities is required in conjunction with adoption of the HEU. Impacts to the City's solid waste disposal would therefore be less than significant at the program-level.

5

Chapter 5
Significant Unavoidable Environmental Effects/Significant Irreversible Environmental Changes/Energy Conservation

CEQA Guidelines Section 15126.2 (b) and (c) require that the significant unavoidable impacts of the project, as well as any significant irreversible environmental changes that would result from project implementation, be addressed in an EIR.

5.1 Significant Environmental Effects Which Cannot Be Avoided if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2 (b) any significant unavoidable impacts of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in the EIR. Implementation of the Housing Element Update (HEU) would result in significant, unavoidable impacts associated with the following issues: aesthetics, air quality, cultural resources, greenhouse gas emissions, land use, and traffic/circulation. Chapter 4 of this EIR provides more detail about the nature and extent of these impacts related to the project.

These impacts would remain significant and unavoidable as a result of the HEU (refer to Chapter 4 of this EIR for further detail). All other significant impacts identified in Chapter 4, Environmental Impact Analysis, of this EIR can be reduced to below a level of significance with implementation of the mitigation framework provided in Chapter 4.0 of this EIR.

5.2 Significant Irreversible Environmental Changes Which Would Result if the Project Is Implemented

CEQA Guidelines Section 15126.2 (c) requires an evaluation of significant irreversible environmental changes. Examples of possible irreversible changes include:

- Primary impacts such as the use of nonrenewable resources during the initial and continued phases of the project
- Secondary impacts (such as highway improvements which provide access to a previously inaccessible area)

5.2.1 Non-renewable Resources

Non-renewable resources generally include biological habitat, agricultural land, cultural and paleontological resources, mineral deposits, water bodies, and some energy sources. Implementation of the project would result in significant irreversible impacts to several of these resources, as described in Section 4.4 and in Chapter 5 below. The HEU would result in less than significant impacts to water bodies (drainage and water quality) as described in Section 4.8 and agricultural and mineral resources as described in Chapter 8.

Actions related to future development would result in an irretrievable commitment of nonrenewable resources, such as energy supplies and construction materials, such as lumber, steel and aggregate. Non-renewable energy resources (coal, natural gas, oil) would be used in construction, heating and refrigeration of food and water, transportation, lighting, and other associated energy needs.

Residential and commercial development anticipated within the housing sites, together with other projects in the City, would require the commitment or destruction of other nonrenewable and slowly renewable resources. These resources include (but are not limited to) lumber and other forested products; sand and gravel; asphalt; petrochemical construction materials; steel, copper, lead, other metals; and water. However, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources.

As described previously, the housing sites are currently developed with the exception of a few vacant lots. Development on vacant parcels would result in the long-term commitment to urbanization because reversion of the housing sites back to vacant land would be difficult and highly unlikely. However, the development of mid- to high-density residential units adjacent to mixed-uses under any of the housing strategies would result in a more efficient land use pattern than would likely occur under the City's adopted General Plan.

In summary, future construction and operation associated with implementation of the HEU would result in the irretrievable commitment of limited, slowly renewable, and

nonrenewable resources, which would limit the availability of these particular resource quantities for future generations or for other uses. However, the use of such resources would be consistent with local and regional growth forecasts for the area. As such, although irreversible environmental changes would result from future development, such changes would not be considered significant.

5.2.2 Secondary Impacts

The proposed housing sites are accessible via regional transportation facilities (e.g., Highway 101 and Interstate 5) and are served by existing utilities and other public services. As a result, secondary impacts are not anticipated from environmental changes resulting from the construction of new infrastructure, as is described in Sections 4.12 and 4.14.

5.3 Energy Conservation

Would the project have a significant impact on energy conservation or result in the inefficient, wasteful or unnecessary consumption of energy?

5.3.1 Impacts

In 1975, the California State Legislature adopted Assembly Bill 1575 (AB 1575) in response to the oil crisis of the 1970s. The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include (1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy sources. In order to assure that energy implications are considered in project decisions, Public Resources Code Section 21100(b)(3) and CEQA Guidelines Appendix F requires a description (where relevant) of the potential wasteful, inefficient, and unnecessary consumption of energy impacts caused by a proposed project.

5.3.1.1 Project Energy Consumption

a. Construction

Grading and construction activities consume energy through the operation of heavy off-road equipment, trucks, and worker traffic. At the program-level, it is too speculative to quantify total construction-related energy consumption of future development, either in total or by fuel type. Energy used during future construction of the housing sites is not considered significant given the level of development proposed and short-term nature of the energy consumption. There are no conditions in the project area that would require non-standard equipment or construction practices that would increase fuel-energy consumption above typical rates. Therefore, the HEU would not result in a wasteful and inefficient use of energy resources during the construction of future development, and impacts would be less than significant.

In addition, the City adopted a Construction & Demolition Debris (C&D) Ordinance in 2008. The City adopted this ordinance to help divert waste from landfills and comply with statewide mandates from the California Integrated Waste Management Board (AB 939), and requires any construction, remodel, or renovation projects greater than 10,000 square feet to prepare a Waste Management Plan to reuse or recycle at least 60 percent of construction and demolition debris. C&D materials include, but are not limited to, asphalt, concrete, brick, dirt, rock, lumber, cardboard, metals, and any vegetative or other land clearing/landscaping materials. This ordinance ensures energy conservation in the form of recycling efforts to reduce wasteful, inefficient, and unnecessary consumption of energy associated with solid waste disposal during construction, operation, maintenance and/or removal for future projects.

b. Long-term Operations

Long-term operational energy use associated with the HEU includes fuel consumption of vehicles and electricity and natural gas consumption by residents and commercial operations, energy consumption related to obtaining water. However, the use of these resources would still be used daily as essential energy sources and utilities regardless of implementation of the HEU. As such, although long-term operational energy use would result from future development, such changes would not be considered significant in comparison to the energy use of other cities in the region. The proposed HEU would not result in any unusual characteristics that would result in excessive long-term operational building energy demand.

Future development associated with implementation of the HEU would be subject to compliance with the California Building Code (Title 24) and associated updates, as well as the City's General Plan, which aim to reduce excessive and inefficient energy use. The California Building Code is regularly updated and includes higher energy-efficiency standards in comparison to other states. The following sections discuss the City's General Plan policies that also guide reductions in the City's long-term operational energy use. The HEU does not automatically allow or permit housing projects. Individual development projects in the City would still be subject to evaluation on a case-by-case basis and would be required to comply with applicable Federal, State, and local energy and building regulations.

Transportation

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NHTSA) is responsible for establishing vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon (mpg). The fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg since 1996. Compliance with federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United

States. Over time, fuel economy standards have increased and reduced the greenhouse gas emissions footprint of vehicles.

In 2009, the U.S. Environmental Protection Agency (EPA) granted a Clean Air Act waiver of preemption to California, granting the ability to enact higher standards than federal fuel economy standards. This waiver will allow California to implement its own greenhouse gas emission standards for motor vehicles beginning with model year 2009 and extending through 2016. In 2012, the EPA and NHTSA issued a joint Final Rulemaking to extend the National Program of harmonized greenhouse gas and fuel economy standards to model year 2017 through 2025 passenger vehicles. In addition, agencies have adopted the first greenhouse gas regulations for heavy-duty engines and vehicles. The proposed standards are projected to require on an average industry fleet wide basis (passenger cars, light-duty trucks, and medium duty passenger vehicles) of a 54.5 mpg fuel economy standard by 2025.

Transportation and vehicle miles traveled (VMT) are relevant considerations in the analysis of the HEU's energy impacts under CEQA Guidelines Appendix F. An analysis of the VMT relative to each housing strategy is provided in Section 4.9, Land Use. All three housing strategies show a VMT/trip reduction over the adopted General Plan Land Use Plan.

Policy 1.15 and the policies of Goal 3 under the City's Circulation Element promote the use of other modes of transport to reduce the dependence of personal automobiles. Policies 3.1-3.11 encourage improving bicycle, pedestrian, and rail services, as well as cooperation with San Diego County, San Diego Association of Governments (SANDAG), and other local jurisdictions for an integrated multi-modal regional transit system.

As discussed above, the HEU is not anticipated to result in any unusual characteristics that would result in excessive long-term operational fuel consumption. The City's Climate Action Plan and General Plan Circulation Element provide strategies to improve transit service and overall mobility within the City, resulting in a decrease in auto dependency and VMT.

Future development under the HEU would potentially increase density in key areas of the City. As these key areas are already served by existing public transit, local residents may be encouraged to utilize more available and efficient alternative transportation. As stated in the Floating Zone Standards, the intent of the floating zones is to "[P]romote infill development and revitalization that is compact and supports pedestrian-friendly development patterns with safe, effective and multi-modal transportation options." (Floating Zone Standards Section 30.36.010A.) To implement this standard, new growth and public services would be primarily directed into existing town centers and village centers, and help create transit-oriented development that includes apartments, townhouses, stacked flats, and/or duplexes along with commercial uses.New development would be designed to accommodate pedestrians and include wider sidewalks, outdoor dining, public plazas to encourage activity. (See Floating Zone Standards Section 30.36.030 stating "Connections to adjacent developments should also be provided to support walking and biking. Enhanced connections to transit is also important.")

This would encourage an increase in public transportation ridership and coincides with modern "smart growth" Transportation Demand Management (TDM) practices as well as statewide and SANDAG transportation planning efforts to decrease single-occupant vehicle (SOV) trips. Housing placed by key amenity centers encourages activities such as walking or biking; therefore, encouraging a shift from SOV trips to non-SOV modes. Thus, future mixed use development proposed by the HEU housing strategies help connect existing neighborhoods to improved town centers and support more efficient transit service and pedestrian opportunities.

Collectively, these initiatives to increase public transit use and improve community walkability along existing urban centers relate to State and regional planning efforts by SANDAG. The availability of public transit for City residents, employees, and visitors would ensure that the HEU would not result in the inefficient, wasteful, or unnecessary consumption of transportation energy. Application of the Floating Zone Standards would support placement of new sites at close proximity to transit and to be designed in a manner that encourages multi-modal transportation options. Overall, fuel consumption associated with vehicle trips generated by future development within the City would not be considered inefficient, wasteful, or unnecessary in comparison to other cities in the region.

Electricity and Natural Gas

California Code of Regulations, Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-residential Buildings. Title 24 was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2013, the CEC updated Title 24 standards with more stringent requirements (California Green Building Standards Code [CALGreen Code]). Title 24 is updated through a triennial code adoption cycle. The 2016 Standards, planned to go into effect on January 1, 2017, are expected to substantially reduce the growth in electricity and natural gas use. Additional savings result from the application of the Standards on building alterations, such as those within Section V (Site Lighting) including Subpart E (Windows), F (Roofs), and S (Mechanical Equipment). These savings are cumulative, increasing as years go by. As detailed in Section 4.6, new construction and major renovations must demonstrate their compliance with the current Energy Code by showing an energy savings of at least 21 percent above the former 2005 Energy Code (see Section 4.6.5).

The HEU does not involve any unusual characteristics that would result in excessive long-term operational demand for electricity or natural gas. Furthermore, the City's General Plan Resource Management Element contains Goal 15 and Policies 15.1-15.3 aimed at energy conservation (Table 5-1).

Table 5-1
General Plan Resource Management Element: Goals and Policies Related to Energy Conservation

Goal/Policy	Description
City of Encinitas General Plan Resource Management Element (2011)	
Goal 15	The City will make every effort to conserve energy in the City, thus reducing our dependence on fossil fuels.
15.1	The City will encourage the use of alternative energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development. (Coastal Act/30253)
15.2	The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.
15.3	Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.

The HEU would be consistent with various energy efficiency goals and policies within the City's General Plan. Additionally, State and Federal codes and standards will assist the City's goal of encouraging the reduction of energy and GHG emissions during the design and building phases of construction projects (see Table 4.6-10 in Section 4.6, Greenhous Gas Emissions). The residential sector accounts for 15 percent of emissions and the non-residential sector accounts for 11 percent of emissions based upon the City's 2005 Citywide GHG Emissions Inventory. However, implementation of the Federal and State regulations and programs Resource Element policies serve as proactive energy conservation measures for all proposed future development projects.

The solid waste sector accounts for 3 percent of emissions based upon the City's 2005 Citywide GHG Emissions Inventory.

As discussed above, compliance with the goals and policies within the General Plan and C&D Ordinance would ensure that there would not be inefficient, wasteful, or unnecessary consumption of energy associated with implementation of the HEU (see Section 4.6.6). Future development projects at housing sites would adhere to, and exceed, all Federal, State, and local requirements for energy efficiency, including Title 24 of the California Code of Regulations regarding building energy efficiency standards. In addition, measures in the City's Resource Management Element promote the use of renewable energy sources such as solar photovoltaics. Therefore, the HEU would not result in the inefficient, wasteful, or unnecessary consumption of transportation or building energy.

Federal Strategy Measures

Table 5-2 lists State and Federal strategy measures that are intended to decrease energy consumption and GHG emissions related to transportation and residential and non-residential construction (see also Table 4.6-10 listing state regulatory programs implemented for the reduction of GHG emissions). While the City does not have a direct role in implementing these strategies, the resulting reductions will contribute significantly to the City's energy conservation profile.

Table 5-2 Encinitas Climate Action Plan State and Federal Strategy Measures		
Measure	Objective: State and Federal Codes and Standards	MT CO_2E Reduction
S&F-1	Renewable Portfolio Standard	12,890
S&F-2	Low Carbon Fuel Standard	31,180
S&F-3	Corporate Average Fuel Economy	65,590
S&F-4	Title 24- Residential Buildings	2,330
S&F-5	Title 24- Non-residential Buildings	690
Total Encinitas Reduction		**112,680**
MT CO_2E = metric tons of CO_2 equivalent		

5.3.1.2 Significance of Impacts

Adherence with the aforementioned State and Federal regulations and the City's General Plan guide reductions in the City's collective long-term operation energy use. Furthermore, the HEU does not grant immediate development rights to new housing projects. All housing and development projects proposed in the City would still be subject to a detailed evaluation on a case-by-case basis and would be required to comply with all local regulations, permit requirements, and building codes. Impacts relative to the inefficient, wasteful, or unnecessary consumption of energy would be less than significant.

6

Chapter 6
Growth Inducement

CEQA requires that an EIR evaluate the "growth-inducing" effects of a proposed project. Specifically, CEQA Guidelines Section 15126.2(d) requires that an EIR:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (for example, a major expansion of a waste water treatment plant might allow for more construction in service areas). Increases in the population might tax existing community services facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can directly or indirectly induce growth. Construction of new housing would directly induce population growth. However, if a project creates substantial new permanent employment opportunities, it could indirectly induce growth by stimulating the need for additional housing and services to support the new employment demand. It could also indirectly induce growth by removing infrastructure limitations or regulatory constraints on a required public service, such as roads or water service. The following discussion is based on a program-level EIR analysis of the City's Housing Element Update (HEU) impacts in regards to growth inducing conditions. Information in this section was obtained from the San Diego Association of Governments (SANDAG) estimates, SANDAG Series 12 2050 Regional Growth Forecasts and the City's draft Housing Element.

6.1 Population and Housing Growth

As discussed above, the HEU does not propose the construction of new housing or other development; rather it provides capacity for future development consistent with State Housing Element Law. Implementation of the HEU would not induce direct population and housing growth in the City because the HEU policies and implementation programs are

intended to accommodate and encourage housing development, in order to meet existing and projected housing needs as established through the Regional Housing Needs Assessment (RHNA) process. This is to accommodate the growth forecast and, therefore, does not directly induce growth.

The State of California Department of Finance is responsible for developing the total state-wide housing demand projection. With the State Department of Housing and Community Development, this demand is apportioned to each of the state's regions. SANDAG is responsible for allocating the San Diego region's projected new housing demand in each of its member jurisdictions through the RHNA process (see Chapter 3.0, Project Description). The allocation takes into account factors such as market demand for housing, employment opportunities, the availability of suitable sites and public facilities, commuting patterns, type and tenure of housing need, and others. As discussed in Section 3.2, local jurisdictions are required by State law (Government Code Section 65580 et seq.) to plan for their fair share of projected housing construction needs in their region over a specified planning period. Thus, the HEU contains policies and implementation programs that would provide for housing development to accommodate the City's share of the regional housing need as identified in the RHNA prepared by SANDAG.

Based on SANDAG data, the City is expected to have an increase of 2,317 housing units and a population increase of 12,750 people between 2015 and 2035 (SANDAG 2015a and 2015b; see Table 4.11-2). While the HEU is intended to allow additional housing to be permitted immediately subsequent to the adoption of the rezone program, the complete buildout of housing sites is not foreseen to potentially occur until 2035 or later, based upon current rates of market absorption. Table 6-1 depicts the three housing strategies identified by the City to accommodate projected housing growth to the buildout year 2035.

Table 6-1
Yield of Proposed Housing Sites in the City of Encinitas

Housing Strategy	Parcel Area (Net)	Existing Residential Units	Adopted General Plan Yield	Proposed Residential Yield	Increase in Units	Increase in Population*
Strategy 1: Ready Made (RM)	82.16	19	455	1,930	1,911	5,121
Strategy 2: Build Your Own (BYO)	85.77	9	187	1,853	1,844	4,942
Strategy 3: Modified Mixed Use Places (MMUP)	150.21	95	808	3,261	3,166	8,485

*Based on the 2035 forecasted 2.68 persons per household (SANDAG 2015).

State law requires the City to accommodate the production of housing to meet its fair share of the regional housing needs distribution made by SANDAG. The permitted mixed use housing and commercial growth identified in the City's HEU would allow the City to address its regional fair-share housing obligations. Thus, adoption of the HEU would not

directly induce population growth; rather it provides a means to meet projected future housing needs in the community.

All three housing strategies were compared to the City's adopted General Plan and 2035 SANDAG forecast for population and housing units. The housing strategies are estimated to result in the following buildout projections:

- Under the projected buildout conditions of housing strategy 1 (RM), the HEU would add approximately 1,911 residential units to the adopted General Plan yield of 455 residential units, and a population increase of 5,121 people. Compared to the SANDAG 2035 forecast, housing strategy 1 (RM) would result in a lower housing unit and population increase than forecasted by SANDAG.

- Under projected buildout conditions of housing strategy 2 (BYO), the HEU would add approximately 1,844 residential units to the adopted General Plan yield of 187 residential units, and a population increase of 4,942 people. Compared to the SANDAG 2035 forecast, housing strategy 2 (BYO) would result in a lower housing unit and population increase than forecasted by SANDAG.

- Under the projected buildout conditions of housing strategy 3 (MMUP), the HEU would add approximately 3,166 residential units to the adopted General Plan yield of 808 residential units, and a population increase of 8,485 people. Compared to the SANDAG 2035 forecast, housing strategy 3 (MMUP) would result in a higher housing unit and population increase than forecasted by SANDAG.

It should be noted that the buildout yields are *potential* yields. With application of the floating zone approach to implementation, a buffer of units in addition to the minimum RHNA allocation is needed to assure compliance with no net loss of adequate sites law, such that the RHNA allocation can be achieved. Full realization of this buildout is unlikely. Out of the three strategies, housing strategy 1 (RM) and housing strategy 2 (BYO) would accommodate projected housing growth and would not directly induce growth as each would result in a lower housing unit and population increase than SANDAG forecasts. However, housing strategy 3 (MMUP) could indirectly induce growth by providing for a land use intensity that slightly exceeds projected growth of the SANDAG 2035 forecasts. (For more detailed discussions on each housing strategy, see Chapter 3.0, Project Description; and Section 4.11, Population and Housing).

6.2 Removal of an Impediment to Growth

The lack of adequate infrastructure, including roads, water, and sewer service and police and fire protection are typically considered impediments to growth, since growth is either typically prohibited in such areas or development cannot feasibly occur where such infrastructure is not present. The HEU does not propose the construction or expansion of new housing, services, or other infrastructure development; rather it accommodates for future development consistent with State Housing Element Law. A vast majority of the permitted future residential units and commercial uses would occur as infill development

and redevelopment within urbanized areas already served by essential roads, utilities, and public services. Therefore, the HEU would not remove an impediment to growth.

6.3 Foster Economic or Employment Growth

Commercial uses permitted within the mixed use housing sites would generally be composed of local neighborhood-serving retail, service and office uses, intended to serve the residents of new and existing housing in the immediate area. As a result, the additional commercial and mixed use activity would not be considered growth inducing in regards to significant economic or employment growth for the City under the HEU. Furthermore, the HEU does not propose or provide direct development rights to new major office or commercial centers that would encourage substantial economic or employment growth.

