INITIAL STUDY & NEGATIVE DECLARATION

OLD TOWN PLACENTIA REVITALIZATION PROJECT
PLACENTIA, CALIFORNIA

PLACENTIA
Rich Heritage, Bright Future

LEAD AGENCY:

CITY OF PLACENTIA
DEVELOPMENT SERVICES DEPARTMENT,
PLANNING DIVISION
401 EAST CHAPMAN AVENUE
PLACENTIA, CALIFORNIA 92870

REPORT PREPARED BY:

BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING
16388 E. COLIMA ROAD, SUITE 206J
HACIENDA HEIGHTS, CALIFORNIA 91745

MAY 22, 2017

PLCA 001

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NEGATIVE DECLARATION

PROJECT NAME: Old Town Placentia Revitalization Project.

ADDRESS: The Old Town Placentia Revitalization Project applies to an L-shaped Planning Area that is located in the southwestern portion of the City of Placentia. The Planning Area is centered along Bradford Avenue south of Chapman Avenue and Santa Fe Avenue from Murray Street on the west to Alta Street on the east. The portion of the Planning Area centered on Bradford Avenue extends east to Alta Street and west to Main Street, south of Chapman Avenue. The portion of the Planning Area centered on Santa Fe Avenue extends from Murray Street on the west, Aguirre Lane (and extension of Aguirre Lane) on the north, the Burlington Northern-Santa Fe (BNSF) railroad tracks to the south, and Alta Street to the east. The Planning Area is just over 32 acres in size and is located north of the Burlington Northern-Santa Fe (BNSF) railroad tracks and south of Chapman Avenue in the City of Placentia. The Old Town Placentia Planning area is bounded by Chapman Avenue in the north, the Burlington Northern and Santa Fe Railway train tracks in the south, Alta Street in the east, and Murray Street in the west.

Within the Planning Area are various sub-areas that define the heights of buildings, the uses, and the architecture in each sub-area. These standards are all described in the proposed zone change, which will change the zoning of the project area from “SF-C” (Santa Fe Commercial), “C-1” (Neighborhood Commercial), “C-2” (Community Commercial), and "R-2" (Low-Medium Density Residential) to "Old Town," which further divides the Old Town into five planning sub-areas, which include Main Street (Two- Three- and Four-Story Height Sub-areas), Village (Three-Story Height Sub-area), Mixed-Use (Four-Story Height District), High-Density Residential (Four-Story Height Sub-area), and Public Facilities (Five Story Height Sub-area). The General Plan designations will also be changed to reflect the land uses contemplated within the Old Town Revitalization Plan. A portion of two zoning sub-areas will also have an R-2 Overlay, wherein the existing underlying residential uses remain conforming. These are depicted in Exhibit 2-5. Finally, the residential development within the proposed High Density Residential zone will be “by right,” pursuant to the State of California housing law. An aerial photograph of the Planning Area is provided in Exhibit 2-4.

CITY AND COUNTY: Placentia, Orange County.

APPLICANT: City of Placentia, 401 East Chapman Avenue, Placentia, California 92870.

PROJECT: The proposed Old Town Placentia Revitalization Project involves the adoption and subsequent implementation of the Old Town Placentia Revitalization Plan document, the Old Town Placentia Revitalization Plan Development Standards (i.e. the zoning text amendment), and the Streetscape Master Plan. The

Revitalization Project will also involve an amendment to the General Plan land use map to reflect the land uses contemplated within the Revitalization Plan document. The Revitalization Project is anticipated to facilitate new sustainable development, especially residential and retail, in a mixed-use setting. The Planning Area is adjacent to the recently approved Metrolink Station and parking structure in the Old Town area and the recently approved Transit Oriented Development (TOD) south of the railroad along Crowther Avenue. The purpose of the Revitalization Project is to enhance the physical environment in the City's Old Town aimed at creating a lively destination to support the current economic base, create a town center for Placentia, and better connect to adjacent neighborhoods and surrounding cities.

FINDINGS:

The City of Placentia determined that a *Negative Declaration* is the appropriate California Environmental Quality Act (CEQA) document for the proposed project. The following findings may be made based on the analysis included in the attached Initial Study:

- The proposed project *will not* have the potential to degrade the quality of the environment.
- The proposed project *will not* have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable, when considering planned or proposed development in the city.
- The proposed project *will not* have environmental effects that will adversely affect humans, either directly or indirectly.

Andrew A. Domides for JOSEPH LAMMERT 5/22/17

Signature
City of Placentia Development Services Department

Date

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SECTION 1 INTRODUCTION

1.1 PURPOSE OF INITIAL STUDY

The proposed Old Town Placentia Revitalization Project involves the adoption and subsequent implementation of the Old Town Placentia Revitalization Plan document, the Old Town Placentia Revitalization Plan Development Standards (i.e. the zoning text amendment), and the Streetscape Master Plan. The Revitalization Project will also involve an amendment to the General Plan land use map to reflect the land uses contemplated within the Revitalization Plan document. The Old Town Placentia Revitalization Project (referred to herein-after as the "Revitalization Project") applies to an L-shaped area that is located in the southwestern portion of the City of Placentia. The geographic area governed by the Old Town Revitalization Project (referred to herein after as the "Planning Area" applies to the same L-shaped area. The Planning Area is centered along Bradford Avenue south of Chapman Avenue and Santa Fe Avenue from Murray Street on the west to Alta Street on the east. The portion of the Planning Area centered on Bradford Avenue extends east to Alta Street and west to Main Street, south of Chapman Avenue. The portion of the Planning Area centered on Santa Fe Avenue extends from Murray Street on the west, Aguirre Lane (and extension of Aguirre Lane) on the north, the Burlington Northern-Santa Fe (BNSF) railroad tracks to the south, and Alta Street to the east. The Planning Area is just over 32 acres in size and is located north of the Burlington Northern-Santa Fe (BNSF) railroad tracks and south of Chapman Avenue in the City of Placentia. The Old Town Placentia Planning area is bounded by Chapman Avenue in the north, the Burlington Northern and Santa Fe Railway train tracks in the south, Alta Street in the east, and Murray Street in the west.

The Revitalization Project is anticipated to facilitate development through a zone change with new specific development standards for each new planning sub-area of the Old Town project area, especially residential and retail in a mixed-use setting, proximate to the newly approved Metrolink Station and parking structure in the Old Town area and the recently approved Transit Oriented Development (TOD) south of the railroad along Crowther Avenue. The purpose of the Revitalization Project is to enhance the physical environment in the City's Old Town aimed at creating a lively destination to support the current economic base, create a town center for Placentia, and better connect to adjacent neighborhoods and surrounding cities.[1] Finally, the residential development within the proposed High Density Residential zone will be "by right," pursuant to the State of California housing law. The Revitalization Project's implementation, through changes to the Zoning Code and General Plan, is critical in aiding in the realization of local and regional goals related to sustainable and infill development.

The adoption and subsequent implementation of the Revitalization Project is considered to be a project under the California Environmental Quality Act (CEQA).[2] The City of Placentia is the designated *Lead Agency* for the proposed project and the City will be responsible for the project's environmental review. Section 21067 of CEQA defines a Lead Agency as the public agency that has the principal responsibility for

[1] Placentia, City of. *Old Town Placentia Revitalization Plan*. May 2017.

[2] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998 (CEQA Guidelines). § 15060 (b).

carrying out or approving a project that may have a significant effect on the environment.[3] The project Applicant is the City of Placentia, Development Services Department, Planning Division, 401 East Chapman Avenue, Placentia, California 92870. As part of the proposed project's environmental review, the City of Placentia authorized the preparation of this Initial Study.[4] The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental implications of a specific action or project. The purpose of this Initial Study is to ascertain whether the proposed project will have the potential for significant adverse impacts on the environment.

Pursuant to the CEQA Guidelines, additional purposes of this Initial Study include the following:

- To provide the City of Placentia with information to use as the basis for deciding whether to prepare an environmental impact report (EIR), mitigated negative declaration, or negative declaration for a project;

- To facilitate the project's environmental assessment early in the design and development of the proposed project;

- To eliminate unnecessary EIRs; and,

- To determine the nature and extent of any impacts associated the proposed project.

Although this Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation, fully represent the independent judgment and position of the City of Placentia, in its capacity as the Lead Agency. The City also determined, as part of this Initial Study's preparation, that a Negative Declaration is the appropriate environmental document for the project's environmental review pursuant to CEQA. The implementation of the Revitalization Project will require a General Plan Amendment and a Zoning Ordinance Amendment. The revisions to both the City of Placentia General Plan and the City of Placentia Zoning Ordinance will permit certain types of land use development within the geographic area governed by the Revitalization Project. The sustainable and infill nature of this new development permitted under the Revitalization Project will help reduce vehicle miles traveled (VMTs), improve air quality, provide new housing opportunities consistent with regional planning initiatives, and promote sustainable development in Placentia's original downtown business district. Finally, the Revitalization Project includes policies and measures that will mitigate project-specific impacts when the new development occurs.

This Initial Study and the *Notice of Intent to Adopt a Negative Declaration* will be forwarded to responsible agencies, trustee agencies, and the public for review and comment. A 20-day public review period will be provided to allow these entities and other interested parties to comment on the proposed

[3] California, State of. *California Public Resources Code. Division 13, Chapter 2.5. Definitions.* As Amended 2001. § 21067.

[4] Ibid.(CEQA Guidelines) § 15050.

project and the findings of this Initial Study.[5] Questions and/or comments should be submitted to the following contact person:

Joseph M. Lambert, Director of Development Services
City of Placentia, Development Services Department, Planning Division
401 East Chapman Avenue
Placentia, California 92870
714-993-8124

1.2 INITIAL STUDY'S ORGANIZATION

The following annotated outline summarizes the contents of this Initial Study:

- S*ection 1 Introduction* provides the procedural context surrounding this Initial Study's preparation and insight into its composition.

- *Section 2 Project Description* provides an overview of the existing environment as it relates to the Planning Area and describes the proposed project's physical and operational characteristics.

- *Section 3 Environmental Analysis* includes an analysis of potential impacts associated with the proposed project's construction and the subsequent occupancy.

- *Section 4 Findings* indicates the conclusions of the environmental analysis and the mandatory findings of significance.

- *Section 5 References* identifies the sources used in the preparation of this Initial Study.

1.3 INITIAL STUDY CHECKLIST

The environmental analysis provided in Section 3 of this Initial Study indicates that the adoption and subsequent implementation of the Old Town Placentia Revitalization Project through Zone and General Plan changes will not result in any significant adverse unmitigable impacts on the environment. For this reason, the City of Placentia determined that a Negative Declaration is the appropriate CEQA document for the proposed project. The findings of this Initial Study are summarized in Table 1-1 provided below and on the following pages.

[5] California, State of. *California Public Resources Code. Division 13, Chapter 2.5. Definitions.* as Amended 2000. *Chapter 2.6, Section 2109(b).* 2000.

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Section 3.1 Aesthetics. *Would the project:*				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X
Section 3.2 Agriculture and Forestry Resources. *Would the project:*				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220[g]), timberland (as defined in Public Resources Code §4526), or timberland zoned production (as defined in Government Code §51104[g])?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
Section 3.3 Air Quality. *Would the project:*				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) 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 releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?				**X**
Section 3.4 Biological Resources. *Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service?				**X**
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				**X**
c) Have a substantial adverse effect on federally protected 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?				**X**
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				**X**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**
Section 3.5 Cultural Resources. *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the CEQA Guidelines?			**X**	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines?			**X**	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	
d) Disturb any human remains, including those interred outside of dedicated cemeteries?			**X**	
Section 3.6 Geology and Soils. *Would the project:*				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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), strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?			**X**	

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2012), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
Section 3.7 Greenhouse Gas Emissions. *Would the project*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases?				X
Section 3.8 Hazards and Hazardous Materials. *Would the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) 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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				**X**
Section 3.9 Hydrology and Water Quality. *Would the project:*				
a) Violate any water quality standards or waste discharge requirements?				**X**
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (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)?				**X**
c) 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 substantial erosion or siltation on- or off-site?			**X**	
d) 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?			**X**	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			**X**	
f) Otherwise substantially degrade water quality?			**X**	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				**X**
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				**X**
i) 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?				**X**
j) Result in inundation by seiche, tsunami, or mudflow?				**X**
Section 3.10 Land Use and Planning. *Would the project:*				
a) Physically divide an established community, or otherwise result in an incompatible land use?				**X**
b) Conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				**X**

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
Section 3.11 Mineral Resources. *Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
Section 3.12 Noise. *Would the project:*				
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Result in the exposure of persons to or the generation of excessive groundborne noise levels?			X	
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located with an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
Section 3.13 Population and Housing. *Would the project:*				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
Section 3.14 Public Services. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*				
a) Fire protection services?			X	

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Police protection services?			X	
c) School services?			X	
d) Other governmental services?			X	
Section 3.15 Recreation. *Would the project:*				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	
Section 3.16 Transportation and Circulation. *Would the project:*				
a) Conflict with an applicable plan, ordinance or policy 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?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X
Section 3.17 Tribal Cultural Resources. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?			X	

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	
Section 3.18 Utilities. *Would the project:*				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			**X**	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?			**X**	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				**X**
Section 3.19 Mandatory Findings of Significance. *The approval and subsequent implementation of the proposed project:*				
a) Will not have the potential to degrade the quality of the environment, with the implementation of the recommended standard conditions and mitigation measures included herein.				**X**
b) Will not have the potential to achieve short-term goals to the disadvantage of long-term environmental goals, with the implementation of the recommended standard conditions and mitigation measures referenced herein.				**X**
c) Will not have impacts that are individually limited, but cumulatively considerable, when considering planned or proposed development in the immediate vicinity, with the implementation of the recommended standard conditions and mitigation measures contained herein.				**X**

Table 1-1
Summary (Initial Study Checklist)

Environmental Issues Area Examined	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Will not have environmental effects that will adversely affect humans, either directly or indirectly, with the implementation of the recommended standard conditions and mitigation measures contained herein.				**X**

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SECTION 2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The proposed Old Town Placentia Revitalization Project involves the adoption and subsequent implementation of the Old Town Placentia Revitalization Plan document, the Old Town Placentia Revitalization Plan Development Standards (i.e. the zoning text amendment), and the Streetscape Master Plan. The Revitalization Project will also involve an amendment to the General Plan land use map to reflect the land uses contemplated within the Revitalization Plan document. The Old Town Placentia Revitalization Project applies to an L-shaped area that is located in the southwestern portion of the City of Placentia. The Planning Area is focused on Bradford Avenue and Santa Fe Avenue. Within the Planning Area are various sub-areas that include planned commercial and high-density residential uses, which are depicted in Exhibit 2-5. An aerial photograph of the Planning Area is provided in Exhibit 2-4. The Planning Area is just over 32 acres in size and is located north of the Burlington Northern-Santa Fe (BNSF) railroad tracks and south of Chapman Avenue. The Revitalization Project is anticipated to facilitate development, especially residential and retail, in a mixed-use setting, proximate to the newly approved Metrolink Station and parking structure in the Old Town area and the proposed Transit Oriented Development (TOD) south of the railroad along Crowther Avenue. The purpose of the Revitalization Project is to enhance the physical environment in the City's Old Town aimed at creating a lively destination to support the current economic base, create a town center for Placentia, and better connect to adjacent neighborhoods and surrounding cities.[6] Finally, the residential development within the proposed High Density Residential zone will be "by right," pursuant to the State of California housing law. The Revitalization Project's implementation, through changes to the Zoning Code and General Plan, is critical in aiding in the realization of local and regional goals related to sustainable and infill development.

2.2 PROJECT LOCATION

The Planning Area for the Old Town Placentia Revitalization Project is located within the corporate boundaries of the City of Placentia. The City of Placentia is located approximately 7.5 miles north of downtown Santa Ana and 23 miles southeast of downtown Los Angeles. The City is bounded by the cities of Brea on the north, Anaheim on the south, Yorba Linda on the east, and Fullerton on the west.[7] The location of Placentia in a regional context is shown in Exhibit 2-1. A citywide map is provided in Exhibit 2-2. The Planning Area is illustrated in Exhibit 2-3.

The Old Town Placentia Revitalization Project applies to an L-shaped Planning Area that is located in the southwestern portion of the City of Placentia. The Planning Area is centered along Bradford Avenue south of Chapman Avenue and Santa Fe Avenue from Murray Street on the west to Alta Street on the east. The portion of the Planning Area centered on Bradford Avenue extends east to Alta Street and west to Main Street, south of Chapman Avenue. The portion of the Planning Area centered on Santa Fe Avenue extends from Murray Street on the west, Aguirre Lane (and extension of Aguirre Lane) on the north, the Burlington Northern-Santa Fe (BNSF) railroad tracks to the south, and Alta Street to the east. The Planning Area is

[6] Placentia, City of. *Old Town Placentia Revitalization Plan*. May 2017.

[7] Google Earth. Website Accessed April 27, 2017.

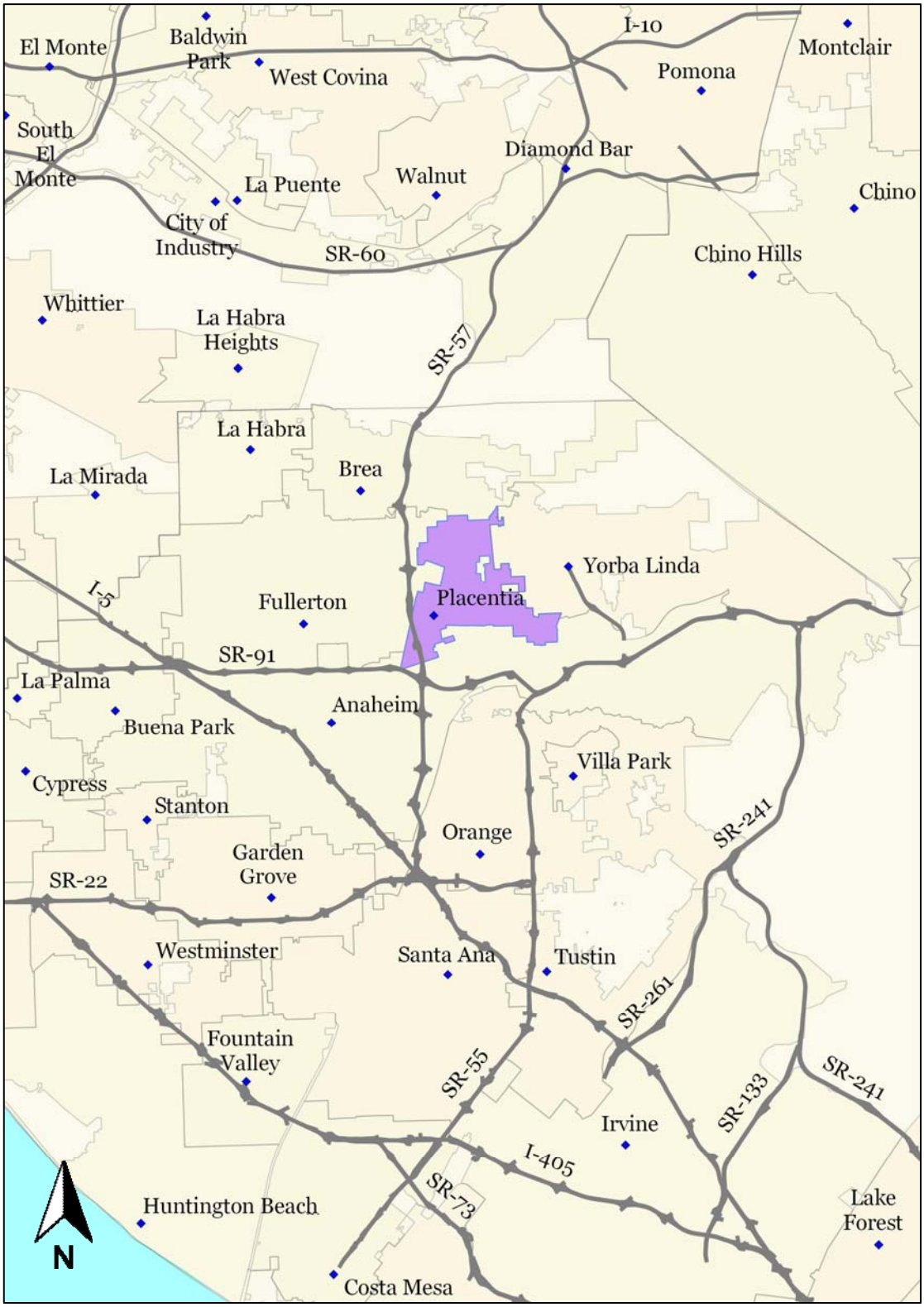

EXHIBIT 2-1
REGIONAL LOCATION
Source: Quantum GIS

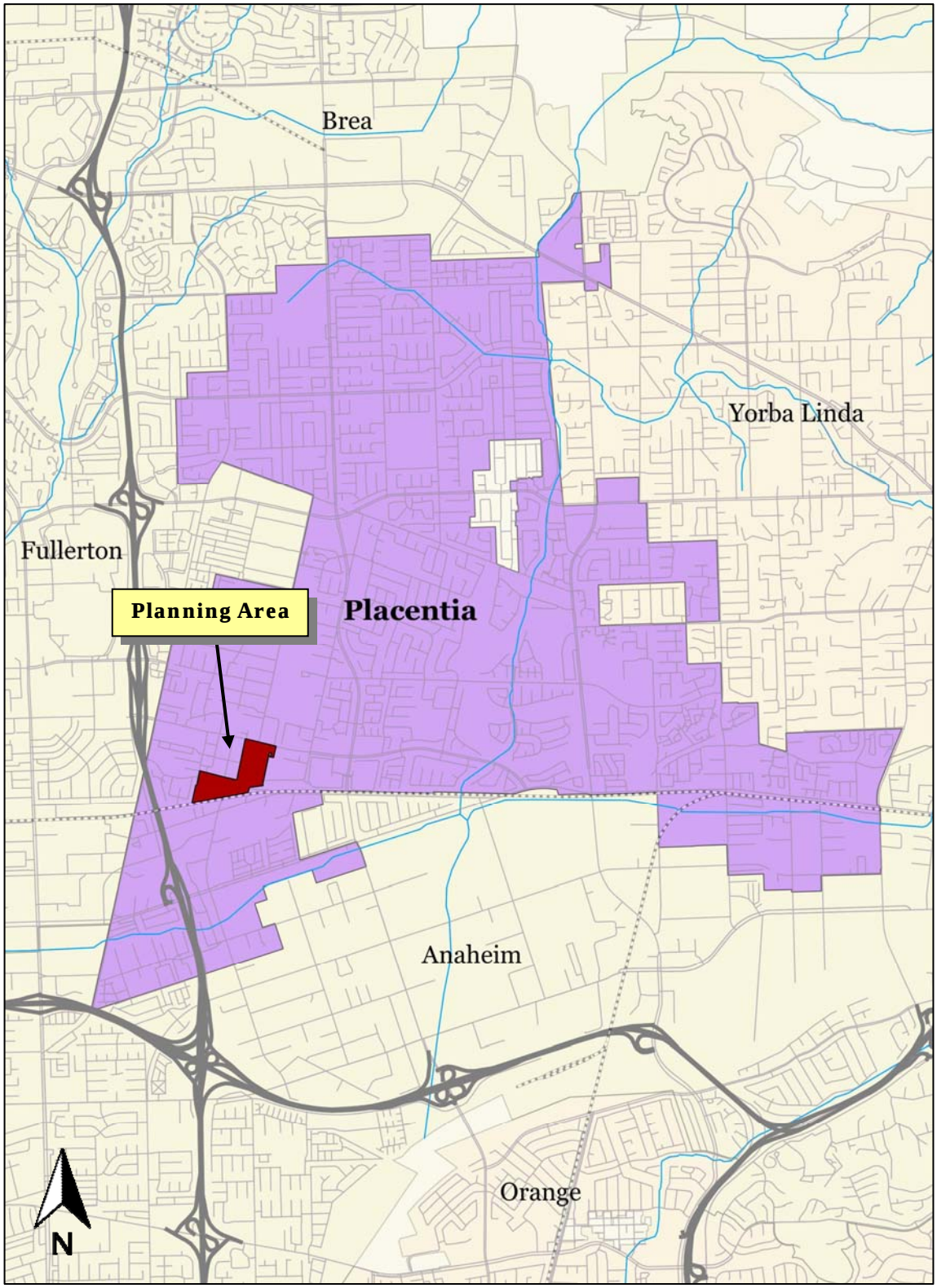

EXHIBIT 2-2
CITYWIDE MAP
Source: Quantum GIS

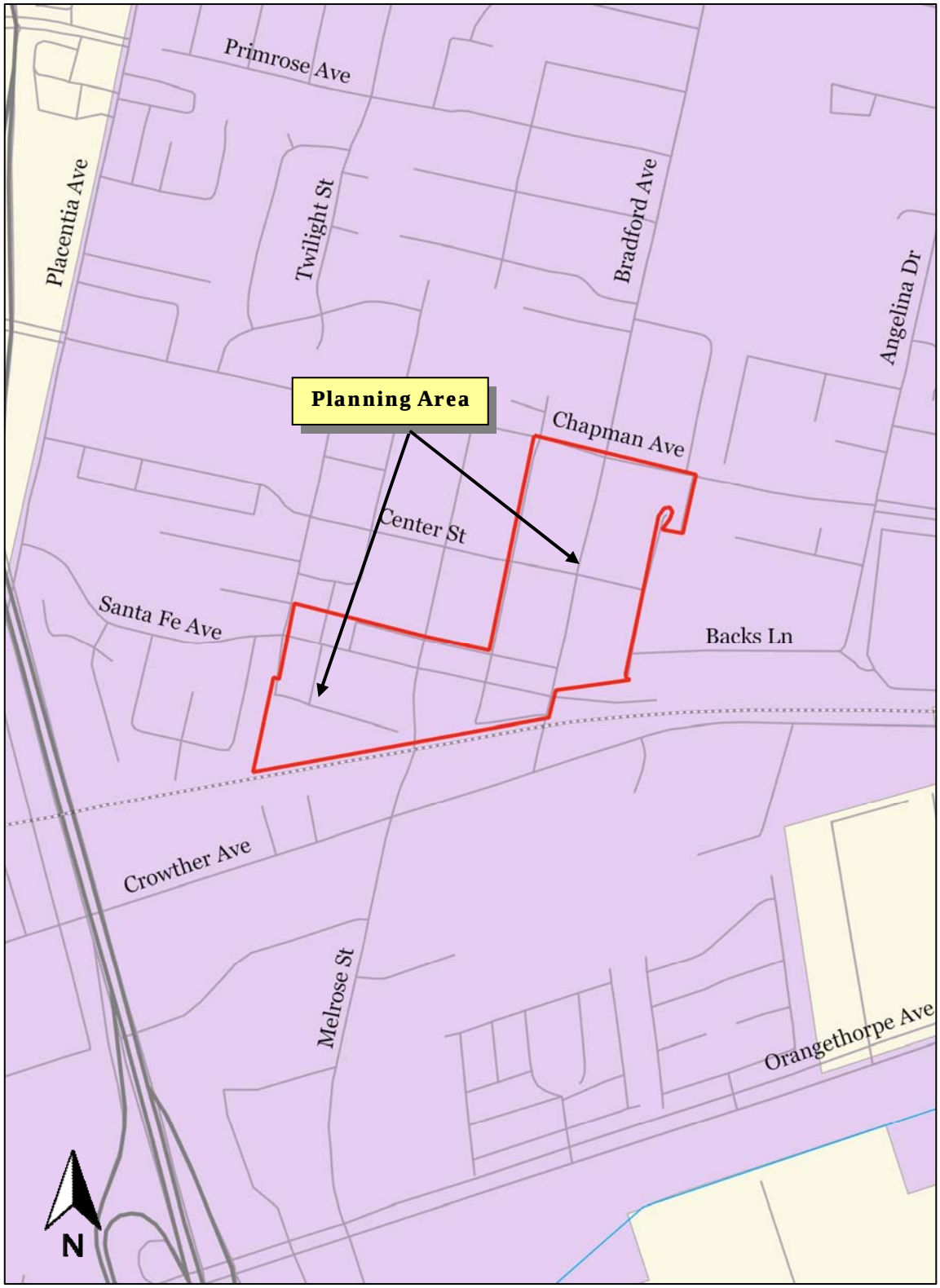

EXHIBIT 2-3
PLANNING AREA
Source: Quantum GIS

just over 32 acres in size and is located north of the Burlington Northern-Santa Fe (BNSF) railroad tracks and south of Chapman Avenue. The Old Town Placentia Planning area is bounded by Chapman Avenue in the north, the Burlington Northern and Santa Fe Railway train tracks in the south, Alta Street in the east, and Murray Street in the west.

2.3 ENVIRONMENTAL SETTING

Old Town Placentia is the City's original central business district founded in 1910 near the original Placentia train depot and the citrus packing houses. The Planning Area primarily consists of commercial uses along Santa Fe Avenue and Bradford Avenue, with residential uses primarily along the surrounding streets. The Planning Area is located north of the Burlington Northern-Santa Fe (BNSF) railroad tracks and proximate to the newly approved Metrolink Station and parking structure in the Old Town area and the recently approved Transit Oriented Development (TOD) south of the railroad along Crowther Avenue. The Metrolink Station will have two platforms, one north of the railroad and one south of the railroad. A pedestrian over-crossing bridge and a grade-separated road at Melrose Street have been completed in anticipation of the new transit station.[8] Together with the new TOD zoning to the south, this proposed rezoning of the Old Town Placentia area represents the City's planning efforts to accommodate and capitalize on the new Metrolink Station.

The Planning Area consists of over 140 parcels made up of a diverse mix of commercial land uses, surrounded by residential neighborhoods to the west, east, and north. Many parcels are less than 5,000 square feet in size and this contributes to the small scale of the Old Town. Notable uses within the Planning Area and in the surrounding area include four community churches/church structures, the City's senior center, a fire station, and two parks. The Planning Area does not include any schools, though Kraemer Middle School and Valencia High School are located north of Chapman Avenue. California State University Fullerton is located approximately two miles to the west, in the City of Fullerton. The Planning Area is principally zoned "SF-C" Santa Fe Commercial District and there are other zones in the planning area: "C-1," "C-2," and "R-2" zones.[9] An aerial photograph of the Planning Area is provided in Exhibit 2-4. The planned zoning designations for the Planning Area are shown in Exhibit 2-5.

2.4 PROJECT DESCRIPTION

BACKGROUND FOR PLANNING

The Old Town Placentia area suffered from disinvestment and economic decline with the widespread growth of Orange County's suburbanization from the 1960's to the 1990's. Nevertheless, existing property owners, residents, and businesses have kept the area active with a mix of small businesses, restaurants, churches, and public venues. This activity has helped this area retain its unique small scale environment which, with the new Metrolink Station, has the potential to become a vibrant commercial area. Market data indicates that population groups of all types are looking for small scale, walkable urban centers

[8] Placentia, City of. *Old Town Placentia Revitalization Plan*. May 2017.

[9] Ibid.

EXHIBIT 2-4
AERIAL PHOTOGRAPH OF THE PLANNING AREA
SOURCE: GOOGLE EARTH

located around transit to live, work, and play. This is occurring in Orange County with new, more compact, and transit-oriented developments and historic reuse districts emerging in Anaheim, Orange, Fullerton, and Santa Ana. Coupled with the proposed Transit Oriented Development (TOD), including a new Metrolink transit station south of the railroad along Crowther Avenue, there is a unique opportunity for Old Town to see revitalization. The goals and objectives of the Old Town Revitalization Plan are expected to be implemented under a partnership between City Elected Officials, City Departments, regional agencies, local businesses, stakeholders, residents, and community organizations. The rezoning of the area and the streetscape plan are expected to be adopted by Summer of 2017 and will assist in attracting development to the area in the shorter term.

FORMAT AND PURPOSE OF THE REVITALIZATION PLAN, DEVELOPMENT STANDARDS, AND STREETSCAPE MASTER PLAN

The City's revitalization efforts for the Old Town area center on three principal documents: the Old Town Placentia Revitalization Plan document, the Streetscape Master Plan, and the Zone Change, which sets out new and specific Development Standards for the Planning Area. The Old Town Revitalization Plan document is organized to provide a framework for private and public realm improvements in the Planning Area.[10] The Plan is organized as follows:

- *Chapter 1: Introduction* explains the Old Town Placentia Revitalization Plan's background and purpose, identifies the Planning Area, describes citywide planning efforts, describes community outreach efforts, and outlines the organization of the Revitalization Plan document. This chapter also sets forth the administration of the Revitalization Plan.