6.4 Conclusion

Overall, the HEU is not intended or considered to be growth inducing as it serves as a plan with programs and policies to accommodate projected growth as required by State law. The HEU would not remove an impediment to growth, develop, or encroach on an isolated or adjacent area of open space, or foster economic and employment expansion. As discussed above, housing strategies 1 (RM) and 2 (BYO) accommodate projected population growth and would not be considered growth inducing as the number of additional housing units and population increase is within projected SANDAG forecasts; whereas housing strategy 3 (MMUP) has the potential to indirectly induce growth by providing for a higher land use intensity and capacity that exceeds projected growth in the 2035 SANDAG forecast. Regardless, the opportunities to provide housing would be consistent with the City's desire to establish a healthy housing base for the community and comply with State law.

7

Chapter 7
Cumulative Impacts

This section addresses cumulative impacts associated with implementation of the Housing Element Update (HEU). CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15355 further states that cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(a) of the CEQA Guidelines requires a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." Cumulatively considerable, as defined in Section 15065(a)(3), "means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

According to Section 15130(b) of the CEQA Guidelines, the discussion of cumulative effects ". . . need not provide as great a detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness . . . ." The evaluation of cumulative impacts is to be based on either (a) "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency," or (b) "a summary of projections contained in an adopted local, regional, or statewide plan or related planning document, that describes or evaluates conditions contributing to the cumulative effect . . . Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency" (CEQA Guidelines Section 15130(b)(1)). Pursuant to Section 15130(d), cumulative impact discussions may rely on previously approved land use documents such as general plans, specific plans, and local coastal plans, which may be incorporated by reference.

7.1 Cumulative Analysis Setting and Methodology

In the case of a planning document with a 20-year buildout horizon, such as the HEU, cumulative effects would occur from development associated with buildout of the housing sites combined with effects of development on land within and around the City of Encinitas (City)

and region in the horizon year (2035). The cumulative impacts of the HEU should, therefore, take into account growth projected by the County General Plan for the unincorporated community of San Dieguito, the City of Carlsbad General Plan and the City of Solana Beach General Plan, along with other anticipated ambient growth in the City itself. A broad examination of cumulative impacts involves considering buildout of the HEU together with growth and new development in the surrounding jurisdictions identified above. For example, growth within the City and adjacent jurisdictions would result in increased traffic on area roadways and regional facilities, such as Interstate 5. While all subject areas are evaluated in the horizon year (2035 buildout of the HEU) based on a summary of projections method, the traffic analysis also includes a near-term analysis due to the North Coast Highway 101 Project, which, if approved, is anticipated to be completed prior to buildout of the HEU[1]

The geographic area considered for each cumulative impact depends upon the impact that is being analyzed. For example, in assessing air quality impacts, all development within the air basin contributes to regional emissions of criteria pollutants, and basin wide projections of emissions are the best tool for determining the cumulative effect. Each subsection below identifies the specific parameters for the cumulative evaluation.

The San Diego Association of Governments (SANDAG) estimates anticipated growth for the 18 cities and the unincorporated areas within San Diego County for the purpose of allocating growth to specific areas and identifying regional transportation infrastructure needed to support regional growth. The land uses and the associated potential development that would result from buildout of the housing sites generally correlate to regional growth forecasts for 2035 made by SANDAG for all three strategies. Strategy 3 (Modified Mixed Use Places [MMUP]), however, would result in slightly greater buildout intensity than projected by SANDAG.

A significant impact would occur if the project's contribution to the cumulative effect is determined to be significant. Each subsection below provides an overview of the potential cumulative impacts that could occur followed by a summary of the HEU's potential contribution to that cumulative effect. The subsection concludes with a determination of the significance of the HEU.

7.1.1 Plans and Programs Evaluated for Determination of Cumulative Impacts

Multiple Federal, State, and local planning documents and programs were used to evaluate the HEU's contribution to cumulative impacts. These plans and programs are discussed under the Regulatory Framework subsections throughout Section 4.0. Highlighted below is a number of regional and City plans and programs relied upon throughout the cumulative evaluation.

[1] The North Coast Highway 101 Project is anticipated to be completed during the horizon of the HEU, although it is not fully funded in the six-year CIP.

7.1.1.1 San Diego Forward: The Regional Plan (San Diego Forward) October 2015

San Diego Forward combines and updates the region's two big picture planning documents: the Regional Comprehensive Plan and the Regional Transportation Plan/Sustainable Community Strategy. San Diego Forward provides a vision for the region's growth through the year 2050. The plan reflects a strategy for a more sustainable future.

7.1.1.2 City of Encinitas General Plan

The City's General Plan serves as a blueprint for physical development and contains goals and policies which aim to maintain the City's character, provide a balance of land uses and services, and to preserve environmentally sensitive areas.

7.1.1.3 City of Encinitas Municipal Code

Multiple chapters were relied upon in the evaluation of impacts including:

- Volume II, Titles 20-30 of the City's Municipal Code which contains the primary zoning implementation and regulatory ordinances aimed at the classification and regulation of land uses throughout the City.

- Chapter 30.34.040B Cultural/Natural Resources Overlay Zone, applying to areas within the Special Study Overlay Zone where site-specific analysis indicates the presence of sensitive cultural, historic, and biological resources, including sensitive habitats.

7.1.1.4 North County Multiple Habitat Conservation Program

Coordinated through SANDAG, the Multiple Habitat Conservation Program (MHCP) is one of three subregional habitat conservation planning programs in the region that, together, contribute to a coordinated preserve system for the San Diego region. The MHCP is a comprehensive conservation planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County.

7.1.2 Project Evaluated for Cumulative Impacts (Near-Term)

The Highway 101 project includes streetscape, pedestrian, circulation, traffic management, and parking improvements to a 2.5-mile segment of North Coast Highway 101 between A Street and La Costa Avenue. These improvements would alter traffic conditions in the area, and would potentially combine with the traffic effects of the proposed HEU. Thus, a specific near-term cumulative traffic analysis is included in Section 7.2.13, below. For this interim condition, a cumulative impact would occur if buildout consistent with the HEU coupled with the growth of neighboring jurisdictional and the capacity changes resulting from the Highway 101 project would combine to result in a significant impact.

7.2 Cumulative Effect Analysis

7.2.1 Aesthetics

The study area for the assessment of cumulative visual impacts includes the North County coastal region comprised of the City and neighboring jurisdictions of the San Dieguito community in the County of San Diego and the cities of Carlsbad and Solana Beach. Future development within the study area could have a cumulative impact on visual resources due to changes in visual character and quality resulting from incremental increases in density and urbanization. This growth could gradually alter the visual makeup of the region. The following is a summary of the project's contribution to cumulative aesthetic impacts.

Future development in accordance with the HEU would not result in significant impacts to visual resources (except for three housing sites (L-7, O-4, and O-5) as described in Section 4.1).

Although adoption of the HEU would contribute to the increased density and urbanization in the region, the extent of adverse effects on visual character would be reduced through regulatory compliance with existing plans and programs as well as implementation of HEU floating zone standards and design guidelines intended to maximize consistency with the surrounding land use, including preserving significant views. The design controls placed on subsequent development consistent with the HEU floating zone would ensure that development occurs in accordance with the City goals, policies and design objectives. Therefore, the HEU's incremental contribution to visual impacts would not be cumulatively considerable.

7.2.2 Air Quality

The study area for the assessment of cumulative air quality impacts is the San Diego Air Basin which is currently in non-attainment for Federal and State ozone standards and respirable particulate matter (PM_{10} and $PM_{2.5}$) standards. Future development within the study area could have a cumulative impact on air quality due to increased air pollution emissions associated with construction and operations, including transportation. In addition to regional effects, increased traffic volumes could increase localized concentrations of carbon monoxide (CO_2). The following is a summary of the project's contribution to cumulative air quality impacts.

The cumulative assessment of air quality impacts to the San Diego Air Basin relies partially on assessment of HEU project consistency with the adopted Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP). The RAQS and SIP are based on growth forecasts for the region, which are in turn based on maximum buildout of land uses as allowed in the adopted community and general plans. As discussed in Section 4.2.5.3, the additional units from the HEU (under any housing strategy) would exceed the assumptions used to develop the RAQS and applicable SIP (see Impact AQ-1). Since the RAQS and SIP contain the means of attaining air quality standards for the entire San Diego region, this exceedance is also considered significant on a cumulative basis (Impact AQ-1).

Construction related air quality effects of the HEU would be reduced through mitigation measure AQ-2 requiring restrictions on construction pursuant to the HEU floating zone including the use of low or no volatile organic compounds rating architectural coating products, or alternatively a restriction on the amount of square feet per day that would be allowed to be coated. Adherence to the HEU Mitigation Framework associated with construction emissions would reduce future project impacts to less than significant. Therefore, the HEU's incremental contribution to construction-related air quality impacts would not be cumulatively considerable.

Section 4.2.6.1 concludes that operational emissions associated with buildout of the HEU would be below the thresholds for all criteria pollutants. In addition, as discussed in Sections 4.9, and 4.13, the vehicle miles travelled analysis shows that although traffic generation would increase under any housing strategy scenario, trip lengths would decrease. This equates to greater trip efficiency. Therefore, the HEU's incremental contribution to operational-related air quality impacts would not be cumulatively considerable.

7.2.3 Biological Resources

The study area for the assessment of cumulative impacts to biological resources includes the North County coastal region comprised of the City and neighboring jurisdictions identified above. Future development within the study area could have a cumulative impact on biological resources through loss of habitat. The following is a summary of the project's contribution to cumulative biological impacts.

As discussed in Section 4.3, the City supports a number of sensitive resources. The distribution of these resources and potential for impacts to occur within the proposed housing sites are listed in Tables 4.3-1 and 4.3-2.

The extent of adverse effects to biological resources would be reduced through the implementation of Federal, State, and regional programs including MHCP compliance, and City General Plan policies and ordinances aimed at the protection of sensitive species. The City did not adopt the regional MHCP, but still uses the plan as a local reference guide. Additionally, mitigation measures BIO-1 through BIO-5 would reduce impacts to biological resources through requirements for site-specific biological and/or U.S. Fish and Wildlife Service protocol surveys, and pre-construction surveys if vegetation clearing is proposed during the typical bird breeding season. Although future projects on sites identified in Section 4.3 would contribute to cumulative biological resource impacts, following the MHCP as a reference for best practices, City codes and policies, and adherence to the HEU Mitigation Framework would ensure that each project's incremental contribution to biological impacts would not be cumulatively considerable.

7.2.4 Cultural Resources

The study area for the assessment of cumulative impacts to cultural resources includes the San Diego region because loss of such resources would be detrimental to the entire region. Future development within the cumulative study area could have a cumulative impact on cultural

resources through loss records or artifacts as land is developed (or redeveloped). The following is a summary of the project's contribution to cumulative cultural resource impacts.

As discussed in Section 4.4, future development in accordance with the HEU could impact historical or archeological resources which may be present on the housing sites (see Impact CUL-1 and CUL-2). Implementation of General Plan policies aimed at protection of historic resources, along with mitigation measures CUL-1 and CUL-2, would reduce impacts to cultural resources, although not to a less than significant level. Since preservation of historical and archeological resources can only be ensured at the project-level, this impact is also considered significant on a cumulative basis (Impacts CUL-1 and CUL-2).

With respect to paleontological impacts, future development in accordance with the HEU could substantially impact unknown subsurface resources (see Impact CUL-3). Mitigation measure CUL-3 would reduce impacts because it requires a monitor to have the authority to halt grading should paleontological resource be encountered. Should a resource be discovered, an excavation plan would be prepared to evaluate the resource and recommend additional mitigation. Although future projects throughout the cumulative project area would contribute to cumulative impacts to paleontological resources, compliance with codes and policies, and adherence to the HEU Mitigation Framework would ensure that the HEU's incremental contribution to paleontological impacts would not be cumulatively considerable.

7.2.5 Geology and Soils

The study area for the assessment of cumulative impacts to geology and soils includes the San Diego region. As population growth increases the number of people potentially exposed to seismic and geological hazards would increase. The following is a summary of the project's contribution to impacts associated with geology and soils.

Future development in accordance with the HEU would involve the construction of two- to three-story structures in a seismically active area. Likewise, future development in accordance with the HEU could have the potential to result in short-term soil erosion during construction activities. As discussed in Section 4.5, potential impacts to future development would be addressed through project-level analysis and the application of remedial measures identified in site-specific geotechnical investigations (when applicable), Additionally, adherence to the state and local regulations including building construction standards would assure potential impacts would be less than significant. Compliance with remedial measures as identified on a project basis would ensure that the HEU's incremental contribution to geology and soils impacts would not be cumulatively considerable.

7.2.6 Greenhouse Gas Emissions

The analysis of greenhouse gas (GHG) emissions is, by its nature, a cumulative issue. The projects incremental effect on statewide GHG emissions is discussed in detail in Section 4.6. The following is a summary of the project's contribution to impacts associated with GHG emissions.

Future development in accordance with the HEU would result in an increase in GHG emissions from the existing condition. Likewise future development throughout the state would also contribute to this global condition. As discussed in Section 4.6, GHG emissions associated with the buildout of the housing strategies reflect the effects of statewide laws including the Energy Code, CalGreen Code, and statewide regulations on vehicles, fuels, and renewable energy requirements. Notwithstanding implementation of regulatory measures, the HEU would increase GHG emissions under the three housing strategies (see Table 4.6-7). Another means of assessing the project's contribution to GHG emissions includes the evaluation of the proposed project's compliance with regulatory programs including SB 375, the Energy Code, the CalGreen Code, Assembly Bill 341, and the City's Water Efficient Landscape Ordinance. As detailed in Section 4.6, due to the uncertainty of construction details at the program-level buildout of the HEU would result in significant impacts due to transportation, energy, and area sources.

Overall, until the anticipated growth under the HEU is included in the emission estimates of the Sustainable Communities Strategy, impacts relative to conformance with the SCS would be cumulatively significant and unavoidable. In addition to compliance with State and local regulations, future projects would be required to implement Mitigation Measures GHG-1 through GHG-6 to address GHG emission impacts. While the proposed mitigation would reduce project GHG emissions, GHG emission reductions cannot be adequately quantified at this time. Therefore, this impact would be cumulatively significant and unavoidable.

7.2.7 Hazards and Hazardous Materials

The study area for the assessment of cumulative impacts to geology and soils includes the San Diego region. As population growth increases the number of people potentially exposed to hazards and hazardous materials would increase. The following is a summary of the project's contribution to impacts associated with hazards and hazardous materials.

Generally, the release of hazardous materials has site-specific impacts that do not compound or increase in combination with impacts elsewhere. As discussed in Section 4.7 future development in accordance with the HEU could result in hazards to the public or the environment by disturbance of existing unknown contaminated soils or groundwater. Specifically, as discussed in Section 4.7.4.1, grading and excavation activities could disturb soils and cause contaminants below ground to become airborne. Excavation below the groundwater table or dewatering could also bring construction workers in contact with contaminants. Additionally, during construction, workers could be exposed to hazardous materials during demolition of older buildings (pre-1978) including asbestos-containing materials, lead-based paints, asbestos. Because schools are located within 0.25 mile of housing sites (including those with listed hazardous materials sites), as well as the uncertainty of where future schools may be sited, future development could also result in hazardous emissions close to a school.

Adverse effects would be reduced through the implementation of local, Federal, State, and regional programs including those aimed at requiring safe handling and storage of known hazardous materials. Additionally, mitigation measure HAZ-1 would reduce impacts to

hazardous material emissions through requirements for preconstruction assessments to assure that soil contamination/hazardous materials are identified and remediated. Compliance with these regulations, General Plan policies, and the HEU mitigation framework would ensure no direct or cumulative impacts related to hazardous materials would result from implementation of the HEU.

Adoption of the HEU could contribute to an increased risk of exposure to wildfire. As discussed in Section 4.7.7.1, three housing sites (C-6, O-4, and O-5) are located within the City's designated Very High Fire Hazard Safety Zone. Locating residential land uses adjacent to or within a high fire hazard area can result in increased fire-related risk to people and structures. To avoid risk from wildland fires, future development on housing sites C-6, O-4, and O-5 must adhere to California Fire Code Title 19, Division 1, Section 3.07(b), which requires a minimum 30-foot brush clearance around structures for fire safety. Potential impacts to future development would be addressed through project-level analysis and the application of remedial measures (when applicable). Additionally, adherence to the State and local regulations including building construction standards would assure potential impacts would be less than significant. Compliance with these regulations as identified on a project basis would ensure that the HEU's incremental contribution to hazardous materials impacts would not be cumulatively considerable.

7.2.8 Hydrology and Water Quality

The study area for the assessment of cumulative impacts to hydrology and water quality includes the Carlsbad Hydrological Unit. New construction and operation of future projects could result in significant impacts on drainage patterns, water quality, flooding, and groundwater, and an increase in storm water runoff within the study area. The following is a summary of the project's contribution to impacts associated with hydrology and water quality.

Adoption of the HEU could contribute to impacts with respect to drainage patterns, water quality, flooding, and an increase in storm water runoff. Development consistent with the HEU must adhere to Federal, State, and local regulations, as described in Section 4.8, to assure potential impacts would be less than significant. Compliance with remedial measures as identified on a project basis would ensure that the HEU's incremental contribution to hydrology and water impacts would not be cumulatively considerable.

7.2.9 Land Use and Planning

The study area for the assessment of cumulative land use impacts would be the City and neighboring jurisdictions as detailed above. Cumulative land use impacts could result from changes to land use plans which become incompatible and/or unsustainable. The following is a summary of the project's contribution to cumulative impacts associated with land use and planning.

Adoption of the HEU could contribute to cumulative impacts if buildout would conflict with land use plans and/or policies, State planning initiatives, or created incompatible neighborhoods. The HEU would be consistent with, modify, or replace policies of adopted plans

and regulations governing land use and development in the City. In addition, the HEU would not conflict with any relevant regional or local plans. Specifically, the HEU is consistent with the goals of San Diego Forward and the City's General Plan policies aimed at conservation and sensitive land. While development pursuant to the HEU would contribute to an overall increase in density and intensity of uses throughout the City, the extent of adverse effects on land use and planning would be reduced through regulatory compliance with existing plans and programs as well as implementation of HEU floating zone standards and design guidelines. The design controls placed on future projects consistent with the HEU floating zone would ensure that development occurs in accordance with the City goals, policies, and design objectives. Therefore, the HEU's incremental contribution to land use impacts would not be cumulatively considerable

7.2.10 Noise

The study area for the assessment of cumulative noise impacts would be the City and neighboring jurisdictions as detailed above. Although the City and surrounding jurisdictions are largely urbanized, future development or redevelopment could cumulatively increase ambient noise. The following is a summary of the project's contribution to cumulative noise impacts.

Noise impacts were assessed by comparing noise levels without the HEU and future noise levels with buildout of the three housing strategies. As discussed in Section 4.10, the increases in ambient noise would be less than 3 dB which is not a perceptible noise increase. Therefore, the project's incremental contribution to an increase in ambient noise levels would not be cumulative considerable.

Future development pursuant to the HEU must adhere to the City's General Plan Policies and Noise Abatement and Control Ordinance to assure that it would not exceed applicable property line noise level limits. However, as identified in Section 4.10.6.1, the degree of success of these regulations cannot be adequately known at the program-level. Mitigation measure NOS-1, identified in Section 4.10.6.1, would reduce impacts associated with on-site noise levels to a level that is less than significant because individual projects would require site-specific noise studies. Future development could result in a cumulative construction-related noise impact if construction of multiple projects were to take place in close proximity (generally closer than 110 feet) and simultaneously. Development of several housing sites identified in Section 4.10.7 have the potential to result in temporary construction noise impacts that are significant due to their proximity to each other. Mitigation measure NOS-2, identified in Section 4.7.2, would reduce impacts associated with construction noise to a less than significant level by requiring contract specific best management practices that would attenuate the construction noise to acceptable levels.

Thus, compliance with the goals, policies, and recommendations of the General Plan and adherence to the HEU Mitigation Framework associated with noise abatement would ensure that the HEU's incremental contribution noise impacts would not be cumulatively considerable.

7.2.11 Population and Housing

The study area considered for the population and housing cumulative impact analysis is defined as the region. The following is a summary of the project's contribution to cumulative impacts associated with population and housing.

Overall, buildout of the HEU would respond to the need for affordable housing in compliance with Regional Housing Needs Assessment allocation and associated projected population increase within the City through the horizon year. Because the City is almost completely built out, any new development would be primarily infill or redevelopment of underutilized lands. The increase in housing stock would accommodate the projected growth in population in the region and is consistent with adopted plans and regional growth principles. No permanent displacement of housing or people would occur with implementation of the HEU. Therefore, buildout of the HEU would not result in a cumulatively considerable contribution to population and housing impacts.