- *Chapter 2: Vision* describes the vision for revitalization of the Planning Area. This chapter also outlines the goals and policies that establish the framework for the recommendations contained in the Revitalization Plan document.

- *Chapter 3: Mobility* details the circulation improvements for the Planning Area, including automobile, transit, pedestrian, and bicycle modes. This chapter also displays images of street cross-sections and streetscape plans for the Old Town Planning Area. Mobility recommendations within this chapter support the "Complete Streets" concept as well as other policy and design approaches, such as a circulation plan for the Planning Area.

- *Chapter 4: Infrastructure* identifies existing infrastructure and any necessary improvements to the water, sewer, storm water systems, and utility lines. This chapter also provides recommendations relevant to utilities.

- *Chapter 5: Streetscapes* describes the pedestrian realm of the Old Town Planning Area and the current lack of streetscapes. This chapter also details various recommended streetscape element improvements.

[10] Placentia, City of. *Old Town Placentia Revitalization Plan*. May 2017.

- *Chapter 6: Parking* describes the current parking conditions and the recommended parking measures and parking programs.

- *Chapter 7: Land Use* sets forth the zoning, permitted uses, and development and design standards for the Revitalization area. This chapter also details the design guidelines that will shape the character of future development in the Revitalization Project area.

- *Chapter 8: Historic Resources* describes the historic context of the Revitalization Project and identifies the existing historical resources within the Planning Area. This chapter also outlines recommendations for historic preservation.

- *Chapter 9: Business Support* outlines recommendations that will encourage small business growth and active business participation for the revitalization of the Planning Area.

- *Chapter 10: Community Events & Programming* defines the purpose of hosting community events and programming, and lists recommendations to facilitate the hosting of community events and programming.

- *Chapter 11: Maintenance* outlines recommendations for on-going maintenance of the Old Town Planning Area.

- *Chapter 12: Implementation* defines the phasing and intergovernmental coordination associated with the implementation of the Revitalization Project. This chapter also provides a table that lists the various phases of implementation, the timing of the phases, and the responsible agency for each phase.

- *Chapter 13: Sources of Funding* describes the various potential sources of funding available for the Old Town Placentia Revitalization Project.

The purpose of the Old Town Placentia Revitalization Plan document is to provide a framework and guidelines in order to enhance the physical environment in the City's Old Town aimed at creating a lively destination to support and expand the current economic base, create a town center for Placentia, and better connect to adjacent neighborhoods and surrounding cities.[11] The Development Standards document (i.e. the zoning amendment) is intended to provide specific development standards for all future development within the Old Town Placentia Planning Area. Specific development standards may include architectural design, building height, and building setback, among many other specifications for development within the different sub-areas of the Planning Area. Finally, the purpose of the Streetscape Master Plan is to identify conceptual designs for the roadway network within the Planning Area.

OLD TOWN PLACENTIA REVITALIZATION PLAN POLICY FRAMEWORK

The Old Town Placentia Revitalization Plan document includes a wide range of goals and policies that will establish the framework for the plan. The following table (Table 2-1) outlines the goals and policies

[11] Placentia, City of. *Old Town Placentia Revitalization Plan*. May 2017.

included in the Revitalization Plan document which will serve to mitigate the potential impacts of new development within the Planning Area.

Table 2-1
Goals and Policies of the Old Town Placentia Revitalization Plan

Goals	Policies
Goal 1: Make Old Town Placentia a Unique Destination.	●A. Celebrate the City's heritage.
	●B. Make connections to the past.
	●C. Create a walkable village atmosphere.
	●D. Build public gathering spots.
	●E. Enhance the City's and Old Town's identity.
	●F. Highlight historic features.
	●G. Improve public and private spaces.
	●H. Create a diversified commercial base.
	●I. Create a shopping destination.
Goal 2: Make Old Town Placentia a Pedestrian, People Priority Zone.	●A. Encourage and allow compact development.
	●B. Encourage and allow outdoor dining.
	●C. Provide for small passive recreation spots.
	●D. Support inclusivity across all walks of life.
	●E. Enhance community facilities and services.
	●F. Build lively streetscapes.
	●G. Create a small-scale village environment.
	●H. Get people to stay in Old Town longer.
	●I. Limit vehicular trips.
	●J. Create a safe, inviting, pleasant, attractive, and appealing sense of place.
	●K. Tuck away parking where provided.
	●L. Avoid conflicts with motor vehicles.
	●M. Provide opportunities to create intimate walkways.
	●N. Make the Old town walk-friendly for all ages and abilities.
Goal 3: Promote Multi Modal and Sustainable Transportation.	●A. Connect surrounding suburban and commercial thoroughfares.
	●B. Encourage use and increased ridership of the Metrolink System.

	●C. Move away from the auto-orientation in the layout and land uses.
	●D. Provide hubs for various transportation modes.
Goal 4: Support Businesses and Provide for Development Opportunities.	●A. Enhance safety and security.
	●B. Develop incentive programs.
	●C. Provide business start-up opportunities.
	●D. Promote the Old Town through media and outreach.
	●E. Provide for infill development, reuse, and preservation.
	●F. Develop a promotional campaign to encourage visits to Old Town Placentia.

Source: Old Town Placentia Revitalization Plan.

PHYSICAL CHANGES RESULTING FROM THE IMPLEMENTATION OF THE REVITALIZATION PROJECT

The Revitalization Project is anticipated to facilitate development, especially retail and residential in a mixed-use setting. The major objectives of the Revitalization Project are to identify land use options that include providing new mixed-uses and increasing housing opportunities and neighborhood-serving retail uses. The Old Town Placentia Revitalization Project will encourage transit oriented development, promote active transportation, reduce vehicles miles traveled, improve access to regional open space resources, and create community benefits. The area's assets include a walkable layout with its short blocks across a linear street pattern.[12]

The adoption of the proposed Revitalization Project, by itself, will not lead to any new development. The adoption of the Revitalization Project will permit new development within the Planning Area governed by the rezoning with new development standards. The potential new development permitted under the Revitalization Project may include residential and retail land uses in a mixed-use setting, proximate to the newly approved Metrolink Station and parking structure in the Old Town area and the proposed Transit Oriented Development (TOD) south of the railroad along Crowther Avenue. The major objectives of the Revitalization Project are to identify land use options that include providing new mixed-uses, increasing housing opportunities, and increasing neighborhood-serving retail uses.[13] The Revitalization Project's implementation is critical in aiding in the realization of local and regional goals related to sustainable and infill development.

The project team, including City Staff and the consultants (traffic, planning, and environmental), identified the maximum amount of new development that could be realized as part of the Revitalization Project's implementation. No specific new projects are known at this time, though the development projections are

[12] Placentia, City of. *Old Town Placentia Revitalization Plan*. May 2017.

[13] Ibid.

critical in evaluating the potential environmental impacts including, but not limited to, land use changes, traffic, air quality, population, and public services. The potential new development is outlined below:[14]

- 525 residential units;
- 85,000 square feet of commercial (non-retail) uses;
- 40,000 square feet of retail use; and,
- A 50-room hotel.

Based on discussions with the City, the proposed residential uses will be a combination of apartments and townhomes. Single family homes will not be permitted in the area. Currently, the Old Town area contains a mix of single-family residential use and various commercial uses. The majority of properties in the area are developed. Therefore, the majority of the proposed land uses are expected to be infill development. Within the Planning Area are various sub-areas that include planned commercial and high-density residential uses, which are depicted in Exhibit 2-5.

The vision for the land use and private and public land is to keep development compact by providing opportunities for infill that preserves the small-scale character of the historic core. The goal for commercial diversity includes a healthy mix of retail, restaurants, combined with outdoor gathering spaces such as public plazas. The Revitalization Project encourages rehabilitation, additions, and alterations to existing properties, while providing opportunities for new infill development. Compact development and shared parking is encouraged in all of the sub-areas; the emphasis is on the pedestrian, not the vehicle. The Revitalization Plan document provides increased height over what is currently allowed by existing zoning. Office and service uses would be permitted on the second floor of the Planning Area buildings, providing an important element to create a more full service area. Residential development could occur in areas outside of the historic core, or "Main Street" areas.

The Plan prioritizes the "commercial block" style of architecture in its historic and contemporary forms. The style can be adapted for the two-, three-, and larger four-story buildings and includes facades placed at, or close to, the right-of-way line. This style is also a form of building designed for occupancy by retail, service, or office use on the ground floor and secondary commercial or residential uses on the upper floors. New infill development, rehabilitation, additions, and building alterations need to consider the context of the Old Town block pattern and setting as well as the existing properties of historic significance or merit.

As previously mentioned, the Planning Area includes the current "SF-C" Santa Fe Commercial District zone and some surrounding parcels in the "C-1", "C-2", and "R-2" zones. The Plan proposes the area to be rezoned as "Old Town" and further divides the Old Town into five planning sub-areas to guide new development, infill, preservation, and reintegration of land uses. These sub-areas include Main Street (two- and three-story) Village, Mixed Use, High Density Residential, and Public Facilities.

[14] DKS Associates. *Old Town Revitalization Project Traffic Impact Analysis, Prepared for the City of Placentia*. May 4, 2017.

Main Street (Two and Three Story Height Sub-area)

This sub-area is the core of the Old Town area and is found along both Bradford Avenue and Santa Fe Avenue from Center Street to Melrose Street and is characterized by small scale buildings with frontages that blend with the streetscapes. The focus is on historic rehabilitation and infill development to create a dense urban segment. Uses would be limited to commercial type uses that occupy smaller spaces and attract a large number of visitors. The Main Street sub-area encourages the preservation and enhancement of its unique historic character, with commercial block building forms and shopfront architecture. Allowable land uses emphasize ground floor retail, restaurant, and related uses, with opportunities for offices and other services above. No residential uses are permitted in the Main Street sub-area. The restoration and renovation of existing façades is encouraged.

Village (Three Story Height Sub-area)

This sub-area is found in two separate places: one at the north end of Bradford Avenue from Center Street to Chapman Avenue (excluding the southeast corner) and along both sides of Santa Fe Avenue from Melrose Street on the east to Murray Street on the west. The intent is to create new and infill development opportunities while preserving existing historically significant properties such as the old City Hall, Library, and Telephone Exchange building. The Village sub-area provides an opportunity for a new walkable retail and office center as an extension of the Main Street sub-area. The Village sub-area would provide for the same building form and setbacks as the Main Street sub-area but would allow three stories, with residential above. Retail and restaurants would be located on the ground floor spaces, with offices and residential permitted above. Building types are intended primarily to be a commercial block with well-defined frontages in the shopfront style similar to the Main Street zone.

Mixed-Use (Four Story Height Sub-area)

This sub-area is found at the southeastern corner of Chapman and Bradford Avenue and would be permitted four stories in height. The Mixed Use sub-area provides for a mix of concentrated urban housing types with some live-work opportunities with commercial on the ground floor. Denser, high quality, landmark development is encouraged here as this is envisioned as the gateway into the Old Town area. This sub-area could provide for urban residential building types including townhouses and courtyard housing, and live-work buildings.

High Density Residential (Four Story Height Sub-area)

At the most southwestern corner of the Plan area is the high density residential sub-area, with a four-story height limit. This area can provide opportunity for new housing development; with its residents patronizing the Old Town businesses and using the new Metrolink station for certain transport needs.

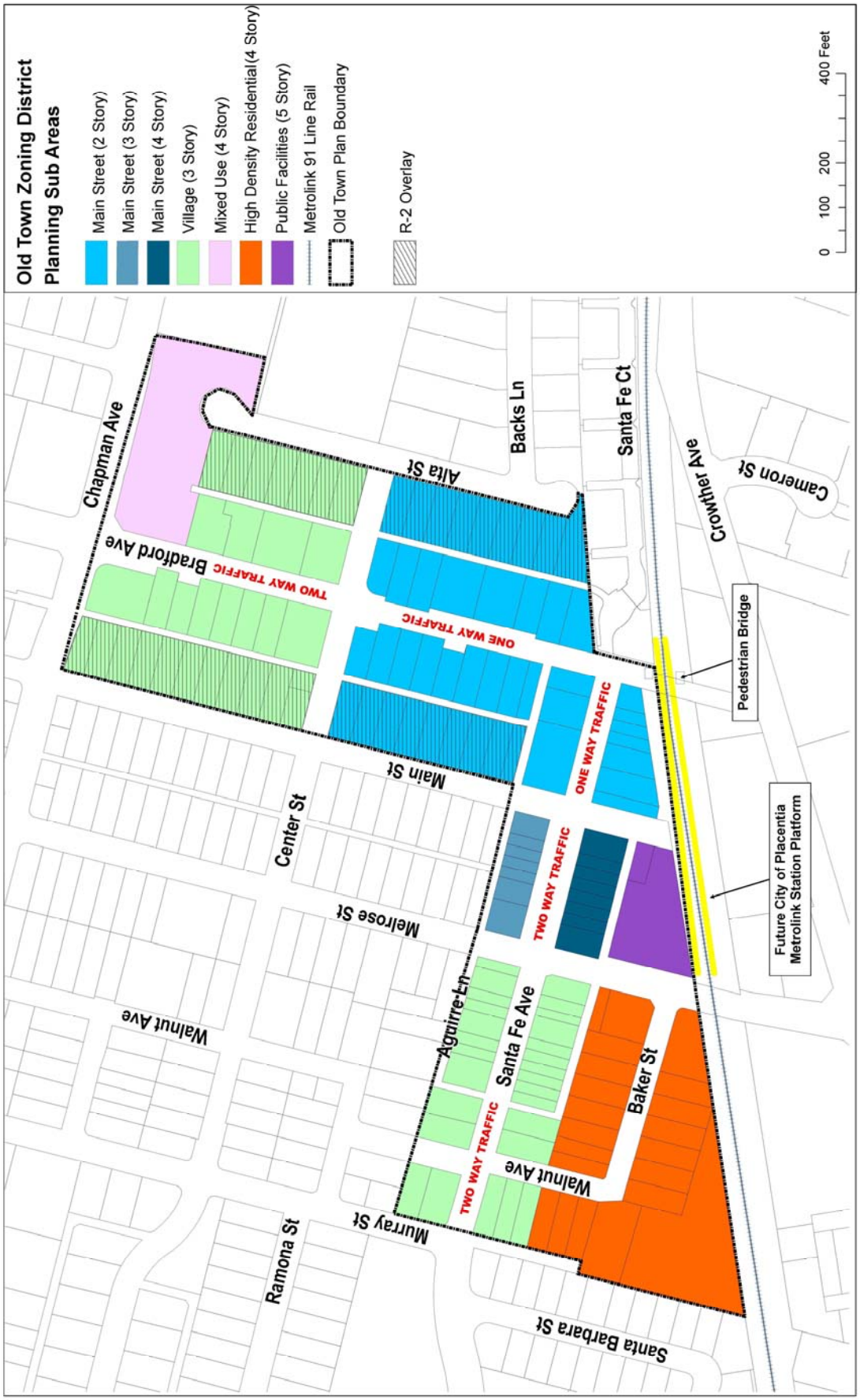

EXHIBIT 2-5
PROPOSED OLD TOWN ZONING DISTRICT PLANNING SUB-AREAS
Source: City of Placentia

Public Facilities (Five Story Height Sub-area)

This sub-area, bounded by Melrose Street on the west, Main Street on the east, the railroad on the south and the alley on the north, is the location for the upcoming parking structure. This structure will be five stories in height and will provide 253 parking spaces and will provide parking for Old Town visitors as well as those using the Metrolink station.

R-2 Overlay Zone

This overlay zone will permit the existing uses within the area and new residential uses, pursuant to Chapter 23.15 of the City's Zoning Code. Within the R-2 Overlay zone, no new retail or commercial uses will be permitted on the ground floor.

2.5 DISCRETIONARY ACTIONS

A discretionary action is a decision taken by a government agency (for this project, the government agency is the City of Placentia) that calls for an exercise of judgment in deciding whether to approve a project. As part of the proposed project's implementation, the City will consider the following approvals:

- General Plan Amendment (GPA 2017-02), to amend the General Plan map from the existing land use designations to a mixed-use land use designation to allow the following: local and neighborhood-supporting mixed-use areas designed to be contextually appropriate in and compatible with the identified neighborhood or historic area. On a single site, a combination of non-residential and residential uses can occur in the same structure or on the same site, where the residential component is located either above (vertical mixed-use) or behind or next to (horizontal mixed-use) the non-residential component. Commercial retail is encouraged to be the primary use on the ground floor. Professional office and housing uses are also encouraged, particularly as adaptive reuse opportunities within existing structures. Transit orientation, walkability and pedestrian access are key considerations..

- Zone Change (ZC 2017-02), to create new development standards for the new Old Town Zone, changing the zoning from R-2, C-1, C-2, and SF-C to Old Town Zone District;

- The adoption of the Old Town Placentia Revitalization Plan document;

- The adoption of a Streetscape Master Plan; and,

- The adoption of the Negative Declaration (ND).

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Rich Heritage, Bright Future

SECTION 3 ENVIRONMENTAL ANALYSIS

This section of the Initial Study prepared for the proposed project analyzes the potential environmental impacts that may result from the proposed project's implementation. The issue areas evaluated in this Initial Study include the following:

- Aesthetics (Section 3.1);
- Agriculture &Forestry Resources (Section 3.2);
- Air Quality (Section 3.3);
- Biological Resources (Section 3.4);
- Cultural Resources (Section 3.5);
- Geology & Soils (Section 3.6);
- Greenhouse Gas Emissions; (Section 3.7);
- Hazards & Hazardous Materials (Section 3.8);
- Hydrology & Water Quality (Section 3.9);
- Land Use (Section 3.10);
- Mineral Resources (Section 3.11);
- Noise (Section 3.12);
- Population & Housing (Section 3.13);
- Public Services (Section 3.14);
- Recreation (Section 3.15);
- Transportation & Circulation (Section 3.16);
- Tribal Cultural Resources (Section 3.17);
- Utilities (Section 3.18); and,
- Mandatory Findings (Section 3.19).

The environmental analysis included in this section reflects the Initial Study checklist format used by the City of Placentia in its environmental review process. Under each issue area, an analysis of impacts is provided in the form of questions and answers. The analysis then provides a response to the individual questions. For the evaluation of potential impacts, questions are stated and an answer is provided according to the analysis completed as part of this Initial Study's preparation. To each question, there are four possible responses:

- *No Impact*. The proposed project will not have any measurable environmental impact on the environment.

- *Less Than Significant Impact*. The proposed project may have the potential for affecting the environment, although these impacts will be below levels or thresholds that the City of Placentia or other responsible agencies consider to be significant.

- *Less Than Significant Impact with Mitigation*. The proposed project may have the potential to generate impacts that will have a significant impact on the environment. However, the level of impact may be reduced to levels that are less than significant with the implementation of mitigation measures.

- *Potentially Significant Impact*. The proposed project may result in environmental impacts that are significant.

This Initial Study will assist the City in making a determination as to whether there is a potential for significant adverse impacts on the environment associated with the implementation of the proposed project.

3.1 AESTHETICS

3.1.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse aesthetic impact if it results in any of the following:

- An adverse effect on a scenic vista;
- Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- A substantial degradation of the existing visual character or quality of the site and its surroundings; or,
- A new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project have a substantial adverse effect on a scenic vista? Less than Significant Impact.

The Planning Area is urban in nature and is currently developed with commercial and residential properties. The major physiographic features in the surrounding area include the Coyote Hills, located three miles to the northwest; the Chino Hills, located approximately four miles to the north; the Puente Hills, located approximately seven miles to the northwest; and the San Gabriel Mountains, located 19 miles to the north. The Old Town Placentia Revitalization Project applies to an L-shaped area that is located in the southwestern portion of the City of Placentia. The Planning Area is focused on Bradford Avenue and Santa Fe Avenue. The Old Town Placentia area encompasses retail, service, commercial, and residential uses. A number of buildings within the Planning Area are blighted and in need of improvement. Currently, there is no overall coherent design character or theme within the Old Town Placentia Planning Area.

The adoption and subsequent implementation of the Revitalization Project includes various goals, policies, and design standards that will enhance the visual appearance of the existing land uses and development within the Planning Area. In addition, development standards for the Planning Area will be adopted and will include guidance regarding the architectural design of new development. The following architectural styles are dictated for specific sub-areas:[15]

- *Main Street Sub-area - Main Street Commercial Architecture.* Multi-story facades are typically divided into base, body, and top with the ground floor taller than the shorter upper floor which is finished by a significant parapet. The ground floor has recessed entries and any expansive glass is interrupted by structural columns with transoms to allow light to penetrate deep into the interior.

[15] Placentia, City of. *Old Town Placentia Revitalization Plan Development Standards.* May 2017.

Upper floor windows are smaller with vertical windows directly relating to the ground floor openings.

- *Village, Mixed-Use, and High Density Residential Sub-areas - Mission Revival Architecture*. Prominent features of the style include red clay tile roofs, use of balconies, smooth-stuccoed exterior walls usually painted white, arched openings, colorful tile work, and elaborate landscaping. The buildings frequently have courtyards.
- *High Density Residential Sub-area - Spanish Colonial Architecture*. Typical features include a low-pitched roof with little or no eave overhang, a red-tiled roof, perhaps a prominent rounded arch over a door, window or porch, a stucco wall surface, and usually an asymmetrical façade. The features elaborate molded ornament around doors and windows, polychrome tile at ingresses and wrought iron grilles and balconies.

The Revitalization Project contemplates buildings of up to five stories, or 65 feet, in height for the public Public Facilities sub-area. This sub-area will contain the public parking structure for the Metrolink Station and Old Town area. Mixed-use and high-density residential development will be more common among the Planning Area, with heights between 30 feet (two stories) and 60 feet (four stories). The majority of four-story residential buildings will be located within the Mixed Use and High Density Residential sub-areas, which will be located at the corner of Bradford and Chapman Avenues and on the southernmost portion of the Planning Area along Baker Street and Walnut Avenue. The three and four story buildings will be contiguous with the single- and two- story residential buildings, creating a unified architectural style. This will ensure a compatibility in architectural style between the different development intensities. This placement of high-density residential and mixed use buildings will mitigate aesthetic impacts by placing the majority of higher-rise building in one planned area to prevent the scattering of higher-rise buildings. Furthermore, public art and public plazas are encouraged in every development. Public art or plazas may be required as part of a development agreement for those developments that include 20 or more units or which are over 20,000 square feet. Public art is encouraged to reflect the history of Old Town Placentia and the citrus growing industry. Public art and public plazas will contribute to the aesthetic quality of the Old Town Placentia Planning Area.

The abovementioned architectural guidelines along with landscaping, street furniture, and regulated building heights will mitigate any adverse aesthetic impacts associated with new development within the Planning Area. As a result, less than significant adverse impacts will result from the implementation of the proposed project.

B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? No Impact.

According to the California Department of Transportation (Caltrans), none of the arterial roadways within the Planning Area are designated scenic highways.[16] In addition, the vegetation present within the Planning Area consists of species typically used for landscaping (palm trees, turf, etc.). The Planning Area is currently developed and does not contain any scenic rock outcroppings.[17] Lastly, the Revitalization

[16] Placentia, City of. Old Town Placentia Revitalization Development Standards. May 2017.

[17] Blodgett Baylosis Environmental Planning. *Site survey*. Survey was conducted on April 20, 2017.

Project's implementation will not involve the removal of any buildings listed in the State or National Registrar (refer to Section 3.5). As a result, no impacts will occur.

C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? No Impact.

The Planning Area and the surrounding areas are developed. The main purpose of the Old Town Placentia Revitalization Project is to promote urban design elements that will enhance the appearance of the Planning Area. The adoption and subsequent implementation of the Revitalization Project will improve the Planning Area's image through the implementation of the design measures included in the Revitalization Plan document, the Development Standards, and the Streetscape Master Plan. As a result, no impacts will occur.

D. Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? No Impact.

Potential sources of light and glare that may result from the adoption and subsequent implementation of the Old Town Placentia Revitalization Project include decorative lighting, security lighting, interior lighting, and vehicle headlights. The main purpose of the Revitalization Project is to promote urban design elements that will enhance the appearance of the Planning Area, including ways to control spill-over lighting and light trespass. In addition, the Development Standards list various regulations for sign lighting. These regulations include the following:[18]

A. Sign lighting. Sign lighting shall be designed to minimize light and glare on surrounding rights-of-way and properties.
    i. External light sources shall be directed and shielded so that they do not produce glare off the site, on any object other than the sign.
    ii. Sign lighting shall not blink, flash, flutter, or change light intensity, brightness, or color.
    iii. Colored lights shall not be used at a location or in a manner so as to be confused or construed as traffic control devices.
    iv. Neither the direct nor reflected light from primary light sources shall create hazards for pedestrians or operators of motor vehicles.
    v. For energy conservation, light sources shall be hard-wired fluorescent or compact fluorescent lamps, or other lighting technology that is of equal or greater energy efficiency. Incandescent lamps are prohibited.

Adherence to the development standards outlined in the Revitalization Plan will effectively mitigate light and glare and potential light trespass. As a result, the implementation of the Revitalization Plan will not result in any adverse light and glare impacts.

[18] Placentia, City of. *Old Town Placentia Revitalization Plan Development Standards*. May 2017.

3.1.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant adverse aesthetic impacts. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Old Town Placentia Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.2 AGRICULTURAL & FORESTRY RESOURCES

3.2.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant impact on agriculture and forestry resources if it results in any of the following:

- The conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use;
- A conflict with existing zoning for agricultural use, or a Williamson Act Contract;
- A conflict with existing zoning for, or the rezoning of, forest land, timberland, or timberland zoned production;
- The loss of forest land or the conversion of forest land to non-forest use; or,
- Changes to the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

3.2.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? No Impact.

No agricultural activities are located within the Planning Area and the applicable General Plan and Zoning designations do not include any agricultural land use designation within the area. In addition, the only agriculturally-designated zone within the City (R-A *Residential Agricultural District*) is located within the northernmost portion of the City and will not be affected by the proposed project, which will be located within the southwestern portion of the City. Furthermore, according to the soil maps prepared for Orange County by the United States Department of Agriculture, the Planning Area is underlain with soils of the Myford Sandy Loam Soils Association. Soils of this association are not classified as prime farmland.[19] The adoption and subsequent implementation of the Revitalization Project will not involve the conversion of

[19] United States Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

any agricultural land to urban uses. As a result, the adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not impact any protected farmland soils.

B. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract? No Impact.

No agricultural activities are located within the Planning Area or in the surrounding area. No agricultural land use designations are located within the Planning Area nor do the applicable land designations permit agricultural land uses. Furthermore, the parcels located within the land area governed by the Revitalization Project are developed with urban uses. No farming or other types of agricultural land uses are found in the Planning Area. In addition, there are no properties within the Planning Area that are subject to a Williamson Act Contract. As a result, the adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not result in any impacts on existing Williamson Act contracts.

C. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220[g]), timberland (as defined in Public Resources Code §4526), or timberland zoned production (as defined in Government Code §51104[g])? No Impact.

The City of Placentia and the area governed by the Old Town Placentia Revitalization Project is located in the midst of a larger urban area and no forest lands are located within the City or within this portion of the Orange County. In addition, the City of Placentia General Plan and the Zoning Ordinance do not provide for any forest land preservation. As a result, no impacts on forest land or timber resources will result from the proposed project's implementation.

D. Would the project result in the loss of forest land or the conversion of forest land to a non-forest use? No Impact.

No forest lands are found within the City of Placentia nor do the applicable General Plan land use designations provide for any forest land protection. As a result, the adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not result in any impacts related to the loss or conversion of existing forest lands. Therefore, no impacts will result from the project's implementation.

E. Would the project involve other changes in the existing environment that, due to their location or nature, may result in conversion of farmland to non-agricultural use or forest land to non-forest use? No Impact.

No agricultural activities, farmland uses, or forest uses are located or otherwise permitted in the geographic area governed by the Old Town Placentia Revitalization Project.[20] As a result, the adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not involve the conversion of any existing farmland area to urban uses or the conversion of forest land to non-forest uses. As a result, no impacts will occur.

[20] Blodgett Baylosis Environmental Planning. *Site survey*. Survey was conducted on April 20, 2017.

3.2.4 MITIGATION MEASURES

The analysis of agriculture and forestry resources indicated that no impacts on these resources would occur as part of the proposed Revitalization Project's implementation. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.3 AIR QUALITY

3.3.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may have a significant adverse environmental impact on air quality if it results in any of the following:

- A conflict with or the obstruction of the implementation of the applicable air quality plan;
- A violation of an air quality standard or a substantial contribution to an existing or projected air quality violation;
- A cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard;
- The exposure of sensitive receptors to substantial pollutant concentrations; or,
- The creation of objectionable odors affecting a substantial number of people.

The South Coast Air Quality Management District (SCAQMD) has established quantitative thresholds for criteria pollutants that include the following:

- *Ozone (O_3)* is a nearly colorless gas that irritates the lungs and damages materials and vegetation. O_3 is formed by photochemical reaction. Los Angeles and the surrounding South Coast Air Basin (SCAB) are designated by the Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) as an extreme ozone *non-attainment area*. [21]
- *Carbon Monoxide (CO)* is a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain that is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust. The SCAB is designated as an attainment area for carbon monoxide by the EPA.
- *Nitrogen dioxide (NO_2)* is a yellowish-brown gas that, at high levels, can cause breathing difficulties. NO_2 is formed when nitric oxide (a pollutant from burning processes) combines with oxygen. Although NO_2 concentrations have not exceeded national standards since 1991, NO_2

[21] A non-attainment area refers to a geographic area where the Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB) have determined that the air quality standards for the criteria pollutants are not being met.

emissions remain a concern because of their contribution to the formation of O_3 and particulate matter. The SCAB is designated as an attainment area for NO_2 by the EPA.

- *Sulfur dioxide* (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children. Though SO_2 concentrations have been reduced to levels that are well below State and Federal standards, further reductions in SO_2 emissions are desirable since SO_2 is a precursor to sulfate and PM_{10}. The SCAB is designated as an attainment area for SO_2.

- *PM_{10}* refers to particulate matter less than ten microns in diameter. PM_{10} particulates cause a greater health risk than larger-sized particles since fine particles can more easily cause respiratory irritation. The Federal standards for PM_{10} have been met in most areas within the SCAB.

- *$PM_{2.5}$* refers to particulate matter less than 2.5 microns in diameter. $PM_{2.5}$ also represents a significant health risk because particulate matter of this size may be more easily inhaled, causing respiratory irritation. The annual average concentrations of $PM_{2.5}$ exceeded Federal standards in some areas of the SCAB. As a result, $PM_{2.5}$ continues to be designated as non-attainment.

3.3.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project conflict with or obstruct implementation of the applicable air quality plan? Less than Significant Impact.

The Planning Area governed by the Old Town Placentia Revitalization Project is located within the South Coast Air Basin (SCAB) which covers a 6,600-square-mile area within Orange County, the non-desert portions of Los Angeles County, Riverside County, and San Bernardino County. The SCAB is subject to the Final 2016 AQMP which was jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG).[22] Specific criteria for determining a project's conformity with the AQMP is defined in Chapter 12 of the 2012 Air Quality Management Plan (AQMP) and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook:[23]

- *Consistency Criteria 1* refers to a proposed project's potential for resulting in an increase in the frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation.

- *Consistency Criteria 2* refers to a proposed project's potential for exceeding the assumptions included in the AQMP or other regional growth projections relevant to the AQMP's implementation.

In terms of Criteria 1, construction-related activities related to the adoption and subsequent implementation of the Revitalization Project will not lead to an exceedance for AQMD daily thresholds. Although most developments will be subject to individual environmental review, all of the projects will be

[22] South Coast Air Quality Management District, *Final 2012 Air Quality Plan*, Adopted February 2013.

[23] South Coast Air Quality Management District. *CEQA Air Quality Handbook*. 2012.

small in size and will not exceed air quality requirements. Developments that will be within the Planning Area will not be projects that are classified as "Regionally Significant Projects" and therefore will not have significant air quality impacts. In order to be classified as a "Regionally Significant Project" by CEQA, a project must be a residential development of more than 500 units; a commercial center or business employing more than 1,000 persons or having more than 500,000 square feet of floor area; an office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor area; a hotel consisting of more than 500 rooms; or an industrial use with more than 650,000 square feet of floor area or occupying more than 40 acres of land, or employing more than 1,000 persons.[24]

Although the development envisioned within the Revitalization Project is extensive, the environmental analysis required for each development will account for the simultaneous construction of neighboring development, thereby minimizing the air quality impacts associated with the construction and operation of the commercial, retail, and residential developments. Short-term (construction-related) and long-term (operational) air quality assessments will be required for all new developments subject to CEQA.[25] The revitalization of the Planning Area would be classified as infill development, which is beneficial because it would be effective in reducing urban sprawl and the overall vehicle miles traveled (VMT) by being located on an underutilized area within a developed area.