7.2.12 Public Services and Facilities

The study area for public services and facilities is the applicable provider's service area. New development or redevelopment within the service area could result in cumulative impacts associated with additional demands for public services, resulting in the need for new or expanded facilities. The following is a summary of the project's contribution to cumulative impacts associated with public services and facilities.

As discussed in Section 4.12, all future development within the City would be required to provide evidence that adequate facilities and services are available at the time of application. Additionally, future development is required to pay applicable fees that support the acquisition and construction of additional facilities for fire/emergency response, schools, and parks and recreational facilities. No expanded services or facilities are warranted with the adoption of the HEU, and impacts would be less than significant. Therefore, the HEU's incremental contribution to public services and facilities impacts would not be cumulatively considerable.

7.2.13 Transportation/Traffic

The study area for traffic includes the roads that would support project-related traffic, traversing neighboring jurisdictions. New development or redevelopment within the study area could result in cumulative impacts associated with increased trips resulting in congested roadways. The following is a summary of the project's contribution to cumulative impacts associated with traffic.

7.2.13.1 Near-Term Effects

As mentioned above, the North Coast Highway 101 project is currently proposed. This project consists of sidewalk, curb, gutter, enhanced crosswalks, raised medians, roundabouts at El Portal and La Costa Avenue, bike lanes, increased parking options, and landscaping elements. Road diets would be implemented, which includes reducing the number of lanes of traffic.

Overall, these improvements would reduce the capacity of North Coast Highway 101. Thus, a limited cumulative near-term analysis of North Coast Highway 101 was completed (North Coast Highway 101 Roadway Analysis (Chen Ryan 2015). This analysis includes a segment analysis, as well as an intersection analysis of North Coast Highway at La Costa Avenue.

As shown in Table 4.13-1, the completion of the North Coast Highway 101 project alone would cause five of the eight North Coast Highway 101 segments to operate at unacceptable level of service (LOS) E. However, the completion of the North Coast Highway 101 project would improve the North Coast Highway 101 at La Costa Avenue intersection operations from LOS B to LOS A.

a. Housing Strategy 1 – Ready Made (RM)

With the addition of housing strategy 1 (RM) traffic to the near-term with North Coast Highway 101 improvements, the five segments operating at unacceptable LOS E would operate at unacceptable LOS F. The addition of project traffic to these segments would further degrade the five segments to LOS F, resulting in a significant contribution to this impact.

b. Housing Strategy 2 – Build Your Own (BYO)

With the addition of housing strategy 2 (BYO) traffic to the near-term with North Coast Highway 101 improvements, two of the segments operating at unacceptable LOS E would operate at unacceptable LOS F and the other three segments would continue to operate at unacceptable LOS E. The addition of project traffic to these segments would further degrade two of the segments to LOS F, resulting in a significant contribution to this impact.

c. Housing Strategy 3 – Modified Mixed Use Places (MMUP)

With the addition of housing strategy 3 (MMUP) traffic to the near-term with North Coast Highway 101 improvements, the five segments operating at unacceptable LOS E would operate at unacceptable LOS F. The addition of project traffic to these segments would further degrade the five segments to LOS F, resulting in a significant contribution to this impact.

The intersection analysis was completed for the highest traffic-generating housing strategy, which is housing strategy 3 (MMUP). The North Coast Highway 101 at La Costa Avenue intersection would operate acceptably with the completion of both the North Coast Highway 101 improvements and the proposed housing strategy 3 (MMUP). Thus, near-term cumulative intersection impacts would be less than significant.

7.2.13.2 Plan Buildout Effects

As discussed in Section 4.13 and detailed in the Traffic Impact Assessment (see Appendix N), the assessment of traffic impacts associated with each housing strategy is based on identifying the buildout traffic conditions and subtracting ambient growth (growth that would occur without the HEU). Therefore, inherently the analysis contained in Section 4.13 is a cumulative analysis. As shown therein, implementation of each housing strategy would result in a different combination of significant impacts to roadway/freeway segments and intersections

throughout the City and surrounding jurisdictions within the cumulative study area. These impacts are expressly set out in Sections 4.13.5.1(c), 4.13.5.1(d), and 4.13.5.1(e) for housing strategies 1 (RM), 2 (BYO), and 3 (MMUP), respectively. Table 4.13-20 shows the significant traffic impacts for the three strategies. These significant impacts likewise represent significant cumulative impacts (see Impacts TRF-1 through TRF-26).

7.2.14 Public Utilities

The study for public utilities is the applicable provider's service area. New development or redevelopment within the service area could result in cumulative impacts associated with additional demands for public utilities, resulting in the need for new or expanded facilities. The following is a summary of the project's contribution to cumulative impacts associated with public utilities.

7.2.14.1 Storm Drain

Adoption of the HEU could contribute to impacts due to increased impervious surfaces throughout the service area, resulting in the potential for greater surface runoff and increased demands on existing storm water. Development consistent with the HEU must adhere to Federal, State, and local regulations, as described in Section 4.8, including local regulatory standards to effectively avoid and/or address potentially significant impacts related to runoff rates and volumes. If future projects need to increase sizing of existing storm drains, this would be reviewed on a project-by-project basis. Compliance with General Plan policies and local regulations would ensure that the HEU's incremental contribution to storm drain infrastructure impacts would not be cumulatively considerable.

7.2.14.2 Wastewater

Adoption of the HEU could contribute to impacts due to proposed increase in density and intensity of uses throughout the City. Future development consistent with the HEU must comply with General Plan policies requiring documentation from the water district that adequate facilities are available to serve the project. Compliance with General Plan policies and local regulations would ensure that the HEU's incremental contribution to wastewater capacity impacts would not be cumulatively considerable.

7.2.14.3 Water Infrastructure/Water Supply

Adoption of the HEU could contribute to impacts due to proposed increase in density and intensity of uses throughout the City. Future development consistent with the HEU must present service letters from either San Dieguito Water District or Olivenhain Municipal Water District depending on the location of the housing site. This would assure that adequate water supplies are available to support the individual projects. Compliance with General Plan policies and local regulations would ensure that the HEU's incremental contribution to water supply impacts would not be cumulatively considerable.

7.2.14.4 Solid Waste

Adoption of the HEU could contribute to impacts due to proposed increase in density and intensity of uses throughout the City. Future development consistent with the HEU must participate in recycling programs, comply with City General Plan requirements, and the solid waste and recycling ordinance thereby avoiding significant solid waste disposal impacts related to construction and operation under any housing strategy. Compliance with General Plan policies and local regulations would ensure that the HEU's incremental contribution to solid waste impacts would not be cumulatively considerable.

8

Chapter 8
Effects Found Not to be Significant

Pursuant to CEQA Guidelines Section 15128, this section briefly describes the environmental issue areas that were determined during preliminary project review not to be significant and were therefore not discussed in detail in this report.

During the scoping process for this PEIR, it was determined that the project would have no impact on agricultural and forestry resources, mineral resources, hazards and hazardous materials (airports), and noise (airports).

8.1 Agricultural and Forestry Resources

According to CEQA Guidelines Appendix G, a project would have a significant impact on Agricultural and Forestry Resources if the project:

- Converted Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use;
- Conflicted with existing zoning agricultural use, or a Williamson Act contract;
- Conflicted with existing zoning for, or cause rezoning of, forest land timberland or timberland zoned Timberland Production; or
- Resulted in the loss of forest land or conversion of forest land to non-forest use.

Agricultural activities occur within the City on a small scale, particularly poinsettia gardens and greenhouses, comprising approximately 3 percent of total land use acreage. Urban agricultural operations occur within the City in the form of private and community gardens. No large-scale, commercial agricultural cultivation occurs within the City, and no land is presently zoned for agriculture. The HEU does not propose to rezone housing sites that are zoned for agricultural use, under a Williamson Act contract or adjacent to active agricultural land.

The City does not include any existing forest land or timberland and implementation of the HEU would not cause rezoning of forest land, timberland, or timberland zoned Timberland Production. Thus, the HEU would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no further analysis on this topic is required in the PEIR.

8.2 Mineral Resources

According to CEQA Guidelines Appendix G, a project would have a significant impact on Mineral Resources if the project:

- Resulted in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Resulted in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

The housing sites are not within an area designated by the state for locally important mineral resources and none are utilized for mineral resource production. As such, the HEU would not impact the availability of any known mineral resources and no further analysis of this topic is required in the PEIR.

8.3 Hazards and Hazardous Materials

According to CEQA Guidelines Appendix G, a project may have a significant impact relative to airport hazards if the project:

- Is located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, resulting in a safety hazard for people residing or working in the project area; or
- For a project within the vicinity of a private airstrip, the project result in a safety hazard for people residing or working in the project area.

There are no public airports or private airstrips within the project area. Therefore, no impacts would occur in this regard, and no further analysis of this topic is required in the PEIR.

8.4 Noise

According to CEQA Guidelines Appendix G, a project may have a significant impact relative to airport noise if the project:

- Is located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, and would the project expose people residing or working in the project area to excessive noise problems; or
- For a project within the vicinity of a private airstrip, the project would expose people residing or working in the project area to excessive noise levels.

There are no public airports or private airstrips within the project area. Therefore, no impacts would occur in this regard, and no further analysis of this topic is required in the PEIR.

9

Chapter 9
Project Alternatives

9.1 Introduction

In order to fully evaluate the environmental effects of projects, the California Environmental Quality Act (CEQA) mandates that alternatives to the project be analyzed. Section 15126.6 of the CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project," even if these alternatives would impede to some degree the attainment of the project objectives. Potential alternatives to the project generally may include: alternatives considered but rejected; a no project alternative, and an environmentally superior alternative. CEQA does not require an EIR to consider every conceivable alternative to a project; however, the Lead Agency must consider a reasonable range of potentially feasible alternatives.

As discussed in Chapter 4.0, buildout of the HEU could result in significant, direct, and/or cumulative environmental impacts related to, aesthetics, air quality, biological resources, cultural resources (historical, archeological and paleontological), greenhouse gas emissions, hazards (accidental release), hydrology and water quality (flooding/inundation), land use compatibility (noise, traffic), noise, and traffic capacity. A mitigation framework that would be implemented by future development in accordance with the HEU has been identified that would reduce all direct and cumulative impacts to below a level of significance, with the exception of aesthetics, air quality, cultural resources (historical and archeological), greenhouse gas emissions, land use compatibility (traffic) and traffic capacity impacts.

In developing the alternatives to be addressed in this section, consideration was given to their ability to meet the basic objectives of the project and eliminate or substantially reduce significant environmental impacts. As identified in Chapter 3.0, project objectives include the following:

Housing Element Update

1. Housing Choice. Accommodate a variety of housing types to meet the needs of all Encinitas residents, creating opportunities for attainably-priced housing for all income groups.

2. Adequate Supply. Provide adequate sites with corresponding density to meet the City's Regional Housing Needs Assessment allocation, inclusive of prior planning cycle carryover housing units.

3. Effective Implementation. Deliver State-mandated and locally desired programs to implement the City's Housing Element.

Housing Mapping Strategies

1. Maintain Community Character. Integrate future development using a blend of two- and three-story buildings or building elements into the City's seven community character contexts through appropriately located sites and project design, and embrace the unique cultural identities expressed in each of the five communities.

2. Emphasize Mixed Use. Accommodate mixed use, walkable places in key activity centers of every Encinitas community, while allowing for some standalone housing.

3. Achieve a Variety of Neighborhood Types. Provide a mix of building types and varied site designs that incorporate existing community character contexts to achieve a variety of neighborhood types in which to develop new housing and mixed use.

4. Consider Infrastructure Conditions. Ensure adequate infrastructure to support new housing by locating future development in areas that have existing or potential capacity for infrastructure and public services to accommodate it.

5. Address Mobility Needs. Maintain or enhance community access and mobility networks.

6. Strive for a Sustainable Encinitas. Coordinate planning for land use, transportation and housing to reduce environmental impacts and preserve a natural, healthy environment.

7. Strengthen the Local Economy. Locate housing in the right places to grow the economy organically by supporting local businesses and making the City more fiscally sustainable.

8. Equitably Distribute Multi-family Housing. Distribute attached and multi-family housing to the City's five communities.

A discussion of the Alternatives Considered but Rejected is presented in this section. In addition, Alternatives that would reduce or avoid significant environmental effects of the project are then discussed. These alternatives include the No Project (Development Under

the Adopted Plan) Alternative as required by CEQA. In addition, an alternative to the HEU housing strategies, the Sustainable Mixed Use Places (SMUP) Alternative, is addressed. As described in more detail in Section 9.3.2, the SMUP Alternative was designed to incorporate those housing sites that: (1) have fewer combined unmitigated impacts than the three project housing strategies; and (2) present the fewest constraints to future implementation of future housing at those location, while still meeting the required RHNA obligation.

This section of the PEIR provides a tabular comparison of the project's three housing strategies, along with a detailed discussion and analysis of the No Project (Development Under the Adopted General Plan) Alternative and the SMUP Sustainable Mixed Use Places Alternative. Each major issue area included in the impact analysis for the project is given consideration in the alternatives analyses and is addressed below. Table 9-1 provides a summary of buildout statistics for each housing strategy along with the alternatives. Table 9-2 provides a summary of the significant project impacts compared to each alternative.

As required under Section 15126.6 (e) (2) of the CEQA Guidelines, an EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, then another alternative among the alternatives evaluated must be identified as the environmentally superior project. Section 9.3 addresses the environmentally superior alternative.

Table 9-1 Maximum Potential Residential and Commercial Buildout Comparison of HEU Housing Strategies and Alternatives										
	HEU Strategy 1: Ready Made (RM)		HEU Strategy 2: Build Your Own (BYO)		HEU Strategy 3: Modified Mixed Use Places (MMUP)		No Project/Adopted General Plan Alternative		Sustainable Mixed Use Places (SMUP) Alternative	
Housing Site	M.R. (du)	M.C. (sf)	M.R. (du)	M.C. (sf)	M.R. (du)	M.C. (sf)	M.R. (du)	M.C. (sf)	M.R. (du)	M.C. (sf)
Alt-2					309	281,255	237	281,255	309	281,255
Alt-3					291	209,207	0	191,800	291	209,207
Alt-4					186	0	13	0	186	0
Alt-5					338	0	54	0		
Alt-6					93	50,000	0	0		
Alt-7					416	450,900	342	450,900	416	450,900
C-1					187	126,300	0	450,900	187	126,300
C-2	317	0	317	0	317	0	89	0		
C-3	97	85,030					0	70,000	97	85,030
C-6					138	0	4	0	138	0
C-7	11	12,004					0	7,180		
L-1	126	90,967	126	90,967			65	90,967		
L-2	43	37,539					27	37,539		
L-4	57	0					6	0		
L-5	51	0					5	0		
L-6	164	0					16	0		
L-7			60	0	60	0	7	0		
NE-1			188	93,400	188	93,400	0	71,400	188	93,400
NE-3			300	0			0	0		
NE-4	378	175,000					0	175,000		
NE-7			181	77,400	181	77,400	0	67,400	181	77,400
O-2	96	83,808	96	83,808	96	83,808	10	0		
O–3					97	70,005	0	63,640		
O-4			80	57,618	80	57,618	9	0		
O-5	48	0	48	0			7	0		
O-6	38	0					4	30,100		
OE-1	46	40,333			46	40,333	43	30,100	46	40,333
OE-2			145	75,700			0	75,700		
OE-4	80	69,840			80	69,840	0	48,000	80	69,840
OE-5	243	186,300					183	159,030		
OE-7	135	0	90	64,820	135	0	0	78,400	135	0
OE-8			222	152,380			0	144,920		
CBHMG-1					23	0	0	10,060		
TOTAL	**1,930**	**780,821**	**1,853**	**696,093**	**3,261**	**1,610,066**	**837**	**2,175,291**	**1,503,670**	**2,351**
M.R. = Maximum Residential Buildout (DU = dwelling units); M.C. = Maximum Commercial Buildout (SF = square feet)										

Table 9-2 Matrix Comparison of the HEU Housing Strategies and Alternatives					
Environmental Issue Area	HEU Strategy 1: Ready Made	HEU Strategy 2: Build Your Own	HEU Strategy 3: Modified Mixed Use Places	No Project/Adopted General Plan Alternative	Sustainable Mixed Use Places Alternative
Aesthetics/Visual Resources					
VIS-1: Plan Consistency	LTS	LTS	LTS	SAME	SAME
VIS-2: Public Views	LTS	SU	SU	LESS	LESS
VIS-3: Community Character	SU	SU	SU	LESS	LESS
VIS-4: Scenic Resources	LTS	SU	SU	LESS	LESS
Air Quality					
AQ-1: Consistency with RAQS	SU	SU	SU	LESS	SAME
AQ-2: Criteria Pollutants	SM	SM	SM	LESS	LESS
AQ-3: Sensitive Receptors	LTS/SM	LTS/SM	LTS/SM	GREATER	LESS
Biological Resources					
BIO-1: Sensitive Wildlife Species	SM	SM	SM	SAME	LESS
BIO-2: Sensitive Vegetation Species	SM	SM	SM	SAME	LESS
BIO-3: Wetlands	SM	SM	SM	SAME	LESS
BIO-4: Wildlife Corridors	LTS	LTS	LTS	SAME	SAME
BIO-5: Habitat Conservation Planning	LTS	LTS	LTS	SAME	SAME
BIO-6: Policies and Ordinances Protecting Biological Resources	LTS	LTS	LTS	SAME	SAME
Cultural and Paleontological Resources					
CR-1: Historical Resources	SU	SU	SU	SAME	LESS
CR-2: Archaeological Resources	SM	SM	SM	SAME	LESS
CR-3: Paleontological Resources	SM	SM	SM	GREATER	LESS
CR-4: Human Remains	LTS	LTS	LTS	SAME	SAME
Geology and Soils					
GEO-1: Seismic Hazards	LTS	LTS	LTS	SAME	SAME
GEO-2: Soil Erosion	LTS	LTS	LTS	SAME	SAME
GEO-3 and GEO-4: Unstable and Expansive Soils	LTS	LTS	LTS	SAME	SAME
Greenhouse Gas Emissions					
GHG-1: GHG Emissions	SU	SU	SU	SAME	SAME
GHG-2: Consistency with GHG Plans, Policies, and Regulations	LTS	LTS	LTS	GREATER	SAME

Table 9-2 Matrix Comparison of the HEU Housing Strategies and Alternatives					
Environmental Issue Area	HEU Strategy 1: Ready Made	HEU Strategy 2: Build Your Own	HEU Strategy 3: Modified Mixed Use Places	No Project/Adopted General Plan Alternative	Sustainable Mixed Use Places Alternative
Hazards and Hazardous Materials					
HAZ-1, HAZ-2, and HAZ-3 Hazardous Materials – Use, Transport, Disposal; Accidental Release; and Emissions near a School	LTS/SM	LTS/SM	LTS/SM	SAME	LESS
HAZ-4: Hazardous Materials - Sites	SM	SM	SM	SAME	SAME
HAZ-5: Emergency Response and Evacuation Plans	LTS	LTS	LTS	SAME	SAME
HAZ-6: Wildland Fires	LTS	LTS	LTS	SAME	SAME
Hydrology and Water Quality					
WQ-1 and WQ-6 Water Quality	LTS	LTS	LTS	SAME	SAME
WQ-2 Groundwater	LTS	LTS	LTS	SAME	SAME
WQ-3, WQ-4, and WQ-5 Drainage Patterns/Runoff	LTS	LTS	LTS	SAME	LESS
WQ-7, WQ-8, WQ-9, and WQ-10: Flooding/Inundation	LTS/SM	LTS/SM	LTS/SM	SAME	LESS
Land Use					
LU-1: Land Use Plans or Policies	LTS	LTS	LTS	GREATER	SAME
LU-2: State Planning Initiatives	LTS	LTS	LTS	GREATER	SAME
LU-3: Neighborhood Compatibility	LTS/SU	LTS/SU	LTS/SU	LESS	LESS
LU-4: Proximity to Agricultural Sites	LTS	LTS	LTS	SAME	LESS
LU-5: Exposure to Noise Levels	SM	SM	SM	SAME	SAME
Noise					
NO-1: Ambient Noise Levels	LTS	LTS	LTS	LESS	SAME
NO-2: On-Site Generated Noise	SM	SM	SM	SAME	SAME
NO-3: Temporary Noise	SM	LTS	SM	SAME	SAME
NO-4: Groundborne Noise and Vibration	SM	SM	SM	SAME	SAME
Population & Housing					
PH-1: Population Growth	LTS	LTS	LTS	SAME	SAME
PH-2: Displacement of People	LTS	LTS	LTS	SAME	SAME
Public Services and Recreation					
SERV-1a: Fire Service	LTS	LTS	LTS	SAME	SAME
SERV-1b: Police Service	LTS	LTS	LTS	SAME	SAME
SERV-1c: Schools	LTS	LTS	LTS	SAME	SAME
SERV-1d: Library Services	LTS	LTS	LTS	SAME	SAME
SERV-2 and SERV-3: Recreation	LTS	LTS	LTS	SAME	SAME

Table 9-2 Matrix Comparison of the HEU Housing Strategies and Alternatives					
Environmental Issue Area	HEU Strategy 1: Ready Made	HEU Strategy 2: Build Your Own	HEU Strategy 3: Modified Mixed Use Places	No Project/Adopted General Plan Alternative	Sustainable Mixed Use Places Alternative
Transportation/Traffic					
TRF-1 and TRF-2: Circulation System Capacity and Operations	SU	SU	SU	LESS	SAME
TRF-3: Alternative Transportation	LTS	LTS	LTS	SAME	SAME
TRF-4 and TRF-5: Traffic Hazards and Access	LTS	LTS	LTS	SAME	SAME
Utilities and Service Systems					
UTIL-1a: Storm Water System	LTS	LTS	LTS	SAME	SAME
UTIL-1b and UTIL-3: Wastewater	LTS	LTS	LTS	SAME	SAME
UTIL-1c: Water System	LTS	LTS	LTS	SAME	SAME
UTIL-2: Water Supply	LTS	LTS	LTS	SAME	SAME
UTIL-4: Solid Waste Disposal	LTS	LTS	LTS	SAME	SAME
LTS = less than significant; SM = significant and mitigated; SU = significant and unavoidable					

9.2 Alternative Sites Considered but Rejected

This subsection of the EIR is provided consistent with CEQA Guidelines, which State that the EIR needs to examine in detail only a reasonable range of alternatives that the Lead Agency determines could feasibly attain most of the basic objectives of the project. Further, the EIR should identify any alternatives that were considered by the Lead Agency but were rejected and briefly explain the reasons underlying the Lead Agency's determination. Among factors used to eliminate alternatives from detailed consideration in the EIR is the failure to meet most of the basic project objectives or inability to avoid significant environmental effects (CEQA Guidelines 15126.6(c)).

According to the CEQA Guidelines (Section 15126.6) (f) (2) (A):

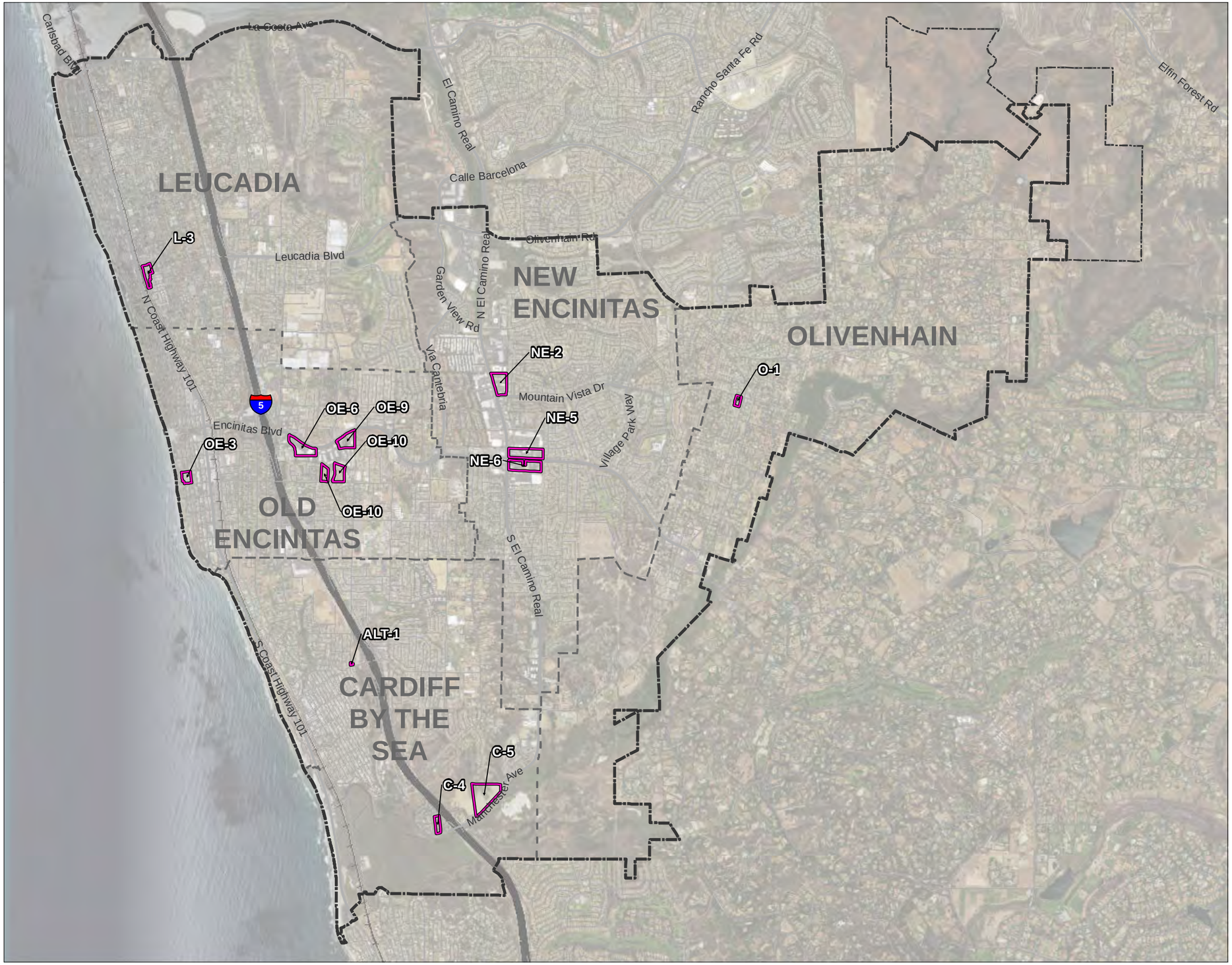
> The key question and first step in (alternative location) analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

As discussed in Sections 3.2.2 and specifically in 3.2.2.3, the proposed housing sites were selected using siting principles and neighborhood prototypes developed to address the distribution for new housing throughout the City. Through the HEU process, the City is advancing more efficient land use strategies to encourage development that is more environmentally sensitive, economically viable, community-oriented, and/or sustainable. The proposed 33 housing sites represent viable placement of higher density and greater intensity dispersed throughout the City's unique communities. The list of sites included in the HEU generally avoids environmentally sensitive areas; minimizes impacts to other valued lands; and proposes more compact housing types built closer to activity centers or on major streets to make it easy to walk to activities and to support more efficient transit service.

Twelve additional sites were reviewed as potential candidate sites for inclusion in the three proposed housing strategies (Ready Made [RM], Build Your Own [BYO], and Modified Mixed use Places [MMUP]). The locations of these sites are shown in Figure 9-1. These alternative sites were considered but were rejected from further analysis for the reasons discussed below.

Housing Site C-4

Housing site C-4, located in Cardiff, is composed of four parcels with a total of approximately 2.2 acres. This site is adjacent to the San Elijo Lagoon Ecological Reserve, west of the freeway. Site C-4 is zoned R-11 (Single-family Residential, 11 dwelling units per acre [du/acre]), and would yield 24 units under the adopted General Plan. Existing structures on site C-4 include two single-family residences and a flooring company. Throughout different public engagement events, many people in the community expressed concerns about the visual and physical impacts that the site would have on the surrounding community. After analysis of site constraints, public feedback, and City Council direction, site C-4 was not considered as an alternative site.



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FIGURE 9-1
Rejected Housing Sites

Housing Site C-5

Housing site C-5 is located at 3111 Manchester Avenue in Cardiff. This site consists of one parcel with a net size of 15.6 acres. The study area for housing site C-5, also known as a portion of Strawberry Fields, is composed of field agriculture uses and one single-family residence located on a prime arterial roadway. The California Department of Transportation (Caltrans) has purchased the property for the construction of a park and ride facility with interest in preserving the remainder portion of the property for agricultural land use. Current zoning for site C-5 is RR-1 (Rural Residential, 1 du/acre), which would generate 15 units under the adopted General Plan. Throughout different public engagement events, many people in the community expressed concerns about the loss of prime agricultural lands – and converting the site's agricultural operations to use that supports multi-family housing development. In addition to a preliminary assessment of the property public feedback, City Council direction, and potential Caltrans interests, housing site C-5 was not considered as an alternative site.

Housing Site L-3

Housing Site L-3 included a study area of 11 parcels with a total of approximately 5.15 acres. Site L-3 is located at 705-847 North Vulcan Avenue and is zoned as Mixed Use (NCRM-2), which allows for a wide range of commercial retailing, office, service activities, and residential uses up to 15 du/acre. This site currently has nine attached and detached homes with varied commercial services and activities. The residential yield for housing site L-3 under the adopted General Plan would be 77 units. Throughout different public engagement events, many people in the community expressed concerns about localized intersection impacts. Based on public feedback and City Council direction, housing site L-3 was not considered as an alternative site.

Housing Site NE-2

Housing site NE-2 is zoned General Commercial (GC) and located at 247-293 El Camino Real in New Encinitas. This 7.5 net acre site is located along a prime arterial roadway and consists of a neighborhood commercial center with retail shops, restaurants, medical offices, and car wash facilities. There are no existing residential units on site NE-2. Utilizing housing site NE-2 was considered for implementation of mixed use residential land use along a highly used roadway. However, throughout different public engagement events, many people in the community expressed concerns about the visual and physical impact that the site would have on the surrounding community. Based upon further analysis of the NE-2 study area, public feedback, and City Council direction, the alternative site was not considered as an alternative site.

Housing Site NE-5

Housing site NE-5 is composed of three parcels, totaling 8.4 acres from 1424-1552 Encinitas Boulevard. The site NE-5 is zoned GC and contains of retail shops, convenience stores, car dealerships, restaurants, fast food chains, and other amenities. Housing site NE-5 was constructed mostly in the late 1970s and is located along two, prime arterial roadways.

Throughout different public engagement events, many people in the community expressed concerns about localized intersection impacts, as well as visual and physical impacts that the site would have on the surrounding community. Based on public feedback and City Council direction, further analysis of the NE-5 study area, public feedback, and City Council direction, the alternative site was not considered as an alternative site.

Housing Site NE-6

New Encinitas housing site NE-6 is approximately 9.6 acres and is zoned GC, located between 127 South Camino Real and 1403-1513 Encinitas Boulevard. This site is adjacent to public transit and is composed of a car dealership, restaurants, offices, a vacant lot, and other retail stores. Utilizing housing site NE-6 was considered due to its prime location and opportunity to implement mixed use land use in an existing commercial area. Throughout different public engagement events, many people in the community expressed concerns about localized intersection impacts, as well other visual and physical impacts. After examining additional site constraints, analyzing public feedback, and receiving City Council direction, site NE-6 was excluded as an alternative site.

Housing Site O-1

Housing site O-1 is composed of three parcels located at 748-770 Rancho Santa Fe Road in Olivenhain. This 1.5-acre site is zoned RR-2 (Rural Residential, 2 du/acre) with structures including one existing single-family residence, a flower stand, and an office building. Throughout different public engagement events, many people in the community expressed concerns about the visual and physical impacts that the site would have on the surrounding community. Based on additional site assessment and analysis of the housing site O-1 study area, it was not included as an alternative site.

Housing Site OE-3

Housing site OE-3 is located at 608 Third Street in Old Encinitas and is approximately 2.5 net acres in size. This site is composed of a former elementary school and a historic school house built in the mid-1880s. The study area for housing site OE-3 is located along a local, two-lane roadway. The City purchased the property for potential civic, art, and cultural use. Therefore, the site was not included as an alternative site.

Housing Site OE-6

Old Encinitas housing site OE-6 consists of 11 parcels with a 7.9 net acre size, situated along 407-479 Encinitas Boulevard. This site is also known as the Encinitas Town and Country Shopping Center and is composed of a grocery store, convenience store, restaurants, and other local amenities. Site OE-6 is currently zoned as GC. Housing site OE-6 was initially considered as a housing opportunity site due to its location to a prime arterial roadway and potential for residential mixed use development. However, throughout different public engagement events, many people in the community expressed concerns about localized intersection impacts, as well other visual and physical impacts. Upon

further site assessment, public feedback, and City Council direction, this site was not considered as an alternative site.

Housing Site OE-9

Housing site OE-9 is located along 523-681 Encinitas Boulevard and is zoned as Business Park (BP) with a total of 5.4 net acres. Site OE-9 is composed of a private school, restaurant, and offices located along a prime arterial roadway. Site OE-9 was identified as an ideal site to increase density with implement efficient mixed use land use. Throughout different public engagement events, many people in the community expressed concerns about site ownership. Many of the tenant spaces are individually owned, which is a constraint to housing development (land accumulation would be difficult). In addition, some other community members identified visual and physical impacts concerns. Ultimately, based on public feedback and City Council direction, this site was rejected as an alternative site.

Housing Site OE-10

Housing site OE-10 includes seven parcels and is located between 544-560 Requeza Street and 655 and 675 Westlake Street. Site OE-10 is zoned as R-3 (Single-family Residential, 3 du/acre) on four lots and R-8 on three lots. The study area currently has four single-family residences and vacant land, and is located along a local, two-lane roadway. Utilizing housing site OE-10 was considered for its location and potential for higher density residential land use. However, throughout different public engagement events, many people in the community expressed concerns about visual and physical impacts. After further analysis of these parcels, public feedback, and City Council direction, site OE-10 was not considered as an alternative site.

Housing Site ALT-1

Alternative housing site ALT-1 is located at 1867 MacKinnon Avenue in Cardiff and is approximately 0.19 net acres. The ALT-1 study area is comprised of a former fire station constructed in the early 1960s. ALT-1 is currently zoned as Public/Semi-Public (P/SP) which allows for a wide range of community service related uses and medical complexes. ALT-1 was rejected as an alternative housing opportunity site because the yield from new housing units was not substantial.

9.3 Alternatives Fully Analyzed

The alternatives described below are analyzed in regard to each major issue identified in Chapter 4.0 of this PEIR (but in lesser detail than the project). A conclusion as to each alternative's impacts level of significance is made, where feasible. Where the magnitude of an alternative's impacts is clearly less than or greater than the impacts of the project, this is stated in the following analysis as well as in Table 9-2. The conclusion for each alternative also provides an overview of how the alternative meets, partially meets, or fails to meet the project objectives.

9.3.1 No Project (Development Under the Adopted General Plan) Alternative

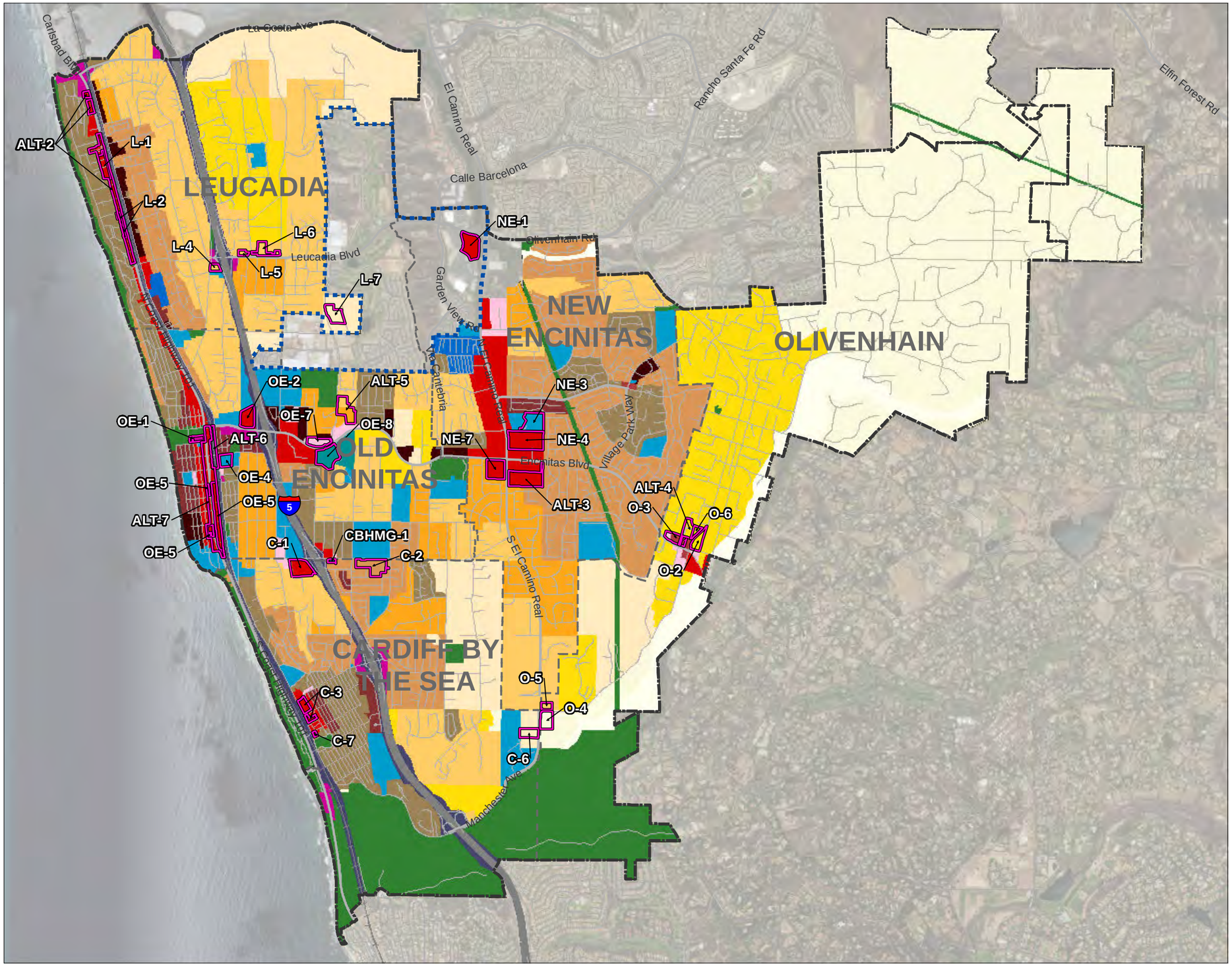
The following discussion of the No Project (Development Under the Adopted Plan) Alternative ("No Project Alternative" hereafter) is based on the CEQA Guidelines Section 15126.6(e)(3)(A) which states:

> When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, an alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

Consistent with CEQA Guidelines Section 15126.6(e)(3)(A), the No Project Alternative represents the continued implementation of the adopted General Plan Land Use and zoning for the housing sites. The adopted General Plan land use plan is shown on Figure 9-2[1].

Compared to the HEU project, the No Project Alternative would have lower density of residential land use per acre and fewer overall square feet of commercial development. Under this alternative, the City is forecasted to have a total population of 74,268 people by the year 2035 (SANDAG 2015) and approximately 837 dwelling units would be permitted throughout the City. An issue-by-issue comparison of the No Project Alternative and the HEU is presented below.

[1]Figure 9-2 shows the adopted General Plan land use outside of adopted specific plan areas in the City. Housing Site NE-1 is within the Encinitas Ranch Specific Plan area. The underlying land use for the housing site has been added to the figure; however, land use within adopted Specific Plans is not otherwise shown.