In terms of Criteria 2, the proposed project will not lead to a significant population growth within the City. According to the population projections contained within the 2016 Regional Transportation Plan prepared by SCAG, the City of Placentia's population in 2012 was 51,500 and the projected population for the year 2040 for the City is projected to be 58,400. As previously mentioned, each individual residential development will require an environmental analysis prior to construction which will determine whether or not the associated population increase will result in air quality impacts. The proposed project will not significantly affect any regional population, housing, and employment projections prepared for the City by the Southern California Association of Governments (SCAG) within the 2016 Regional Transportation Plan. As a result, less than significant impacts will occur.

B. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Less than Significant Impact.

The potential construction emissions and long-term emissions from the build-out of the Revitalization Project are included in Appendix A. Future site-specific development proposals that deviate from the Revitalization Project would be evaluated for potential air emissions once development details have been determined and are available. Individual projects permitted as part of the Revitalization Project's implementation will not result in significant air quality emissions. Although individual development projects have the potential to exceed SCAQMD thresholds, the objectives, policies, and implementation actions in the Revitalization Plan document would address the potential impacts. Therefore, the Revitalization Project's implementation will not result in any significant air quality impacts.

[24] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998 (CEQA Guidelines). § 15206 (2) (A-E).

[25] Ibid. § 15060 – 15065.

C. 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 releasing emissions which exceed quantitative thresholds for ozone precursors)? Less than Significant Impact.

As indicated previously, the SCAB is a designated non-attainment area for ozone and particulates. The revitalization of the Old Town Placentia Planning Area would be classified as infill development, which is beneficial because it would be effective in reducing urban sprawl and in the overall vehicle miles traveled (VMT). This is because the Planning Area is located within an established urban area. Finally, the proposed Revitalization Project will not exceed these adopted projections used in the preparation of the Regional Transportation Plan. As a result, less than significant impacts related to an increase in criteria pollutants will occur.

D. Would the project expose sensitive receptors to substantial pollutant concentrations? Less than Significant Impact.

Most vehicles generate carbon monoxide (CO) as part of the tail-pipe emissions and high concentrations of CO along busy roadways and congested intersections are a concern. The areas surrounding the most congested intersections are often found to contain high levels of CO that exceed applicable standards. Typically, a hot-spot may occur near an intersection that is experiencing severe congestion (a LOS E or LOS F). The SCAQMD stated in its CEQA Handbook that a CO hot-spot would not likely develop at an intersection operating at LOS C or better. Since the Handbook was written, there have been new CO emissions controls added to vehicles and reformulated fuels are now sold in the SCAB. These new automobile emissions controls, along with the reformulated fuels, have resulted in a lowering of both ambient CO concentrations and vehicle emissions. In addition, the infill nature of the project as well as the requirements for sustainable development will promote land uses and development contemplated in the Air Quality Management Plan and the Regional Growth Management Plan.

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors located within the Planning Area and the surrounding area include the City's senior center, two schools, and two parks. The only sensitive receptor within the Planning Area is the Placentia Senior Center, which is located on the northwest corner of Bradford Avenue and Center Street. As previously mentioned, each individual development will require an environmental analysis prior to construction which will determine whether or not the development will have any air quality impact on any nearby sensitive receptors. As a result, less than significant impacts related to the adoption and subsequent implementation of the Revitalization Project will occur.

E. Would the project create objectionable odors affecting a substantial number of people? No Impact.

The SCAQMD has identified those land uses that are typically associated with odor complaints. These uses include activities involving livestock, rendering facilities, food processing plants, chemical plants,

composting activities, refineries, landfills, and businesses involved in fiberglass molding.[26] The proposed project will include residential, commercial, and mixed-use development, and no generation of odors will occur. During the site survey, no odors were detected at the site. Furthermore, odor-generating uses are not permitted within the Planning Area. As a result, no odor-related impacts will occur.

3.3.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.4 BIOLOGICAL RESOURCES

3.4.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on biological resources if it results in any of the following:

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

- A substantial adverse effect on any riparian habitat or other sensitive natural plant community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

- A substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means;

- A substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites;

- A conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,

- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

[26] South Coast Air Quality Management District. *CEQA Air Quality Handbook*. April 1993.

3.4.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. 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 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? No Impact.

The City of Placentia is an entirely urbanized city. A review of the California Department of Fish and Wildlife California Natural Biodiversity Database (CNDDB) Bios Viewer for the Placentia Quadrangle indicated that out of a total of 47 native plant and animal species, nine are either threatened or endangered.[27] These species include:

- The *Coastal California Gnatcatcher* is not likely to be found on-site due to the amount urbanization in the area and the lack of habitat suitable for the California Gnatcatcher. The absence of coastal sage scrub, the California Gnatcatcher's primary habitat, further diminishes the likelihood of encountering such birds.[28]

- The *least Bell's Vireo* lives in a riparian habitat, with a majority of the species living in San Diego County.[29] As a result, it is not likely that any least Bell's vireos will be encountered during on-site construction activities.

- The *tricolored blackbird* lives and breeds in freshwater marsh habitats and forages in farm fields, pastures, cattle pens, and large lawns. Furthermore, this bird species exists in densely-packed colonies, which have made the species more vulnerable to endangerment and less likely to be found in or around the Planning Area.[30]

- The *western yellow-billed cuckoo* is an insect eating bird found in riparian woodland habitats. The likelihood of encountering a western yellow-billed cuckoo is slim due to the level of urbanization present in the surrounding areas and the lack of riparian habitat.[31]

- The *California least tern* generally lives along the coast. According to the U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, the areas within Orange County that the avian species has been known to live include Anaheim Bay, Surfside Beach, Bolsa Chica, Huntington Beach, and Upper Newport Bay, which are all outside of the Planning Area.[32]

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[27] California Department of Fish and Wildlife. Bios Viewer. https://map.dfg.ca.gov/bios/?tool=cnddbQuick.

[28] Audubon. *California Gnatcatcher*. *http://birds.audubon.org/species/calgna*.

[29] California Partners in Flight Riparian Bird Conservation Plan. *Least Bell's Vireo*. *http://www.prbo.org/calpif/htmldocs/species/riparian/least_bell_vireo.htm*.

[30] National Audubon Society. *Tricolored Blackbird*. http://www.audubon.org/field-guide/bird/tricolored-blackbird.

[31] US Fish and Wildlife Service. *Sacramento Fish and Wildlife Office, Public Advisory*. http://www.fws.gov/sacramento/outreach/Public-Advisories/WesternYellow-BilledCuckoo/outreach_PA_Western-Yellow-Billed-Cuckoo.htm.

[32] US Fish and Wildlife Service. *California Least Tern*. https://www.fws.gov/sacramento/es_species/Accounts/Birds/es_ca-least-tern.htm.

- The *California black rail* occurs in habitats that include salt marshes, freshwater marshes, and wet meadows, which do not exist within the Planning Area. In addition, the majority of the species is found in the tidal salt marshes of the northern San Francisco Bay region.[33]

- *Santa Ana sucker* is a fish species that will not be found on-site because no bodies of water are located within the Planning Area.[34]

- The *quino checkerspot butterfly* is not likely to be found on-site since the eight known populations are located in Riverside County and San Diego County.[35]

- *Santa Ana River woollystar* is a plant species that grows in sandy areas and requires periodic flooding along with scouring and sediment deposition to persist. Occurrences of the plant species exist primarily within San Bernardino County and Riverside County. Historical occurrences are known from Orange County, but it has been extirpated from those locations.[36]

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not have an impact on the aforementioned species because the Planning Area is located in the midst of an urban area and there is no suitable riparian or native habitat located within, or in the vicinity of, the Planning Area. As a result, no impacts on any candidate, sensitive, or special status species will result from proposed project's implementation.

B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? No Impact.

A review of the U.S. Fish and Wildlife Service National Wetlands Inventory, Wetlands Mapper was conducted and it was determined that there are no wetlands or riparian habitats located within the Planning Area and the surrounding area.[37] The nearest wetland is a lake which is located 0.8 miles southeast of the Planning Area. In addition, there are no designated "blue line streams" located within the Planning Area.[38] As a result, no impacts on natural or riparian habitats will result from the adoption and subsequent implementation of the Old Town Placentia Revitalization Project.

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[33] U.S. Forest Service. *California Black Rail Distribution and Abundance in Relation to Habitat and Landscape Features in the San Francisco Nay Estuary*. https://www.fs.usda.gov/treesearch-beta/pubs/31850.

[34] Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was completed on April 20, 2017.

[35] Center for Biological Diversity. *Endangered Species Act Profile, Quino checkerspot butterfly*. http://www.biologicaldiversity.org/species/invertebrates/Quino_checkerspot_butterfly/endangered_species_act_profile.html.

[36] California Department of Fish and Wildlife. *Santa Ana River Woollystar*. https://www.wildlife.ca.gov/Conservation/Plants/Endangered/Eriastrum-densifolium-ssp-sanctorum.

[37] U.S. Fish and Wildlife Service. *Wetlands Mapper*. http://www.fws.gov/Wetlands/data/Mapper.html.

[38] A blue-line stream is any stream shown as a solid or broken blue line on 7.5 Minute Series quadrangle maps prepared by USGS. Essentially, a blue-line stream is any stream with a significant amount of water-flow for a significant part the year.

C. Would the project have a substantial adverse effect on federally protected 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? No Impact.

The Planning Area does not contain any natural wetland and/or riparian habitat. As previously indicated, there are no designated wetlands or riparian habitat present in the geographic area governed by the Old Town Placentia Revitalization Project. This conclusion is also supported by a review of the U.S. Fish and Wildlife Service National Wetlands Inventory, Wetlands Mapper.[39] As a result, the adoption and subsequent implementation of the Revitalization Project will not impact any protected wetland area or designated blue-line stream.

D. 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 life corridors, or impede the use of native wildlife nursery sites? No Impact.

No natural open space areas are located within the Planning Area or in the surrounding area that would potentially serve as an animal migration corridor. As a result, the adoption and subsequent implementation of the Revitalization Project will not result in any impacts.

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? No Impact.

No areas within the City of Placentia are included in any natural community conservation plan or other habitat conservation plan. Chapter 14.12, Trees and Shrubs, of the City's Municipal Code governs the use of all public trees and activities which may affect all public trees. The Old Town Placentia Revitalization Project also includes a focus on landscaping and tree planting with the new developments. As a result, the adoption and subsequent implementation of the Revitalization Project will not result in any impacts.

F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? No Impact.

The Planning Area is currently developed and no natural habitats are found in the Planning Area. The Planning Area is not located within an area governed by a habitat conservation or community conservation plan. The nearest ecological reserve is the Coal Canyon Ecological Reserve, located 10.3 miles east of the Planning Area.[40] Since the proposed project will not conflict with any local, regional, or State habitat conservation plans, no impacts will result.

[39] U.S. Fish and Wildlife Service. *Wetlands Mapper*. http://www.fws.gov/Wetlands/data/Mapper.html

[40] California Department of Fish and Wildlife. *Ecological Reserves and Wildlife Areas in California*. https://www.wildlife.ca.gov/lands/places-to-visit.

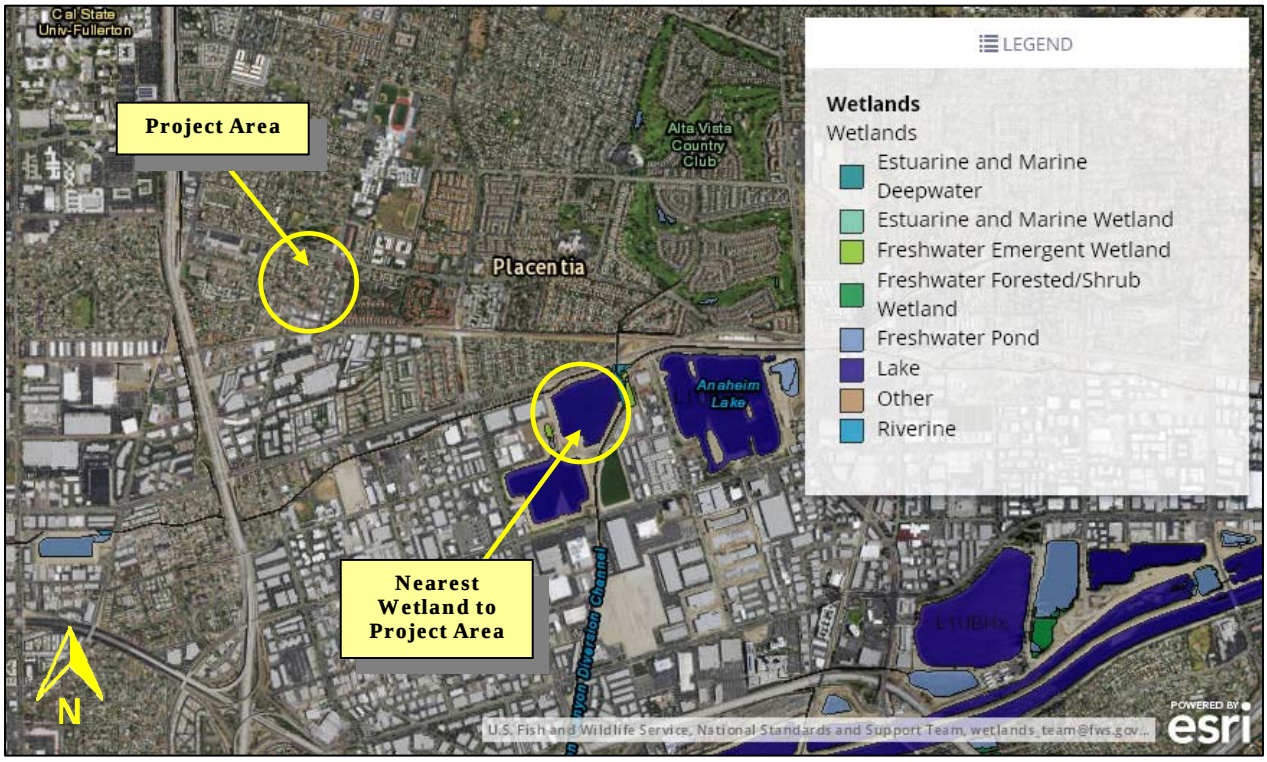


EXHIBIT 3-1
WETLANDS MAP

Source: U.S. Fish and Wildlife Service, National Wetlands Inventory

3.4.3 MITIGATION MEASURES

The analysis indicated that the proposed project would not result in any impacts on biological resources. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Old Town Placentia Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.5 CULTURAL RESOURCES

3.5.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project will normally have a significant adverse impact on cultural resources if it results in any of the following:

- A substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines;
- A substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines;
- The destruction of a unique paleontological resource, site, or unique geologic feature; or,
- The disturbance of any human remains, including those interred outside of formal cemeteries.

3.5.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines? Less than Significant Impact.

Historic structures and sites are defined by local, State, and Federal criteria. A site or structure may be historically significant if it is locally protected through a local General Plan or historic preservation ordinance. A site or structure may be historically significant according to State or Federal criteria even if the locality does not recognize such significance. The State, through the State Historic Preservation Office (SHPO), maintains an inventory of those sites and structures that are considered to be historically significant. Finally, the U.S. Department of Interior has established specific Federal guidelines and criteria that indicate the manner in which a site, structure, or district is to be defined as having historic significance and in the determination of its eligibility for listing on the National Register of Historic Places.[41] To be considered eligible for the National Register, a property's significance may be determined if the property is associated with events, activities, or developments that were important in the past, with the lives of people who were important in the past, or represents significant architectural, landscape, or engineering elements. Specific criteria include the following:

[41] U. S. Department of the Interior, National Park Service. *National Register of Historic Places*. http://focus.nps.gov/nrhp.

- Districts, sites, buildings, structures, and objects that are associated with the lives of significant persons in the past;

- Districts, sites, buildings, structures, and objects that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,

- Districts, sites, buildings, structures, and objects that have yielded or may be likely to yield, information important in history or prehistory.

Ordinarily, properties that have achieved significance within the past 50 years are not considered eligible for the National Register. However, such properties *will qualify* if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance;

- Districts, sites, buildings, structures, and objects that are associated with events that have made a significant contribution to the broad patterns of our history;

- A building or structure removed from its original location that is significant for architectural value, or which is the surviving structure associated with a historic person or event;

- A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life;

- A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;

- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;

- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,

- A property achieving significance within the past 50 years if it is of exceptional importance.[42]

Four locations within the City are recorded on the National Register of Historic Places and the list of California Historical Resources. These include the Bradford, A.S., House, the Key, George, Ranch, the Placentia Mutual Orange Association Packing House, and the site of the first Macadamia Tetraphylla

[42] U. S. Department of the Interior, National Park Service. *National Register of Historic Places*. http://focus.nps.gov/nrhp.

planted in California.[43] These sites and structures are not located within or adjacent to the Planning Area. An inventory of potential historic resources located in the Planning Area is included in Table 3-1.

Table 3-1
Historic Resources in Placentia

Resource Name	Location
Placentia Water Tower	Chapman Ave at Main St
Old Placentia Library	143 S Bradford Ave
Old City Hall	120 S Bradford Ave
Cavalry Church	102 S Bradford Ave
The Kraemer Building	238 & 240 S Bradford Ave
Telephone Exchange Building	125 S Bradford Ave
Marjie Building	149, 155, and 161 W Santa Fe Ave
The Stradley Building No. 2	167 & 173 W Santa Fe Ave

Source: Old Town Placentia Revitalization Plan.

The Revitalization Plan document recommends that a historic resource survey be conducted for the entire Planning Area within the first year of adoption to closely identify properties of significance. Infill development and alterations will need to be carefully reviewed on a case-by-case basis.

Adaptive reuse involves the conversion of a historic property for more contemporary use that may require certain modifications to the building form and features. Such modifications can be achieved without compromising the features identified as significant in earlier work. Historic rehabilitation may involve returning previously inappropriate alterations made to conform to the style and features of the historic architecture. Infill development in a historically sensitive area requires special attention to scale, massing, rhythm, and building placement. Guidance for alterations to historic properties is best found in the Secretary of the Interior's Standards and Guidelines for Rehabilitation of Historic Properties. Changes, alterations, and demolition of potential and listed historic resources often undergo a design review process to determine the impact of the changes on the historic significance of the property. Minor changes and ongoing maintenance require minimal staff review, but major alterations and demolitions are typically reviewed by a commission.

The structures within the Planning Area are not listed on the National or State Historic Register. As indicated previously, there are four locations in the City that are recorded on the National or State Register

[43] U. S. Department of the Interior, National Park Service. *National Register of Historic Places*. http://focus.nps.gov/nrhp. Secondary Source: California Department of Parks and Recreation. *California Historical Resources*. http://ohp.parks.ca.gov/ListedResources.

of Historic Places.[44] The Revitalization Project will be limited to the Planning Area and will not affect any existing resources listed on the National or State Registers. Redevelopment of the Planning Area may ay impact local culturally important buildings. Any impact to these buildings will be evaluated on a case-by-case basis once a particular development concept has been submitted to the City. As a result, less than significant impacts are associated with the proposed Revitalization Project's implementation.

B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines? Less than Significant Impact.

The greater Los Angeles Basin was previously inhabited by the Gabrielino people, named after the San Gabriel Mission. The Gabrielino tribe has lived in this region for around 7,000 years.[45] Prior to Spanish contact, approximately 5,000 Gabrielino people lived in villages throughout the Los Angeles Basin.[46] Gabrielino villages were often located near bodies of water, such as the Los Angeles River, the Rio Hondo River, the Santa Ana River, and the San Gabriel River. The closest known village to the City of Placentia is Hotuuknga, which was located in the cities of Anaheim and Yorba Linda.[47] The Revitalization Project will promote new development located in an area that is occupied by commercial and residential uses. Although the surrounding area has been subject to disturbance to accommodate the existing commercial and residential buildings, the Planning Area may be situated in an area of high archaeological significance.

Formal Native American consultation was undertaken in accordance with AB-52 and no responses were received. In the unlikely event that remains are uncovered by construction crews, all excavation and grading activities shall be halted and the Orange County Sheriff will be contacted (the Department will then contact the County Coroner). This is a standard condition under California Health and Safety Code Section 7050.5(b), which states:

> *"In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with (b) Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that*

[44] National Park Service U.S. Department of the Interior. *National Register of Historic Places, Title List Display*. *http://nrhp.focus.nps.gov/natreghome.do*.

[45] Tongva People of Sunland-Tujunga. *Introduction*. http://www.lausd.k12.ca.us/Verdugo_HS/classes/multimedia/intro.html.

[46] Rancho Santa Ana Botanical Garden. *Tongva Village Site*. http://www.rsabg.org/tongva-village-site1.

[47] TongvaPeople.com. *Villages*. http://tongvapeople.com/villages.html.

they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."

In addition, Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. Therefore, the potential impacts are considered to be less than significant.

C. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Less than Significant Impact.

No paleontological resources or geologic features are anticipated to be encountered during the construction phase of any new development due to the age of the soil and the limited amount of excavation that will be required to implement the project. The soils that underlie the Planning Area are alluvial in nature. Alluvial deposits are typically quaternary in age (from two million years ago to the present day) and span the two most recent geologic epochs, the Pleistocene and the Holocene.[48] Given the degree of previous disturbance on-site and the depth to natural soils under the alluvial soils near the surface, the likelihood of encountering paleontological resources is slim. As a result, the potential impacts will be less than significant.

D. Would the project disturb any human remains, including those interred outside of dedicated cemeteries? Less than Significant Impact.

There are no dedicated cemeteries located within the City of Placentia. The nearest cemetery to the Planning Area is the Anaheim Cemetery located approximately 2.05 miles to the southwest in the City of Anaheim.[49] In the unlikely event that a human burial is encountered during the construction of any new development within the Old Town Placentia Planning Area, all construction activities shall be halted and the Placentia Police Department will be contacted (the department will then contact the County Coroner). In the event of an accidental discovery, Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. As a result, the impacts are considered to be less than significant.

3.5.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts on cultural resources. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. Finally, the adherence to those regulation and protocols that govern the discovery of cultural resources during grading and excavation will further reduce potential impacts. As a result, no additional mitigation beyond the standard conditions identified previously will be required.

[48] United States Geological Survey. *What is the Quaternary?* http://geomaps.wr.usgs.gov/sfgeo/quaternary/stories/what_is.html.

[49] Google Earth. Website accessed May 4, 2017.

3.6 GEOLOGY & SOILS

3.6.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on the environment if it results in the following:

- The exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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), ground shaking, liquefaction, or landslides;

- Substantial soil erosion resulting in the loss of topsoil;

- The exposure of people or structures to potential substantial adverse effects, including location on a geologic unit or a 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;

- Locating a project on an expansive soil, as defined in the California Building Code, creating substantial risks to life or property; or,

- Locating a project in, or exposing people to potential impacts, including soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

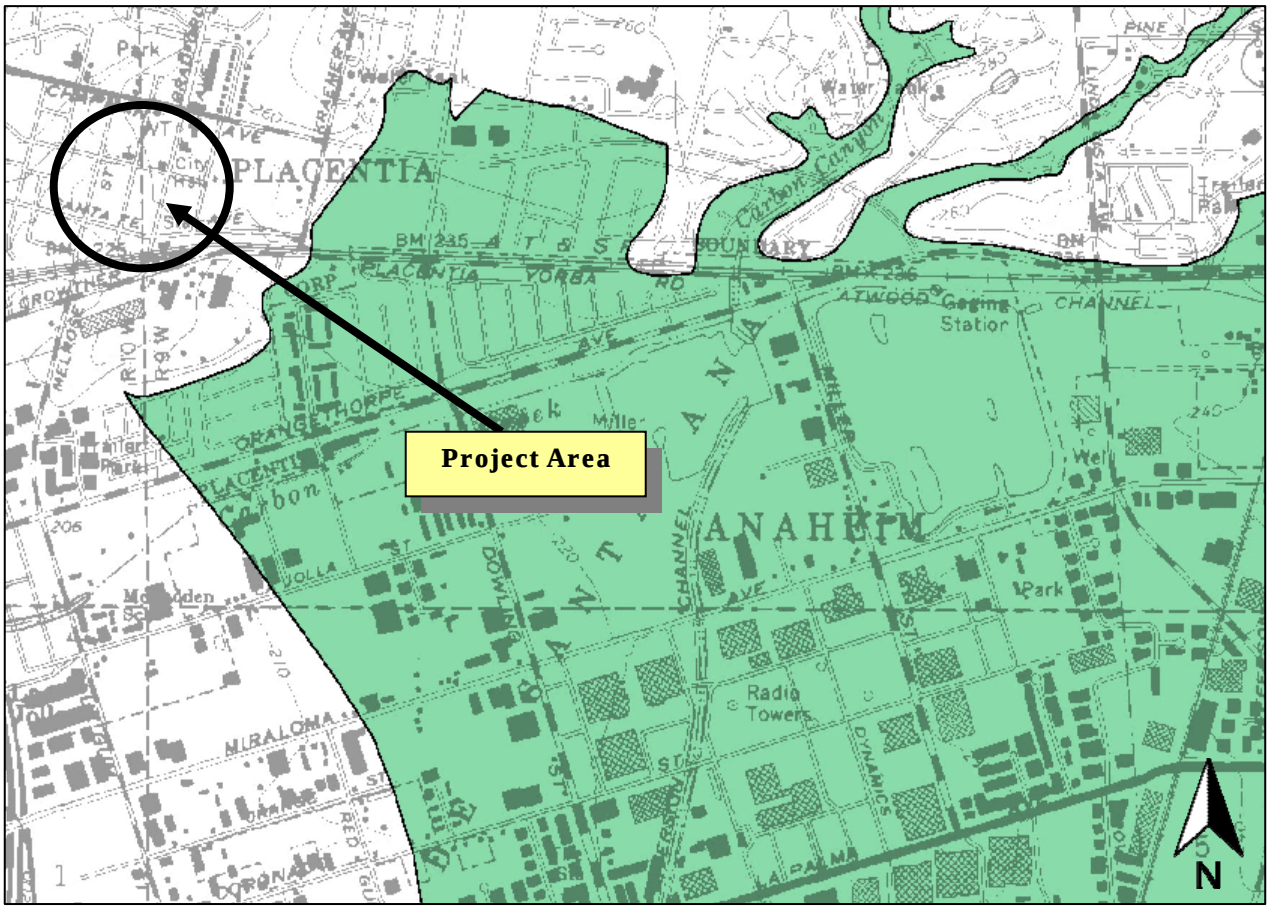
3.6.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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), ground–shaking, liquefaction, or landslides? Less than Significant Impact.*

The City of Placentia is located in a seismically active region. Earthquakes from several active and potentially active faults in the Southern California region could affect the Planning Area. The biggest threats to both the City and the Planning Area are the El Modeno and Peralta Hills Faults, located approximately two miles to the south, and the Whittier Fault, located approximately 4.3 miles to the north.[50] In 1972, the Alquist-Priolo Earthquake Zoning Act was passed in response to the damage sustained in the 1971 San Fernando Earthquake. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active

[50] California Institute of Technology, Southern California Earthquake Data Center. *Significant Earthquakes and Faults, Historical Earthquakes and Significant Faults in Southern California.* http://scedc.caltech.edu/significant.

EXHIBIT 3-2
FAULTS IN THE PROJECT AREA
SOURCE: SOUTHERN CALIFORNIA EARTHQUAKE DATA CENTER



MAP EXPLANATION

Zones of Required Investigation:

Liquefaction

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslides

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

EXHIBIT 3-3
LIQUEFACTION RISK
SOURCE: CALIFORNIA GEOLOGICAL SURVEY

faults.[51] The City of Placentia was not included in any Alquist-Priolo Special Studies Zone.[52] However, the Old Town Placentia area, like all development in the City, would be subject to ground shaking. All new development within the State and within the Planning Area would be required to comply with the California Building Code development standards, which identifiy specific requirements to seismicity.[53] Liquefaction is the process by which the ground soil loses strength due to an increase in water pressure following seismic activity. According to the California Department of Conservation, the Planning Area for the Old Town Placentia Revitalization Project is not located in a liquefaction zone. As a result, the impacts are considered to be less than significant.

B. Would the project expose people or structures to potential substantial adverse effects, including substantial soil erosion or the loss of topsoil? Less than Significant Impact.

According to the soil maps prepared for Orange County by the United States Department of Agriculture, the Planning Area is underlain with soils of the Myford Sandy Loam Soils Association. Soils of the Myford association have an erosion hazard; however, the majority of the Planning Area and the surrounding area is currently developed, which has reduced the area's soil erosion risk.[54] The Planning Area is level and limited excavation will be required for the structural supports, building foundations, and utility lines of any new development. In addition, the project applicant for each development must adhere to the construction best management practices (BMPs) identified by the City and the Water Quality Management Plan (WQMP), which will decrease any potential erosion impacts.

Operational BMPs would include elements such as modular wetlands, bioswales, stormwater retention basins, grate inlet filters, etc. as a means to reduce stormwater runoff and erosion. Furthermore, the surface grades within the parking and internal roadways of new developments will be designed to facilitate drainage into the nearest roadway curb and gutters. As a result, the impacts are expected to be less than significant.

C. Would the project expose people or structures to potential substantial adverse effects, including location on a geologic unit or a soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? Less than Significant Impact.

Recent studies completed by the California Geological Survey (CGS) Seismic Hazard Zones Mapping Program indicate the Planning Area is not located within an area that is subject to potential slope failure. The Planning Area is located within an area that is not subject to potential liquefaction risk. The Myford Sandy Loam Soils underlie the Planning Area and this soils association is suitable for future development as is evident of the existing development found within and around the Planning Area. The design of future

[51] California Department of Conservation. *What is the Alquist-Priolo Act*. http://www.conservation.ca.gov /cgs/rghm/ap/ Pages/main.aspx.

[52] California Department of Conservation. *Table 4, Cities and Counties Affected by Alquist-Priolo Earthquake Fault Zones as of January 2010.*

[53] California. State of. California Building Standards Commission. *California Building Code, Part 2, Volume 2, Chapter 16.*

[54] United States Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

projects will be required to conform to the current building code seismic requirements. As a result, the adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not result in any significant impacts.

D. Would the project result in or expose people to potential impacts, including location on expansive soil, as defined in Uniform Building Code (2012), creating substantial risks to life or property? No Impact.

The soils that underlie the Planning Area belong to the Myford Sandy Loam Soils Association. These soils do not represent a constraint to development according to the United States Department of Agriculture (USDA).[55] Shrinking and swelling is influenced by the amount of clay present in the underlying soils.[56] According to the United States Department of Agriculture, clay is present in the composition of Myford Soils Association beyond a depth of 12 inches.[57] However, all new structural improvements would be required to comply with the most current California Building Code requirements. As a result, no impacts related to expansive soils are anticipated.

E. Would the project result in or expose people to potential impacts, including soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? No Impact.

No septic tanks will be used as part of any future development. As a result, no impacts associated with the use of septic tanks will occur as part of the proposed project's implementation.

3.6.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts related to geology and soils. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.7 GREENHOUSE GAS EMISSIONS

3.7.1 THRESHOLDS OF SIGNIFICANCE

A project may be deemed to have a significant adverse impact on greenhouse gas emissions if it results in any of the following:

[55] United States Department of Agriculture, Soil Conservation Service. *Report and General Soil Map, Orange County, California.* Rev. 1969.

[56] Natural Resources Conservation Service Arizona. *Soil Properties Shrink/Swell Potential.* *http://www.nrcs.usda.gov/wps/portal/nrcs /detailfull/az/soils/?cid=nrcs144p2_065083*.

[57] United States Department of Agriculture. *Myford Series*. https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MYFORD.html.

- The generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and,

- The potential for conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

3.7.2 ENVIRONMENTAL ANALYSIS

A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Less than Significant Impact.

The State of California requires CEQA documents to include an evaluation of greenhouse gas (GHG) emissions or gases that trap heat in the atmosphere. GHG are emitted by both natural processes and human activities. Examples of GHG that are produced both by natural processes and human activities include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The accumulation of GHG in the atmosphere regulates the earth's temperature. Without these natural GHG, the Earth's surface would be about 61°F cooler. However, emissions from fossil fuel combustion have elevated the concentrations of GHG in the atmosphere to above natural levels.