City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites
Encinitas Ranch Specific Plan Boundary

General Plan Land Use

- Rural Residential 0.00-0.25 du/ac (RRFP)
- Rural Residential 0.26-0.50 du/ac (RR)
- Rural Residential 0.51-1.00 du/ac (RR1)
- Rural Residential 1.01-2.00 du/ac (RR2)
- Residential 2.01-3.00 du/ac (R3)
- Residential 3.01-5.00 du/ac (R5)
- Residential 5.01-8.00 du/ac (R8)
- Residential 8.01-11.00 du/ac (R11)
- Residential 11.01-15.00 du/ac (R15)
- Residential 15.01-25.00 du/ac (R25)
- Mobile Home Park (MHP)
- Office Professional (OP)
- Local Commercial (LC)
- General Commercial (GC)
- Visitor Serving Commercial (VSC)
- Light Industial (LI)
- Public/Semi Public (P/SP)
- Transportation Corridor (TC)
- Ecological Resource/Open Space/Park (ER/OS/PK)

0 Miles 0.5

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FIGURE 9-2
No Project/Adopted
General Plan Alternative

9.3.1.1 Description of the No Project (Development Under the Adopted General Plan) Alternative

Under the No Project Alternative, the development of the housing sites would proceed pursuant to the adopted City of Encinitas General Plan and zoning ordinance. Presently adopted land use designations and potential buildout yield for each housing site are summarized in Table 9-3. Total buildout potential for all 33 housing sites under the adopted General Plan and zoning would include 837 residential units and 2,175,291 square feet of commercial development. Presently, the housing sites contain only 101 existing residential units; therefore, buildout of the adopted General Plan has the potential to yield 736 additional units. Approximately 625,000 square feet of additional commercial development is anticipated on the housing sites under General Plan buildout, although redevelopment also could occur. Mixed use development is permitted under some of the City's current land use designations and zoning. Future projects consistent with the adopted General Plan would be discretionary because nearly all projects in the City are required to undergo design review. In addition to design review, subdivision maps, conditional use permits, and Master Design Review Permits (MDPs) may be required for the entitlement of future development consistent with the adopted General Plan. Only custom single-family detached housing outside of the Coastal Zone may be developed ministerially. [Development under the adopted General Plan would not be in compliance with State law with regards to providing adequate sites with high-density residential zoning. This alternative would not satisfy the project objectives stated in Chapter 3.0 (Project Description), which are restated above.

Table 9-3
No Project/Adopted General Plan Alternative
Commercial/Residential Yield and Land Use/Zoning

Housing Site	Parcel Area (Net)	Adopted General Plan Commercial/ Building Density Yield (square feet)	Adopted Plan Residential Yield	Adopted Land Use
C-1	9.35	122,000	0	GC
C-2	10.57	0	89	R-8
C-3	4.87	70,000	0	GC
C-6	4.60	0	4	RR-1
C-7	0.55	7,180	0	GC
L-1	5.21	90,967	65	GC
L-2	2.15	37,539	27	GC
L-4	1.89	0	6	R-3
L-5	1.69	0	5	R-3
L-6	5.45	0	16	R-3
L-7	7.50	0	7	RR-1
NE-1	10.20	71,400	0	GC
NE-3	10.00	0	0	P/SP
NE-4	18.90	175,000	0	GC
NE-7	9.05	67,400	0	GC
O-2	4.80	0	10	RR-2
O-3	4.87	63,640	0	LC and OP
O-4	4.00	0	9	RR

Table 9-3 No Project/Adopted General Plan Alternative Commercial/Residential Yield and Land Use/Zoning				
Housing Site	Parcel Area (Net)	Adopted General Plan Commercial/ Building Density Yield (square feet)	Adopted Plan Residential Yield	Adopted Land Use
O-5	1.60	0	7	R-3
O-6	1.50	0	4	RR-2
OE-1	2.31	30,100	43	GC
OE-2	7.25	75,700	0	GC
OE-4	4.00	48,000	0	P/SP
OE-5	12.17	159,030	183	GC
OE-7	4.50	78,400	0	OP
OE-8	11.09	144,920	0	GC
CBHMG-1	0.77	10,060	0	P/SP
ALT 2	10.19	281,255	145	GC
ALT 3	14.56	191,800	0	GC
ALT 4	2.19	0	4	RR-2
ALT 5	11.27	0	54	R-5
ALT 6	3.10	0	0	TC
ALT 7	8.85	450,900	159	GC
Totals	**211.00**	**2,175,291**	**837**	

GC = General Commercial
LC = Local Commercial
OP = Office Professional
P/SP = Public /Semi-Public
RR-X = Rural Residential
R-X = Single-Family Residential (Units/Acre)
TC = Transportation Corridor

9.3.1.2 Environmental Analysis of the No Project (Development Under the Adopted Plan) Alternative

a. Aesthetics/Visual Resources

Issue 1: Plan Consistency

Impacts related to plan consistency from buildout under the No Project Alternative would be the same as under the HEU. Future development under the HEU would not conflict with any City policy or regulation protecting visual resources, including General Plan/LCP policies, Hillside/Inland Bluff Overlay Zone, or Scenic Visual Corridor Overlay Zone/Design Review Guidelines. Future development under the No Project Alternative would likewise be consistent with these adopted plans; impacts to plan consistency would be similar to the HEU.

Issue 2: Public Views

Impacts related to public views from the No Project Alternative would be less than development under the HEU. Under the HEU, development of housing site O-4 has the

potential to impact scenic views of the San Elijo Lagoon as viewed from the scenic roadways, due to potential construction of 57,618 additional square feet of commercial and 80 residential units. Nine residential units would be permitted on this site under the adopted plan and therefore, with the lesser intensity of development, impacts to public views would be less than the HEU.

Issue 3: Community Character

Impacts related to community character from future development under the No Project Alternative would be less than for development under the HEU. Under the HEU, development of housing sites L-7, O-4, and O-5 have the potential to impact community character because such development would be inconsistent with the existing rural environment that surrounds these sites. Specifically, the HEU would yield a total of 57,618 square feet of commercial and 188 residential units on sites L-7, O-4, and O-5. A total of 23 residential units could be constructed on these sites under the adopted plan and therefore, impacts to community character would be less than the HEU.

Issue 4: Scenic Resources

Impacts related to scenic resources from the No Project Alternative would be less than the HEU. Under HEU development of housing site O-4 has the potential to impact scenic resources because housing site O-4 contains a large stand of mature vegetation that is a visual extension of the natural open space associated with Escondido Creek and the San Elijo Lagoon to the south. The HEU would yield 57,618 square feet of commercial density and 80 residential units on this site, whereas only 9 residential units would be constructed under the adopted plan. Therefore, impacts to scenic resources would be less than the HEU.

b. Air Quality

Issue 1: Consistency with the Regional Air Quality Strategy

Impacts related to plan consistency from the No Project Alternative would be less than the HEU because existing regional air plans are based on the existing City forecasts. Future development under the HEU would increase growth in the City not currently accounted for resulting in a significant and unmitigated impact. Development under the No Project Alternative would be consistent with existing Regional Air Quality Strategy (RAQS), and impacts to consistency with RAQS would be less than the HEU.

Issue 2: Criteria Pollutants

Impacts related to criteria pollutants from the No Project Alternative would be less than under the HEU. Future development of certain housing sites consistent with the HEU could result in the emission of reactive organic gases (ROG) during construction, resulting in an exceedance of the significance thresholds, identified in Section 4.2.6. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Development under the adopted plan would result in construction-related emissions. However, development under the adopted

General Plan would not allow for the same intensity of development that could occur on the housing sites under the HEU. Therefore, impacts to criteria pollutants under the No Project Alternative would be less than the HEU.

Issue 3: Sensitive Receptors

Impacts related to sensitive receptors from the No Project Alternative would be greater than under the HEU. Development of the housing sites identified in Section 4.2.7 as being within 500 feet of Interstate 5 (I-5) and therefore subject to diesel particulate matter exposure also could be developed under the adopted plan. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Future development under the adopted plan would not be subject to the mitigation framework provided in this PEIR. Therefore, impacts to sensitive receptors under the No Project Alternative would be greater than under the HEU.

c. Biological Resources

Issue 1: Sensitive Species

Impacts related to sensitive species from the No Project Alternative would be the same as the HEU. Development within the HEU housing sites identified in Section 4.3.5 have potential to result in significant impacts to sensitive species under both the HEU and the No Project Alternative. Future development under both the HEU and No Project Alternative would be required to adhere to all applicable Federal, State, and local regulations regarding the protection of sensitive species. Furthermore, future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing sensitive biological resources would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. Therefore, impacts to sensitive species under the No Project Alternative would be the same as the HEU.

Issue 2: Sensitive Vegetation

Impacts related to sensitive vegetation from the No Project Alternative would be the same as the HEU. Development under both the HEU and No Project Alternative would be required to adhere to all applicable Federal, State, and local regulations regarding the protection of sensitive vegetation communities. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing sensitive biological resources would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. Therefore, impacts to sensitive vegetation under the No Project Alternative would be the same as the HEU.

Issue 3: Wetlands

Impacts related to wetlands from the No Project Alternative would be the same as the HEU. Development under both the HEU and No Project Alternative would be required to adhere to all applicable Federal, State, and local regulations regarding the protection of jurisdictional waters and wetlands. Development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing sensitive biological resources would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. Therefore, impacts to wetlands under the No Project Alternative would be the same as the HEU.

Issue 4: Wildlife Corridors

Impacts related to wildlife corridors from the No Project Alternative would be the same as the HEU. No significant, regional wildlife movement corridors exist within the vicinity of the housing sites. Future development within the housing sites would not have potential to result in significant impacts to wildlife movement corridors under either the HEU or No Project Alternative. Therefore, impacts to wildlife corridors under the No Project Alternative would be the same as the HEU.

Issue 5: Habitat Conservation Planning

Impacts related to habitat conservation planning from the No Project Alternative would be the same as the HEU. Future development within the City would be required to adhere to all applicable planning documents and regulations relating to an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or any other approved local, regional, or State HCP. Even absent the adoption of a formal Multiple Habitat Conservation Program (MHCP), under the adopted General Plan, future development on housing sites containing sensitive biological resources would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. Therefore, impacts to habitat conservation planning under the No Project Alternative would be the same as the HEU.

Issue 6: Policies and Ordinances Protecting Biological Resources

Impacts related existing local polices and ordinances protecting biological resources from the No Project Alternative would be the same as the HEU. Future development within the housing sites would be required to adhere to all existing applicable tree policies and ordinances protecting biological resources. Therefore, impacts to policies and ordinances protecting biological resources under the No Project Alternative would be the same as the HEU.

d. Cultural Resources

Issue 1: Historical Resources

Impacts related to historical resources from the No Project Alternative would be the same as the HEU. Future development within the housing sites could result in significant impacts to known or unknown resources under both the HEU and the No Project Alternative. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing or having the potential to contain historical resources would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. However, at the program-level, under either the adopted plan or HEU, construction details are unknown and impacts would remain significant and unmitigated. Therefore, impacts to historical resources under the No Project Alternative would be the same as the HEU.

Issue 2: Archaeological Resources

Impacts related to archeological resources from the No Project Alternative would be the same as the HEU. Future development within the housing sites could result in significant impacts to unknown resources under both the HEU and the No Project Alternative. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing or having the potential to contain archaeological resources would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. However, at the program-level, under either the adopted plan or HEU, construction details are unknown, and impacts would remain significant and unmitigated. Therefore, impacts to archeological resources under the No Project Alternative would be the same as the HEU.

Issue 3: Paleontological Resources

Impacts related to paleontological resources from the No Project Alternative would be greater than the HEU. Future development within the housing sites could result in significant impacts to unknown resources under both the HEU and the No Project Alternative. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Future development under the adopted plan would not be subject to the mitigation framework provided in this PEIR. Therefore, impacts to paleontological resources under the No Project Alternative would be greater than under the HEU.

Issue 4: Human Remains

Impacts related to human remains from the No Project Alternative would be the same as the HEU. There are no known burial sites or cemeteries within the vicinity of the City. Future development within the housing sites does not have potential to result in significant

impacts to human remains under either the HEU or No Project Alternative and impacts would be the same.

e. Geology and Soils

Issue 1: Seismic Hazards

Impacts related to seismic hazards from the No Project Alternative would be the same as the HEU. Future development within the housing sites would be required to comply with City General Plan policies, ordinances, the California Building Code (CBC), engineering standards and codes requiring future site-specific geotechnical reports. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or No Project Alternative, and impacts would be the same.

Issue 2: Soil Erosion

Impacts related to soil erosion from the No Project Alternative would be the same as the HEU. Potential impacts related to soil erosion from future development within the housing sites would be less than significant under both the HEU and No Project Alternative. Future development within the housing sites would be required to comply with the City General Plan policies, CBC; City ordinances; engineering standards and codes; and the National Pollutant Discharge Elimination System (NPDES) requiring site-specific storm water pollution prevention plan (SWPPP) under both the HEU and No Project Alternative. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or No Project Alternative, and impacts would be the same.

Issues 3-4: Unstable and Expansive Soils

Impacts related to unstable and expansive soils from the No Project Alternative would be the same as the HEU. Potential impacts related to unstable and expansive soils from future development within the housing sites would be less than significant under both the HEU and the adopted plan. Future development within the housing sites would be required to comply with the CBC; City of Encinitas Grading, Erosion, and Sediment Control Ordinance; the City's General Plan policies; and implement any recommendations described in a site-specific geotechnical investigation under both the HEU and No Project Alternative. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or No Project Alternative and impacts would be the same.

f. Greenhouse Gas Emissions

Issue 1: GHG Emissions

Impacts related to GHG emissions from the No Project Alternative would be similar to the HEU. Buildout under the HEU would yield a greater amount of density and intensity of use, potentially resulting in greater GHG emissions. However, the HEU also provides for a more efficient land use pattern and would reduce vehicle miles travelled (VMT) compared to the No Project Alternative. Pursuant to Assembly Bill 32, all future development would

adhere to the California Energy Code requiring projects to show improvements in energy efficiency based on the relevant updated Code. The 2013 Code update achieves an average of 23 percent energy efficiency improvement over the 2008 Energy Code; and the 2016 update is anticipated to achieve an average 28 percent increase in energy efficiency over the 2013 Energy Code. However, at the program-level, under either the adopted General Plan or HEU, construction details are unknown, and impacts would remain significant and unmitigated. Therefore, impacts relative to GHG emissions under the No Project Alternative would be the same as the HEU.

Issue 2: Consistency with GHG Plans, Policies, and Regulations

Impacts related to consistency with GHG plans, policies, and regulations from the No Project Alternative would be greater than the HEU. The No Project Alternative would not comply with the CARB Scoping Plan and SCS. It would work against regional and statewide efforts to reduce GHG emissions because it would not work to reduce VMT throughout the City as compared to the HEU (see Table 4.6-8). Therefore, potential impacts from future development consistent with the HEU would be greater under the No Project Alternative.

g. Hazards and Hazardous Materials

Issues 1-3: Hazardous Materials – Use, Transport, Disposal; Accidental Release; and Emissions near a School

Impacts related to hazardous materials from the No Project Alternative would be the same as the HEU. Future development within the housing sites would be required to comply with Federal, State, County (Department of Environmental Health) and City regulations, as well as specific requirements of the San Diego Air Pollution Control District during both construction and operational phases of future projects. Additionally, any use of hazardous materials on-site would require preparation and adherence to a Hazardous Materials Business Plans under both the HEU and No Project Alternative. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing or having the potential to contain hazardous materials would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. Therefore, impacts to hazardous materials under the No Project Alternative would be the same as the HEU.

Issue 4: Hazardous Materials – Sites

Impacts related to hazardous materials sites from the No Project Alternative would be the same as the HEU. No hazardous materials sites (pursuant to Government Code Section 65962.5) exist within the housing sites. Therefore, impacts associated with hazardous materials sites under the No Project Alternative and the HEU would be the same.

Issue 5: Emergency Response and Evacuation Plans

Impacts related to emergency response and evacuation plans from the No Project Alternative would be the same as the HEU. The City does not have an adopted emergency response plan. Additionally, applications for all future projects under both the HEU and No Project Alternative would be reviewed and approved by the City Fire Department prior to issuance of building permit. Therefore, impacts associated with emergency response plan or emergency evacuation plan under the No Project Alternative and the HEU would be the same.

Issue 6: Wildland Fires

Impacts related to wildland fires from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative would be required to adhere to the State and local fire codes and City Design Guidelines to reduce risks related to wildland fire. Therefore, impacts associated with wildland fires under the No Project Alternative and the proposed HEU would be the same.

h. Hydrology and Water Quality

Issues 1 and 6: Water Quality

Impacts related to water quality from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative would be subject to Federal, State, and local regulations aimed at controlling water quality impacts. Therefore, impacts associated with water quality under the No Project Alternative and the proposed HEU would be the same.

Issue 2: Groundwater

Impacts related to groundwater from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative would obtain potable water from either the San Dieguito Water District (serving Leucadia, Old Encinitas, Cardiff and portions of New Encinitas) or Olivenhain Municipal Water District (serving other areas of the City), neither of which uses groundwater for part of their potable supplies. Therefore, future development associated with buildout of the housing sites under the HEU or No Project Alternative would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge and impacts would be the same.

Issues 3-5: Drainage Pattern/Runoff

Impacts related to drainage pattern/runoff from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative would be required to conform to applicable Federal, State, and City regulatory standards to effectively avoid and/or address potentially significant impacts. Therefore, impacts associated with drainage patterns/runoff under the No Project Alternative and the proposed HEU would be the same.

Issues 7-10: Flooding/Inundation

Impacts related to flooding/inundation from the No Project Alternative would be the same as the HEU. Future development of the housing sites identified in Section 4.8.1.1 could be impacted by dam or levee failure under the HEU or No Project Alternative. Future development under both the HEU and No Project Alternative would be required to conform to City General Plan policies related to flood hazards. Future development under the HEU would additionally be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, under the adopted General Plan, future development on housing sites containing or having the potential to contain flood hazard areas would implement similar mitigation measures to that proposed under the HEU, reducing these impacts to less than significant. Therefore, impacts associated with flooding/inundation under the No Project Alternative and the proposed HEU would be the same.

i. Land Use

Issue 1: Plan and Policy Consistency Impacts

Impacts related to plan and policy consistency from the No Project Alternative would be greater than the HEU. As discussed under GHG, the No Project Alternative would not comply with the CARB Scoping Plan and SCS. It would work against regional and statewide efforts to reduce GHG emissions because it would not work to reduce VMT throughout the City as compared to the HEU. Future development under both the HEU and No Project Alternative would be reviewed for consistency with local plans and policies. However, impacts associated with plan and policy consistency would be greater under the No Project Alternative than the HEU.

Issue 2: Conflict with State Planning Initiatives

Impacts related to conflict with State planning initiatives from the No Project Alternative would be greater than the HEU. The City's adopted General Plan does not fully account for adequate sites for future high-density housing consistent with State Housing Element Law. Specifically, the purpose for the HEU is to provide additional housing throughout the City to allow the City to conform to its RHNA obligations. Future development under the No Project Alternative would not meet these goals and would not comply with State planning initiatives. Therefore, impacts associated with conflict with State planning initiatives under the No Project Alternative would be greater than the proposed HEU.

Issue 3: Neighborhood Compatibility Impacts (Associated with Significant Traffic, Noise, or Aesthetic Impacts)

With respect to traffic impacts associated with neighborhood compatibility, see Section 9.3.2.2(m), below.

With respect to noise impacts associated with neighborhood compatibility, see Section 9.3.2.2(j), below.

With respect to aesthetics impacts associated with neighborhood compatibility, see Section 9.3.2.2(a), above.

Issue 4: Result in Land Use Conflicts In Relation to the Proximity of Housing to Existing Agricultural Uses/Commodity Sites

Impacts related to housing in proximity to existing agriculture from the No Project Alternative would be the same as the HEU. As discussed in Section 4.9.8, most activities associated with greenhouse cultivation would be contained within a controlled environment and would not likely be a factor in creating incompatibility with surrounding land uses. Therefore, future development of these housing sites would not likely result in a significant impact associated with land use (agricultural use) conflicts. Therefore, impacts associated with housing in proximity to existing agriculture under the No Project Alternative would be the same as the HEU.

Issue 5: Result in Exposure of Persons to Noise Levels in Excess of Standards Established in the Local General Plan

Impacts related to exposure of persons to noise levels in excess of General Plan standards from the No Project Alternative would be the same as the HEU. Specifically, both the No Project Alternative and HEU could result in future development adjacent to roadways or freeways that would generate noise levels greater than 60 day-night equivalent level (L_{dn}). This is in excess of the City's normally acceptable exterior noise compatibility level. Additionally, development could occur on housing sites that are located adjacent to roadways or freeways that would generate noise levels greater than 70 $L_{dn.}$ Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the noise mitigation framework therein. Future development proposals under the adopted General Plan would be reviewed for General Plan noise - land use compatibility and would be conditioned appropriately. Implementation of mitigation and/or conditions would reduce significant impacts to less than significant under either the HEU or No Project Alternative, and impacts would be the same.

j. Noise

Issue 1: Ambient Noise Levels

Impacts related to ambient noise levels from the No Project Alternative would be less than the HEU. While an increase in ambient noise would occur under the HEU and adopted plan, vehicle traffic noise would be slightly greater under the HEU, specifically in those areas where the HEU would result in the improvement of underutilized lands to higher densities than contemplated under the adopted plan. Therefore, impacts to ambient noise levels under the No Project Alternative would be less than the HEU.