GHG differ from criteria or toxic air pollutants in that the GHG emissions do not cause direct adverse human health effects. Rather, the direct environmental effect of GHG emissions is the increase in global temperatures, which in turn has numerous impacts on the environment and humans. Some examples of observed changes include shrinking glaciers, thawing permafrost, late freezing, early break-up of ice on rivers and lakes, a lengthened growing season, shifts in plant and animal ranges, and earlier flowering of trees.

Table 3-2 summarizes annual greenhouse gas (CO_2E) emissions from build-out of the proposed development that would be part of the Old Town Revitalization Project.[58] Carbon dioxide equivalent, or CO_2E, is a term that is used for describing different greenhouses gases in a common and collective unit. As indicated in Table 3-2, the CO_2E total for the project is 41,370.25 pounds per day or 18.77 $MTCO_2E$ per day. This translates into an annual emission of 6,851.05 $MTCO_2E$. As indicated in Table 3-2, the great majority of the GHG emissions will be generated from mobile sources (Long-Term Mobile Emissions). For this reason, the project's use of trip reduction incentives (the use alternative forms of transportation, the installation of electric vehicle charging stations and bicycle racks, and other TDM measures) will be important. The project is also an infill development that will be placed amongst an urban and underutilized area.

[58] The CalEEMod Air Quality Worksheets are provided in Appendix A.

Table 3-2
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (Lbs/Day)			
	CO_2	CH_4	N_2O	CO_2E
Long-term Area Emissions	78.03	0.08	--	79.93
Long-term Energy Emissions	3,262.61	0.06	0.06	3,282.00
Long-term Mobile Emissions	37,951.97	2.25	--	38,008.32
Total Long-term Emissions	**41,292.61**	**2.39**	**0.06**	**41,370.25**

Source: CalEEMod V.2016.V. 3.1

Although the development envisioned within the Revitalization Project is extensive, the environmental analysis required for each development will account for the simultaneous construction of neighboring development, thereby minimizing the greenhouse gas impacts associated with the construction and operation of the commercial, retail, and residential developments. Short-term (construction-related) and long-term (operational) greenhouse gas emission assessments will be required for all new developments subject to CEQA.[59] Although individual development projects may have the potential to exceed SCAQMD thresholds, the objectives, policies, and implementation actions in the Revitalization Project would address the potential impacts. The adoption and subsequent implementation of the Revitalization Project will not result in a significant amount of additional greenhouse gases. As a result, less than significant impacts are anticipated.

B. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gasses? No Impact.

The City of Placentia is in the process of updating its General Plan, which was adopted in the 1980's. The General Plan will establish new objectives, policies, and implementation actions to reduce greenhouse gases by encouraging the use of alternative energy sources, reducing vehicle miles traveled (VMT), conserving parks/open space, developing public education programs emphasizing green building practices and promoting innovative approaches to reduce harmful impacts to the atmosphere. The objectives, policies, and implementation actions within the Revitalization Plan document will further reduce greenhouse gas emissions since the project focuses on the revitalization of an underutilized area, which will become a pedestrian-oriented area with a diverse mix of uses.

Although the development envisioned within the Revitalization Project is extensive, the environmental analysis required for each development will account for the simultaneous construction of neighboring development, thereby minimizing the greenhouse gas impacts associated with the construction and operation of the commercial, retail, and residential developments. Short-term (construction-related) and long-term (operational) greenhouse gas emission assessments will be required for all new developments subject to CEQA.[60] Although individual development projects may have the potential to exceed SCAQMD

[59] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998 (CEQA Guidelines). § 15060 – 15065.

[60] Ibid.

thresholds, the objectives, policies, and implementation actions in the Revitalization Project would further address the potential impacts since the project focuses on the revitalization of an underutilized area, which will become a pedestrian-oriented area with a diverse mix of uses.

Furthermore, there will also be a regional benefit in terms of a reduction in VMT because it is classified as an infill project that is consistent with the regional and State sustainable growth objectives identified in the State's Strategic Growth Council (SGC).[61] The proposed project will provide employment opportunities for local residents, local shopping and dining establishments, and residential uses, thereby reducing VMT and reducing trip length for vehicle trips in the surrounding area. As a result, no potential conflict with an applicable greenhouse gas policy plan, policy, or regulation will occur.

3.7.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts related to greenhouse gas emissions. In addition, the goals, policies, and implementation programs that will be contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.8 HAZARDS & HAZARDOUS MATERIALS

3.8.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on risk of upset and human health if it results in any of the following:

- The creation of a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;

- The creation of 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;

- The generation of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;

[61] California Strategic Growth Council. http://www.sgc.ca.gov/Initiatives/infill-development.html. Promoting and enabling sustainable infill development is a principal objective of the SGC because of its consistency with the State Planning Priorities and because infill furthers many of the goals of all of the Council's member agencies. Focusing growth toward infill areas takes development pressure off conservation lands and working lands; it increases transit rider-ship and reduces vehicle trips; it requires less per capita energy and water use than less space-efficient development; it improves public health by promoting active transportation and active lifestyles; and it provides a more equitable mix of housing choices, among other benefits. Thus, the SGC has been investigating actions that can be taken to improve the ability of local governments and private developers to successfully plan and build good infill projects.

- Locating the project on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 resulting in a significant hazard to the public or the environment;

- Locating the project within an area governed by an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or a public use airport;

- Locating the project in the vicinity of a private airstrip that would result in a safety hazard for people residing or working in the Planning Area;

- The impairment of the implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan; or,

- The exposure of people or structures to a significant risk of loss, injury, or death involving wild land fire, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands.

3.8.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Less than Significant Impact.

The proposed project involves the revitalization of the Old Town Placentia area, which will involve the construction and operation of commercial, retail, residential, and mixed-use uses. The use of hazardous materials for the new developments will largely consist of those commonly found in a commercial setting used in routine maintenance and cleaning. All future tenants will need to comply with all Federal and State regulations regarding hazardous materials. A database search was conducted of the California Department of Toxic Substances Control (DTSC) Envirostor database and the Environmental Protection Agency (EPA) Envirofacts database to locate any potentially contaminated sites within the Old Town Planning Area. One auto body location was identified through the EPA Envirofacts database.[62] The identified site is a small waste generator and will not create a significant environmental impact to the larger Old Town Placentia Planning Area.

The Planning Area is currently developed with a variety of commercial and residential land uses. Depending on the age of the buildings that would be demolished as part of any future development within the Planning Area, potential asbestos containing materials (ACMs) and lead-based paint (LBP) may be present within the buildings. If any of the buildings to be demolished are determined to have been constructed prior to 1975, a ACM/LBP survey will be required to be completed prior to the building demolition to assess the occurrence of these hazardous materials, pursuant to Federal and State regulations. Furthermore, if the building is discovered to contain ACMs, LBPs, or other hazardous substances, the project contractors will adhere to all requirements governing the handling, removal, and disposal of the hazardous substances that may be encountered during demolition and land clearance activities. Any contamination encountered during the demolition, grading, and/or site preparation

[62] California Department of Toxic Substances Control. *Envirostor*. https://www.envirostor.dtsc.ca.gov/public. Secondary Source: United States Environmental Protection Agency (EPA). *Envirofacts*. *https://www3.epa.gov/enviro*.

activities must also be removed and disposed of in accordance with applicable laws prior to the issuance of any building permit. This is a standard condition that is required as part of any development within the City. Adherence to Federal and State regulations governing the handling, transport, and disposal of lead based paint and asbestos containing materials will reduce potential impacts to levels that are less than significant.

B. Would the project create a significant hazard to the public or the environment, or result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Less than Significant Impact.

Future development arising as part of the Old Town Placentia Revitalization Project's implementation will not result in any significant adverse impact related to hazardous materials. As previously mentioned, the use of hazardous materials for the new development will largely consist of those commonly found in a commercial setting used in routine maintenance and cleaning. In addition, the auto body site that was identified through the EPA Envirofacts database is a small waste generator and will not create a significant environmental impact to the larger Old Town Planning Area. Furthermore, if any buildings are discovered to contain ACMs, LBPs, or other hazardous substances, the project contractors will adhere to all Federal and State requirements governing the handling, removal, and disposal of the hazardous substances that may be encountered during demolition and land clearance activities. As a result, less than significant impacts are anticipated with the proposed project's implementation.

C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? No impact.

Kraemer Middle School and Valencia High School are located within one-quarter mile of the Planning Area. However, hazardous chemicals and materials used on-site will be limited to common household maintenance and cleaning products. Due to the nature of the proposed use, no hazardous materials will be emitted. As a result, no impacts are anticipated with the proposed project's implementation.

D. Would the project be located on a site, which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment? No Impact.

Government Code Section 65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List, maintained by the California Department of Toxic Substances Control. The Cortese list contains hazardous waste and substance sites including public drinking water wells with detectable levels of contamination, sites with known underground storage tanks (USTs) having a reportable release, solid waste disposal facilities from which there is a known migration, hazardous substance sites selected for remedial action, historic Cortese sites, and sites with known toxic material identified through the abandoned site assessment program. A search of the Envirostor Hazardous Waste

and Substances Site "Cortese" List database did not identify any Cortese sites within the Planning Area or the entire City.[63] Therefore, no impacts will occur.

E. For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area? No Impact.

The Planning Area is not located within two miles of an operational public airport. The nearest public use airport is the Fullerton Municipal Airport and it is located approximately 5.75 miles west of the Planning Area. The nearest major airport is located in Long Beach approximately 12.7 miles to the south.[64] As a result, no impacts will occur.

F. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? No Impact.

The Planning Area is not located within two miles of a private airstrip.[65] The nearest private airport to the Planning Area is a heliport that is located 0.6 miles southwest of the Planning Area. As a result, no impacts will occur.

G. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? No Impact.

At no time will any local roadways be completely closed to traffic during the construction of any new development. Each new development will be evaluated to determine if a construction plan is necessary so the proposed development does not impair or interfere with any emergency response or evacuation plan. The construction plan must ensure that all construction staging occurs on-site. The construction plan must also identify specific provisions for the regulation of construction vehicle ingress and egress to the site as a means to provide continued through-access. As a result, no impacts are associated with the proposed project's implementation.

H. Would the project expose people or structures to a significant risk of loss, injury, or death involving wild lands fire, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands? No Impact.

The Planning Area is urbanized and the properties surrounding the site are developed. There are no areas of native vegetation found within the Planning Area or in the surrounding area that could provide a fuel source for a wildfire. As a result, there are no impacts associated with potential wildfires from off-site locations.

[63] California Department of Toxic Substances Control. *Hazardous Waste and Substances Site Cortese List.* http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

[64] Toll Free Airline. *Orange County Public and Private Airports, California.* http://www.tollfreeairline.com/california/orange.htm.

[65] Ibid.

3.8.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts related to hazards and hazardous materials. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.9 HYDROLOGY & WATER QUALITY

3.9.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse environmental impact on water resources or water quality if it results in any of the following:

- A violation of any water quality standards or waste discharge requirements;
- A substantial depletion of groundwater supplies or interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- A substantial alteration of the existing drainage pattern of the site or area through the alteration of the course of a stream or river in a manner that would result in substantial erosion or siltation on or off-site;
- A substantial alteration of the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in flooding on or off-site;
- The creation or contribution of water runoff that would exceed the capacity of existing or planned storm water drainage systems or the generation of substantial additional sources of polluted runoff;
- The substantial degradation of water quality;
- The placement of housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map;
- The placement of structures within 100-year flood hazard areas that would impede or redirect flood flows;
- The exposure of people or structures to a significant risk of flooding as a result of dam or levee failure; or,
- The exposure of a project to inundation by seiche, tsunami, or mudflow.

3.9.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project violate any water quality standards or waste discharge requirements? No Impact.

As part of the new development supported by the Revitalization Project, certain improvements will be installed that will affect the amount of potential storm water runoff. The major source of potential water pollution is related to sheet runoff capturing surface pollutants that are then conveyed into the local storm water system that is composed of gutters, drains, catch basins, and pipes. This storm water infrastructure collects the rainwater runoff and ultimately deposits everything it gathers, including contaminants and debris, into the ocean. All development will be required to comply with all pertinent stormwater discharge requirements. In addition, future development must adhere to the construction best management practices (BMPs) identified by the City and the Water Quality Management Plan (WQMP). The future development will also be required to implement operational BMPs such as modular wetlands, bioswales, stormwater retention basins, grate inlet filters, etc. as a means to reduce stormwater runoff and filter out potential contaminants. The adoption and subsequent implementation of the Revitalization Project will not involve any significant impacts since all new development will be required to comply with the aforementioned requirements. As a result, no impacts are anticipated with the proposed project's implementation.

B. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge in such a way that would cause a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of a pre-existing nearby well would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? No Impact.

Grading related activities are not anticipated to encounter and deplete groundwater supplies. A search was conducted through the Regional Water Quality Control Board's on-line database Geotracker to identify the presence of any natural underground water wells within the Planning Area. The search yielded no results.[66] In addition, all new development will be connected to the City's water lines and will not deplete groundwater supplies through the consumption of the water. All new development will be required to meet the City's Water Efficiency Landscape Ordinance to reduce the burden placed on the City's water resources.[67] As a result, no impacts are anticipated with the proposed project's implementation.

C. Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site? Less than Significant Impact.

Although the impervious surfaces (asphalt, building slabs, etc.) that will be constructed with new development will result in the generation of stormwater runoff, the Planning Area will be properly drained and is not expected to result in erosion or siltation on- or off-site. In the absence of mitigation, the new impervious surfaces (buildings, internal driveways, parking areas, etc.) that would be constructed may result in the generation of pollutants. The Planning Area will be graded so that stormwater runoff will be

[66] Geotracker GAMA. http://geotracker.waterboards.ca.gov/gama/gamamap/public/default.asp.

[67] Placentia, City of. *Muncipal Code, Chapter 23.77, Water Efficient Landscape Ordinance.*

directed to the curbs and gutters on the local roadways. Furthermore, there are no streams, rivers, or other bodies of water located within, or adjacent to the Planning Area. The proposed project will be restricted to the Planning Area and will not alter the course of any waterways.[68] In addition, no natural drainage or riparian areas remain within the Planning Area due to the past development. As a result, less than significant impacts are anticipated.

D. Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner, which would result in flooding on-or off-site? Less than Significant Impact.

As indicated previously, the impervious surfaces (asphalt, building slabs, etc.) that will be constructed will result in the generation of stormwater runoff. However, the Planning Area will be properly drained and is not expected to result in flooding on-or off-site. The Planning Area will be graded so that stormwater runoff will be directed to the curbs and gutters on the local roadways. As indicated in the previous section, the proposed project will be restricted to the Planning Area and will not alter the course of any waterways. As a result, less than significant impacts are anticipated.

E. Would the project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? Less than Significant Impact.

Future development in the City would increase impervious areas and overall levels of activity. As a result, impacts to stormwater quality would occur. The pollutants that would be expected with future development projects include pollutants typically found in stormwater runoff. Without mitigation, future development would be expected to increase pollutant loadings, including hydrocarbons, fertilizers, pesticides, trash, and sediment. Future development would be required to include both Structural and Non-Structural BMPs, and to comply with the SUSMP. New development projects would also be required to meet pertinent water quality standards and implement mitigation (as necessary) to reduce impacts to levels that are less than significant. As a result, less than significant impacts are anticipated with the proposed project's implementation.

F. Would the project otherwise substantially degrade water quality? Less than Significant Impact.

The City of Placentia will require the preparation of a SUSMP. The preparation of the SUSMP will ensure that local water quality remains undisturbed once the project is operational. As a result, less than significant impacts are anticipated with the proposed project's implementation.

[68] Google Earth. Website accessed May 8, 2017.

G. Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? No Impact.

According to maps obtained at the Federal Emergency Management System Map Service Center, the Planning Area is not located within a 100-year flood plain (refer to Exhibit 3-4).[69] As a result, no impacts related to flood flows are associated with the proposed project's implementation.

H. Would the project place within a 100-year flood hazard area, structures that would impede or redirect flood flows? No Impact.

As indicated previously, the Planning Area is not located within a designated 100-year flood hazard area as defined by FEMA.[70] As a result, the proposed project will not involve the placement of any structures that would impede or redirect potential floodwater flows since the site is not located within a 100-year flood hazard area. Therefore, no flood-related impacts are anticipated to occur with the implementation of the Old Town Placentia Revitalization Project.

I. Would the project expose people or structures to a significant risk of flooding as a result of dam or levee failure? No Impact.

The City of Placentia is within the dam inundation area of the Carbon Canyon Dam and the Prado Dam. If an inundation event should occur as a result of dam failure, floodwaters may potentially reach the SR-91 Freeway in the southern portion of the City. The Planning Area is currently developed and new developments would not increase the exposure of people or structures to a significant flooding risk. As a result, no impacts are anticipated with the proposed project's implementation.

J. Would the project result in inundation by seiche, tsunami, or mudflow? No Impact.

The Planning Area is located approximately 15 miles inland from the Pacific Ocean and would not be exposed to the effects of a tsunami. There are no surface water bodies in the immediate area of the Planning Area that would result in a potential seiche hazards. The Planning Area would not be subject to mudflows since the Planning Area is currently developed and generally level. As a result, no impacts related to seiche, tsunami, or mudflows will result from the implementation of the proposed project.

3.9.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts related to hydrology and water quality. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

[69] Federal Emergency Management Agency. *FEMA's National Flood Hazard Layer*. https://msc.fema.gov/portal.

[70] Federal Emergency Management Agency. *FEMA and ESRI Flood Insurance Rate Mapping*. 2010.

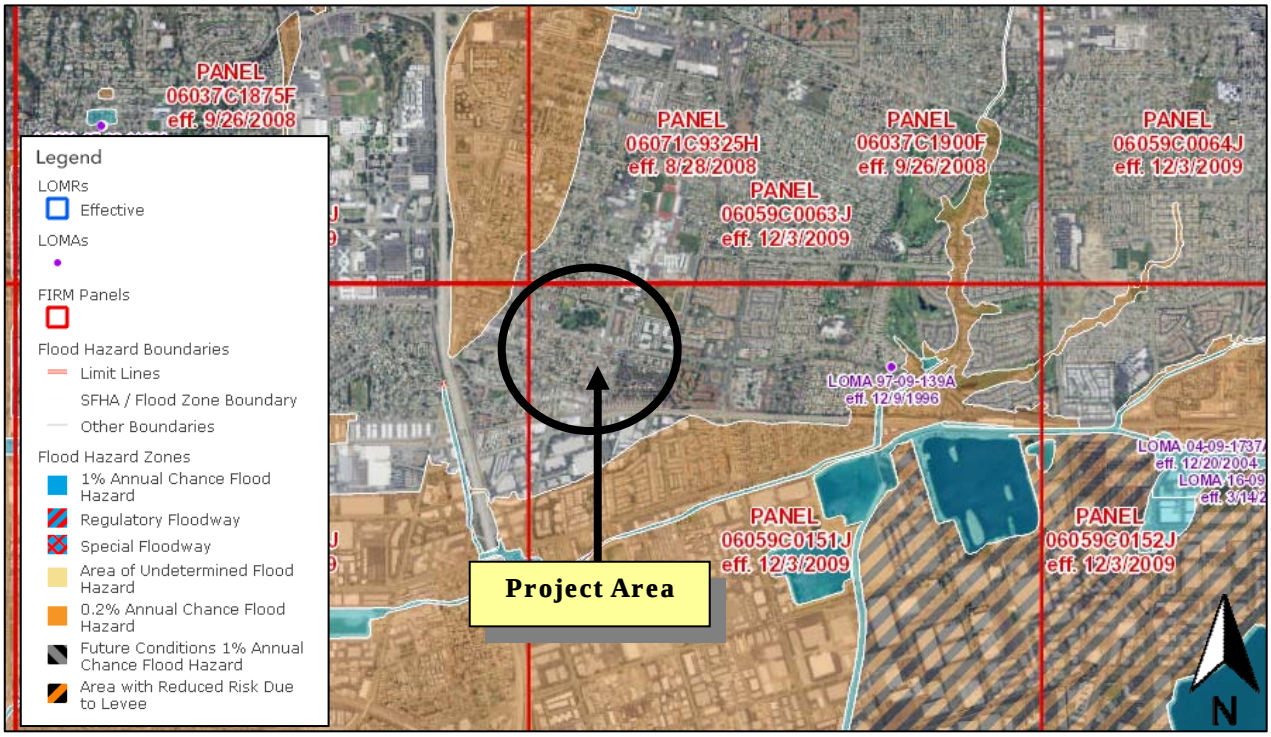


EXHIBIT 3-4
FEMA FLOOD MAP

Source: Federal Emergency Management Agency

3.10 LAND USE & PLANNING

3.10.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant impact on land use and development if it results in any of the following:

- The disruption or division of the physical arrangement of an established community;
- A conflict with an applicable land use plan, policy or regulation of the agency with jurisdiction over the project; or,
- A conflict with any applicable conservation plan or natural community conservation plan.

3.10.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project physically divide or disrupt an established community or otherwise result in an incompatible land use? No Impact.

The Revitalization Project is anticipated to facilitate development, especially residential and retail in a mixed-use setting, proximate to the newly approved Metrolink Station and parking structure in the Old Town area and the recently approved Transit Oriented Development (TOD) south of the railroad along Crowther Avenue. The purpose of the Revitalization Project is to enhance the physical environment in the City's Old Town aimed at creating a lively destination to support the current economic base, create a town center for Placentia, and better connect to adjacent neighborhoods and surrounding cities. The Revitalization Project's implementation is critical in aiding in the realization of local and regional goals related to sustainable and infill development.

California State law requires specific plans (the Revitalization Plan document is essentially a specific plan) to be internally consistent with the jurisdiction's general plan. The City is currently in the process of updating the City's General Plan adopted in the 1980's to provide a regulatory framework for development throughout the City. The General Plan land use map is being updated concurrently with the Revitalization Project to reflect the vision for the Old Town area within the Revitalization Plan document. With proposed General Plan Amendment and the update to the General Plan land use map, the Revitalization Project is intended to be consistent with the City's General Plan, Zoning Code, Municipal Codes, and regional planning initiatives particularly for climate action, sustainability, multimodal transportation, complete streets, and livability. The current adopted General Plan designations for the Planning Area include Commercial, High Density Residential, and Medium Density Residential (refer to Exhibit 3-6). The General Plan Map will be amended to reflect the land use designations identified in the Old Town Placentia Revitalization Plan document. The land uses and development promoted in the Revitalization Project are generally consistent with the land use and development policies that are included in the Placentia General Plan.

A zoning text amendment, referred to as the Old Town Placentia Revitalization Development Standards herein, is being concurrently processed with the Revitalization Project. The Planning Area currently

includes the "SF-C" (Santa Fe Commercial) zone and some surrounding parcels in the "C-1" (Neighborhood Commercial), "C-2" (Community Commercial), and "R-2" (Low-Medium Density Residential) zones (refer to Exhibit 3-5). The area will be rezoned as "Old Town" and further divides the Old Town into five planning sub-areas to guide new development, infill, preservation, and reintegration of land uses. These sub-areas were drawn around distinctive areas or locations in the Planning Area, with distinctive standards (refer to Exhibit 3-7). These five planning sub-areas include Main Street (Two- Three- and Four-Story Height Sub-areas), Village (Three-Story Height Sub-area), Mixed-Use (Four-Story Height District), High-Density Residential (Four-Story Height Sub-area), and Public Facilities (Five Story Height Sub-area). Each sub-area will permit different uses and will employ designated architectural styles, setbacks, and other designated development standards outlined within the Old Town Placentia Revitalization Development Standards.[71] The project team, including City Staff and the consultants (traffic, planning, and environmental) identified the maximum amount of new development that could be realized as part of the Revitalization Project's implementation. No specific new projects are known at this time though the development projections are critical in evaluating the potential environmental impacts including, but not limited to land use changes, traffic, air quality, population, and public services.

Based on discussions with the City, the proposed residential uses will be a combination of apartments and townhomes. Currently, the Old Town Planning Area contains a mix of residential uses and various commercial uses. Since the majority of properties located within the Planning Area are developed, the majority of the proposed land uses are expected to be infill development.[72] The Revitalization Project is intended to expand the purpose and reach of the "Santa Fe Commercial District" zoning code provisions, creating a new zone called "Old Town," with revised development standards to accommodate the goals of the community and the Revitalization Plan. The Revitalization Plan has also been prepared to be consistent with the Transit Oriented Development Packing House District plan and development codes for the area to the immediate south of the Old Town, separated by the Burlington Northern-Santa Fe (BNSF) railroad tracks. The proposed Revitalization Project's implementation will not physically divide or disrupt an established community since the existing residential neighborhoods will be maintained.

B. Would the project conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? No Impact.

The current General Plan designations for the Planning Area include Commercial, High Density Residential, and Medium Density Residential (refer to Exhibit 3-6). The Planning Area currently includes the "SF-C" (Santa Fe Commercial) zone and some surrounding parcels in the "C-1" (Neighborhood Commercial), "C-2" (Community Commercial), and "R-2" (Low-Medium Density Residential) zones. The existing Zoning designations for the Planning Area are shown in Exhibit 3-5.

[71] Placentia, City of. *Old Town Placentia Revitalization Plan Development Standards.* May 2017.

[72] Ibid.

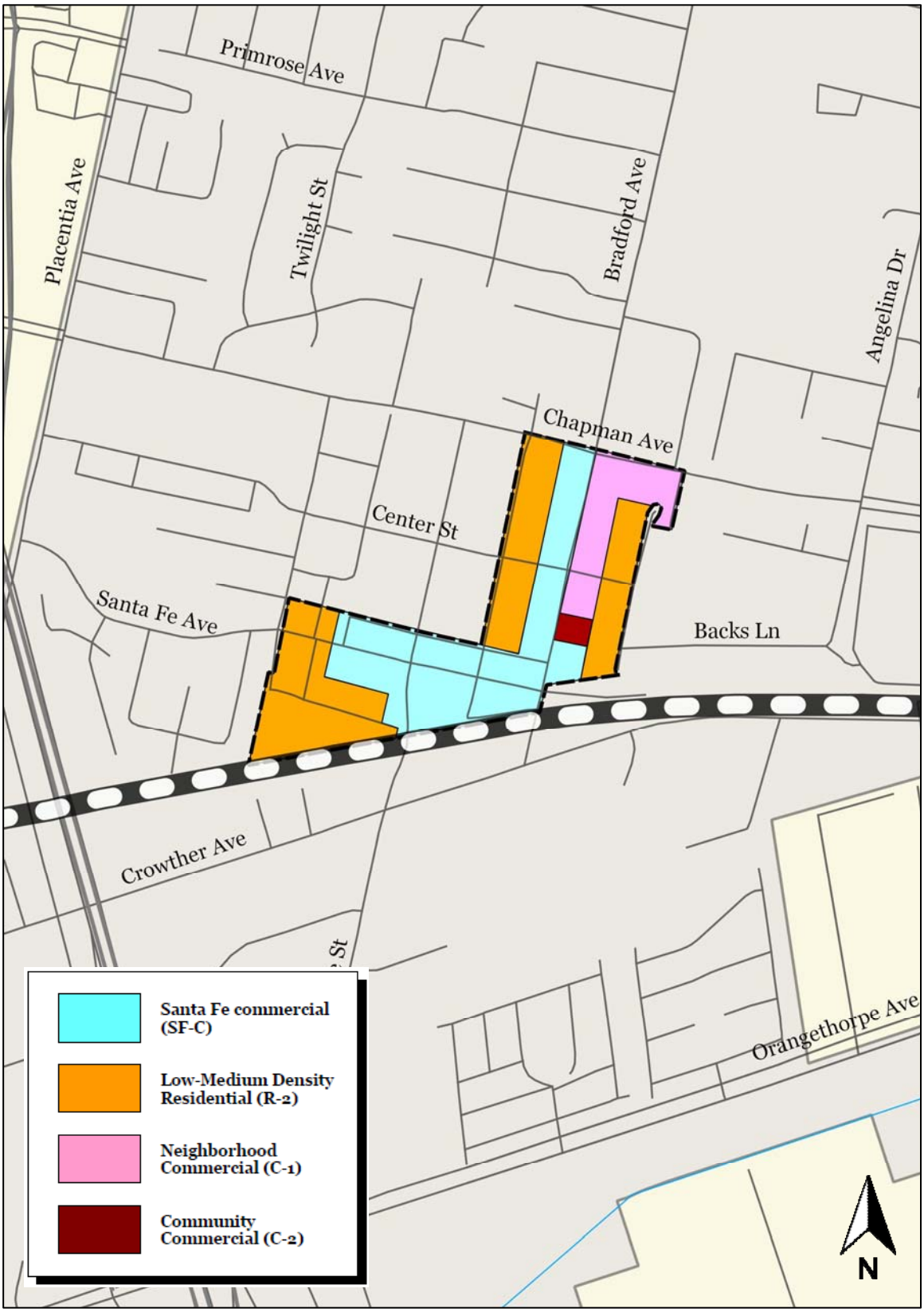


EXHIBIT 3-5
EXISTING ZONING MAP FOR THE PLANNING AREA
Source: QGIS

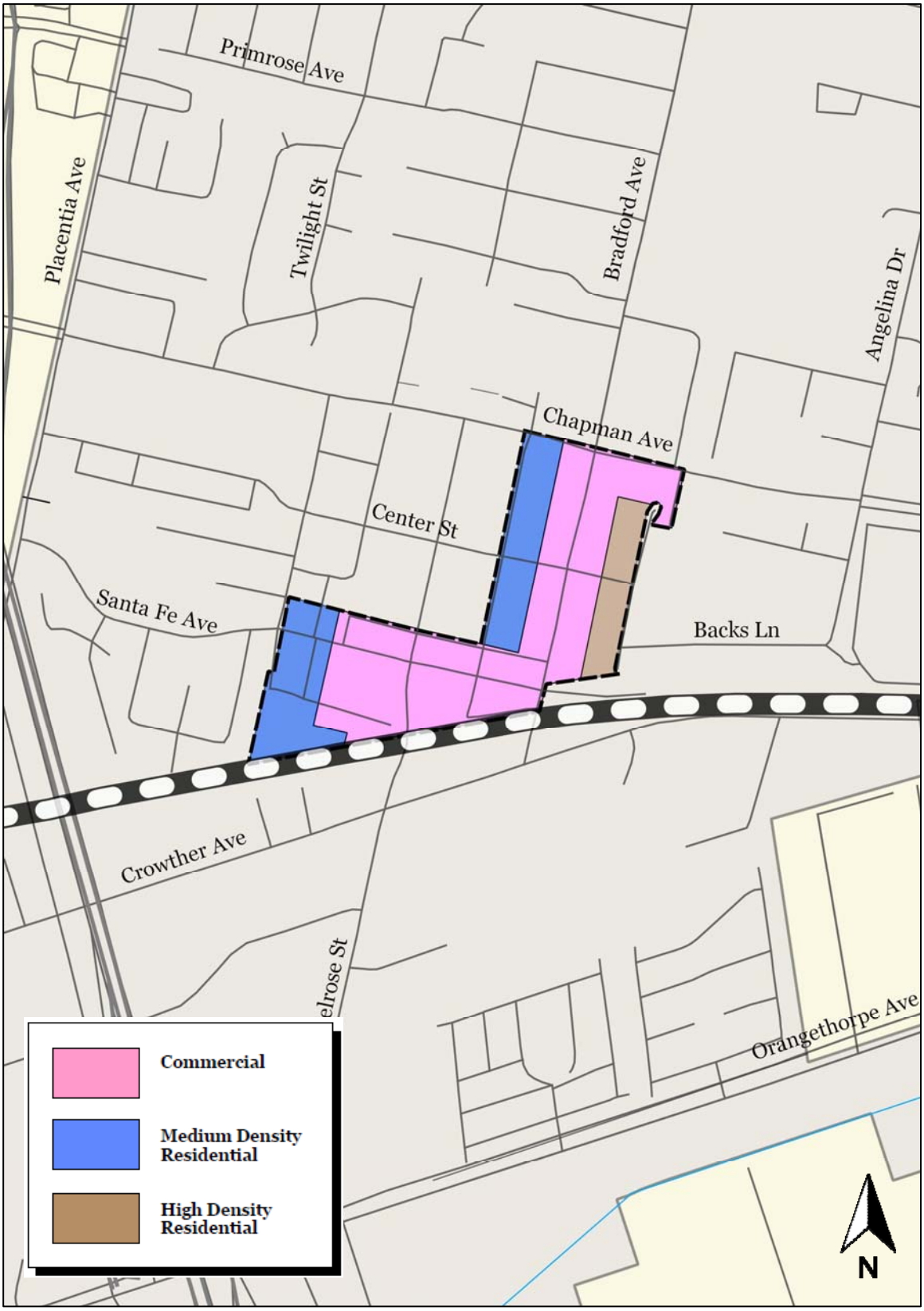


EXHIBIT 3-6
EXISTING GENERAL PLAN MAP FOR THE PLANNING AREA
Source: QGIS

A zoning text amendment, referred to as the Old Town Placentia Revitalization Development Standards herein, is being concurrently processed with adoption of the Revitalization Project. An amendment to the City's General Plan land use map is also being processed concurrently with the adoption of the Revitalization Project to reflect the land use designations envisioned within the Revitalization Plan document. With proposed zoning text and General Plan land use map amendments, the Revitalization Project is intended to be consistent with the City's General Plan, Zoning Code, Municipal Codes, and regional planning initiatives particularly for climate action, sustainability, multimodal transportation, complete streets, and livability.

The Plan proposes the area to be rezoned as "Old Town" and further divides the Old Town into five planning sub-areas to guide new development, infill, preservation, and reintegration of land uses. These sub-areas were drawn around distinctive areas or locations in the Plan area, with distinctive standards (refer to Exhibit 3-7). These five planning sub-areas include Main Street (Two- Three- and Four-Story Height Sub-areas), Village (Three-Story Height Sub-area), Mixed-Use (Four-Story Height District), High-Density Residential (Four-Story Height Sub-area), and Public Facilities (Five Story Height Sub-area).

The major objectives of the Revitalization Project are to identify land use options that include providing new mixed-uses, and increasing housing opportunities and neighborhood-serving retail uses. Furthermore, there will also be a regional benefit in terms of a reduction in vehicle miles traveled (VMT) because it is classified as an infill project that is consistent with the regional and State sustainable growth objectives identified in the State's Strategic Growth Council (SGC).[73] The proposed project will provide employment opportunities for local residents, local shopping and dining establishments, and residential uses, thereby reducing VMT and reducing trip length for vehicle trips in the surrounding area. As a result, no impacts related to the adoption and subsequent implementation of the Revitalization Project will occur.

C. Will the project conflict with any applicable habitat conservation plan or natural community conservation plan? No Impact.

The Planning Area is currently developed and no natural habitats are found on the within the area. The Planning Area is not located within an area governed by a habitat conservation or community conservation plan. The nearest ecological reserve is the Coal Canyon Ecological Reserve, located 10.3 miles east of the Planning Area.[74] The Revitalization Project will be restricted to the Planning Area will not encroach upon the ecological reserve. As a result, no impacts will occur.

[73] California Strategic Growth Council. http://www.sgc.ca.gov/Initiatives/infill-development.html. Promoting and enabling sustainable infill development is a principal objective of the SGC because of its consistency with the State Planning Priorities and because infill furthers many of the goals of all of the Council's member agencies. Focusing growth toward infill areas takes development pressure off conservation lands and working lands; it increases transit rider-ship and reduces vehicle trips; it requires less per capita energy and water use than less space-efficient development; it improves public health by promoting active transportation and active lifestyles; and it provides a more equitable mix of housing choices, among other benefits. Thus, the SGC has been investigating actions that can be taken to improve the ability of local governments and private developers to successfully plan and build good infill projects.

[74] California Department of Fish and Wildlife. *Ecological Reserves and Wildlife Areas in California.* https://www.wildlife.ca.gov/lands/places-to-visit.

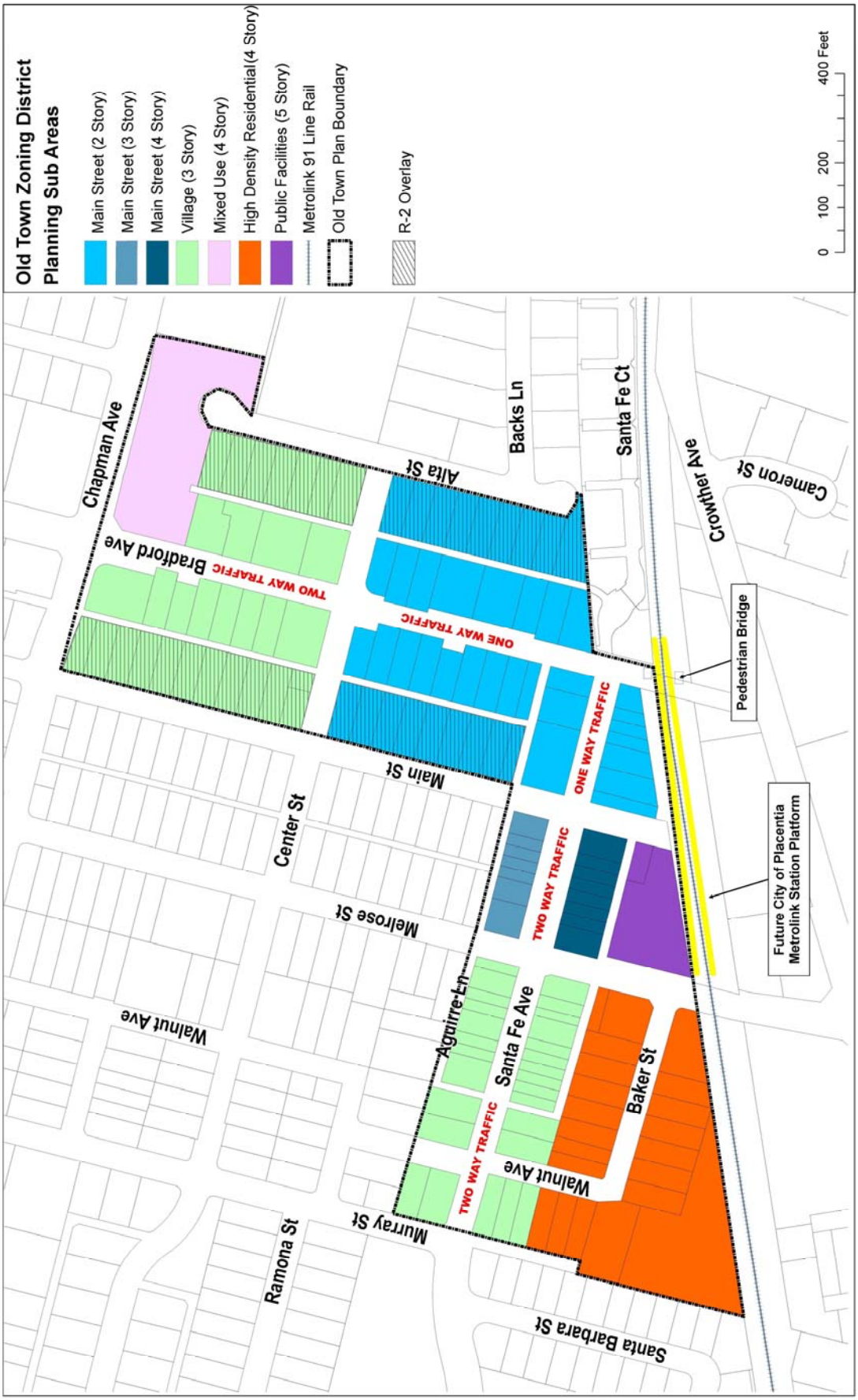


EXHIBIT 3-7
PROPOSED OLD TOWN ZONING DISTRICT PLANNING SUB-AREAS
Source: City of Placentia

3.10.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts. An amendment to the General Plan land use map and a zoning text amendment are being concurrently processed with the Revitalization Project. With the General Plan and zoning code amendments, the Revitalization Plan is intended to be consistent with the City's General Plan, Zoning Code, Municipal Codes, and regional planning initiatives particularly for climate action, sustainability, multimodal transportation, complete streets, and livability. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.11 MINERAL RESOURCES

3.11.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on energy and mineral resources if it results in any of the following:

- The loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or,

- 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.

3.11.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents or the state? No Impact.

The Planning Area is not located in a Significant Mineral Aggregate Resource Area (SMARA) nor is it located in an area with active mineral extraction activities. A review of California Division of Oil, Gas, and Geothermal Resources Well Finder indicates that there are no wells located within the Planning Area.[75] The nearest wells to the Planning Area are located approximately 285 feet east of the northern Alta Street terminus, and approximately 100 feet south of Santa Fe Avenue, within Santa Fe Park.[76] The first well mentioned is currently plugged, and the second well is buried.[77]

In addition, according to the Generalized Mineral Land Classification of Orange County, the Planning Area is located in Mineral Resource Zone (MRZ) boundary number three (MRZ-3). Areas located in MRZ-3 are classified as areas where the significance of mineral deposits cannot be determined from the available

[75] California, State of. Department of Conservation. California *Oil, Gas, and Geothermal Resources Well Finder*. *http://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx.*

[76] Google Earth. Website accessed May 9, 2017.

[77] California, State of. Department of Conservation. *Well Details*. *https://secure.conservation.ca.gov/WellSearch/Details?api=05901179.*

data.[78] Although the Planning Area is located in MRZ-3, the implementation of the proposed project will not interfere with any active mineral resource extractions. There are a total of five active mineral resource areas in Orange County. These areas include the Santa Ana River Resource Area, the Lower Santiago Creek Resource Area, the Upper Santiago Creek Resource Area, the Arroyo Trabuco Resource Area, and the San Juan Creek Resource Area.[79] None of these resource areas are located near the Planning Area. As a result, no impacts to mineral resources will occur.

B. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? No Impact.

As previously mentioned, no mineral, oil, or energy extraction and/or generation activities are located within the Planning Area or in the vicinity. Moreover, the proposed project will not interfere with any well-extraction activities. Therefore, no impacts will result from the implementation of the proposed project.

3.11.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any impacts related to mineral resources. In addition, the goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.12 NOISE

3.12.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant impact on the environment if it results in any of the following:

- The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan, noise ordinance or applicable standards of other agencies;
- The exposure of people to, or generation of, excessive ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

[78] California, State of. Department of Conservation. *Generalized Mineral Land Classification of Orange County, California.* ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Plate_1.pdf

[79] California, State of. Department of Conservation. *Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, California, Part III: Orange County.* Report dated 1994. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Text.pdf

- Locating within an area governed by an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or private use airport, where the project would expose people to excessive noise levels; or,

- Locating within the vicinity of a private airstrip that would result in the exposure of people residing or working in the Planning Area to excessive noise levels.

3.12.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Less than Significant Impact.

Noise levels may be described using a number of methods designed to evaluate the "loudness" of a particular noise. The most commonly used unit for measuring the level of sound is the decibel (dB). Zero on the decibel scale represents the lowest limit of sound that can be heard by humans. The eardrum may rupture at 140 dB. An increase of between 3.0 dB and 5.0 dB is the ambient noise level considered to represent the threshold for human sensitivity. Noise levels associated with everyday activities are illustrated in Exhibit 3-8. The City of Placentia Municipal Code has established the following noise control standards for residential and commercial development:[80]

- *All Residential Property (Zone 1):* 55 dBA between 7:00 AM and 10:00 PM and 50 dBA between 10:00 PM and 7:00 AM; and,
- *All Commercial Property (Zone 2): 65* dBA anytime.

According to the City of Placentia municipal code, City noise standards are not to be exceeded:

- For a cumulative period of time more than 30 minutes in any hour; or,
- By five dBA for a cumulative period of more than 15 minutes in any hour; or,
- By 10 dBA for a cumulative period of more than five minutes in any hour; or,
- By 15 dBA for a cumulative period of more than one minute in any hour; or,
- By 20 dBA for any period of time.

Since the proposed project involves the development of both commercial and residential zones, the City's noise ordinance states that the noise standard applicable to the affected property shall apply. As a result, noise emanating from commercial properties should not exceed 55 dbA when adjacent to residential properties.

[80] Placentia, City of. *Municipal Code, Title 23 Zoning, Section 23.76.050 Exterior Noise Standards.*

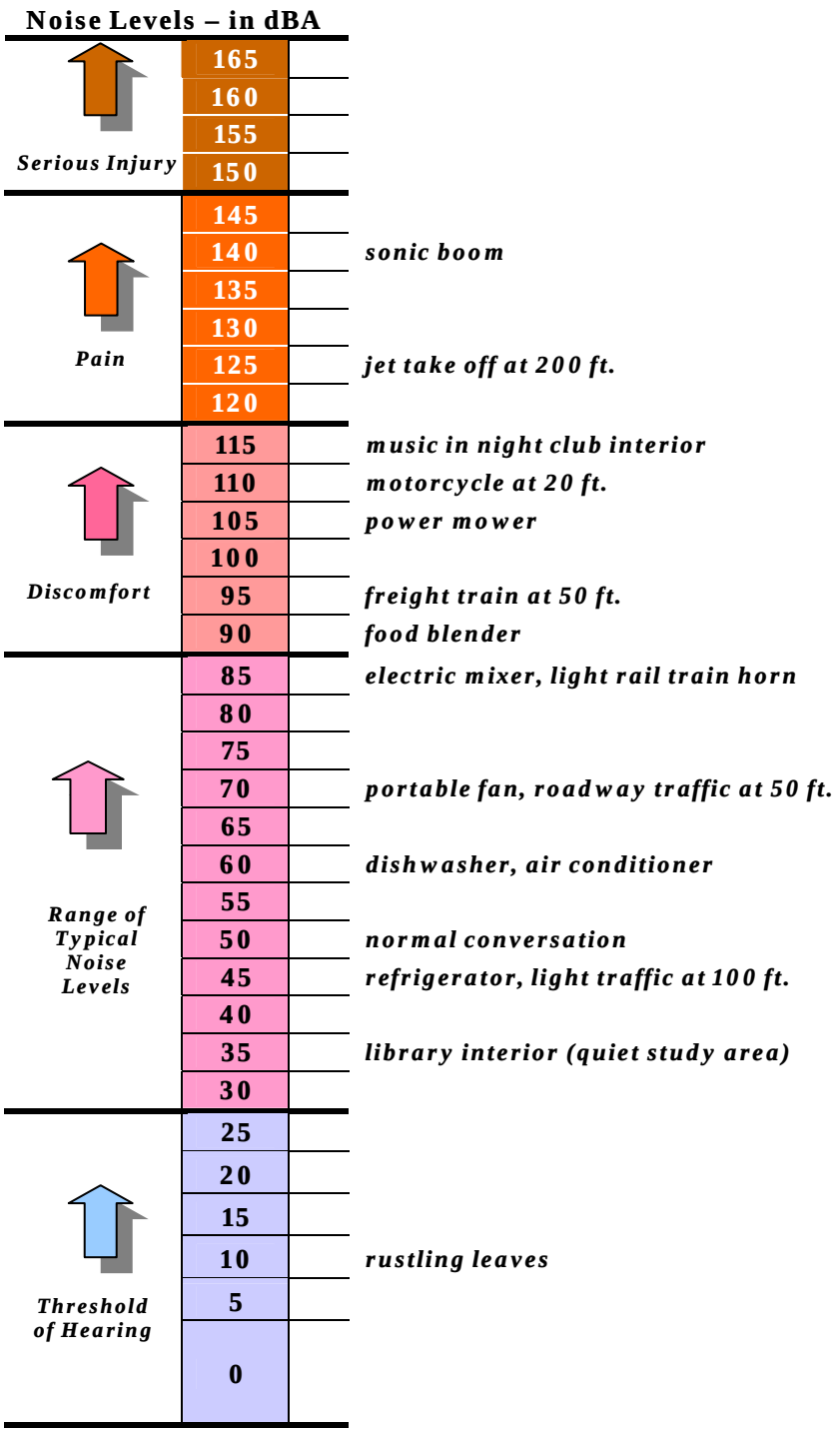


EXHIBIT 3-8
TYPICAL NOISE SOURCES AND LOUDNESS SCALE

Source: Blodgett Baylosis Environmental Planning

Noise sources associated with grading, construction, and the maintenance of real property are not subject to the abovementioned provisions. However, the City limits the use of power construction tools or equipment to specific time periods.[81] All grading is only permitted between the hours of 7:00 AM and 7:00 PM Monday through Friday, and between the hours of 9:00 AM and 6:00 PM on Saturday, and are prohibited on Sundays and on all Federal holidays, unless performing emergency work. Permitted hours for construction activities and the maintenance of real property are outlined within the City of Placentia municipal code and listed below in Table 3-3.

Table 3-3
Permitted Hours for Construction Activities and the Maintenance of Real Property within the City of Placentia

	Monday-Friday	Saturday	Sunday and Holidays
Initial Construction	7:00 AM to 7:00 PM	9:00 AM to 6:00 PM	Prohibited
Remodeling, Repair Work	7:00 AM to 7:00 PM	9:00 AM to 6:00 PM	10:00 AM to 5:00 PM
Maintenance of Real Property	7:00 AM to 7:00 PM	9:00 AM to 6:00 PM	10:00 AM to 5:00 PM

Source: City of Placentia Municipal Code

Noise monitoring was conducted using a Sper Scientific digital sound level meter Model 840029. A total of 400 noise measurements were taken at four different areas within the Old Town Placentia Planning Area: the Calvary Church parking lot (102 Bradford Avenue), the southwest corner of Bradford Avenue and Santa Fe Avenue, the northeast corner of Santa Fe Avenue and Aguirre Lane, and the cul-de-sac at the eastern terminus of Baker Street. The measurements were taken in between the hours of 11:00 AM and 12:00 PM on May 10, 2017. The average noise levels at the first measurement location (Calvary Church parking lot) were 56.3 dBA; the average noise levels at the second measurement location (southwest corner of Bradford Avenue and Santa Fe Avenue) were 56.4 dBA; the average noise levels at the third measurement location (northeast corner of Santa Fe Avenue and Aguirre Lane) were 57.2 dBA; finally, the average noise levels at the fourth measurement location (the cul-de-sac at the eastern terminus of Baker Street) were 53.5 dBA.[82] The results of the four noise measurement surveys are graphically depicted in Exhibit 3-9.

A change in traffic noise levels of between 3.0 dBA and 5.0 dBA is generally considered to be the limit where the change in the ambient noise levels may be perceived by persons with normal hearing. The streetscape plan, building design, and other development standards will be effective in attenuating any increased traffic noise. In addition, the future land uses and development will be required to comply with the City's noise control requirements.

[81] Placentia, City of. *Municipal Code, Title 23 Zoning, Section 23.81.170 Grading, Construction and Maintenance of Real Property*.

[82] Blodgett Baylosis Environmental Planning. *Second Site Survey*. Survey was completed on May 10, 2017.

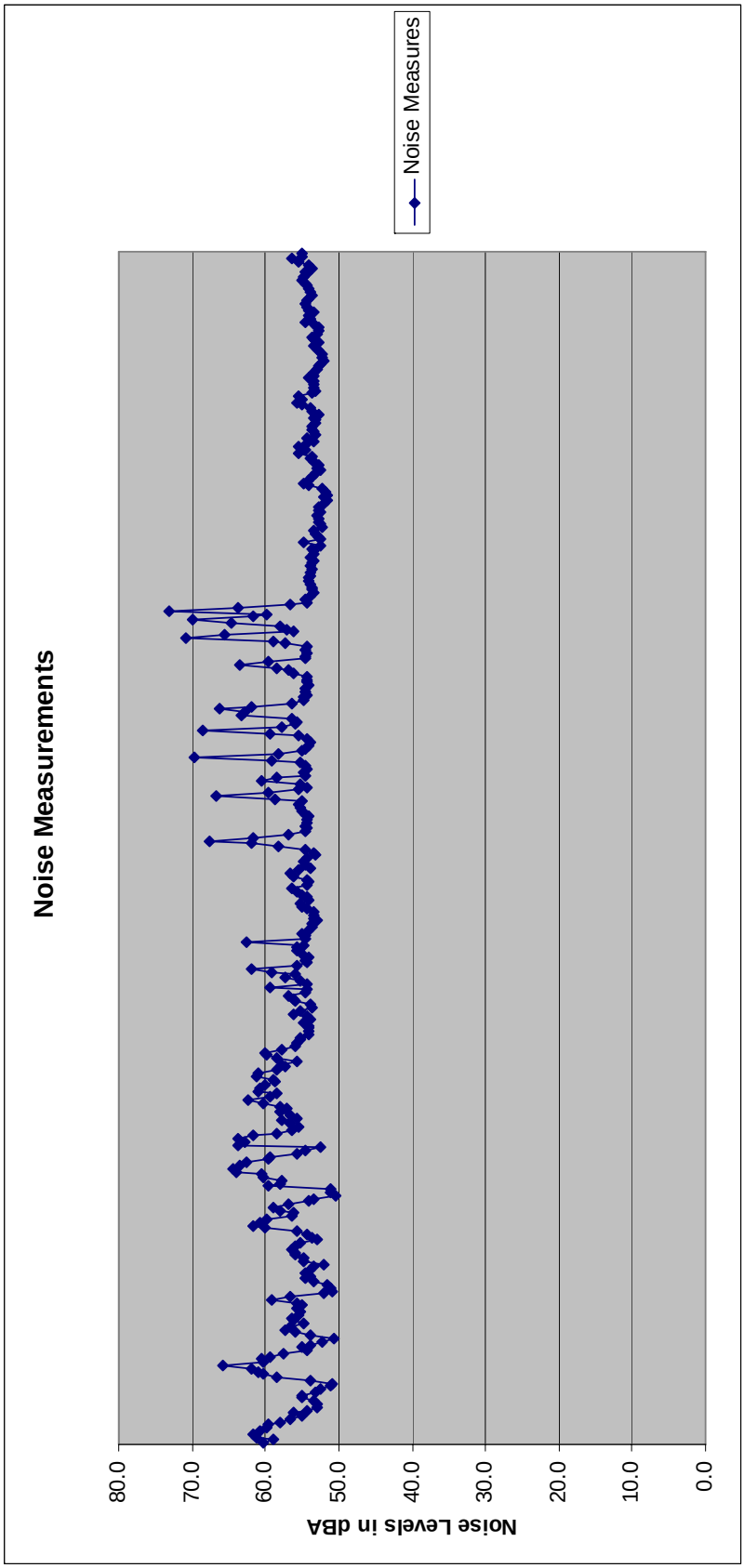


EXHIBIT 3-9
NOISE MEASUREMENT RESULTS
Source: Blodgett Baylosis Environmental Planning

The current noise environment within the Planning Area is dominated by traffic noise emanating from nearby arterial roadways and the railroad track. The levels of noise emanating from local traffic are dependent on various factors. For example, the speed of the traffic is more influential to noise levels than the volume of traffic. Although traffic levels will increase in the Planning Area, various development standards will result in traffic calming. Traffic calming involves the incorporation of physical design and other measures to deliberately reduce traffic speeds. Physical design elements may include speed bumps, the narrowing of roads, and the installation of raised pedestrian crossings. As a result, less than significant impacts will occur.

B. Would the project result in exposure of people to or generation of excessive ground-borne noise levels? Less than Significant Impact.

As indicated in the previous section, a change in traffic noise levels of between 3.0 dBA and 5.0 dBA is generally considered to be the limit where the change in the ambient noise levels may be perceived by persons with normal hearing. It typically requires a doubling of traffic volumes to register a perceptible increase in traffic noise. The current noise environment within the Planning Area is dominated by traffic noise emanating from nearby roadways and the neighboring railroad track. The levels of noise emanating from local traffic are dependent on various factors. For example, the speed of the traffic is more influential to noise levels than the volume of traffic. Although traffic levels will increase in the Planning Area, various development standards will result in traffic calming. Traffic calming involves the incorporation of physical design and other measures to deliberately reduce traffic speeds. Physical design elements may include speed bumps, the narrowing of roads, and the installation of raised pedestrian crossings. Traffic calming will be effective in reducing any potential ground-borne noise levels. As a result, less than significant impacts will occur.

C. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Less than Significant Impact.

A change in traffic noise levels of between 3.0 dBA and 5.0 dBA is generally considered to be the limit where the change in the ambient noise levels may be perceived by persons with normal hearing. The streetscape plan, building design, and other development standards will be effective in attenuating any increased traffic noise. In addition, the future land uses and development will be required to comply with the City's noise control requirements. The current noise environment within the Planning Area is dominated by traffic noise emanating from nearby arterial roadways and the railroad track. The levels of noise emanating from local traffic are dependent on various factors. For example, the speed of the traffic is more influential to noise levels than the volume of traffic. Although traffic levels will increase in the Planning Area, various development standards will result in traffic calming. Traffic calming involves the incorporation of physical design and other measures to deliberately reduce traffic speeds. Physical design elements may include speed bumps, the narrowing of roads, and the installation of raised pedestrian crossings. As a result, less than significant impacts will occur.

D. 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? Less than Significant Impact.

Noise levels associated with various types of construction equipment are summarized in Exhibit 3-10. The noise levels are those that would be expected at a distance of 50 feet from the noise source. Composite construction noise is best characterized in a study prepared by Bolt, Beranek, and Newman. In the study, the noisiest phases of construction are anticipated to be 89 dBA as measured at a distance of 50 feet from the construction activity. In later phases during building erection, noise levels are typically reduced from these values and the physical structures further break up line-of-sight noise. However, as a worst-case scenario, the 89 dBA value was used as an average noise level for the construction activities at 50 feet from the noise sources. Typical noise levels from various types of construction equipment are shown in Exhibit 3-10.

Two types of noise impacts could occur during the construction phase: the transport of workers and equipment to the construction site, which would incrementally increase noise levels along access roadways. Composite construction noise is best characterized by Bolt, Beranek, and Newman.[83] In this study, the noisiest phases of construction for development is presented as 89 dBA as measured at a distance of 50 feet from the construction effort. As previously mentioned, noise sources associated with grading, construction, and the maintenance of real property are not subject to the abovementioned provisions. However, the City limits the use of power construction tools or equipment to specific time periods.[84] As a result, the impacts related to the adoption and subsequent implementation of the Revitalization Project will be less than significant.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? No Impact.

The Planning Area is not located within two miles of an operational public airport. The nearest public use airport is the Fullerton Municipal Airport and it is located approximately 5.75 miles west of the Planning Area. The nearest major airport is located in Long Beach approximately 12.7 miles to the south.[85] As a result, no significant adverse impacts related to the exposure of persons to aircraft noise from a public use airport are anticipated.

[83] USEPA, Protective Noise Levels. 1971

[84] Placentia, City of. *Municipal Code, Title 23 Zoning, Section 23.81.170 Grading, Construction and Maintenance of Real Property.*

[85] Toll Free Airline. *Orange County Public and Private Airports, California.* http://www.tollfreeairline.com/california/orange.htm.

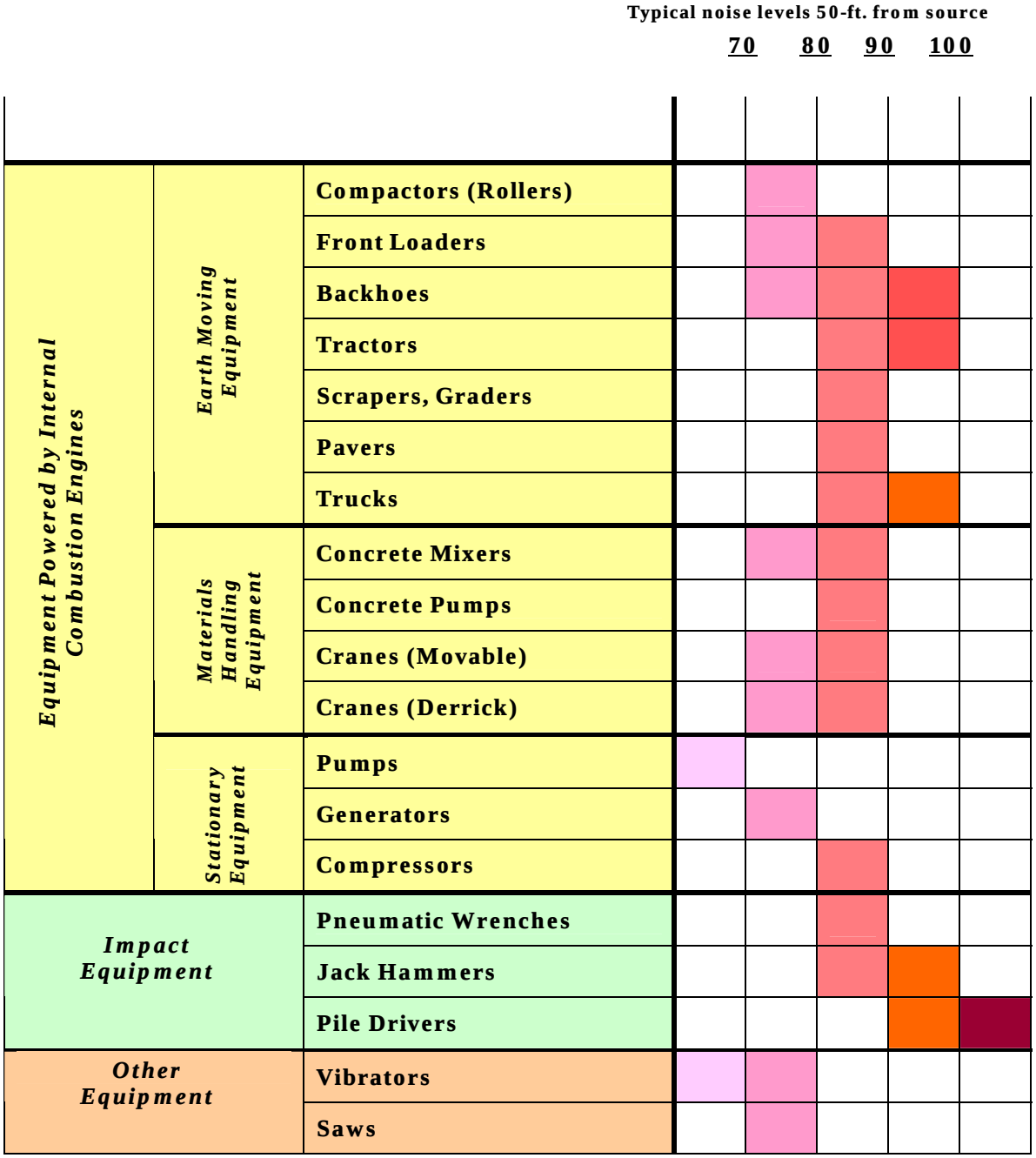


EXHIBIT 3-10
TYPICAL CONSTRUCTION NOISE LEVELS

Source: Blodgett Baylosis Environmental Planning

F. Within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? No Impact.

The Planning Area is not located within two miles of a private airstrip.[86] As a result, no noise impacts related to the exposure of persons to aircraft noise from a private airstrip will result from the proposed project.

3.12.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts. The goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.13 POPULATION & HOUSING

3.13.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant impact on housing and population if it results in any of the following:

- A substantial growth in the population within an area, either directly or indirectly related to a project;
- The displacement of a substantial number of existing housing units, necessitating the construction of replacement housing; or,
- The displacement of substantial numbers of people, necessitating the construction of replacement housing.

3.13.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project induce substantial population growth in an area, either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? Less than Significant Impact.

Based on discussions with the City, the proposed residential uses will be a combination of apartments and townhomes. Currently, the Old Town area contains a mix of single-family residential use and various commercial uses. As we understand, the majority of properties in the area are developed. Therefore, the majority of the proposed land uses are expected to be infill development. No specific new projects are known at this time.

[86] Toll Free Airline. *Orange County Public and Private Airports, California.* http://www.tollfreeairline.com/california/orange.htm.

Although the residential development envisioned within the Revitalization Project may be extensive, environmental analysis will be required for all new residential developments subject to CEQA.[87] The environmental analysis for each residential development will account for the population growth anticipated for the specific development and that of any neighboring development that may be simultaneously constructed. Although there will be significant population growth, the commercial development contemplated within the Revitalization Project will be able to support the population growth. Furthermore, the revitalization of the Planning Area would be classified as infill development, which is beneficial because it would be effective in reducing urban sprawl and the overall vehicle miles traveled (VMT) by being located on an underutilized area within a developed area. Finally, the residential development within the proposed High Density Residential zone will be "by right," pursuant to the State of California housing law, thereby allowing the streamlining of City approval for legally-complying residential projects. As a result, less than significant impacts will occur.

B. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? No Impact.

Based on the development standards in the zone change, the proposed residential uses will be a combination of apartments and townhomes. Currently, the Old Town area contains a mix of residential uses and various commercial uses. The majority of properties in the area are developed. Therefore, the majority of the proposed land uses are expected to be infill development. Although the implementation of the Revitalization Project may result in the reuse of existing residential structures, the potential new development will result in the construction of up to 525 residential units. Therefore, a substantial number of existing housing will not be displaced and no adverse impacts will result.

C. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? No Impact.