Impact 2: On-Site Generated Noise

Impacts related to on-site generated noise from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative

could result in the exposure of sensitive receptors to noise through the placement of commercial and residential uses at close proximity. However, this would occur to a lesser extent under the No Project Alternative, wherein fewer sites would be designated for mixed use. Future development under both the No Project Alternative and the HEU would be required to adhere to City noise regulations aimed at controlling noise levels and reducing noise-related incompatibilities between land uses. Future development under the HEU additionally would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein, which would help to minimize impacts associated with mixed land uses. Therefore, impacts associated with on-site generated noise under the No Project Alternative and the HEU would be the same.

Issue 3: Temporary Noise

Impacts related to temporary noise from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative could result in temporary construction noise at the housing sites identified in Section 4.10.7.1 because potential housing sites are located less than 100 feet from their acoustic centers. However, the intensity of development is notably greater at housing sites under the HEU, which could result in a greater amount of construction noise over longer periods of time. All future development would be required to adhere to noise regulations in the City's Municipal Code. Additionally, future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Therefore, impacts associated with temporary noise under the No Project Alternative and the HEU would be the same.

Issue 4: Groundborne Noise and Vibration

Impacts related to groundborne noise and vibration from the No Project Alternative would be the same as the HEU. No operational components of the HEU include significant groundborne noise or vibration sources and no significant vibrations sources currently exist, or are planned, in the City. Similarly, no such impacts are anticipated under the adopted plan. Therefore, no significant groundborne noise or vibration impacts would occur with the operation of future projects implemented under the HEU or the No Project Alternative, and impacts would be the same.

k. Population and Housing

Issue 1: Population Growth

Impacts related to population growth from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative would be required to adhere to the General Plan, provide required development impact fees, and comply with applicable development regulations to assure that the City is capable of supporting the growth. Therefore, impacts associated with population growth under the No Project Alternative and the proposed HEU would be the same.

Issue 2: Displacement of People

Impacts related to displacement of people from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative do not anticipate the displacement of people during development/redevelopment. Therefore, impacts associated with displacement of people under the No Project Alternative and the proposed HEU would be the same.

l. Public Services and Recreation

Issue 1: Fire Rescue Service

Impacts related to fire rescue service from the No Project Alternative would be the same as the HEU. The demand for fire rescue services under the No Project Alternative would be similar to or incrementally less than the HEU; however, future development under both the HEU and No Project Alternative would increase demand for fire rescue services over time. All future development would be required to assure that adequate levels of service are maintained. Therefore, impacts associated with fire rescue service under the No Project Alternative and the proposed HEU would be the same.

Issue 2: Police Service

Impacts related to police service from the No Project Alternative would be the same as the HEU. The demand for police service under the No Project Alternative would be similar to or incrementally less than the HEU; however, future development under both the HEU and No Project Alternative would increase demand for police service over time. All future development would be required to assure that adequate levels of service are maintained. Therefore, impacts associated with police service under the No Project Alternative and the proposed HEU would be the same.

Issue 3: Schools

Impacts related to schools from the No Project Alternative would be the same as the HEU. The demand for schools under the No Project Alternative would be similar to or incrementally less than the HEU; however, both the HEU and No Project Alternative would increase demand for schools over time. All new development would be subject to school impact fees in accordance with the provisions of SB 50. Therefore, impacts associated with schools under the No Project/Adopted Plan Alternative and the proposed HEU would be the same.

Issue 4: Library Services

Impacts related to library services from the No Project Alternative would be the same as the HEU. The demand for library services under the No Project Alternative would be similar to or incrementally less than the HEU. The County of San Diego would ultimately be responsible for improving the library system to accommodate growth within its service

area. Therefore, impacts associated with library services under the No Project Alternative and the proposed HEU would be the same.

Issue 5: Recreation

Impacts related to recreation from the No Project Alternative would be the same as the HEU. The demand for parks and recreational facilities under the No Project Alternative would be similar to or incrementally less than the HEU; however, the City has adequate facilities to serve the needs under either the adopted General Plan or HEU. Therefore, impacts associated with recreation under the No Project Alternative and the proposed HEU would be the same.

m. Transportation/Traffic

Issues 1 and 2: Circulation System Capacity and Operations

Impacts related to circulation system capacity and operations from the No Project Alternative would be less than the HEU. As identified in Section 4.13.1.2, multiple roadway (and freeway) segments and intersections throughout the City currently operate at substandard level of service (LOS) E or F. While increased traffic under the No Project Alternative would further degrade this condition, it would do so to a lesser degree than under the HEU. Future development under the HEU would result in greater impacts to roadway segments. This is primarily due to the HEU's improvement of underutilized lands to higher densities than contemplated under the adopted plan (see Table 6.1 in the Traffic Impact Study for a summary of buildout roadway LOS under the adopted plan compared to the housing strategies). Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Implementation of mitigation measures (on a project basis) would likely reduce direct traffic impacts for development of housing sites under both the No Project Alternative and the HEU. The fee program mitigation would mitigate some cumulative impacts for future development under HEU; however, some cumulative impacts under both the HEU and No Project Alternative could remain significant and unmitigated. Regardless, impacts to circulation system capacity and operations under the No Project Alternative would be less than the proposed HEU.

Issue 3: Alternative Transportation

Impacts related to alternative transportation from the No Project Alternative would be the same as the HEU. Future development under both the HEU and No Project Alternative would be required to adhere to General Plan goals and policies regarding alternative transportation. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or No Project Alternative, and impacts would be the same.

Issues 4 and 5: Traffic Hazards and Emergency Access

Impacts related to traffic hazards and emergency access from the No Project Alternative would be the same as the HEU. Specifically, future development would be required to adhere to road standards and design specifications intended to assure the safety of the City's roadway system. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or No Project Alternative, and impacts would be the same.

n. Utilities and Service Systems

Issue 1a: Storm Drain System

Impacts related to storm drain systems from the No Project Alternative would be the same as the HEU. Reduction of capacity of the existing storm drain system under the No Project Alternative would be similar to or incrementally less than the HEU. The City's Stormwater Manual requires all future development to implement project-specific measures to control and reduce storm water runoff, and at the program-level, no construction or expansion of storm water facilities would be required under either the adopted plan or HEU. Therefore, impacts to storm drain systems under the No Project Alternative and the HEU would be the same.

Issue 1b and 3: Wastewater

Impacts related to wastewater from the No Project Alternative would be the same as the HEU. Reduction of capacity of the existing wastewater treatment facilities under the No Project Alternative would be similar to or incrementally less than the HEU; however, development under both would be required to adhere to General Plan policies ensuring that the rate of growth does not exceed the capability of available services and facilities. Therefore, impacts associated with wastewater under the No Project Alternative and the proposed HEU would be the same.

Issue 1c: Water System

Impacts related to water system from the No Project Alternative would be the same as the HEU. Reduction of capacity of the existing system under the No Project Alternative would be similar to or incrementally less than the HEU; however, development under both plans would be required to adhere to General Plan policies ensuring that the rate of growth does not exceed the capability of available services and facilities. Therefore, impacts associated with water system under the No Project Alternative and the proposed HEU would be the same.

Issue 2: Water Supply

Impacts related to water supply from the No Project Alternative would be the same as the HEU. The demand for water under the No Project Alternative would be similar to or incrementally less than the HEU. Future development would be required to present service

letters from either San Dieguito Water District or Olivenhain Municipal Water District assuring that adequate water supplies would be available. Additionally, all future projects would be required to assure adequate measures are proposed to meet all water conservation requirements pursuant to the General Plan and City Municipal Code. Therefore, impacts associated with water supply under the No Project Alternative and the proposed HEU would be the same.

Issue 4: Solid Waste Disposal

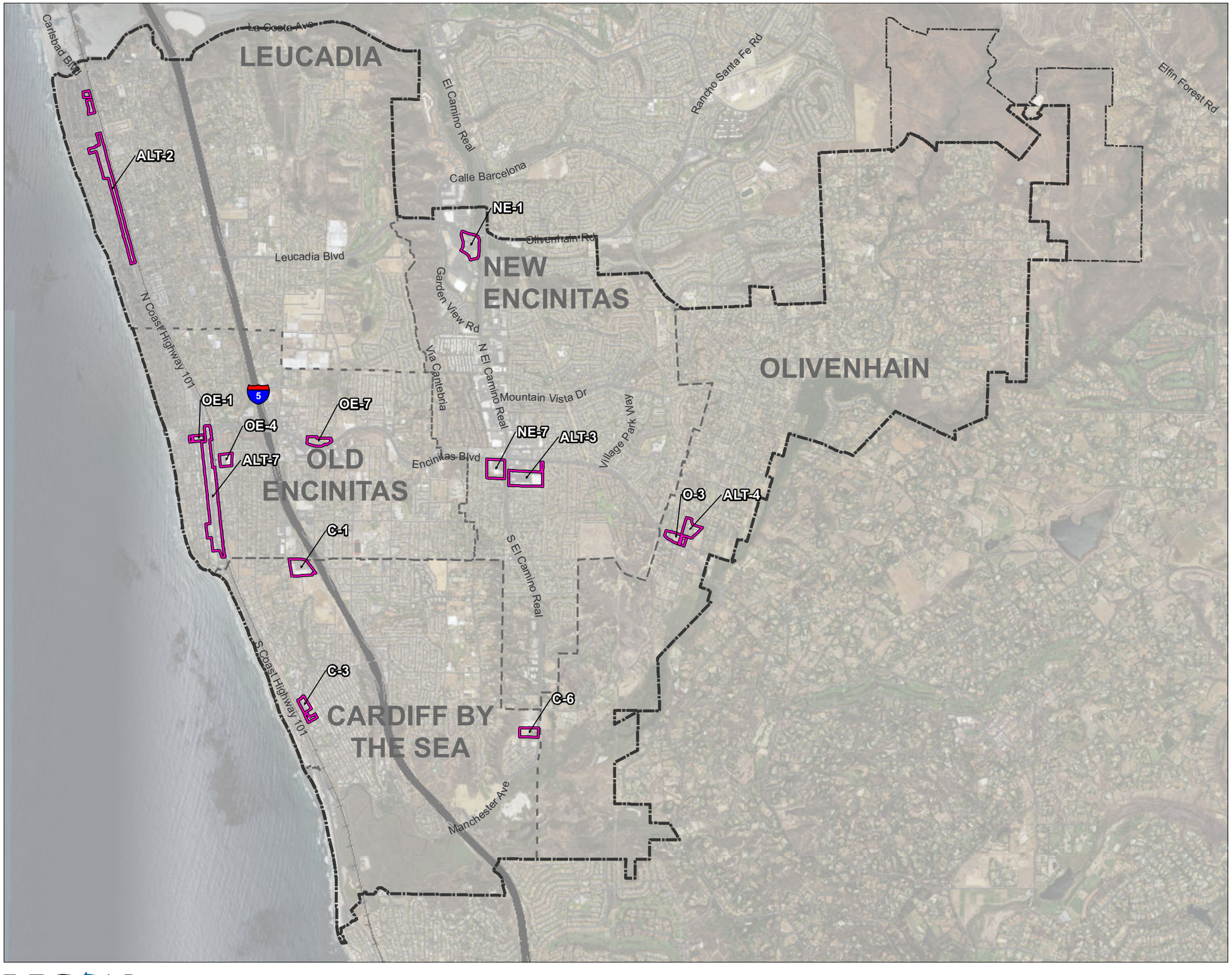
Impacts related to solid waste disposal from the No Project Alternative would be the same as the HEU. The demand for solid waste disposal under the No Project Alternative would be similar to or incrementally less than the HEU. Future development under both plans would be required to implement State and local recycling programs, and adhere to all General Plan and City Municipal Code section aimed at reducing waste and the diversion of recyclables from the City waste stream. Therefore, impacts associated with solid waste disposal under the No Project Alternative and the proposed HEU would be the same.

9.3.1.3 Conclusion Regarding the No Project (Development Under the Adopted Plan) Alternative

As shown in Table 9-2, the No Project Alternative would result is similar impacts associated with most environmental issues; however, due to the fewer number of trips generated by the adopted plan, impacts associated with traffic (mobile emissions, traffic-related noise) would be less than the HEU. Additionally under the adopted General Plan, less intense development would occur on a number of visually sensitive housing sites, wherein buildout under the No Project Alternative would result in fewer and reduced visual and community character related impacts, as compared to the HEU. The No Project Alternative would, however, result in several greater impacts than the HEU. Because future development under the No Project Alternative would not be subject to the mitigation framework in this PEIR impacts associated with sensitive receptors and paleontological resources would be greater. In addition, buildout of the adopted General Plan would not result in as efficient as land use pattern as the housing strategies under the HEU; therefore, GHG and land use impacts would be greater.

9.3.2 Sustainable Mixed Use Places Housing Strategy Alternative

The Sustainable Mixed Use Places Housing Strategy Alternative (SMUP Alternative) would meet the City's RHNA obligation, while providing adequate buffer to ensure compliance with the State law requiring no net loss of adequate sites. This alternative incorporates those housing sites that: (1) have fewer combined unmitigated impacts than the other three housing strategies; and (2) presents the fewest constraints to future implementation of future housing at those locations (refer to Figure 9-3 and Tables 9-4 and 9-5).



City Limits
Sphere of Influence
Community Area Boundaries
Housing Sites

0 Miles 0.5

FIGURE 9-3
Sustainable Mixed Use Places
Housing Strategy Alternative

RECON

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Table 9-4
Matrix Comparison of the Housing Sites and Significant Mitigated (SM)/ Significant Unavoidable (SU) Impacts

Housing Sites	A-1: Plan Consistency	A-2: Public Views	A-3: Community Character	A-4: Scenic Resources	AQ-1: Consistency with RAQS[1]	AQ-2: Criteria Pollutants	AQ-3: Sensitive Receptors	BIO-1: Sensitive Species	BIO-2: Sensitive Veg. Comm.	BIO-3: Wetlands	BIO-4: Wildlife Corridors	BIO-5: Habitat Conservation Plan.	BIO-6: Policies/Ord. Protecting	CR-1: Historical Resources	CR-2: Archaeological Resources	CR-3: Paleontological Resources	CR-4: Human Remains	GEO-1: Seismic Hazards	GEO-2: Soil Erosion	GEO-3/4: Unstable/Expansive Soils	GHG-1: GHG Emissions	GHG-2: Conflicts with Plans/Policies	HAZ-1-3: Use, Transport, Disposal	HAZ-4: Hazardous Sites	HAZ-5: Emergency Plans/Response	HAZ-6: Wildland Fires	HYDRO-1/6: Water Quality	HYDRO-2: Groundwater	HYDRO 3-5: Drainage Pattern/Runoff	HYDRO 7-10: Flooding/Inundation	LU-1: Land Use Plans/Policies	LU-2: State Planning Initiatives	LU-3: Neighborhood Compatibility	LU-4: Proximity to Agricultural Sites	LU-5: Noise/Land Use Compatibility	:NOISE-1: Ambient Noise Levels	NOISE-2: On-site Generated Noise	NOISE-3: Temporary Noise	NOISE-4: Groundborne Noise/Vibration	P&H-1: Population Growth	P&H-2: Displacement of People	SERV-1a: Fire Service	SERV-1b: Police Service	SERV-1c: Schools	SERV 1d: Libraries	SERV 2-3: Recreation	TRAF-1-2: Circulation System Cap.	TRAF-3: Alternative Transportation	TRAF 4-5: Traffic Hazards/ Emergency Access	UTL-1a: Stormwater System	UTL-1b and 3: Wastewater	Utl-1c: Water System	UTIL-2: Water Supply	UTIL-4: Solid Waste Disposal
Alt-2						SM		SM						SU							SU		SM							SM					SM		SM	SM									SU							
Alt-3						SM								SU		SM					SU		SM												SM		SM										SU							
Alt-4								SM	SM	SM				SU	SU	SM					SU														SM		SM										SU							
Alt-5								SM	SM	SM				SU	SU	SM					SU		SM												SM		SM										SU							
Alt-6														SU		SM					SU		SM							SM					SM		SM										SU							
Alt-7						SM		SM		SM				SU		SM					SU		SM							SM					SM		SM	SM									SU							
C-1						SM	SM							SU							SU		SM												SM		SM										SU							
C-2						SM		SM						SU							SU		SM												SM		SM										SU							
C-3														SU							SU		SM												SM		SM										SU							
C-6								SM	SM	SM				SU	SU	SM					SU									SM					SM		SM										SU							
C-7														SU							SU		SM												SM		SM	SM									SU							
L-1														SU							SU		SM							SM					SM		SM										SU							
L-2														SU							SU		SM							SM					SM		SM	SM									SU							
L-4							SM	SM	SM	SM					SU						SU		SM												SM		SM										SU							
L-5							SM	SM						SU							SU		SM												SM		SM										SU							
L-6														SU							SU		SM												SM		SM	SM									SU							
L-7				SU				SM	SM	SM					SU	SM					SU														SM		SM										SU							
NE-1						SM		SM		SM				SU							SU														SM		SM										SU							
NE-3						SM		SM	SM	SM				SU	SU	SM					SU		SM												SM		SM										SU							
NE-4								SM						SU		SM					SU		SM												SM		SM										SU							
NE-7								SM						SU		SM					SU		SM												SM		SM										SU							
O-2								SM	SM	SM					SU	SM					SU									SM					SM		SM										SU							
O-3								SM						SU		SM					SU														SM		SM										SU							
O-4		SU	SU	SU				SM	SM	SM					SU	SM					SU									SM			SU		SM		SM										SU							
O-5			SU			SM		SM	SM	SM				SU	SU	SM					SU												SU		SM		SM										SU							
O-6								SM	SM	SM					SU	SM					SU														SM		SM										SU							
OE-1								SM	SM	SM				SU	SU	SM					SU		SM												SM		SM										SU							
OE-2							SM	SM	SM	SM				SU	SU	SM					SU		SM							SM					SM		SM										SU							
OE-4														SU							SU		SM												SM		SM										SU							
OE-5						SM								SU							SU		SM												SM		SM	SM									SU							
OE-7								SM	SM	SM				SU	SU	SM					SU		SM												SM		SM										SU							
OE-8						SM								SU		SM					SU														SM		SM										SU							
CBHMG-1							SM	SM						SU							SU		SM												SM		SM	SM									SU							

NOTE: Cells left blank represent a conclusion of no impact or a less than significant impact.
SM = significant, mitigated
SU= significant, unmitigated

Table 9-5
Sustainable Mixed Use Places Alternative:
Matrix Comparison of the Housing Sites and Significant Mitigated (SM)/ Significant Unavoidable (SU) Impacts

Impacts (columns A-1 through HYDRO-2)

Housing Sites	A-1: Plan Consistency	A-2: Public Views	A-3: Community Character	A-4: Scenic Resources	AQ-1: Consistency with RAQS[1]	AQ-2: Criteria Pollutants	AQ-3: Sensitive Receptors	BIO-1: Sensitive Species	BIO-2: Sensitive Veg. Comm.	BIO-3: Wetlands	BIO-4: Wildlife Corridors	BIO-5: Habitat Conservation Plan.	BIO-6: Policies/Ord. Protecting	CR-1: Historical Resources	CR-2: Archaeological Resources	CR-3: Paleontological Resources	CR-4: Human Remains	GEO-1: Seismic Hazards	GEO-2: Soil Erosion	GEO-3/4: Unstable/Expansive Soils	GHG-1: GHG Emissions	GHG-2: Conflicts with Plans/Policies	HAZ-1-3: Use, Transport, Disposal	HAZ-4: Hazardous Sites	HAZ-5: Emergency Plans/Response	HAZ-6: Wildland Fires	HYDRO-1/6: Water Quality	HYDRO-2: Groundwater
Leucadia																											
Alt-2						SM		SM						SU							SU		SM				
Old Encinitas																											
OE-1								SM	SM	SM				SU	SU	SM					SU		SM				
OE-4														SU							SU		SM				
Alt-7						SM		SM		SM				SU		SM					SU		SM				
OE-7								SM	SM	SM				SU	SU	SM					SU		SM				
Cardiff																											
C-1						SM	SM							SU							SU		SM				
C-3														SU							SU		SM				
C-6								SM	SM	SM				SU	SU	SM					SU						
New Encinitas																											
NE-1						SM		SM		SM				SU							SU						
NE-7								SM						SU		SM					SU		SM				
Alt-3						SM								SU		SM					SU		SM				
Olivenhain																											
O-3								SM						SU		SM					SU						
Alt-4								SM	SM	SM				SU	SU	SM					SU						

Impacts (columns HYDRO 3-5 through UTL-4)

Housing Sites	HYDRO 3-5: Drainage Pattern/Runoff	HYDRO 7-10: Flooding/Inundation	LU-1: Land Use Plans/Policies	LU-2: State Planning Initiatives	LU-3: Neighborhood Compatibility	LU-4: Proximity to Agricultural Sites	LU-5: Noise/Land Use Compatibility	:NOISE-1: Ambient Noise Levels	NOISE-2: On-site Generated Noise	NOISE-3: Temporary Noise	NOISE-4: Groundborne Noise/Vibration	P&H-1: Population Growth	P&H-2: Displacement of People	SERV-1a: Fire Service	SERV-1b: Police Service	SERV-1c: Schools	SERV 1d: Libraries	SERV 2-3: Recreation	TRAF-1-2: Circulation System Cap.	TRAF-3: Alternative Transportation	TRAF 4-5: Traffic Hazards/ Emergency Access	UTL-1a: Stormwater System	UTL-1b and 3: Wastewater	Utl-1c: Water System	UTL-2: Water Supply	UTL-4: Solid Waste Disposal
Leucadia																										
Alt-2		SM					SM		SM	SM									SU							
Old Encinitas																										
OE-1							SM		SM										SU							
OE-4							SM		SM										SU							
Alt-7		SM					SM		SM	SM									SU							
OE-7							SM		SM										SU							
Cardiff																										
C-1							SM		SM										SU							
C-3							SM		SM										SU							
C-6		SM					SM		SM										SU							
New Encinitas																										
NE-1							SM		SM										SU							
NE-7							SM		SM										SU							
Alt-3							SM		SM										SU							
Olivenhain																										
O-3							SM		SM										SU							
Alt-4							SM		SM										SU							

NOTE: Cells left blank represent a conclusion of no impact or a less than significant impact.
SM = significant, mitigated
SU= significant, unmitigated

9.3.2.1 Description of the Sustainable Mixed Use Places Alternative

The SMUP Alternative represents an alternative to the HEU housing strategies addressed as the project in Chapter 3.0. It is an alternative that refines, but would have fewer impacts than the project's MMUP strategy, which was developed in response to substantial public input. This environmental analysis and the determination of substantial compliance for the draft Housing Plan by Housing and Community Development (HCD; Appendix A-1) occurred subsequent to the creation of the MMUP. With the benefit of the analysis and findings in this PEIR, along with the review of HCD, the SMUP Alternative was created. All sites that comprise the SMUP would meet the project's objectives. The differences and explanation for the changes from the MMUP housing strategy are as follows:

a. Sites Removed from the MMUP Housing Strategy in Development of the SMUP

C-2: The removal of housing site C-2 from the analysis reduced traffic trips.

CBHMG-1: The removal of housing site CBHMG-1 from the analysis reduced traffic trips. This site was also removed because the site is needed to remain in its existing condition for public utility purposes.

ALT-6: Housing site Alt-6 was removed from the analysis because is the site is physically constrained and is needed to service transportation-related purposes at the Encinitas Transit Center.

L-7: The removal of housing site L-7 from the analysis reduced multiple significant unmitigated aesthetic impacts.

O-4: The removal of housing site O-4 from the analysis reduced multiple significant unmitigated aesthetic impacts.

O-2: This site was removed the SMUP strategy because the lower population of Olivenhain would adequately be served by a single, new mixed activity center, which is accomplished with housing sites ALT-4 and O-3 on the opposite side of Rancho Santa Fe Road. Additionally, removing O-2 would allow Rancho Santa Fe Road to serve as a visual break between more urban development on the west side of the road to a rural character on the east side. The removal of housing site O-2 from the analysis also reduced impacts to cultural resources.

ALT-5: The removal of housing site Alt-5 from the analysis reduced traffic trips.

b. Sites Included in the SMUP

Leucadia

ALT-2: Housing site Alt-2 was included in the SMUP Alternative because this site provides an opportunity to strengthen the walkable Main Street Corridor character of Leucadia. Additionally, its inclusion helps meet project objectives by transitioning residential yields from moderate-income categories to lower income categories.

Old Encinitas

OE-1: Housing site OE-1 was included in the SMUP Alternative because it provides an opportunity to convert incompatible heavy commercial and light industrial land uses adjacent to Moonlight Beach and the downtown walkable Main Street Corridor with complementary and visitor serving uses. Visitor-serving uses are an important consideration adjacent to the beach in the Coastal Zone.

OE-4: Housing site OE-4 was included in the SMUP Alternative because it provides an opportunity for redevelopment of the underutilized City Hall sites into a mixed use place immediately adjacent to the Encinitas transit center.

ALT-7: Housing site Alt-7 was included in the SMUP Alternative because it provides an opportunity to strengthen the walkable Main Street Corridor character of Downtown Encinitas by converting underutilized sites to stitch together the whole of the downtown. Additionally, its inclusion helps meet project objectives by transitioning residential yields from moderate-income categories to lower income categories.

OE-7: Housing site OE-7 was included in the SMUP Alternative because while there is potential for biological resources, the site is isolated being fully surrounded by urbanization. Changing the land use from commercial to residential would reduce overall traffic trips and takes advantage of adjacent bus service.

Cardiff

C-3: Housing site C-3 was included in the SMUP Alternative because it would reduce traffic trips and strengthen the walkable character of the Cardiff Town Center/Village by accommodating mixed use. C1: Housing site C-1 was included in the SMUP Alternative because it provides an opportunity to complement the Encinitas Community Park by improving entrance aesthetics and allowing residents to walk to the park rather than drive from a distant site.

C-6: Housing site C-6 was included in the SMUP Alternative because it provides an opportunity to meet diverse housing needs.

New Encinitas

NE-7: Housing site NE-7 was included in the SMUP Alternative because it reduces traffic trips and provides a mixed use walkable place for New Encinitas. It also provides an opportunity to improve the aesthetics in the heart of the City's commercial corridor.

ALT-3: Housing site Alt-3 was included in the SMUP Alternative because it provides an opportunity to improve the aesthetics in the heart of the City's commercial corridor.

NE-1: Housing site NE-1 was included in the SMUP Alternative because it reduces traffic trips and provides a mixed use walkable place adjacent to existing shopping, park facility and planned cultural facility.

Olivenhain

ALT-4: Housing site Alt-4 was included in the SMUP Alternative because it focuses the change in land use to only one of the "four corners" of Olivenhain and supports the viability of the adjacent new mixed use site, O-3.

O-3: Housing site O-3 was included in the SMUP Alternative because it reduces traffic trips and provides a mixed use walkable place for Olivenhain.

An issue-by-issue comparison of the Reduced Constraints Alternative and the HEU housing strategies is presented below.

9.3.2.2 Environmental Analysis of the Sustainable Mixed Use Places Alternative

a. Aesthetics/Visual Resources

Issue 1: Plan Consistency

Impacts related to plan consistency from future development under the SMUP Alternative would be similar to those identified for the HEU housing strategies. Future development under both the Reduced Constraints Alternative and the HEU would not conflict with any City policy or regulation protecting visual resources, including General Plan/LCP policies, Hillside/Inland Bluff Overlay Zone, or Scenic Visual Corridor Overlay Zone/Design Review Guidelines. Therefore, impacts to plan consistency would be similar to the HEU housing strategies.

Issue 2: Public Views

Impacts related to public views from future development under the SMUP Alternative would be less than development under the HEU housing strategies. Housing strategies proposed under the HEU include development of housing site O-4, which has the potential to impact scenic views due to potential construction of 57,618 square feet of commercial and

80 residential units within the viewshed of a scenic highway. This housing site would not be included in the SMUP Alternative. Therefore, construction on this site would be limited to nine residential units as allowed under the adopted plan. Therefore, to public views would be less than the HEU.

Issue 3: Community Character

Impacts related to community character from future development under the SMUP Alternative would be less than development under the HEU housing strategies. Under the HEU development of housing sites L-7, O-4, and O-5 have the potential to impact community character because the development of 57,618 square feet of commercial uses and 188 residential units would be inconsistent with the existing rural environment that surrounds these sites. These housing sites would not be included in the SMUP Alternative. Therefore, to community character would be less than the HEU.

Issue 4: Scenic Resources

Impacts related to scenic resources from future development under SMUP Alternative would be less than the HEU housing strategies. Under HEU development of housing site O-4 has the potential to impact scenic resources because the development of 57,618 square feet of commercial density and 80 residential units would reduce the site's scenic views of the Escondido Creek and the San Elijo Lagoon. This housing site would not be included in the SMUP Alternative. Therefore, impacts to scenic resources would be less than the HEU.

b. Air Quality

Issue 1: Consistency with RAQS

Impacts related to plan consistency from future development under the SMUP Alternative would be same as the HEU housing strategies. Existing regional air plans are based on the existing City forecasts; future development under both the HEU and the SMUP Alternative would increase growth in the City not currently accounted for resulting in a significant and unavoidable impact at the program-level. Therefore, impacts to consistency with RAQS would be the same as the HEU.

Issue 2: Criteria Pollutants

Impacts related to criteria pollutants from the future development under SMUP Alternative would be less than under the HEU housing strategies. As discussed in Section 4.2.6, construction of certain housing sites could result in emissions of ROG that exceed the significance threshold of 250 pounds per day, as well as result in significant construction emissions. These sites include the following:

- Housing Strategy 1 (RM): NE-4, OE-5, C-2
- Housing Strategy 2 (BYO): OE-8, C-2, NE-3
- Housing Strategy 3 (MMUP): ALT-7, ALT-2, ALT-3, ALT-5, C-2, C-1, NE-1

The SMUP Alternative would only include the following sites: ALT-7, ALT-2, ALT-3, C-1, and NE-1. The future development under the HEU and the SMUP Alternative would be required to implement similar mitigation measures to reduce potentially significant impacts to criteria pollutants. However, future development under this alternative would result in the release of slightly less criteria pollutant compared to housing strategies 1 (RM) and 2 (BYO), and similar compared to housing strategy 3 (MMUP) due to the number of housing sites that could result in significant impacts would be developed to the degree allowed under the HEU. Overall, however, impacts to criteria pollutants under the SMUP Alternative would be less compared to the HEU.

Issue 3: Sensitive Receptors

Impacts related to sensitive receptors from future development under the SMUP Alternative would be less than HEU housing strategies. As discussed in Section 4.2.7, buildout of housing sites under the HEU would result in potentially significant impacts associated with diesel particulate matter due to their proximity to I-5. These sites include:

- Housing Strategy 1 (RM): L-4, L-5
- Housing Strategy 2 (BYO): OE-2
- Housing Strategy 3 (MMUP): CBHMG-1

None of these housing sites would be included in the SMUP Alternative. Therefore, impacts to sensitive receptors under the SMUP Alternative would be less than the HEU.

c. Biological Resources

Issue 1: Sensitive Species

Impacts related to sensitive species from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.3.5, buildout of housing sites under the HEU would result in impacts to sensitive plants and wildlife due to grading and other land development activities. These sites include:

- Housing Strategy 1 (RM): L-4, O-2, O-5, O-6, OE-1, OE-2, OE-7, C-2, L-5, NE-4
- Housing Strategy 2 (BYO): L-7, NE-3, O-2, O-4, O-5, OE-2, OE-7, NE-1, C-2, NE-7
- Housing Strategy 3 (MMUP): C-6, L-7, O-2, O-4, OE-1, OE-7, NE-1, C-2, NE-7, O-3

The SMUP Alternative would only include the following sites: OE-1, OE-7, NE-1, C-6, NE-7, and O-3. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive species and implement similar mitigation measures to reduce these potentially significant impacts to sensitive species. However, development under this alternative would result in slightly fewer impacts to sensitive species compared to any of the three strategies because fewer of the housing sites with the potential for sensitive species are included in this alternative. Therefore, impacts to sensitive species under the SMUP Alternative would be less than the HEU.

Issue 2: Sensitive Vegetation

Impacts related to sensitive vegetation from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.3.6, buildout of housing sites under the HEU would result in impacts to sensitive vegetation communities through vegetation removal. These sites include:

- Housing Strategy 1 (RM): L-4, O-2, O-5, O-6, OE-1, OE-7
- Housing Strategy 2 (BYO): L-7, NE-3, O-2, O-4, O-5, OE-2, OE-7
- Housing Strategy 3 (MMUP): ALT-4, ALT-5, C-6, L-7, O-2, O-4, OE-1, OE 7

The SMUP Alternative would only include the following sites: OE-1, OE-7, Alt-4, and C-6. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive vegetation communities and implement similar mitigation measures to reduce potentially significant impacts to sensitive vegetation. However, development under this alternative would result in slightly fewer impacts to sensitive species compared to any of the three strategies because fewer of the housing sites with the potential for sensitive species are included in this alternative. Therefore, impacts to sensitive species under the SMUP Alternative would be less than the HEU.

Issue 3: Wetlands

Impacts related to wetlands from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.3.7, buildout of housing sites under the HEU would result in impacts to impact jurisdictional waters or wetlands through such activities through vegetation removal and grading activities associated with development. These sites include:

- Housing Strategy 1 (RM): L-4, O-2, O-5, O-6, OE-1, OE-7
- Housing Strategy 2 (BYO): L-7, NE-1, NE-3, O-2, O-4, O-5, OE-2, OE-7
- Housing Strategy 3 (MMUP): ALT-4, ALT-5, ALT-7, C-6, L-7, NE-1, O-2, O-4, OE-1, OE-7

The SMUP Alternative would only include the following sites: OE-1, OE-7, Alt-4, Alt-7, NE-1, and C-6. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive vegetation communities and implement similar mitigation measures to reduce potentially significant impacts to wetlands. However, development under this alternative would result in slightly fewer impacts to sensitive species compared to any of the three strategies because fewer of the housing sites with the potential for sensitive species are included in this alternative. Therefore, impacts to historical resources under the SMUP Alternative would be less than the HEU.

Issue 4: Wildlife Corridors

Impacts related to wildlife corridors from future development under the SMUP Alternative would be the same as the HEU housing strategies. No significant, regional wildlife movement corridors exist within the vicinity of the housing sites. Future development within the housing sites would not result in significant impacts to wildlife movement corridors under either the HEU or SMUP Alternative. Therefore, impacts to wildlife corridors under the No Project Alternative would be the same as the HEU.

Issue 5: Habitat Conservation Planning

Impacts related to habitat conservation planning from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development within the City, under any plan, would be required to adhere to all applicable planning documents and regulations relating to an adopted HCP, NCCP, or any other approved local, regional, or State HCP. Even absent the adoption of a formal MHCP, similar mitigation measures to that proposed for future development under the HEU would be required under SMUP Alternative reducing these impacts to less than significant. Therefore, impacts to habitat conservation planning under the SMUP Alternative would be the same as the HEU.

Issue 6: Policies and Ordinances Protecting Biological Resources

Impacts related existing local polices and ordinances protecting biological resources from the SMUP Alternative would be the same as the HEU. Future development within the housing sites would be required to adhere to all existing applicable tree policies and ordinances protecting biological resources. Therefore, impacts to policies and ordinances protecting biological resources under the SMUP Alternative would be the same as the HEU.

d. Cultural and Paleontological Resources

Issue 1: Historical Resources

Impacts related to historical resources from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.4.5, buildout of housing sites under the HEU could result in impacts known historical resources including historic structures and/or buildings or structures greater than 50 years old. These sites include:

- Housing Strategy 1 (RM): L-1, OE-1, OE-5, C-2, C-3, C-7, L-1, L-2, L-5, L-6, NE-4, O-5, OE-4, OE-7
- Housing Strategy 2 (BYO): L-1, C-2, NE-1, NE-3, NE-7, O-5, OE-2, OE-7, OE-8
- Housing Strategy 3 (MMUP): ALT-2, ALT-7, OE-1, ALT-3, ALT-4, ALT-5, ALT-6, C-1, C-2, C-6, NE-1, NE-7, O-3, OE-4, OE-7, CBHMG-1

The SMUP Alternative would include the following sites that have the potential for significant impacts to historical resources: OE-1, OE-4, OE-7, C-1, C-3, C-6, NE-1, NE-7, ALT-2, ALT-3, ALT-4, ALT-7, and O-3. Future development under all three housing

strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive resources and implement similar mitigation measures to reduce significant impacts to historical resources. Similar to the HEU, impacts associated with these sites would remain significant and unavoidable at the program-level. However, development under this alternative would result in slightly fewer impacts to sensitive resources compared to any of the three strategies because fewer of the housing sites with the potential for sensitive species are included in this alternative. Therefore, impacts to historical resources under the SMUP Alternative would be less than the HEU.

Issue 2: Archaeological Resources

Impacts related to archeological resources from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.4.6, ground-disturbing activities such as grading or excavation within housing sites under the HEU could result in impacts to undiscovered subsurface archaeological resources. These sites include:

- Housing Strategy 1 (RM): L-4, O-2, O-5, O-6, OE-1, OE-7
- Housing Strategy 2 (BYO): L-7, NE-3, O-2, O-4, O-5, OE-2, OE-7
- Housing Strategy 3 (MMUP): ALT-4, ALT-5, C-6, L-7, O-2, O-4, OE-1, OE-7

The SMUP Alternative would only include the following sites that have the potential for significant impacts to archeological resources: OE-1, OE-7, ALT-4, and C-6. Future development under all three housing strategies and SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive resources and implement similar mitigation measures to reduce significant impacts to historical resources. Similar to the HEU, impacts associated with these sites would remain significant and unavoidable at the program-level. However, development under this alternative would result in slightly fewer impacts to sensitive resources compared to any of the three strategies because fewer of the housing sites with the potential for sensitive species are included in this alternative. Therefore, impacts to archeological resources under the SMUP Alternative would be less than the HEU.

Issue 3: Paleontological Resources

Impacts related to paleontological resources from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.4.7, grading housing sites with potential to contain undisturbed deposits of Torrey Sandstone and/or the Del Mar formation would have the potential to significantly impact subsurface paleontological resources. These sites include:

- Housing Strategy 1 (RM): NE-4, O-2, O-5, O-6, OE-1, OE-7
- Housing Strategy 2 (BYO): L-7, NE-3, NE-7, O-2, O-4, O-5, OE-2, OE-7, OE-8
- Housing Strategy 3 (MMUP): ALT-3, ALT-4, ALT-5, ALT-6, ALT-7, C-6, L-7, NE-7, O-2, O-3, O-4, O-5, OE-1, OE-7

The SMUP Alternative would include the following sites that have the potential for significant impacts to paleontological impacts: OE-1, OE-7, NE-7, ALT-3, ALT-4, ALT-7, O-3 and C-6. Future development under all three housing strategies and the and SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive resources and implement similar mitigation measures to reduce significant impacts to historical resources. However, development under this alternative would result in slightly fewer impacts to sensitive resources compared to any of the three strategies because fewer of the housing sites with the potential for sensitive species are included in this alternative. Therefore, impacts to paleontological resources under the SMUP Alternative would be less than the HEU.

Issue 4: Human Remains

Impacts related to human remains from future development under the SMUP Alternative would be the same as the HEU housing strategies. There are no known burial sites or cemeteries within the vicinity of the City. Future development within the housing sites does not have potential to result in significant impacts to human remains under either the HEU or the SMUP Alternative and impacts would be the same.

e. Geology and Soils

Issue 1: Seismic Hazards

Impacts related to seismic hazards from future development under the SMUP Alternative would be the same as the HEU housing strategies. As discussed in Section 4.5.4, housing sites that contain steep slopes include: NE-3, NE-7, OE-4 and OE-7. The SMUP Alternative would include the following of these sites: NE-7, OE-4, and OE-7. Additional seismic hazards could occur within additional housing sites due to ground movement and structural damage. Future development under any plan would be required to comply with City General Plan policies, ordinances, the CBC, engineering standards and codes requiring future site-specific geotechnical reports. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or SMUP Alternative and impacts would be the same.

Issue 2: Soil Erosion

Impacts related to soil erosion from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under any plan would be required to comply with the City General Plan policies, CBC; City ordinances; engineering standards and codes; and the NPDES requiring site-specific SWPPP. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or SMUP Alternative and impacts would be the same.

Issues 3-4: Unstable and Expansive Soils

Impacts related to unstable and expansive soils from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under

any plan would be required to comply with the CBC; City of Encinitas Grading, Erosion, and Sediment Control Ordinance; the City's General Plan policies; and implement any recommendations described in a site-specific geotechnical investigation. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or SMUP Alternative and impacts would be the same.

f. Greenhouse Gas Emissions

Issue 1: GHG Emissions

Impacts related to GHG emissions from future development under the SMUP Alternative would be the same as the HEU housing strategies. Buildout under the three HEU housing strategies and the SMUP Alternative would yield similar amounts of density and intensity of use, resulting in higher GHG emissions than the existing condition. Future development under all three housing strategies and the SMUP Alternative would implement similar mitigation measures to reduce GHG emissions. However, at the program-level, under either plan, construction details are unknown and impacts would remain significant and unmitigated. Therefore, impacts to GHG emission under the SMUP Alternative would be the same as the HEU.