Based on the proposed development standards in the zone changes, the proposed residential uses will be a combination of apartments and townhomes. Currently, the Old Town area contains a mix of residential uses and various commercial uses. As we understand, the majority of properties in the area are developed. Therefore, the majority of the proposed land uses are expected to be infill development. No specific new projects are known at this time, though the potential new development involves the construction of 525 residential units. As a result, a substantial number of people will not be displaced and no adverse impacts will result.

3.13.3 MITIGATION MEASURES

Although the residential development envisioned within the Revitalization Project may be extensive, environmental analysis will be required for all new residential developments subject to CEQA.[88] The environmental analysis for each residential development will account for the population growth anticipated for the specific development and that of any neighboring development that may be

[87] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998 (CEQA Guidelines). § 15060 – 15065.

[88] Ibid.

simultaneously constructed. Furthermore, the revitalization of the Planning Area would be classified as infill development, which is beneficial because it would be effective in reducing urban sprawl and the overall vehicle miles traveled (VMT) by being located on an underutilized area within a developed area. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.14 PUBLIC SERVICES

3.14.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on public services if it results in any of the following:

- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impact in order to maintain acceptable service ratios, response times, or other performance objectives relative to fire department services;

- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impact in order to maintain acceptable service ratios, response times, or other performance objectives relative to law enforcement services;

- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impact in order to maintain acceptable service ratios, response times, or other performance objectives relative to school services; or,

- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impact in order to maintain acceptable service ratios, or other performance objectives relative to other government services.

3.14.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to fire department services? Less than Significant Impact.*

The Director of the Orange county Fire Authority provides fire services under a joint powers agreement (JPA) to the City of Placentia. Battalion 2 provides firefighting services at two fire stations in Placentia. Fire Station 34 is located at 1530 North Valencia Avenue; Fire Station 35 is located at 120 South Bradford Avenue. The residential, commercial, and mixed-use development, once occupied, will be periodically inspected by the Orange County Fire Department. In addition, the Fire Department will review the

development plans to ascertain the nature and extent of any additional measures that may be required to meet any Fire Code requirements. The Fire Department currently reviews all new development plans, and future development will be required to conform to all fire protection and prevention requirements, including, but not limited to, building setbacks, emergency access, fire hydrants, interior sprinklers, etc. All new development will be state-of-the-art and will include modern fire suppression equipment and technology. The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts because additional fire staff will not be needed now or in the near future. As a result, less than significant impacts will result.

B. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to police services? Less than Significant Impact.

Law enforcement services in Placentia are provided by the Placentia Police Department. The Police Department is located in the Civic Center. As part of the Police Department's annual review, demand shall be evaluated and resources allocated as necessary. The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts because additional police staff will not be needed now or in the near future. As a result, less than significant impacts will result.

C. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, or other performance objectives relative to school services? Less than Significant Impact.

The Planning Area is located within the service boundaries of the Placentia-Yorba Linda Unified School District. New development will be required to pay all pertinent development fees to the school district. Although the new residential development will result in an incremental increase of school-age students residing within the City, additional school services will not be needed now or in the near future. As a result, less than significant impacts will result.

D. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives relative to other governmental services? Less than Significant Impact.

As previously mentioned, although the new commercial and residential development will result in an incremental increase in demand of governmental services, additional governmental services will not be needed now or in the near future. As a result, less than significant impacts will result.

3.14.3 MITIGATION MEASURES

Although the new commercial and residential development will result in an incremental increase in demand of public services, no significant demand for public services will occur within the immediate

future. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.15 RECREATION

3.15.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on the environment if it results in any of the following:

- 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,

- The construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

3.15.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Less than Significant Impact.

The City of Placentia operates 16 parks throughout the City. Although the new residential development will result in an incremental increase in demand of park facilities, additional recreational facilities will not be needed now or in the near future. Furthermore, no established park facilities will be displaced by future development that is contemplated as part of the Revitalization Project's implementation. As a result, less than significant impacts will result.

B. Would the project affect existing recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? Less than Significant Impact.

As previously mentioned, although the new residential development will result in an incremental increase in demand of park facilities, additional recreational facilities will not be needed now or in the near future. Furthermore, no established park facilities will be displaced by future development that is contemplated as part of the Revitalization Project's implementation. As a result, less than significant impacts are anticipated.

3.15.3 MITIGATION MEASURES

Although the new residential development will result in an incremental increase in demand of recreational facilities, there will be no significant demand for recreational services within the near future. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.16 TRANSPORTATION & CIRCULATION

3.16.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project will normally have a significant adverse impact on traffic and circulation if it results in any of the following:

- A conflict with an applicable plan, ordinance, or policy 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 conflict with an applicable congestion management program, including but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways;

- Results in a change in air traffic patterns, including either an increase in traffic levels or a change in the location that result in substantial safety risks;

- Substantially increases hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Results in inadequate emergency access; or,

- A conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

3.16.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project cause a conflict with an applicable plan, ordinance, or policy 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)? Less than Significant Impact.

The Old Revitalization Project is bounded by Alta Street in the east, the Burlington Northern and Santa Fe Railway train tracks in the south, Chapman Avenue in the north and Murray Street in the west. The revitalization project consists of adding 525 residential units, 85,000 square feet of commercial use, 40,000 square feet of retail use, and a 50-room hotel to the existing area. The Traffic Impact Analysis (TIA) has been prepared consistent with the policies of the City of Placentia guidelines, discussions with the City staff, and methodologies from the Institute of Transportation Engineers (ITE) manuals.

The Revitalization Plan document lists various design options considered for one-way circulation patterns within the Planning Area. The preferred circulation design (Option #3) for the Old Town Planning Area proposes one-way traffic southbound on Bradford Avenue from Center Street to Santa Fe Avenue, and westbound on Santa Fe Avenue from Bradford Avenue to Main Street.

Based on discussions with the City, the analysis was conducted at the study intersections for the following scenarios as part of the TIA:

1) Existing (2017) Conditions;
2) Existing (2017) Plus Project Conditions;
3) Project Buildout Year (2037) Without Project Conditions; and,
4) Project Buildout Year (2037) With Project Conditions, including a new one way circulation pattern along Bradford Avenue and Santa Fe Avenue, as indicated above.

Regional access to the project area is provided by State Route 57 (SR-57). The project's traffic related impacts were evaluated at following eight intersections:

1) Chapman Avenue/SR-57 Southbound Ramps;
2) Chapman Avenue/SR-57 Northbound Ramps;
3) Chapman Avenue/Placentia Avenue;
4) Chapman Avenue/Murray Street;
5) Chapman Avenue/Melrose Street;
6) Chapman Avenue/Bradford Avenue;
7) Santa Fe Street/Melrose Street (All-Way Stop); and,
8) Center Street/Bradford Avenue (All-Way Stop)

Exhibit 3-11 illustrates the Planning Area's location and study intersections.

City of Placentia General Plan guidelines and the Orange County Congestion Management Program (CMP) require that the analysis of signalized intersections be performed using the Intersection Capacity Utilization (ICU) methodology. The assessment of intersection conditions addresses Levels of Service (LOS), in terms of volume-to-capacity (V/C) ratio under the ICU analysis for signalized intersections. Unsignalized intersections and intersections under jurisdiction of Caltrans require the analysis to be performed using the Highway Capacity Manual (HCM) methodology. The assessment of intersection conditions addresses LOS in terms of control delay for HCM analysis.

The Traffix Version 8.0 software package was used to determine intersection LOS based on ICU methodology and HCM methodology for the study intersections.

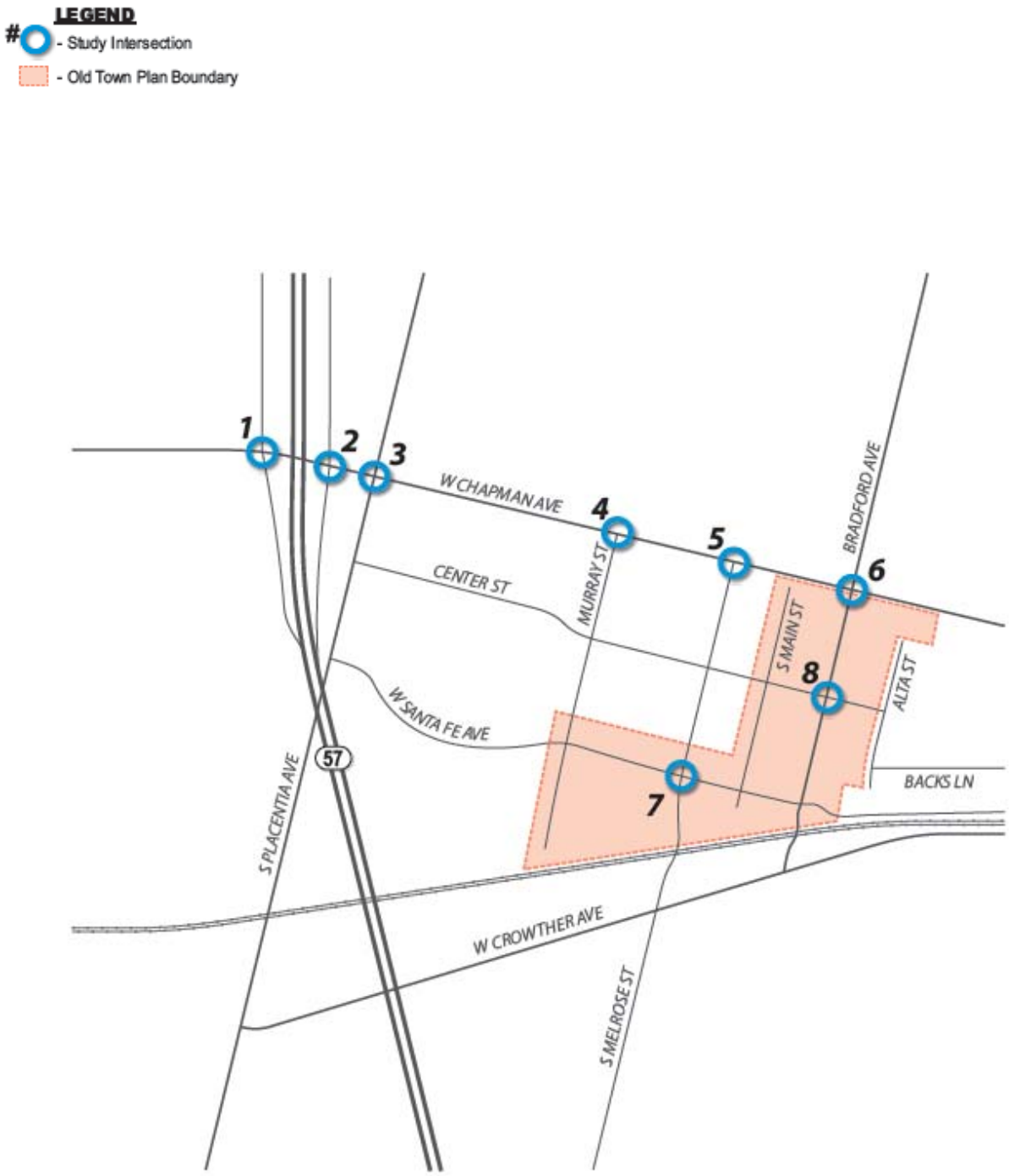


EXHIBIT 3-11
PLANNING AREA AND STUDY INTERSECTIONS
Source: DKS Associates

Brief LOS definitions along with the corresponding volume to capacity ratio for the ICU methodology are shown in Table 3-4.

Table 3-4
Level of Service ICU/VC Definitions

Level of Service	V/C Ratio
A	0.00-0.60
B	0.61-0.70
C	0.71-0.80
D	0.81-0.90
E	0.91-1.00
F	1.01 or greater

Source: Orange County Congestion Management Plan, 2015

The corresponding control delays for the HCM methodology for signalized and unsignalized intersections are shown in Tables 3-9 and 3-10, respectively.

Table 3-5
Level of Service Definitions for Signalized Intersections Based on HCM Delay

Level of Service	Delay per Vehicle (in seconds)
A	≤ 0-10
B	> 10-20
C	> 20-35
D	> 35-55
E	> 55-80
F	> 80

Source: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Table 3-6
Level of Service HCM Definitions

Level of Service	Delay per Vehicle (in seconds)
A	≤ 0-10
B	> 10-15
C	> 15-25
D	> 25-35
E	> 35-50
F	> 50

Source: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

The degree of congestion at an intersection is described by the level-of-service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. Table 3-7 provides a description of each specific LOS grade (LOS A through LOS F).

Table 3-7
Level of Service Descriptions

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Source: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Based on the City of Placentia's Circulation Element, the acceptable level of service for all study intersections is LOS D or better. Therefore, any intersection operating at a LOS E or F will be considered deficient. An intersection is considered to be significantly impacted if the project-related increase in the V/C ratio equals or exceeds 0.01, if it is operating at LOS E or LOS F. For intersections under the jurisdiction of Caltrans, the significant impact criteria is based on the *Caltrans Guide for the Preparation of Traffic Impact Studies* document. Caltrans maintains a target LOS at the transition between LOS C and LOS D using the HCM methodology. Key roadways in the study area are summarized in Table 3-8 along with their existing characteristics. As shown, all surrounding roadways within the study area network are under the jurisdiction of City of Placentia, with the exception of the SR-57 Freeway.

Table 3-8
Existing Characteristics of Roadways in the Planning Area

Roadway	Roadway Jurisdiction	Roadway Classification	Cross-Section	Posted Speed	Pedestrian Facilities	Bicycle Facilities	Transit Facilities
Chapman Avenue	City of Placentia	Primary Arterial	4 Lanes	35/40 mph	Sidewalks	None	OCTA
Placentia Avenue	City of Placentia	Secondary Arterial	4 Lanes	40 mph	Sidewalks	None	OCTA
Murray Street	City of Placentia	Local Street	2 Lanes	25 mph	Sidewalks	None	None
Melrose Street	City of Placentia	Secondary Arterial	2 Lanes	25 mph	Sidewalks	None	None
Bradford Avenue	City of Placentia	Secondary Arterial	2 Lanes	25 mph	Sidewalks	None	OCTA
Center Street	City of Placentia	Local Street	2 Lanes	25 mph	Sidewalks	None	None
Santa Fe Avenue	City of Placentia	Local Street	2/4 Lanes	25/35 mph	Sidewalks	None	None
SR-57 Freeway	Caltrans	Freeway	10 Lanes	60 mph	None	None	None

Exhibit 3-12 illustrates the existing roadway conditions for the study area roadways. The number of through traffic lanes and the existing intersection controls are identified. Existing traffic volumes at all study intersections were collected on Wednesday, April 26, 2017. The peak hours were determined by combining the four highest adjacent 15 minute periods during the AM peak period (7:00-9:00 AM) and the PM peak period (4:00-6:00 PM) at the intersections. Exhibit 3-13 illustrates the existing AM and PM peak hour traffic volumes at the study intersections. The actual counts are provided in Appendix A of the DKS Traffic Study. The existing LOS have been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections.

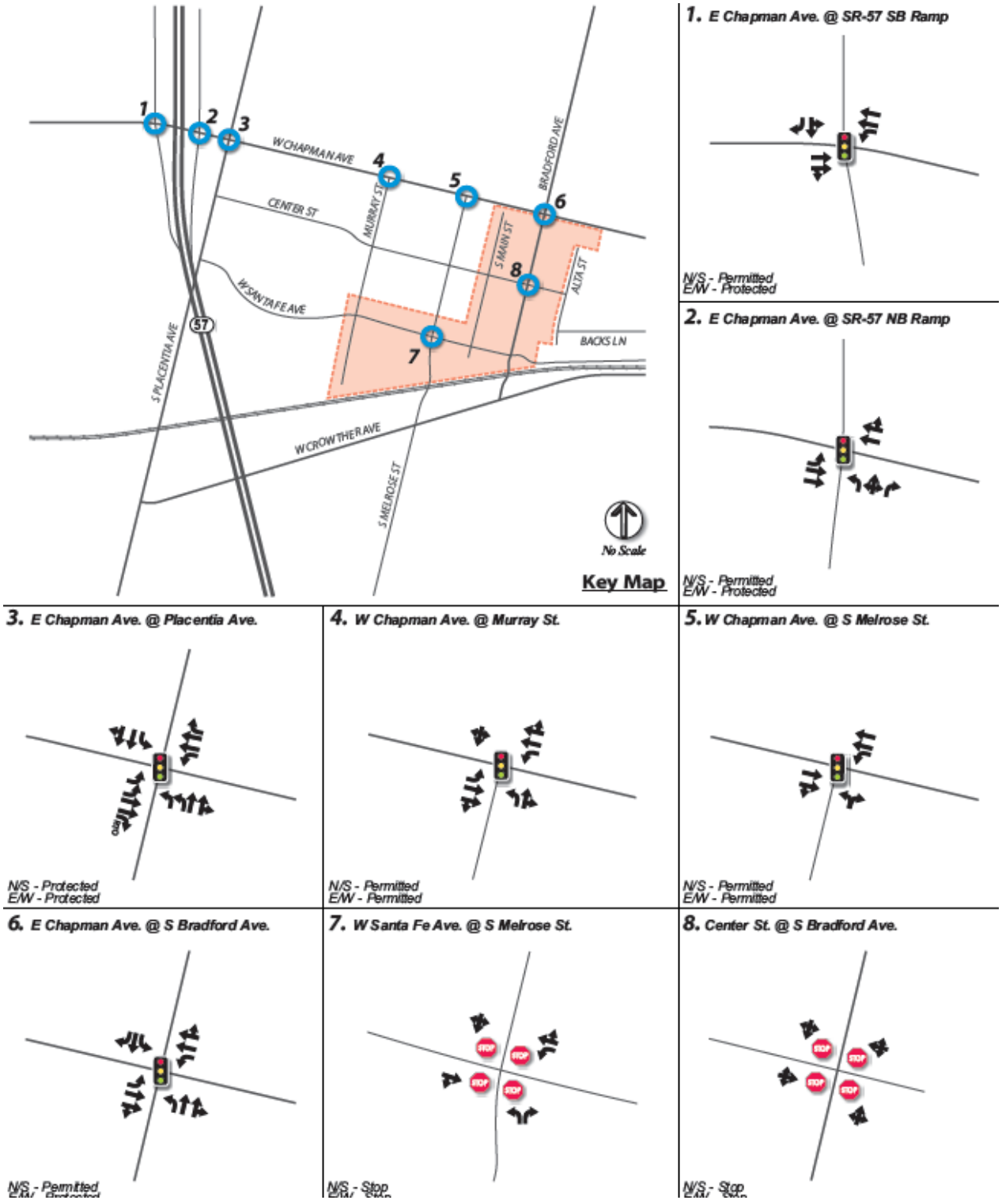


EXHIBIT 3-12
EXISTING LANE CONFIGURATIONS

Source: DKS Associates

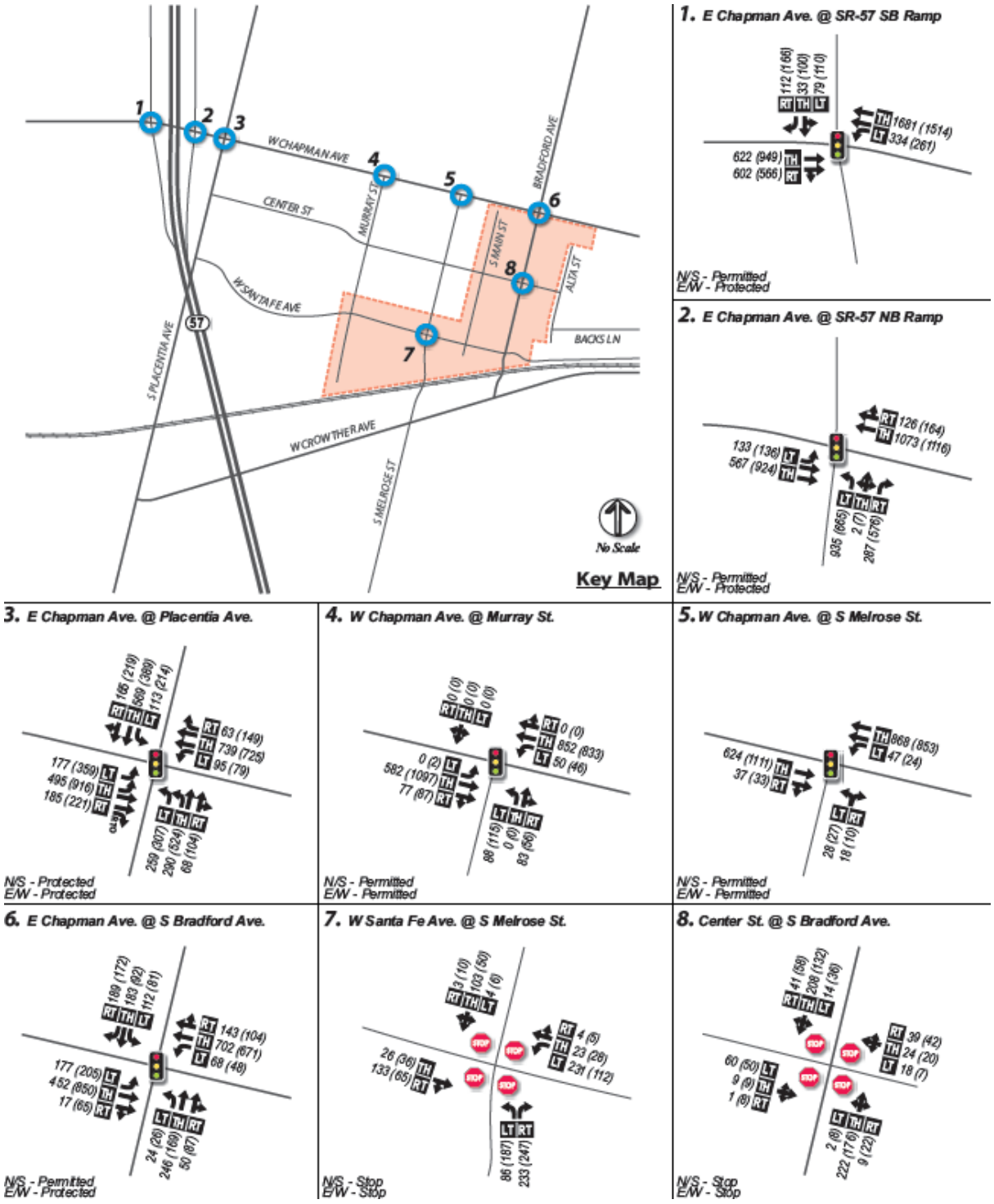


EXHIBIT 3-13
EXISTING 2017 AM/PM PEAK HOUR VOLUMES

Source: DKS Associates

The LOS summary is shown in Table 3-9. As shown, all intersections operate at LOS C or better. LOS calculation sheets are provided in Appendix B of the DKS Traffic Study.

Table 3-9
Existing Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
Caltrans – Signalized				
Chapman Avenue/SR-57 Southbound Ramps	12.7	B	15.4	B
Chapman Avenue/SR-57 Northbound Ramps	26.4	C	26.2	C
City of Placentia – Signalized				
Chapman Avenue/Placentia Avenue	0.611	B	0.679	B
Chapman Avenue/Murray Street	0.352	A	0.493	A
Chapman Avenue/Melrose Street	0.332	A	0.416	A
Chapman Avenue/Bradford Avenue	0.556	A	0.521	A
City of Placentia – All-Way Stop Controlled				
Santa Fe Street/Melrose Street	11.1	B	9.9	A
Center Street/Bradford Avenue	8.6	A	8.7	A

Analysis Software: Traffix, Version 8.0. Per the Intersection Capacity Utilization methodology, overall volume to capacity ratios and levels of service are shown for intersections controlled by traffic signals. Per the Highway Capacity Manual (HCM 2000) methodology, overall average intersection delay and level of service are shown for intersections controlled by all-way stop and for intersections under the jurisdiction of Caltrans.

The Revitalization Project would add 525 residential units, 85,000 square feet of commercial use, 40,000 square feet of retail use, and a 50-room hotel. The proposed residential use will be a combination of apartments and townhomes. As a conservative approach, this analysis will assume 100% apartment use due to the greater trip generation rate compared to townhomes. Currently, the Old Town area contains a mix of residential uses and various commercial uses. The majority of properties in the area are developed. Therefore, the majority of the proposed land uses are expected to be infill development. While it can be expected that some existing land uses may be replaced, DKS is assuming the Old Town Revitalization Project consists of the proposed development plus all the existing land uses.

Based on discussions with City staff, the City has approved the use of three trip credits, transit, pass-by, and internal capture. Due to the project's vicinity to transit facilities, including the proposed Placentia Metrolink Station, and the project's goal to develop a walkable urban environment, DKS applied a transit trip credit. The Orange County Congestion Management Program (CMP) highlights the benefits of utilizing pass-by and internal capture credits for mixed-used developments, such as the Old Town Revitalization Project. Pass-by traffic is retail traffic that is already on the road and driving by the site. The driver will stop at the retail shop on their way to their final destination. Internal capture is the portion of trips generated by a development that both begin and end within the site. Based on techniques outlined in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 9th Edition, pass-by and internal

capture trip credits were estimated. As shown in Table 3-10, a 34% pass-by credit can be applied to commercial retail use and a 12% internal capture trip credit can be applied to the overall development.

Trip generation estimates for the proposed project were developed using trip rates established in the ITE Trip Generation Manual, 9th Edition. As shown in Table 3-10, the combination of the proposed development and the applied trip credits results in approximately 7,361 trip-ends per day, with 306 (115 inbound, 191 outbound) trips during the AM peak hour and 510 (281 inbound, 229 outbound) trips during the PM peak hour.

Table 3-10
Project Trip Generation Summary

Land Use	ITE Code	Size		Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Rates										
Apartment	220	per	DU	6.65	0.10	0.41	0.51	0.40	0.22	0.62
Hotel	310	per	RM	8.17	0.31	0.22	0.53	0.31	0.29	0.60
Shopping Center (Retail/Commercial)	820	per	TSF	42.70	0.60	0.36	0.96	1.78	1.93	3.71
Trip Generation										
Trips										
Apartment		525	DU	3,491	53	215	268	210	116	326
Hotel		50	RM	409	16	11	27	15	15	30
Shopping Center (Retail/Commercial)		125.00	TSF	5,338	75	45	120	223	241	464
Gross Total Trips				**9,238**	**144**	**271**	**415**	**448**	**372**	**820**
Land Use	**ITE Code**	**Size**		**Daily**	**AM Peak Hour**			**PM Peak Hour**		
					In	**Out**		**In**	**Out**	
Transit Reduction for Apartment (Less 25% Transit Trip)	(873	(13)		(54)	(67)	(53)		(29)	(82)	
Pass-by Reduction for Retail/Commercial (Less 34% Pass-by Trip)	--	--		--	--	(76)		(82)	(158)	
Internal Capture Reduction for Development (12% Internal Trip)	(1,004)	(16)		(26)	(42)	(38)		(32)	(70)	
Net Project Trip Generation	**7,361**	**115**		**191**	**306**	**281**		**229**	**510**	

Project trip distribution patterns were based on factors such as: 1) transportation facility characteristics that impact travel demand (i.e. location of urban arterials, freeways, and interchanges); 2) location of employment and commercial facilities; and 3) existing traffic patterns.

Exhibits 3-14 and 3-15 illustrate trip distribution percentages for the proposed project. Trip distribution percentages were applied to the proposed project's trip generation to calculate the traffic volumes which the project would generate at study intersections (i.e. trip assignment). The resulting AM and PM peak hour trip assignments used for the LOS analysis are shown in Exhibit 3-16.

The trips generated from the project, as shown in Exhibits 3-16, were added to the existing traffic volumes which resulted in the existing plus project traffic scenario. Exhibit 3-17 illustrates the Existing Year (2017) Plus Project traffic volumes. The existing level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections.

In conclusion, and as shown, all intersections operate at LOS C or better. LOS calculation sheets are provided in Appendix C of the DKS Traffic Study. Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections under Existing (2017) Plus Project traffic conditions for both the AM and PM peak periods. Therefore, no mitigation measures are required on study intersections as part of the project.