Issue 2: Consistency with GHG Plans, Policies, and Regulations

Impacts related to consistency with GHG plans, policies and regulations from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under all three housing strategies and the SMUP Alternative would be required to comply with all State and local regulations. Neither the HEU nor the SMUP Alternative would conflict with GHG plans, policies and regulations and impacts would be the same.

g. Hazards and Hazardous Materials

Issues 1-3: Hazardous Materials – Use, Transport, Disposal; Accidental Release; and Emissions near a School

Impacts related to hazardous materials from future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.7.5, future development of the housing sites would not result in the routine transport, use, or disposal of substantial quantities of hazardous materials. Development could however, result in accidental release of hazardous materials due to development on or near known and potentially known hazardous materials sites. These sites include:

- Housing Strategy 1 (RM): C-2, C-3, C-7, L-1, L-2, L-4, L-5, L-6, NE-4, OE-1, OE4, OE-5
- Housing Strategy 2 (BYO): C-2, L-1, NE-3, NE-7, OE-2, OE-7
- Housing Strategy 3 (MMUP): ALT-2, ALT-3, ALT-5, ALT-6, ALT-7, C-1, C-2, CBHMG-3, NE-7, OE-1, OE-4, OE-7

The SMUP Alternative would include the following sites that have the potential for significant impacts associated with hazardous materials: C-1, C-3, OE-1, OE-4, OE-7, NE-7, ALT-2, ALT-3, and ALT-7. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the protection of sensitive resources and implement similar mitigation measures to reduce significant impacts to historical resources. However, development under this alternative would result in slightly fewer impacts to hazardous materials compared to housing strategies 1 (RM) and 3 (MMUP), but similar impacts to housing strategy 2 (BYO). Overall, however, impacts to hazardous materials under the SMUP Alternative would be less than the HEU.

Issue 4: Hazardous Materials – Sites

Impacts related to hazardous materials sites from future development under the SMUP Alternative would be the same as the HEU housing strategies. No hazardous materials sites (pursuant to Government Code Section 65962.5) exist within any of the housing sites. Therefore, impacts associated with hazardous materials sites under the SMUP Alternative and the HEU would be the same.

Issue 5: Emergency Response and Evacuation Plans

Impacts related to emergency response and evacuation plans from future development under the SMUP Alternative would be the same as the HEU housing strategies. The City does not have an adopted emergency response plan. Additionally, applications for all future projects under both the HEU and SMUP Alternative would be reviewed and approved by the City Fire Department prior to issuance of building permit. Therefore, impacts associated with emergency response plan or emergency evacuation plan under the SMUP Alternative and the HEU would be the same.

Issue 6: Wildland Fires

Impacts related to wildland sites from the future development under SMUP Alternative would be the same as the HEU housing strategies. As discussed in Section 4.7.8, housing sites C-6, O-4, and O-5 are located near open space associated with the San Elijo Lagoon and are within the City's designated VHFHSZ. Only one of these housing sites would be included in the SMUP Alternative (C-6); however, future development under all three housing strategies and the SMUP Alternative would be required to adhere to the State and local fire codes and City Design Guidelines to reduce risks related to wildland fire. Therefore, impacts associated with wildland fires under the SMUP Alternative and the proposed HEU would be the same.

h. Hydrology and Water Quality

Issues 1 and 6: Water Quality

Impacts related to water quality from the future development under the SMUP Alternative would be the same as the HEU housing strategies Future development under all three

housing strategies and the SMUP Alternative would be subject to Federal, State, and local regulations aimed at controlling water quality impacts. Therefore, impacts associated with water quality under the SMUP Alternative and the proposed HEU would be the same.

Issue 2: Groundwater

Impacts related to groundwater from the future development under the SMUP would be the same as the HEU housing strategies. Future development under all three housing strategies and the SMUP Alternative would obtain potable water from either of the water districts serving the City, neither of which uses groundwater for part of their potable supplies. Therefore, future development associated with buildout of the housing sites under the HEU or SMUP Alternative would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge and impacts would be the same.

Issues 3-5: Drainage Pattern/Runoff

Impacts related to drainage pattern/runoff from the future development under the SMUP Alternative would less than the HEU housing strategies. Generally, increased development results in increased impervious surfaces that could alter drainage patterns and increase runoff. The physical development of undeveloped sites could result in impacts greater than the redevelopment of existing built conditions. As discussed in Section 4.8.6, several sites included in the HEU housing strategies are presently undeveloped. These sites include: ALT-4, ALT-5, C-6, L-4, L-7, NE-3, O-2, O-4, O-5, O-6, OE-1, OE-2, and OE-7. Only four of these sites are included in the SMUP Alternative. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations including future design measures to reduce impacts associated with hydrology and increased runoff. However, development under this alternative would result in slightly fewer impacts to drainage patterns and runoff compared to the HEU because it includes fewer undeveloped sites. Therefore, impacts to drainage patterns/runoff under the SMUP Alternative would be less than the HEU.

Issues 7-10: Flooding/Inundation

Impacts related to flooding/inundation from the future development under the SMUP Alternative would be less than the HEU housing strategies. As discussed in Section 4.8.8, development could result in flood hazards and dam inundation to those sites that occur within special 10-year and 100-year flood problem areas and/or located within a dam inundation area. These sites include:

- Housing Strategy 1 (RM): L-1, L-2; O-2
- Housing Strategy 2 (BYO): L-1, OE-2, O-2, O-4
- Housing Strategy 3 (MMUP): ALT-2, ALT-6, ALT-7, C-6, O-2 O-4

The SMUP Alternative would include the following sites that have the potential for significant impacts associated with flooding/inundation: ALT-2, ALT-7, and C-6. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to applicable Federal, State, and local regulations regarding the

protection of sensitive resources and implement similar mitigation measures to reduce significant impacts to historical resources. However, development under this alternative would result in slightly fewer impacts to flooding and dam inundation compared to any of the three housing strategies because fewer of the sites with the potential for sensitive species are included in this alternative. Therefore, impacts to flooding/inundation under the SMUP Alternative would be less than the HEU.

i. Land Use

Issue 1: Plan and Policy Consistency Impacts

Impacts related to plan and policy consistency from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under all three housing strategies and the SMUP Alternative would be reviewed for consistency with regional and local plans and policies. Therefore, impacts associated with plan and policy consistency under the SMUP Alternative and the proposed HEU would be the same.

Issue 2: Conflict with State Planning Initiatives

Impacts related to conflict with State planning initiatives from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under all three housing strategies and the SMUP Alternative would fully account for capacity for future development consistent with State Housing Element Law and allow the City to conform to its RHNA obligations. Therefore, impacts associated with conflict with State planning initiatives under the SMUP Alternative and the proposed HEU would be the same.

Issue 3: Neighborhood Compatibility Impacts

With respect to traffic impacts associated with neighborhood compatibility, see Section 9.3.3.2(m), below.

With respect to noise impacts associated with neighborhood compatibility, see Section 9.3.3.2(j), below.

With respect to aesthetics impacts associated with neighborhood compatibility, see Section 9.3.3.2(a), above.

Issue 4: Result in Land Use Conflicts In Relation to the Proximity of Housing to Existing Agricultural Uses/Commodity Sites

Impacts related to housing in proximity to existing agriculture from future development under the SMUP Alternative would be less than HEU housing strategies. As discussed in Section 4.9.8, buildout of housing sites that are on or adjacent to agricultural commodity parcels could result in significant impacts associated with the interface between agricultural operations and residential uses. These sites include:

- Housing Strategy 1 (RM): L-4, L-5
- Housing Strategy 2 (BYO): L-7
- Housing Strategy 3 (MMUP): L-7

Although, future development of these housing sites would not likely result in a significant impact associated with land use (agricultural use) conflicts due to the nature of greenhouse agriculture, none of these housing sites would be included in the SMUP Alternative. Therefore, impacts to housing in proximity to existing agriculture under the SMUP Alternative would be less than the HEU.

Issue 5: Result in Exposure of Persons to Noise Levels in Excess of Standards Established in the Local General Plan

Impacts related to exposure of persons to noise levels in excess of General Plan standards from future development under the SMUP Alternative would be the same as the HEU housing strategies. Specifically, future development could result in interior noise levels exceeding the residential interior noise level standard of 45 L_{dn}. Future development under all three housing strategies and the SMUP Alternative would be reviewed for consistency with the General Plan and similar mitigation measures would be implemented to reduce noise level impacts to less than significant. Implementation of these mitigation measures would reduce significant impacts to less than significant under either the HEU or No Project Alternative and impacts would be the same.

j. Noise

Issue 1: Ambient Noise Levels

Impacts related to ambient noise levels from future development under the SMUP Alternative would be the same as the HEU housing strategies. Because of the increase in regional growth that is expected to occur, there would be an increase in existing ambient noise levels under either plan. The increase in ambient noise attributed to the HEU (all strategies) would be less than 3 decibels adjacent to all roadway segments. Likewise, buildout of the SMUP Alternative would result in a similar increase in ambient noise levels. Impacts to ambient noise levels under the SMUP Alternative and the HEU would be the same.

Impact 2: On-Site Generated Noise

Impacts related to on-site generated noise from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future on-site generated noise sources have the potential to exceed to property line noise levels limits established in the City's Noise Ordinance Development. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to local noise regulations aimed at controlling noise levels and reducing noise related incompatibilities between land uses, and similar mitigation measures would be implemented to reduce noise level impacts to less than significant. Therefore, impacts associated with on-site generated noise under the SMUP Alternative and the HEU would be the same.

Impact 3: Temporary Noise

Impacts related to temporary noise from future development under the SMUP Alternative would be similar to the HEU housing strategies. As discussed in Section 4.10.7, while noise levels would vary depending on the nature of the construction including the duration of specific activities, significant impacts would occur if residential land uses are located closer than 110 feet of construction activities. Buildout of the following housing sites would be located less than 110 feet from existing residential uses and could result in significant impacts:

- Housing Strategy 1 (RM): C-7, L-2, L-6, OE-5
- Housing Strategy 2 (BYO): None
- Housing Strategy 3 (MMUP): ALT-2, ALT-7, CBHMG-1

The SMUP Alternative would result in the same construction-generated noise as all three HEU strategies because it would include two sites that have the potential for significant impacts associated with temporary noise: ALT-2, ALT-7. Future development under all three housing strategies and the SMUP Alternative would be required adhere to local noise regulations aimed at restrictions on construction noise and implement similar mitigation measures to reduce significant impacts to construction noise Therefore, impacts to temporary noise under the SMUP Alternative would be the same as the HEU.

Impact 4: Groundborne Noise and Vibration

Impacts related to groundborne noise and vibration from future development under the SMUP would be the same as the HEU housing strategies. No operational components of either plan would include significant groundborne noise or vibration sources and no significant vibrations sources currently exist, or are planned in the City. No significant groundborne noise or vibration impacts would occur with the operation of future projects implemented under the HEU or the SMUP Alternative. Therefore, impacts associated with groundborne noise and vibration under the SMUP Alternative and the HEU would be the same.

k. Population and Housing

Issue 1: Population Growth

Impacts related to population growth from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to the General Plan, provide required development impact fees, and comply with applicable development regulations to assure that the City is capable of supporting the growth. Therefore, impacts associated with population growth under the SMUP Alternative and the proposed HEU would be the same.

Issue 2: Displacement of People

Impacts related to displacement of people from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development under all three housing strategies and the SMUP Alternative would not anticipate the displacement of people during development/redevelopment Therefore, impacts associated with displacement of people under the SMUP Alternative and the HEU would be the same.

l. Public Services and Recreation

Issue 1: Fire Rescue Service

Impacts related to fire rescue service from future development under the SMUP Alternative would be the same as the HEU housing strategies. Both the HEU and SMUP Alternative would increase demand for fire rescue services over time. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to the General Plan, as well as implement regulatory fire mitigation fees pursuant to Title 23 of the City's Municipal Code assuring that future projects maintain adequate levels of service. At this program-level, impacts under both the HEU and SMUP Alternative would be less than significant. Therefore, impacts associated with fire rescue service under the SMUP Alternative and the proposed HEU would be the same.

Issue 2: Police Service

Impacts related to police service from future development under the SMUP Alternative would be the same as the HEU housing strategies. Both the HEU and SMUP Alternative would increase demand for police service over time. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to the General Plan, assuring that adequate levels of service are available in conjunction with future development. At this program-level, impacts under both the HEU and SMUP Alternative would be less than significant. Therefore, impacts associated with police service under the SMUP Alternative and the proposed HEU would be the same.

Issue 3: Schools

Impacts related to schools from future development under the SMUP Alternative would be the same as the HEU housing strategies. Both the HEU and SMUP Alternative would increase demand for schools. Future development under all three housing strategies and the SMUP Alternative would be required to pay statutory fees to assure the reduction of school impacts. At this program-level, impacts under both the HEU and SMUP Alternative would be less than significant. Therefore, impacts associated with schools under the SMUP Alternative and the proposed HEU would be the same.

Issue 4: Library Services

Impacts related to library services from future development under the SMUP Alternative would be the same as the HEU housings strategies. The demand for library services under

the SMUP Alternative would be similar to the HEU; the City has adequate facilities to serve the needs under either plan. Therefore, impacts associated with library services under the SMUP Alternative and the proposed HEU would be the same.

Issue 5: Recreation

Impacts related to recreation from future development under the SMUP Alternative would be the same as the HEU housing strategies. The demand for parks and recreational facilities under the SMUP Alternative would be similar to or incrementally less than the HEU; however, the City has adequate facilities to serve the needs under either plan. Therefore, impacts associated with recreation under the SMUP Alternative and the proposed HEU would be the same.

m. Transportation/Traffic

Issue 1 and 2: Circulation System Capacity and Operations

The SMUP Alternative generates fewer daily trips than the most intense HEU strategy (MMUP), but a greater number of trips than under housing strategy 1 (RM) or 2 (BYO). Impacts related to circulation system capacity and operations from the SMUP Alternative would be less than under the HEU (MMUP), but incrementally greater than under housing strategies 1 (RM) and 2 (BYO). As identified in Section 4.13.1.2, multiple roadway (and freeway) segments and intersections throughout the City currently operate at substandard LOS E or F. Increased traffic under the Reduced Alternative would further degrade conditions similar to the HEU. Future development under the HEU would be reviewed for consistency with this PEIR and compliance with the mitigation framework therein. Likewise, similar mitigation measures to that proposed under the HEU would be required for development under the SMUP Alternative. Implementation of the mitigation framework would reduce traffic impacts under the HEU and SMUP Alternative; however, not to a less than significant level. Therefore, impacts relative to circulation system capacity and operations under the SMUP Alternative would be significant and unavoidable, the same as the HEU.

Issue 3: Alternative Transportation

Future development under both the HEU and the SMUP Alternative would be required to adhere to General Plan goals and policies regarding alternative transportation. Buildout under both the HEU housing strategies and the SMUP Alternative would be required to comply with transportation demand management measures detailed in the mitigation framework. Compliance with adopted policies relative to alternative transportation and the mitigation framework would reduce significant impacts to less than significant under either the HEU or SMUP Alternative and impacts would be the same.

Issues 4 and 5: Traffic Hazards and Emergency Access

Impacts related to traffic hazards and emergency access from future development under the SMUP Alternative would be the same as the HEU housing strategies. Future development

under all three housing strategies and the SMUP Alternative would be required to adhere to road standards and design specifications intended to assure the safety of the City's roadway system. Regulatory compliance would reduce significant impacts to less than significant under either the HEU or SMUP Alternative and impacts would be the same.

n. Utilities and Service Systems

Issue 1a: Storm Drain System

Impacts related to storm drain systems from future development under the SMUP Alternative would be similar to buildout under the HEU housing strategies. The growth anticipated under the HEU is similar to the SMUP Alternative, and likewise, future development would result in similar increases in storm water runoff. The City's Stormwater Manual requires future development to implement project-specific measures to control and reduce storm water runoff. Therefore, at this program-level of analysis, neither the HEU nor the SMUP Alternative would result in the need for expanded or newly constructed storm water facilities. Impacts associated with storm drain system would be the same.

Issue 1b and 3: Wastewater

Impacts related to wastewater from future development under the SMUP Alternative would be the same as the HEU housing strategies. The growth anticipated under the HEU is similar to the SMUP Alternative and would result in similar demands on the existing wastewater system. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to General Plan policies ensuring that the rate of growth does not exceed the capability of available services and facilities. Wastewater master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of wastewater facilities would be required under the HEU or the SMUP Alternative. Therefore, impacts to wastewater facilities under the SMUP Alternative and the HEU would be the same.

Issue 1c: Water System

Impacts related to water system from future development under the SMUP Alternative would be the same as the HEU housing strategies. The growth anticipated under the HEU is similar to the SMUP Alternative and would result in similar capacity reduction of the existing water system. Future development under all three housing strategies and the SMUP Alternative would be required to adhere to General Plan policies ensuring that the rate of growth does not exceed the capability of available services and facilities. Water master planning is in place to assure adequate facilities would be available to serve new development and, no construction or expansion of wastewater facilities would be required under the HEU or the SMUP Alternative. Therefore, impacts to water system under the SMUP Alternative and the proposed HEU would be the same.

Issue 2: Water Supply

Impacts related to water supply from future development under the SMUP Alternative would be the same as the HEU housing strategies. The growth anticipated under the HEU is similar to the SMUP Alternative and would result in similar increase in demands for water. Future development under all three housing strategies and the SMUP Alternative would be required to present service letters from either San Dieguito Water District or Olivenhain Municipal Water District assuring that adequate water supplies would be available. Individual development projects would also be required to assure adequate measures are proposed to meet all water conservation requirements pursuant to the General Plan and City Municipal Code. Plans for water supply are in place to assure adequate facilities would be available to serve new development under the HEU or the SMUP Alternative. Therefore, impacts to water supply under the SMUP Alternative and the proposed HEU would be the same.

Issue 4: Solid Waste Disposal

Impacts related to solid waste disposal future development under the SMUP Alternative would be the same as the HEU housing strategies. The growth anticipated under the HEU is similar to the SMUP Alternative and would result in similar increase in demands for solid waste disposal. Future development under all three housing strategies and the SMUP Alternative would be required to implement State and local recycling programs, and adhere to all General Plan and City Municipal Code section aimed at reducing waste and the diversion of recyclables from the City waste stream. Solid waste and landfill planning are in place to assure adequate facilities would be available to serve new development and, no construction or expansion of solid waste facilities would be required under the HEU or the SMUP Alternative. Therefore, impacts to solid waste disposal under the SMUP Alternative and the proposed HEU would be the same.

9.3.2.3 Conclusion Regarding the Sustainable Mixed Use Places Alternative

The SMUP Alternative would incrementally reduce significant impacts associated with aesthetics, air quality, biological resources (sensitive wildlife/vegetation species and wetlands), cultural/paleontological resources, land use (neighborhood compatibility and proximity to agricultural sites), hazardous materials, and hydrology compared to the HEU housing strategies (refer to Table 9-2). Although traffic impacts would remain significant and unavoidable for the HEU, the SMUP Alternative would reduce traffic impacts through a reduction in trip generation. This alternative would also reduce aesthetic impacts and provide greater alternative transit opportunities. Thus, the SMUP Alternative would meet all the project's objectives and would result in compliance with State Housing Element law while meeting the City's share of allocated RHNA units.

9.4 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from the other alternatives. The project itself may not be identified as the environmentally superior alternative.

The SMUP Alternative is considered the environmentally superior alternative, because it would incrementally reduce significant impacts associated with aesthetics, air quality, biological resources (sensitive wildlife/vegetation species and wetlands), cultural/paleontological resources, land use (neighborhood compatibility and proximity to agricultural sites), hazardous materials, and hydrology compared to the project's HEU housing strategies (refer to Table 9-2). Although traffic impacts would remain significant and unavoidable for the HEU, the SMUP Alternative would reduce these impacts through the selection of housing sites described above in the SMUP Alternative to reduce trips generation while improving aesthetics and alternative transit opportunities. Thus, the SMUP Alternative would meet all the project's objectives and would result in compliance with State Housing Element law while meeting the City's share of allocated RHNA units. In conclusion, the SMUP Alternative is considered the environmentally superior alternative, because it would result in fewer impacts than any of the project's three HEU housing strategies and still meets the project's objectives.

10

Chapter 10
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11

Chapter 11
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12

Chapter 12
Certification

This document has been completed by the City of Encinitas' Planning Department under the direction of the Department of Planning and Building Acting Director and is based on independent analysis and determinations made pursuant to CEQA.

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