Table 3-11
Existing (2017) Plus Project Intersection Level of Service Summary

Intersection	Existing				Existing Plus Project				Difference		Project Impact
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak	PM Peak	
	V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS	
Caltrans – Signalized											
Chapman Ave/ SR-57 SB Ramp	12.7	B	15.4	B	13.5	B	17.7	B	2.7	2.3	NO
Chapman Ave/ SR-57 NB Ramp	26.4	C	26.2	C	27.3	C	27.3	C	0.9	1.1	NO
City of Placentia – Signalized											
Chapman Ave/ Placentia Ave	0.611	B	0.679	B	0.637	B	0.721	C	0.026	0.042	NO
Chapman Ave/ Murray St	0.352	A	0.493	A	0.393	A	0.558	A	0.558	0.041	NO
Chapman Ave/ Melrose St	0.332	A	0.416	A	0.367	A	0.494	A	0.494	0.035	NO
Chapman Ave/ Bradford Ave	0.556	A	0.521	A	0.566	A	0.541	A	0.541	0.010	NO
City of Placentia – All-Way Stop Controlled											
Santa Fe Ave/ Melrose St	11.1	B	9.9	A	12.2	B	11.1	B	1.1	1.2	NO
Center St/ Bradford Ave	8.6	A	8.7	A	9.1	A	9.9	A	0.5	1.2	NO

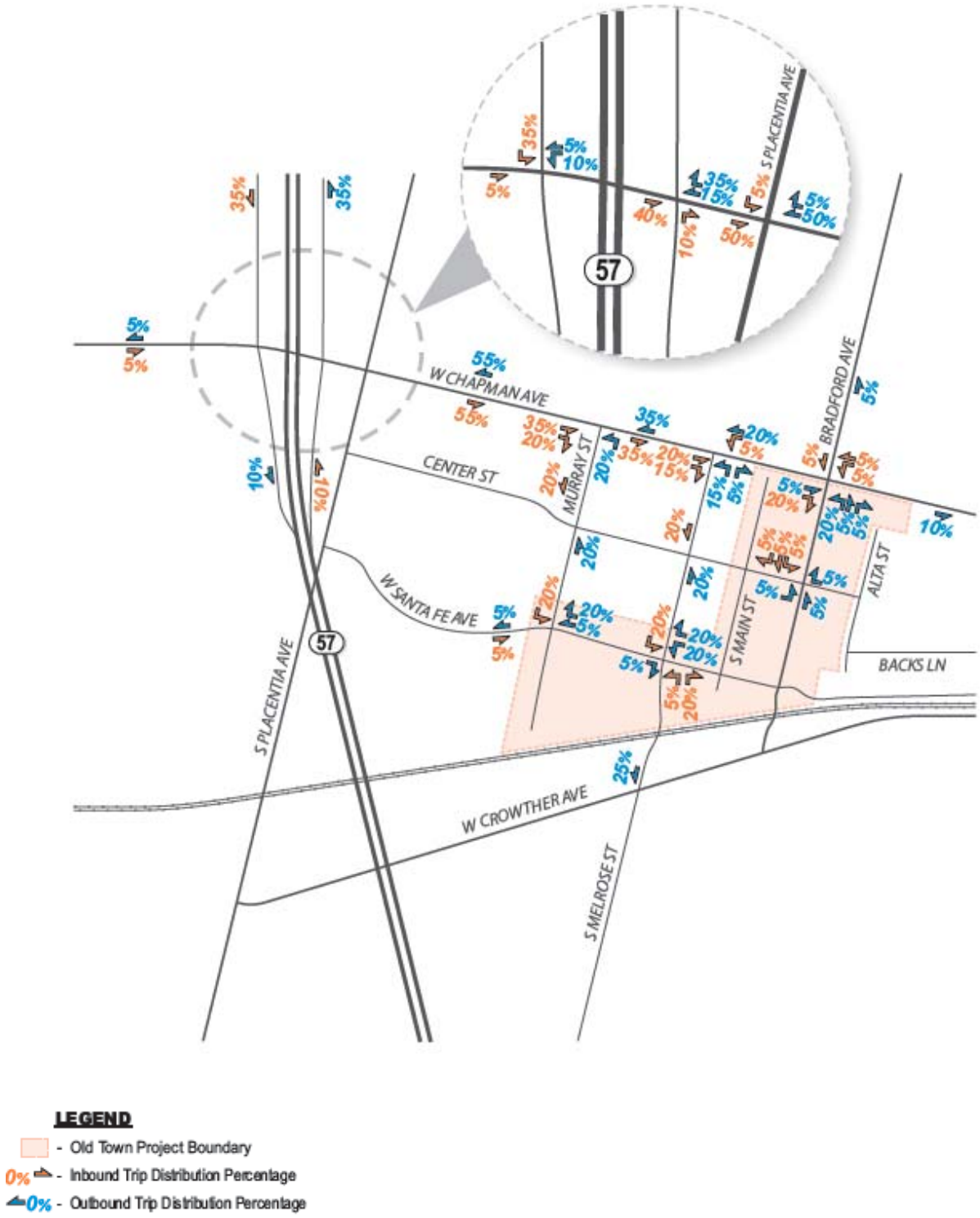


EXHIBIT 3-14
PROJECT TRIP DISTRIBUTION-RESIDENTIAL & HOTEL

Source: DKS Associates

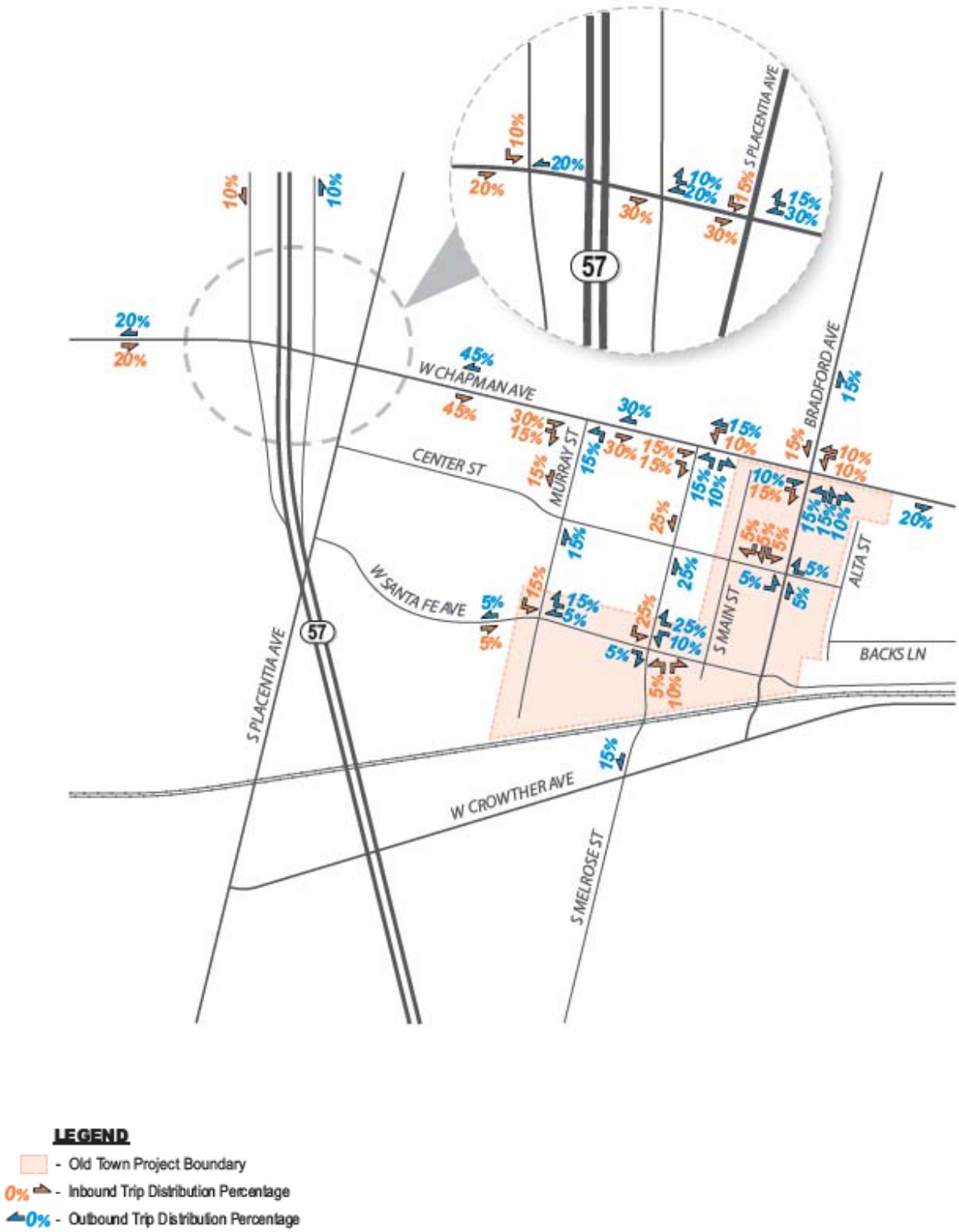


EXHIBIT 3-15
PROJECT TRIP DISTRIBUTION-COMMERCIAL & RETAIL

Source: DKS Associates

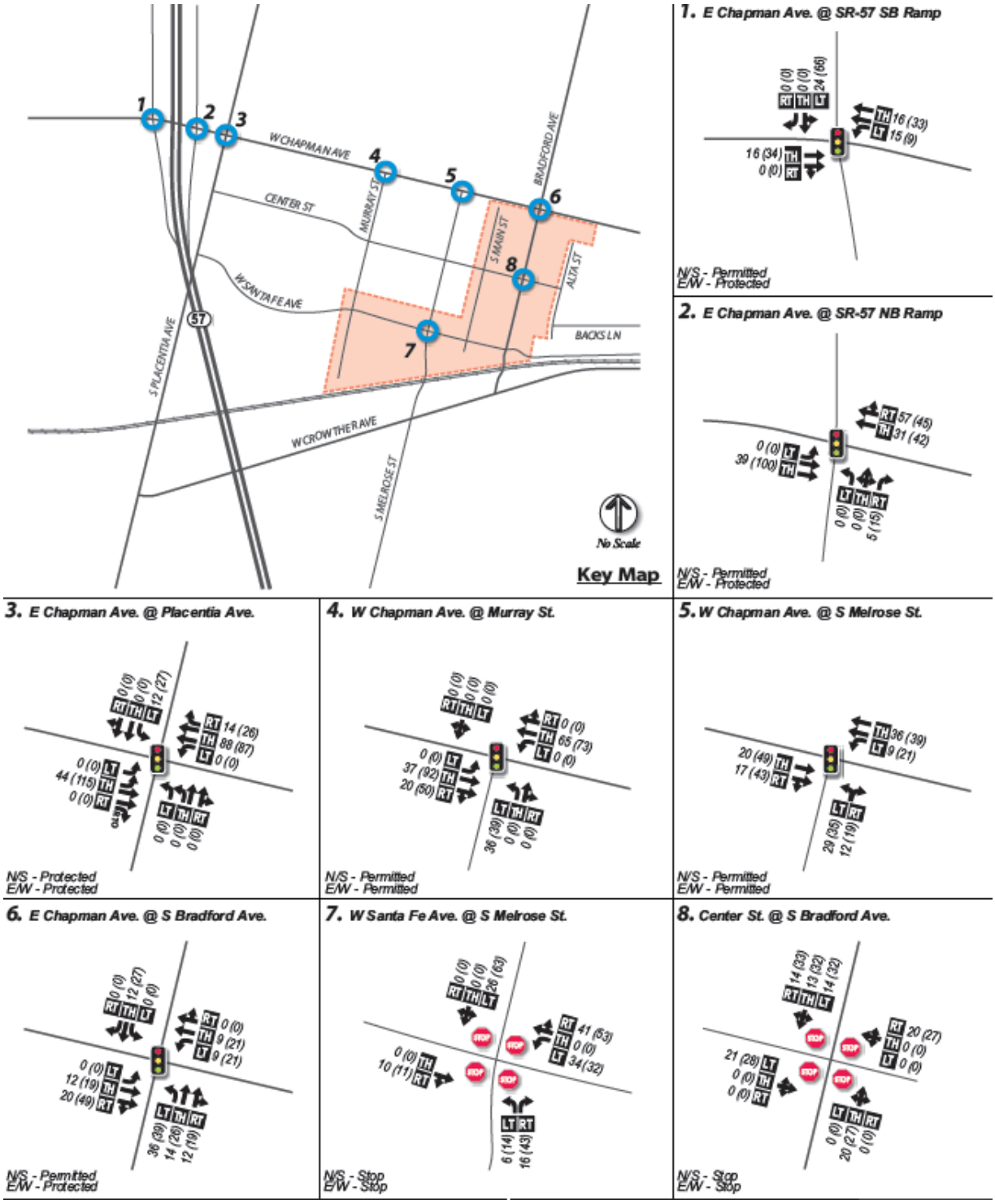


EXHIBIT 3-16
PROJECT TRIP ASSIGNMENT

Source: DKS Associates

Future year buildout traffic forecasts were developed in order to analyze the project traffic impacts during the buildout year of the project (2037). Based on discussions with the City staff, a 1% annual growth was added to the existing vehicular traffic volumes for a period of 20 years to determine the future 2037 traffic volumes at the study intersections. In addition, the City of Placentia provided a list and locations of cumulative projects to be used for the future 2037 analysis. Figure 8 in the Traffic Report included in Appendix B illustrates the general location of these cumulative projects. The list of cumulative projects is presented in Table 3-12.

Table 3-12
List of Cumulative Projects

Cumulative Project	Description	Location
Placentia Metrolink Station	New Train Station	NEC of Melrose St/Crowther Ave
Transit Oriented Development (TOD)	752 Single-Family Residential Units	Melrose St/Crowther Ave Vicinity
General Plan Zoning Change	318,000 square feet of 'Industrial' to 'Commercial'	NEC of Placentia Ave/Crowther Ave

As shown in Table 3-13, the cumulative developments are projected to generate approximately 8,263 trip-ends per day, with 425 (113 inbound, 312 outbound) trips during the AM peak hour and 708 (389 inbound, 319 outbound) trips during the PM peak hour. Trip distribution details for the cumulative projects are included in Appendix E of the DKS Traffic Study.

Table 3-13
Cumulative Projects Trip Generation Summary

Cumulative Project	ITE Code	Size	Units	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Placentia Metrolink Station	--	--	--	1,180	211	31	242	31	211	242
Transit Oriented Development (TOD)	220	752	DU	3,753	-65	259	194	261	60	321
Existing Zoning Designation – Industrial	110	108.580	TSF	-757	-88	-12	-100	-13	-92	-105
Proposed Zoning Designation – Commercial	826	92.220	TSF	4,087	55	34	89	110	140	250
Total Trips				**8,263**	**113**	**312**	**425**	**389**	**319**	**708**

Exhibit 3-17 shows the cumulative project volumes at study intersections. Exhibit 3-18 illustrates the Project Buildout Year (2037) Without Project AM and PM peak hour traffic volumes in the study area. Project Buildout Year (2037) traffic conditions include the existing peak hour intersection volumes plus the ambient growth rate (20 years at 1% growth per year) and cumulative traffic volumes.

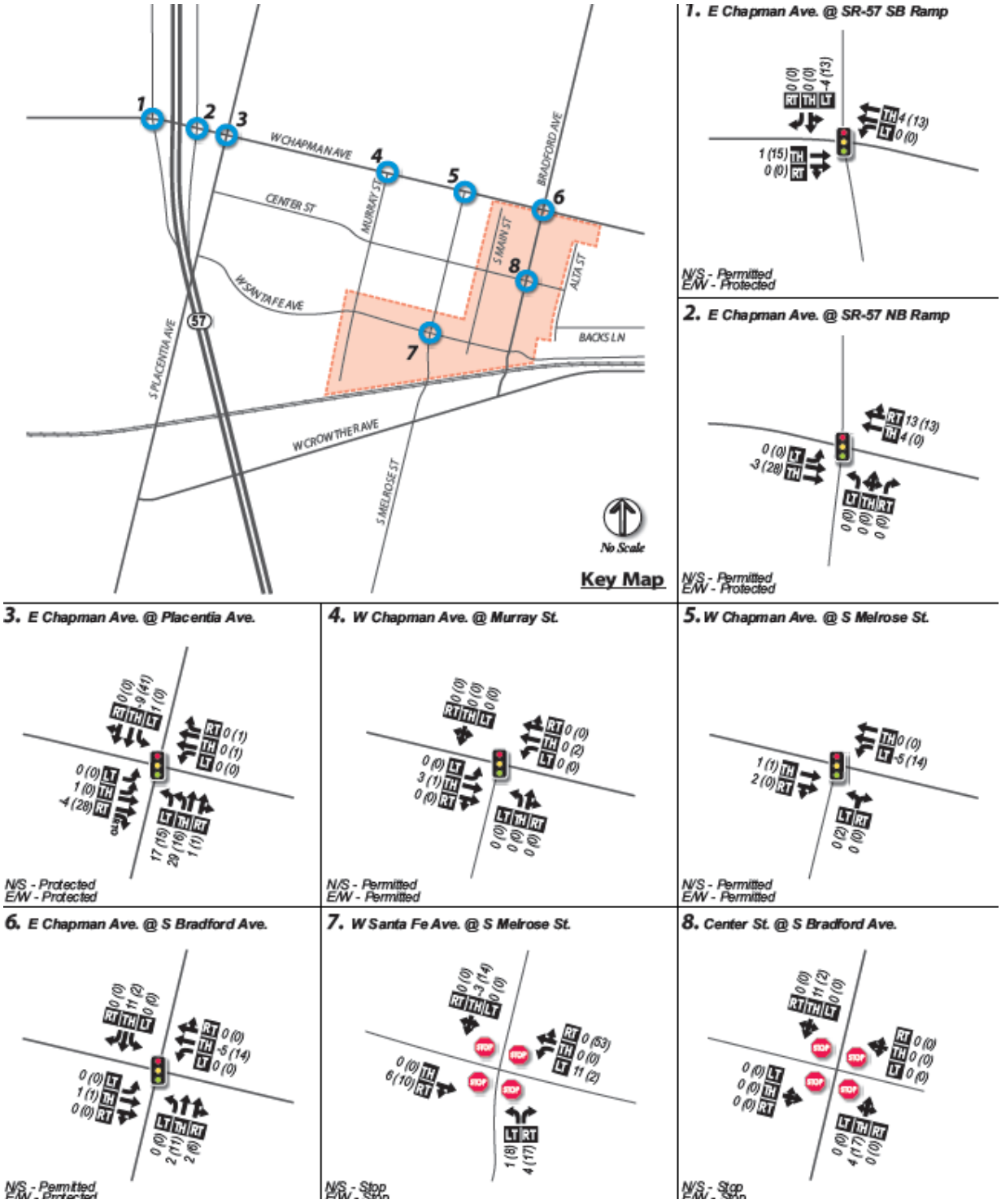


EXHIBIT 3-17
CUMULATIVE PROJECT PEAK HOUR VOLUMES

Source: DKS Associates

The Project Buildout Year (2037) Without Project level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections. The LOS summary for intersections is shown in Table 3-14. As shown, all intersections operate at LOS D or better. LOS calculation sheets are provided in Appendix E of the DKS Traffic Study.

Table 3-14
Project Buildout Year (2037) Without Project
Intersection Level of Service Summary

Intersection	AM Peak Hour		PM Peak Hour	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
Caltrans – Signalized				
Chapman Avenue/SR-57 Southbound Ramps	15.1	B	18.3	B
Chapman Avenue/SR-57 Northbound Ramps	39.1	D	40.8	D
City of Placentia – Signalized				
Chapman Avenue/Placentia Avenue	0.726	C	0.811	D
Chapman Avenue/Murray Street	0.413	A	0.582	A
Chapman Avenue/Melrose Street	0.390	A	0.510	A
Chapman Avenue/Bradford Avenue	0.656	B	0.623	B
City of Placentia – All-Way Stop Controlled				
Santa Fe Street/Melrose Street	13.2	B	11.2	B
Center Street/Bradford Street	10.4	B	9.5	A

The projected trips from the Revitalization Project, as shown in Exhibit 3-19, were added to the Project Buildout Year (2037) Without Project traffic volumes shown in Exhibit 3-18, which results in the Project Buildout Year (2037) With Project traffic scenario. Exhibit 3-19 illustrates the Project Buildout Year (2037) With Project traffic volumes.

The Project Buildout Year (2037) With Project level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections. The LOS summary for intersections is shown in Table 3-15. As shown, all intersections operate at LOS D or better. LOS calculation sheets are provided in Appendix F of the DKS Traffic Study.

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections under Project Buildout Year (2037) Plus Project traffic conditions for both the AM and PM peak periods. Therefore, no mitigation measures are required on study intersections as part of the project.

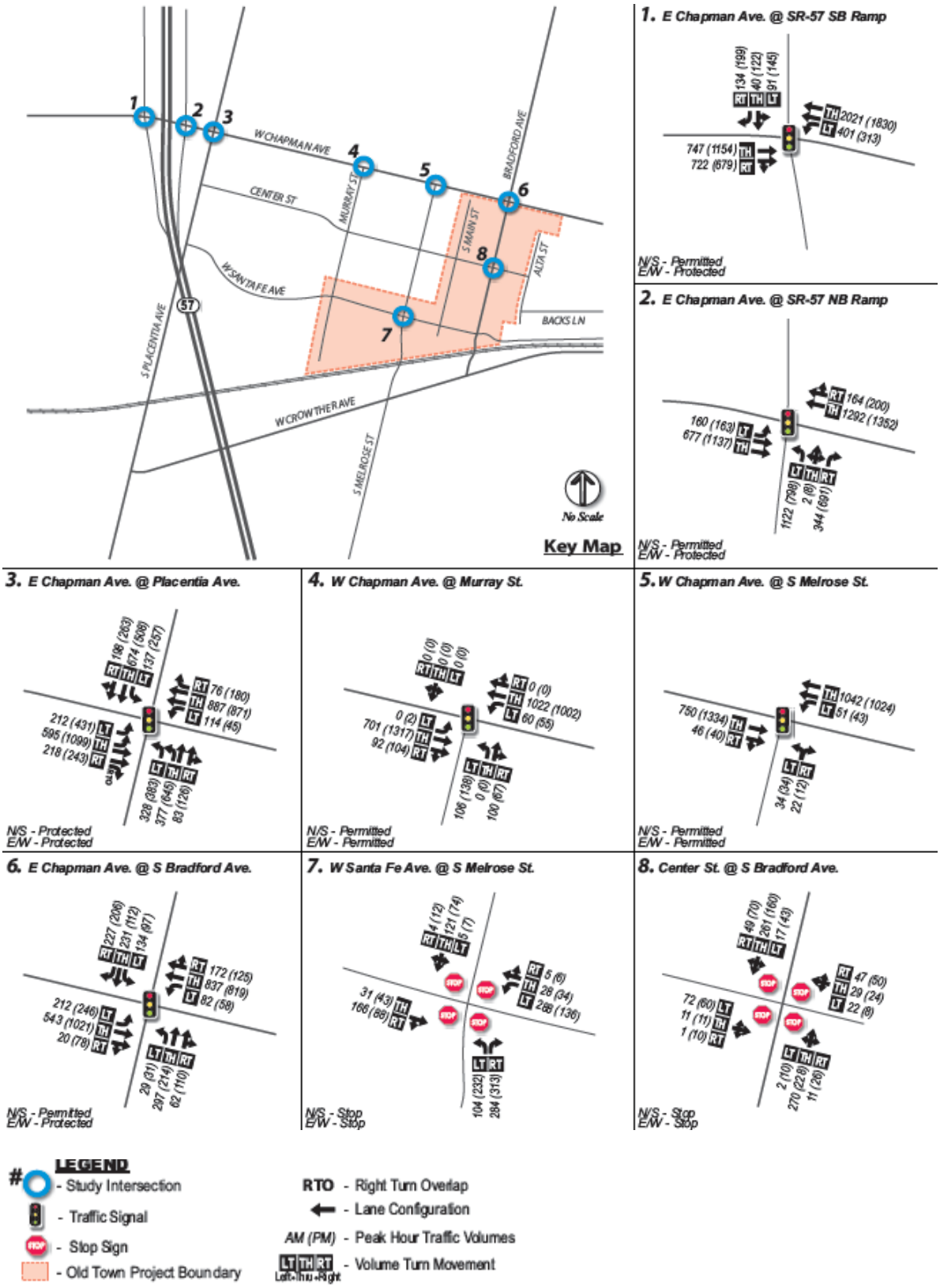


EXHIBIT 3-18
PROJECT BUILDOUT YEAR (2037) WITHOUT PROJECT TRAFFIC

Source: DKS Associates

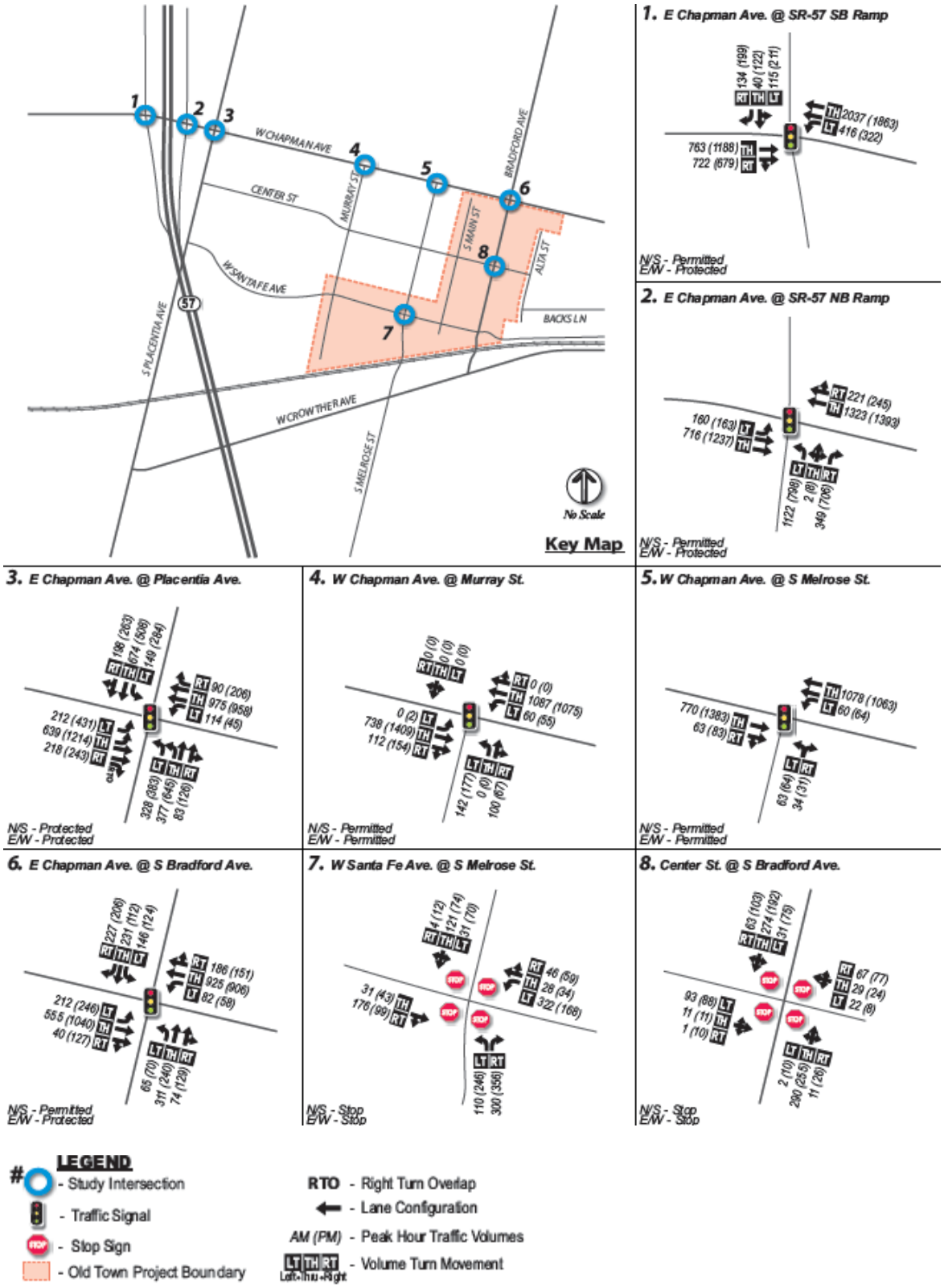


EXHIBIT 3-19
PROJECT BUILDOUT YEAR (2037) WITH PROJECT TRAFFIC

Source: DKS Associates

Table 3-15
Level of Service Impacts from Buildout Year (2037) Plus Project

Intersection	Year 2037 without Project				Year 2037 with Project				Difference		Project Impact
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak	PM Peak	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	
Caltrans – Signalized											
Chapman Avenue/ SR-57 Southbound Ramps	15.1	B	18.3	B	16.1	B	21.0	C	1.0	2.7	NO
Chapman Avenue/ SR-57 Northbound Ramps	39.1	D	40.8	D	43.0	D	45.3	D	3.9	4.5	NO
City of Placentia – Signalized											
Chapman Avenue/ Placentia Avenue	0.726	C	0.811	D	0.752	C	0.856	D	0.026	0.045	NO
Chapman Avenue/ Murray Street	0.413	A	0.582	A	0.453	A	0.647	B	0.040	0.065	NO
Chapman Avenue/ Melrose Street	0.390	A	0.510	A	0.425	A	0.581	A	0.035	0.071	NO
Chapman Avenue/ Bradford Avenue	0.656	B	0.623	B	0.666	B	0.642	B	0.010	0.019	NO
City of Placentia – All-Way Stop Controlled											
Santa Fe Street/ Melrose Street	13.2	B	11.2	B	15.0	B	12.9	B	1.8	1.7	NO
Center Street/ Bradford Street	10.4	B	9.5	A	11.4	B	11.0	B	1.0	1.5	NO

Based on the results of the analysis, the proposed project generated trips would not cause significant impact at any of the study intersections for both Existing (2017) Plus Project and Project Buildout (Year 2037) With Project traffic conditions during the AM and PM peak periods. Therefore, no mitigation measures are required at any study intersection as a part of the proposed project.

B. Would the project result in a conflict with an applicable congestions management program, including but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways? No Impact.

In June 1990, the passage of the Proposition 111 gas tax increase required California's urbanized areas – areas with populations of 50,000 or more– to adopt a Congestion Management Program (CMP). The following year, Orange County's local governments designated the Orange County Transportation Authority (OCTA) as the Congestion Management Agency (CMA) for the County. As a result, OCTA is responsible for the development, monitoring, and biennial updating of Orange County's CMP.

The CMP for Orange County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. Developments that will be within the Planning Area will not be projects that are classified as "Regionally Significant Projects" and therefore will not potentially affect any local CMP intersection. In order to be classified as a "Regionally Significant Project" by CEQA, a

project must be a residential development of more than 500 units; a commercial center or business employing more than 1,000 persons or having more than 500,000 square feet of floor area; an office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor area; a hotel consisting of more than 500 rooms; or an industrial use with more than 650,000 square feet of floor area or occupying more than 40 acres of land, or employing more than 1,000 persons.[89] Therefore, the adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts. As a result, no impacts will occur.

C. *Would the project results in a change in air traffic patterns, including either an increase in traffic levels or a change in the location that results in substantial safety risks? No Impact.*

The proposed Old Town Placentia Revitalization Project will not result in traffic air traffic patterns. As a result, no significant averse impacts will result.

D. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? No Impact.

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts. The Revitalization Plan document lists various design options considered for one-way circulation patterns within the Planning Area. The preferred circulation design (Option #3) for the Old Town Planning Area proposes one-way traffic southbound on Bradford Avenue from Center Street to Santa Fe Avenue, and westbound on Santa Fe Avenue from Bradford Avenue to Main Street. This proposed circulation pattern will not result in a hazardous design feature for the Planning Area. Furthermore, various development standards will result in traffic calming. Traffic calming involves the incorporation of physical design and other measures to deliberately reduce traffic speeds. Physical design elements may include speed bumps, the narrowing of roads, and the installation of raised pedestrian crossings. Traffic calming measures will result in safer road conditions for both drivers and pedestrians. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

E. Would the project result in inadequate emergency access? No Impact.

The future development supported by the Old Town Placentia Revitalization Project would comply with applicable regulations established by the Orange County Fire Department and the Placentia Division of Building and Safety, in addition to the standard design requirements of the Uniform Building Code. The Fire Department will review any development plan including all buildings, fences, drive gates, or other features that might affect Fire Department access. This review process, along with the proponent's compliance with the applicable regulations and standards, would ensure that adequate emergency access would be provided. Therefore, no impacts will occur.

[89] California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998 (CEQA Guidelines). § 15206 (2) (A-E).

F. Would the project result in a conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? No Impact.

The adoption and subsequent implementation of the Old Town Placentia Revitalization Project will not lead to any significant impacts. The goals, policies, and implementation programs contained within the Revitalization Project will mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. Thus, no impacts will occur.

3.16.3 MITIGATION MEASURES

Based on the results of the analysis, the proposed project generated trips would not cause significant impact at any of the study intersections for both Existing (2017) Plus Project and Project Buildout (Year 2037) With Project traffic conditions during the AM and PM peak periods. In addition, the goals, policies, and implementation programs contained within the Revitalization Plan document will also further reduce the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. Therefore, no mitigation measures are required at any study intersection as a part of the proposed project.

3.17 TRIBAL CULTURAL RESOURCES

3.17.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on tribal cultural resources if it results in any of the following:

- A substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or,

- A substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

3.17.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?● Less than Significant Impact.

A Tribal Resource is defined in Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "non-unique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Formal Native American consultation was undertaken in accordance with AB-52 and no responses were received. In the unlikely event that remains are uncovered by construction crews, all excavation and grading activities shall be halted and the Orange County Sheriff will be contacted (the Department will then contact the County Coroner). This is a standard condition under California Health and Safety Code Section 7050.5(b), which states:

> *"In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with (b) Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her*

determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."

In addition, Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. Therefore, the potential impacts are considered to be less than significant.

B. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ● Less than Significant Impact.*

Formal Native American consultation was undertaken in accordance with AB-52. In the unlikely event that remains are uncovered by construction crews, all excavation and grading activities shall be halted and the Orange County Sheriff will be contacted (the Department will then contact the County Coroner). In addition, Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. Therefore, the potential impacts are considered to be less than significant.

3.17.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Revitalization Project will not lead to any significant impacts. The goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development. As a result, no additional mitigation beyond that which may be required for individual development projects is required.

3.18 UTILITIES

3.18.1 THRESHOLDS OF SIGNIFICANCE

According to the City of Placentia, acting as Lead Agency, a project may be deemed to have a significant adverse impact on utilities if it results in any of the following:

- An exceedance of the wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- The construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts;

- The construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- An overcapacity of the storm drain system causing area flooding;

- A determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand;

- The project will be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs;

- Non-compliance with federal, state, and local statutes and regulations relative to solid waste;

3.18.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Less than Significant Impact.

The Orange County Sanitation District treats wastewater from the City of Placentia.[90] Local sewer lines are maintained by the City of Placentia. This system contains sewage collection piping ranging in size from eight inches to fifteen-inches. The Orange County Sanitation District (OCSD) owns, operates, and maintains the large trunk sewers of the regional wastewater conveyance system. The OCSD collects, treats, and disposes of and/or reclaims the wastewater generated by 2.5 million people living and working in central and northwestern Orange County. OCSD's service area encompasses approximately 479 square miles and its system includes approximately 580 miles of sewer lines and two treatment plants located in the cities of Fountain Valley and Huntington Beach. Through these facilities, OCSD collects, conveys, treats, and/or reclaims approximately 230 million gallons of wastewater generated daily in its service area. Approximately 80% of the wastewater comes from homes (i.e., sinks, toilets, showers, laundry, and dishwashers).

The OCSD operates two treatment facilities: Reclamation Plant No. 1, located in the City of Fountain Valley, and Reclamation Plant No. 2, located in the City of Huntington Beach. The City of Placentia is served by Reclamation Plant No. 2. The plant receives raw wastewater through five major sewers. Approximately 33 percent of the effluent receives secondary treatment through an activated sludge system, and all of the effluent is discharged into the ocean disposal system. The current capacity for Reclamation Plant No. 2 is 168 million gallons per day (mgd) of primary treated wastewater and 90 mgd of secondary treated wastewater. The current average flow is 151 mgd; thus, remaining capacity at this plant is approximately 24 mgd. Expansion plans by OCSD are ongoing and designed to address the incremental increase in sewage generation as a result of a new development. The secondary treatment capacity at this plant is currently being increased by 60 mgd for a future total capacity of 150 mgd. The capacity of

[90] Orange County Sanitation Districts. www.lacsd.org/about/serviceareamap.asp

Reclamation Plant No. 2 will also be analyzed on a per project basis as development under the project occurs. As a result, the potential impacts are considered to be less than significant.

B. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? Less than Significant Impact.

As stated in the previous subsection, the City of Placentia is located within the service boundaries of OCSD Reclamation Plant No. 2, which is located in the City of Huntington Beach. As individual projects within the Revitalization Project are proposed, an analysis of local sewer line capacity and treatment plant capacity will be undertaken on a per project basis. Thus, the proposed impacts are anticipated to be less than significant.

Golden State Water Company has been serving the City of Placentia since 1929. Golden State Water Company provides water for 15,500 customers in Placentia and portions of Anaheim, Cowan Heights, Lemon Heights, Orange, and Yorba Linda. Three water systems serve the Placentia Customer Service Area. Water delivered to customers in the Cowan Heights, Placentia, and Yorba Linda systems is a blend of groundwater pumped from the Orange County Groundwater Basin and imported water from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California).

According to the 2010 Urban Water Management Plan prepared for Golden State Water Company and the City of Placentia, demand for water is projected to be 5,691 acre-feet per year by 2020 and 5,848 acre-feet per year by 2025. Supplies are anticipated to total 9,178 acre-feet per year by 2020 and 9,432 acre-feet per year in 2025. Demand through the year 2025 is anticipated to be up to 62 percent of projected supplies. The future development permitted under the Revitalization Project will contribute to an incremental increase in water consumption. Each individual project's water consumption will be analyzed on a per project basis and mitigation may be recommended if demand exceeds the capacity of the local water lines. The installation of water efficient appliances and fixtures will reduce demand for water. In addition, the planting of Xeriscape landscaping will further reduce future water consumption. As a result, the impacts are considered to be less than significant.

C. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Less than Significant Impact.

The City of Placentia is served by the Orange County Flood Control District (LACFCD), which operates and maintains regional and municipal storm drainage facilities. The City works with the (LACFCD) in making local drainage plans and improvements. According to the City, any project submitted to the City of Placentia for review and approval may be subject to the requirements of the Municipal NPDES permit. Water Quality Management Plan (WQMP) compliance is a requirement within the Permit. Development and Redevelopment projects submitted for review and approval will be screened during this process to determine if a WQMP is required. The WQMP will identify both construction and operational Low Impact Development (LID) Best Management Practices (BMPs) that will reduce the volume of water discharged into the local storm drains and filter out any contaminants present in the stormwater runoff.

As individual projects within the revitalization area are proposed, the applicants will be will be required to implement the construction and operational Best Management Practices (BMPs) identified in the WQMPs. These construction BMPs may include, but are not limited to, the limiting of grading during rain events; planting vegetation on slopes; covering slopes susceptible to erosion; maintaining stockpiles of soil on-site; and containing runoff, spills, and equipment on-site.

Typical post-construction/operational BMPs that may also be required include biofiltration/retention basins, stormwater detention chambers, grate inlet filters, and bioswales as well as other mechanisms for reducing runoff and removing potential contaminants. The biofiltration basins facilitate proper treatment and discharge of storm water runoff by using plants to capture and biologically degrade pollutants carried by storm water runoff. Biofiltration/retention areas also reduce the volume of storm water runoff discharged into the local storm drains.[91] These facilities normally consist of a grass buffer strip, sand bed, ponding area, organic layer or mulch layer, planting soil, and plants. The runoff's velocity is reduced by passing over or through a sand bed and is subsequently distributed evenly along a ponding area. Adherence to the post construction BMPs identified in the WQMPs will ensure that all potential impacts remain at levels that are less than significant.

D. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? Less than Significant Impact.

As indicated in subsection 3.18.2.B, Golden State Water Company presently serves the City of Placentia. Golden State Water Company provides water for 15,500 customers in Placentia and portions of Anaheim, Cowan Heights, Lemon Heights, Orange, and Yorba Linda. Three water systems serve the Placentia Customer Service Area. Water delivered to customers in the Cowan Heights, Placentia, and Yorba Linda systems is a blend of groundwater pumped from the Orange County Groundwater Basin and imported water from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California).

According to the 2010 Urban Water Management Plan prepared for Golden State Water Company and the City of Placentia, demand for water is projected to be 5,691 acre-feet per year by 2020 and 5,848 acre-feet per year by 2025. Supplies are anticipated to total 9,178 acre-feet per year by 2020 and 9,432 acre-feet per year in 2025. Demand through the year 2025 is anticipated to be up to 62 percent of projected supplies. The future development permitted under the Revitalization Project will contribute to an incremental increase in water consumption. Each individual project's water consumption will be analyzed on a per project basis and mitigation may be recommended if demand exceeds the capacity of the local water lines. The installation of water efficient appliances and fixtures will reduce demand for water. In addition, all new development will be required to meet the City's Water Efficiency Landscape Ordinance to reduce the burden placed on the City's water resources.[92] As a result, the impacts are considered to be less than significant.

[91] California Department of Transportation. *Biofiltration Strips*. http://www.dot.ca.gov/hq/LandArch/16_la_design/guidance/ec_toolbox/stormwater/biofiltration_strips.htm

[92] Placentia, City of. *Muncipal Code, Chapter 23.77, Water Efficient Landscape Ordinance.*

E. Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? Less than Significant Impact.

The adoption of the Old Town Placentia Revitalization Project will not lead to a direct generation in wastewater or a direct increase in demand for water. Individual projects within the planning area will be analyzed on a per project basis. Specifically, each project's impacts to the local sewer and water lines will be analyzed and mitigation may be proposed to better accommodate the increased demand. As a result, the potential impacts will be less than significant.

F. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Less than Significant Impact.

Trash collection in the City of Placentia is provided by Republic Services for disposal into the nearby landfills, primarily the Olinda Alpha landfill (the Puente Landfill is now closed). The Olinda Alpha landfill accepts up to 8,000 tons of solid waster on a daily basis and processes an average of 5,322 tons of waste per day.[93] In addition, the Los Angeles County Sanitation District selected the Mesquite Regional Landfill in Imperial County as the new target destination for the County's waste (as an alternative to the closed Puente Hills landfill). The Mesquite Regional Landfill in Imperial County has a 100-year capacity at 8,000 tons per day.

Additionally, the nearby Puente Hills Transfer Station/Materials Recovery Facility (MRF) is able to accept 4,440 tons per day of solid waste. Waste may also be transferred to the Downey Area Recycling and Transfer Facility, the South Gate Transfer Station, the Commerce Refuse-to-Energy Facility, and the Southeast Resource and recovery facility. The adoption of the Revitalization Project will lead to approximately 2,850 pounds per day of solid waste, which is well within the capacity of the abovementioned waste facilities. Furthermore, solid waste generation will be analyzed on a per project basis. As a result, the potential impacts are considered to be less than significant.

G. Would the project comply with federal, state, and local statutes and regulations related to solid waste? No Impact.

The future development supported by the Revitalization Project, like all other development in Placentia, will be required to adhere to City and County ordinances with respect to waste reduction and recycling. As a result, no impacts related to state and local statutes governing solid waste are anticipated.

3.18.3 MITIGATION MEASURES

The adoption and subsequent implementation of the Revitalization Project will not lead to any significant impacts. The goals, policies, and implementation programs contained within the Revitalization Project will also further mitigate the potential impacts from new development contemplated as part of the implementation of the Revitalization Project. As a result, no additional mitigation beyond that which may

[93] Solid Waste Association of North America (SWANA). *SWANA 2014 Landfill Management Excellence Award for Olinda Alpha Landfill.*

be required for individual development projects is required.The analysis determined that the project's potential impacts in regards to utilities were less than significant.

3.19 MANDATORY FINDINGS OF SIGNIFICANCE

The following findings can be made regarding the mandatory findings of significance set forth in Section 15065 of the CEQA Guidelines based on the results of this environmental assessment:

- The approval and subsequent implementation of the Old Town Placentia Revitalization Project *will not* have the potential to degrade the quality of the environment, with the implementation of the mitigation measures included herein.

- The approval and subsequent implementation of the Old Town Placentia Revitalization Project *will not* have the potential to achieve short-term goals to the disadvantage of long-term environmental goals, with the implementation of the mitigation measures referenced herein.

- The approval and subsequent implementation of the Old Town Placentia Revitalization Project *will not* have impacts that are individually limited, but cumulatively considerable, when considering planned or proposed development in the immediate vicinity, with the implementation of the mitigation measures contained herein.

- The approval and subsequent implementation of the Old Town Placentia Revitalization Project *will not* have environmental effects that will adversely affect humans, either directly or indirectly.

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SECTION 4 CONCLUSIONS

4.1 FINDINGS

The Initial Study determined that the proposed project is not expected to have significant adverse environmental impacts. The following findings can be made regarding the mandatory findings of significance set forth in Section 15065 of the CEQA Guidelines based on the results of this Initial Study:

- The Old Town Placentia Revitalization Project *will not* have the potential to degrade the quality of the environment, with the implementation of the mitigation measures included herein.

- The Old Town Placentia Revitalization Project *will not* have the potential to achieve short term goals to the disadvantage of long-term environmental goals, with the implementation of the mitigation measures referenced herein.

- The Old Town Placentia Revitalization Project *will not* have impacts that are individually limited, but cumulatively considerable, when considering planned or proposed development in the immediate vicinity, with the implementation of the mitigation measures contained herein.

- The Old Town Placentia Revitalization Project *will not* have environmental effects that will adversely affect humans, either directly or indirectly, with the implementation of the mitigation measures contained herein.

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SECTION 5 REFERENCES

5.1 PREPARERS

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5.2 REFERENCES

Bugliarello, et. al., *The Impact of Noise Pollution,* Chapter 127, 1975.

California Administrative Code, *Title 24, Energy Conservation,* 1990.

California Department of Fish and Game, *Natural Diversity Database*, 2010.

California Division of Mines and Geology, *Seismic Hazards Mapping Program,* 2008.

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APPENDICES

Appendix A – Air Quality Worksheets

Appendix B – DKS Associates Traffic Impact Analysis

Appendix C – Utilities Worksheets

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APPENDIX A
AIR QUALITY WORKSHEETS

Old Town Placentia

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	50.00	Room	1.67	72,600.00	0
Apartments Mid Rise	525.00	Dwelling Unit	13.82	525,000.00	1502
Regional Shopping Center	125.00	1000sqft	2.87	125,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per IS/MND

Construction Phase - Per IS/MND

Woodstoves - No hearths planned

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	261.00
tblConstructionPhase	NumDays	30.00	262.00
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	10.00	261.00
tblConstructionPhase	PhaseEndDate	7/12/2019	12/30/2023
tblConstructionPhase	PhaseEndDate	5/17/2019	12/31/2021
tblConstructionPhase	PhaseEndDate	1/26/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	3/23/2018	12/31/2020
tblConstructionPhase	PhaseEndDate	6/14/2019	12/31/2022
tblConstructionPhase	PhaseEndDate	2/9/2018	12/31/2019
tblConstructionPhase	PhaseStartDate	6/15/2019	1/1/2023
tblConstructionPhase	PhaseStartDate	3/24/2018	1/1/2021
tblConstructionPhase	PhaseStartDate	2/10/2018	1/1/2020
tblConstructionPhase	PhaseStartDate	5/18/2019	1/1/2022
tblConstructionPhase	PhaseStartDate	1/27/2018	1/1/2019
tblGrading	AcresOfGrading	655.00	75.00
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.7998	38.3805	23.0567	0.0407	0.1677	1.9399	2.1076	0.0445	1.8061	1.8505	0.0000	4,054.6693	4,054.6693	1.0730	0.0000	4,081.4931
2019	4.4232	45.6341	22.8718	0.0401	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	3,979.0309	3,979.0309	1.1983	0.0000	4,008.9888
2020	4.5406	50.2583	32.7759	0.0643	6.5492	2.1756	8.7248	3.4023	2.0016	5.4039	0.0000	6,234.7488	6,234.7488	1.9490	0.0000	6,283.4737
2021	4.0397	27.1470	35.4668	0.0994	5.5772	1.0126	6.5898	1.4920	0.9516	2.4436	0.0000	9,939.2331	9,939.2331	0.8961	0.0000	9,961.6356
2022	1.1622	11.1620	15.1030	0.0244	0.1677	0.5691	0.7368	0.0445	0.5236	0.5680	0.0000	2,367.8189	2,367.8189	0.7180	0.0000	2,385.7699
2023	20.2068	1.5044	4.7064	0.0123	1.0060	0.0778	1.0838	0.2668	0.0773	0.3441	0.0000	1,206.5852	1,206.5852	0.0387	0.0000	1,207.5523
Maximum	**20.2068**	**50.2583**	**35.4668**	**0.0994**	**18.2675**	**2.3919**	**20.6594**	**9.9840**	**2.2006**	**12.1846**	**0.0000**	**9,939.2331**	**9,939.2331**	**1.9490**	**0.0000**	**9,961.6356**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.7998	38.3805	23.0567	0.0407	0.1677	1.9399	2.1076	0.0445	1.8061	1.8505	0.0000	4,054.6693	4,054.6693	1.0730	0.0000	4,081.4930
2019	4.4232	45.6341	22.8718	0.0401	7.2470	2.3919	9.6390	3.9263	2.2006	6.1269	0.0000	3,979.0309	3,979.0309	1.1983	0.0000	4,008.9888
2020	4.5406	50.2583	32.7759	0.0643	2.6906	2.1756	4.8662	1.3631	2.0016	3.3646	0.0000	6,234.7488	6,234.7488	1.9490	0.0000	6,283.4737
2021	4.0397	27.1470	35.4668	0.0994	5.5772	1.0126	6.5898	1.4920	0.9516	2.4436	0.0000	9,939.2331	9,939.2331	0.8961	0.0000	9,961.6356
2022	1.1622	11.1620	15.1030	0.0244	0.1677	0.5691	0.7368	0.0445	0.5236	0.5680	0.0000	2,367.8189	2,367.8189	0.7180	0.0000	2,385.7699
2023	20.2068	1.5044	4.7064	0.0123	1.0060	0.0778	1.0838	0.2668	0.0773	0.3441	0.0000	1,206.5852	1,206.5852	0.0387	0.0000	1,207.5523
Maximum	**20.2068**	**50.2583**	**35.4668**	**0.0994**	**7.2470**	**2.3919**	**9.6390**	**3.9263**	**2.2006**	**6.1269**	**0.0000**	**9,939.2331**	**9,939.2331**	**1.9490**	**0.0000**	**9,961.6356**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	46.89	0.00	37.29	53.15	0.00	35.52	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	154.6033	11.3957	310.4648	0.6834		40.3429	40.3429		40.3429	40.3429	4,917.6322	9,528.0283	14,445.6604	14.7415	0.3338	14,913.6621
Energy	0.2991	2.6000	1.4123	0.0163		0.2066	0.2066		0.2066	0.2066		3,262.6093	3,262.6093	0.0625	0.0598	3,281.9973
Mobile	18.4712	89.0884	220.6915	0.7342	56.1706	0.7195	56.8901	15.0302	0.6754	15.7055		74,634.1464	74,634.1464	3.8313		74,729.9280
Total	**173.3735**	**103.0841**	**532.5687**	**1.4339**	**56.1706**	**41.2691**	**97.4396**	**15.0302**	**41.2249**	**56.2550**	**4,917.6322**	**87,424.7839**	**92,342.4161**	**18.6353**	**0.3936**	**92,925.5874**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.0344	0.5028	43.4751	2.2900e-003		0.2390	0.2390		0.2390	0.2390	0.0000	78.0283	78.0283	0.0762	0.0000	79.9320
Energy	0.2991	2.6000	1.4123	0.0163		0.2066	0.2066		0.2066	0.2066		3,262.6093	3,262.6093	0.0625	0.0598	3,281.9973
Mobile	14.9194	63.9169	125.3396	0.3727	26.3558	0.3720	26.7278	7.0523	0.3488	7.4011		37,951.9700	37,951.9700	2.2540		38,008.3186
Total	**32.2529**	**67.0197**	**170.2270**	**0.3913**	**26.3558**	**0.8177**	**27.1735**	**7.0523**	**0.7945**	**7.8468**	**0.0000**	**41,292.6075**	**41,292.6075**	**2.3926**	**0.0598**	**41,370.2480**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	81.40	34.99	68.04	72.71	53.08	98.02	72.11	53.08	98.07	86.05	100.00	52.77	55.28	87.16	84.80	55.48

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	12/31/2018	5	261	
2	Site Preparation	Site Preparation	1/1/2019	12/31/2019	5	261	
3	Grading	Grading	1/1/2020	12/31/2020	5	262	
4	Building Construction	Building Construction	1/1/2021	12/31/2021	5	261	
5	Paving	Paving	1/1/2022	12/31/2022	5	260	
6	Architectural Coating	Architectural Coating	1/1/2023	12/30/2023	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 1,063,125; Residential Outdoor: 354,375; Non-Residential Indoor: 296,400; Non-Residential Outdoor: 98,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Old Town Placentia - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	448.00	89.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	90.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**		**1.9386**	**1.9386**		**1.8048**	**1.8048**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	**0.0808**	**0.0580**	**0.7526**	**1.8400e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**182.9028**	**182.9028**	**6.2400e-003**		**183.0587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**		**1.9386**	**1.9386**		**1.8048**	**1.8048**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	**0.0808**	**0.0580**	**0.7526**	**1.8400e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**182.9028**	**182.9028**	**6.2400e-003**		**183.0587**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	**0.0882**	**0.0613**	**0.8088**	**2.1400e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4400e-003**	**0.0548**		**212.5780**	**212.5780**	**6.6500e-003**		**212.7442**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**7.0458**	**2.3904**	**9.4362**	**3.8730**	**2.1991**	**6.0721**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	**0.0882**	**0.0613**	**0.8088**	**2.1400e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4400e-003**	**0.0548**		**212.5780**	**212.5780**	**6.6500e-003**		**212.7442**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3257	0.0000	6.3257	3.3430	0.0000	3.3430			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**6.3257**	**2.1739**	**8.4996**	**3.3430**	**2.0000**	**5.3430**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0905	0.0608	0.8176	2.3000e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		228.8835	228.8835	6.5800e-003		229.0480
Total	**0.0905**	**0.0608**	**0.8176**	**2.3000e-003**	**0.2236**	**1.7000e-003**	**0.2253**	**0.0593**	**1.5600e-003**	**0.0609**		**228.8835**	**228.8835**	**6.5800e-003**		**229.0480**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4670	0.0000	2.4670	1.3038	0.0000	1.3038			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**2.4670**	**2.1739**	**4.6409**	**1.3038**	**2.0000**	**3.3038**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0905	0.0608	0.8176	2.3000e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5600e-003	0.0609		228.8835	228.8835	6.5800e-003		229.0480
Total	**0.0905**	**0.0608**	**0.8176**	**2.3000e-003**	**0.2236**	**1.7000e-003**	**0.2253**	**0.0593**	**1.5600e-003**	**0.0609**		**228.8835**	**228.8835**	**6.5800e-003**		**229.0480**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2477	8.4884	2.0143	0.0227	0.5696	0.0171	0.5867	0.1640	0.0164	0.1803		2,424.7024	2,424.7024	0.1467		2,428.3692
Worker	1.8911	1.2265	16.8773	0.0498	5.0076	0.0369	5.0444	1.3280	0.0340	1.3620		4,961.1669	4,961.1669	0.1334		4,964.5022
Total	**2.1388**	**9.7149**	**18.8916**	**0.0725**	**5.5772**	**0.0540**	**5.6312**	**1.4920**	**0.0503**	**1.5423**		**7,385.8692**	**7,385.8692**	**0.2801**		**7,392.8714**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2477	8.4884	2.0143	0.0227	0.5696	0.0171	0.5867	0.1640	0.0164	0.1803		2,424.7024	2,424.7024	0.1467		2,428.3692
Worker	1.8911	1.2265	16.8773	0.0498	5.0076	0.0369	5.0444	1.3280	0.0340	1.3620		4,961.1669	4,961.1669	0.1334		4,964.5022
Total	**2.1388**	**9.7149**	**18.8916**	**0.0725**	**5.5772**	**0.0540**	**5.6312**	**1.4920**	**0.0503**	**1.5423**		**7,385.8692**	**7,385.8692**	**0.2801**		**7,392.8714**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0594	0.0371	0.5225	1.6100e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		160.1586	160.1586	4.0400e-003		160.2595
Total	**0.0594**	**0.0371**	**0.5225**	**1.6100e-003**	**0.1677**	**1.2000e-003**	**0.1689**	**0.0445**	**1.1000e-003**	**0.0456**		**160.1586**	**160.1586**	**4.0400e-003**		**160.2595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0594	0.0371	0.5225	1.6100e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		160.1586	160.1586	4.0400e-003		160.2595
Total	**0.0594**	**0.0371**	**0.5225**	**1.6100e-003**	**0.1677**	**1.2000e-003**	**0.1689**	**0.0445**	**1.1000e-003**	**0.0456**		**160.1586**	**160.1586**	**4.0400e-003**		**160.2595**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.6800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**19.8717**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3351	0.2014	2.8953	9.2800e-003	1.0060	7.0100e-003	1.0130	0.2668	6.4500e-003	0.2732		925.1372	925.1372	0.0219		925.6833
Total	**0.3351**	**0.2014**	**2.8953**	**9.2800e-003**	**1.0060**	**7.0100e-003**	**1.0130**	**0.2668**	**6.4500e-003**	**0.2732**		**925.1372**	**925.1372**	**0.0219**		**925.6833**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.6800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**19.8717**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3351	0.2014	2.8953	9.2800e-003	1.0060	7.0100e-003	1.0130	0.2668	6.4500e-003	0.2732		925.1372	925.1372	0.0219		925.6833
Total	**0.3351**	**0.2014**	**2.8953**	**9.2800e-003**	**1.0060**	**7.0100e-003**	**1.0130**	**0.2668**	**6.4500e-003**	**0.2732**		**925.1372**	**925.1372**	**0.0219**		**925.6833**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.9194	63.9169	125.3396	0.3727	26.3558	0.3720	26.7278	7.0523	0.3488	7.4011		37,951.9700	37,951.9700	2.2540		38,008.3186
Unmitigated	18.4712	89.0884	220.6915	0.7342	56.1706	0.7195	56.8901	15.0302	0.6754	15.7055		74,634.1464	74,634.1464	3.8313		74,729.9280

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	3,491.25	3,354.75	3076.50	11,661,031	5,471,472
Hotel	408.50	409.50	297.50	937,254	439,769
Regional Shopping Center	5,337.50	6,246.25	3155.00	11,150,619	5,231,981
Total	9,237.25	10,010.50	6,529.00	23,748,904	11,143,222

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Apartments Mid Rise	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Regional Shopping Center	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2991	2.6000	1.4123	0.0163		0.2066	0.2066		0.2066	0.2066		3,262.6093	3,262.6093	0.0625	0.0598	3,281.9973
NaturalGas Unmitigated	0.2991	2.6000	1.4123	0.0163		0.2066	0.2066		0.2066	0.2066		3,262.6093	3,262.6093	0.0625	0.0598	3,281.9973

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	20203.5	0.2179	1.8619	0.7923	0.0119		0.1505	0.1505		0.1505	0.1505		2,376.8836	2,376.8836	0.0456	0.0436	2,391.0082
Hotel	6840.31	0.0738	0.6706	0.5633	4.0200e-003		0.0510	0.0510		0.0510	0.0510		804.7426	804.7426	0.0154	0.0148	809.5248
Regional Shopping Center	688.356	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003		80.9831	80.9831	1.5500e-003	1.4800e-003	81.4643
Total		**0.2991**	**2.6000**	**1.4123**	**0.0163**		**0.2066**	**0.2066**		**0.2066**	**0.2066**		**3,262.6093**	**3,262.6093**	**0.0625**	**0.0598**	**3,281.9973**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	20.2035	0.2179	1.8619	0.7923	0.0119		0.1505	0.1505		0.1505	0.1505		2,376.8836	2,376.8836	0.0456	0.0436	2,391.0082
Hotel	6.84031	0.0738	0.6706	0.5633	4.0200e-003		0.0510	0.0510		0.0510	0.0510		804.7426	804.7426	0.0154	0.0148	809.5248
Regional Shopping Center	0.688356	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003		80.9831	80.9831	1.5500e-003	1.4800e-003	81.4643
Total		**0.2991**	**2.6000**	**1.4123**	**0.0163**		**0.2066**	**0.2066**		**0.2066**	**0.2066**		**3,262.6093**	**3,262.6093**	**0.0625**	**0.0598**	**3,281.9973**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.0344	0.5028	43.4751	2.2900e-003		0.2390	0.2390		0.2390	0.2390	0.0000	78.0283	78.0283	0.0762	0.0000	79.9320
Unmitigated	154.6033	11.3957	310.4648	0.6834		40.3429	40.3429		40.3429	40.3429	4,917.6322	9,528.0283	14,445.6604	14.7415	0.3338	14,913.6621

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.3075					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	137.5689	10.8929	266.9897	0.6811		40.1039	40.1039		40.1039	40.1039	4,917.6322	9,450.0000	14,367.6322	14.6653	0.3338	14,833.7300
Landscaping	1.3250	0.5028	43.4751	2.2900e-003		0.2390	0.2390		0.2390	0.2390		78.0283	78.0283	0.0762		79.9320
Total	**154.6033**	**11.3957**	**310.4649**	**0.6834**		**40.3429**	**40.3429**		**40.3429**	**40.3429**	**4,917.6322**	**9,528.0283**	**14,445.6604**	**14.7415**	**0.3338**	**14,913.6621**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.4019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.3075					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3250	0.5028	43.4751	2.2900e-003		0.2390	0.2390		0.2390	0.2390		78.0283	78.0283	0.0762		79.9320
Total	**17.0344**	**0.5028**	**43.4751**	**2.2900e-003**		**0.2390**	**0.2390**		**0.2390**	**0.2390**	**0.0000**	**78.0283**	**78.0283**	**0.0762**	**0.0000**	**79.9320**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

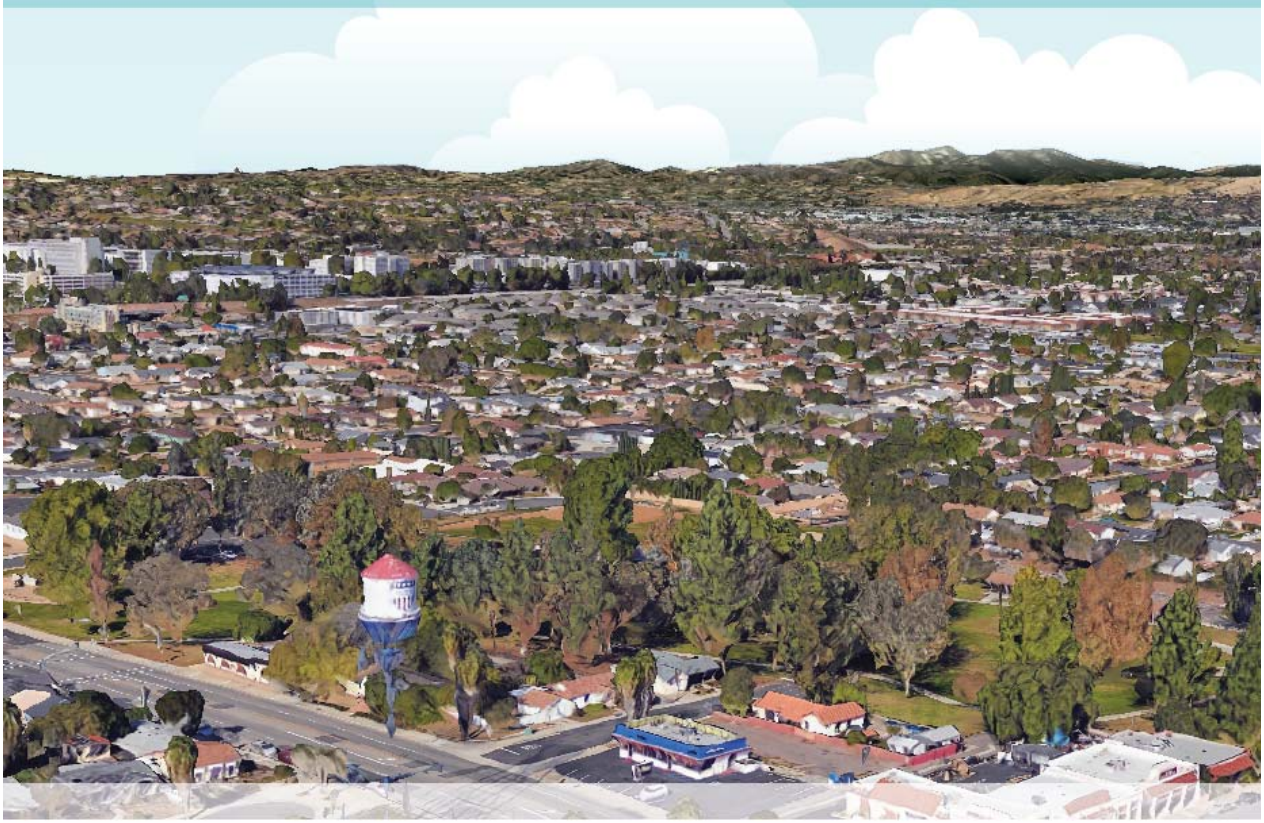
Equipment Type	Number

11.0 Vegetation

APPENDIX B
DKS ASSOCIATES TRAFFIC IMPACT ANALYSIS

Old Town Revitalization Project
Traffic Impact Analysis

Prepared for the
City of Placentia



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Prepared by:
DKS Associates

Prepared On:
May 17th, 2017

Traffic Impact Analysis

OLD TOWN REVITALIZATION PROJECT

CITY OF PLACENTIA, CA

Prepared by

DKS

Project No. 17066-000
Submitted May 17, 2017

***DKS** Associates*
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APPENDICES

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1.0 INTRODUCTION

The following presents the Traffic Impact Analysis (TIA) prepared by DKS Associates (DKS) for the Old Town Revitalization Project in the City of Placentia, CA (City). The Old Revitalization Project is bound by Alta Street in the east, the Burlington Northern and Santa Fe Railway train tracks in the south, Chapman Avenue in the north and Murray Street in the west. The revitalization project consists of adding 525 residential units, 85,000 square feet (sf) of commercial use, 40,000 sf of retail use, and a 50-room hotel to the existing area. This TIA has been prepared consistent with the policies of the City of Placentia guidelines, discussions with the City staff, and methodologies from the Institute of Transportation Engineers (ITE) manuals.

Purpose and Objectives of the TIA

Based on discussions with the City, the purpose of this TIA is to evaluate the traffic and circulation impacts of the proposed project. The study objectives of this TIA include:

- Documentation of existing traffic conditions and future traffic conditions corresponding to the "future year" (existing plus ambient growth) of the proposed project when it would be completely built-out. The project completion year is 2037.
- Determination of additional mitigation measures needed to achieve City Level-Of-Service (LOS) requirements with implementation of the proposed project (if required).

Analysis Scenarios

Based on discussions with the City, the analysis was conducted at the study intersections for the following scenarios as part of the TIA:

1) Existing (2017) Conditions
2) Existing (2017) Plus Project Conditions
3) Project Buildout Year (2037) Without Project Conditions
4) Project Buildout Year (2037) With Project Conditions

Site Location and Study Area

The Old Town Revitalization Project is bound by Alta Street in the east, the Burlington Northern and Santa Fe Railway train tracks in the south, Chapman Avenue in the north and Murray Street in the west. Regional access is provided by the State Route 57 Freeway (SR-57).

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Based on discussions with the City staff, the project's traffic related impacts will be evaluated at following eight (8) intersections:

1) Chapman Avenue/SR-57 Southbound Ramps
2) Chapman Avenue/SR-57 Northbound Ramps
3) Chapman Avenue/Placentia Avenue
4) Chapman Avenue/Murray Street
5) Chapman Avenue/Melrose Street
6) Chapman Avenue/Bradford Avenue
7) Santa Fe Street/Melrose Street (All-Way Stop)
8) Center Street/Bradford Avenue (All-Way Stop)

Figure 1 illustrates the project site location and study intersections.

Methodology

City of Placentia General Plan guidelines and the Orange County Congestion Management Program (CMP) require that the analysis of signalized intersections be performed using the Intersection Capacity Utilization (ICU) methodology. The assessment of intersection conditions addresses LOS, in terms of volume-to-capacity (V/C) ratio under the ICU analysis for signalized intersections. Unsignalized intersections and intersections under jurisdiction of Caltrans require the analysis to be performed using the Highway Capacity Manual (HCM) methodology. The assessment of intersection conditions addresses LOS in terms of control delay for HCM analysis.

The Traffix Version 8.0 software package was used to determine intersection LOS based on ICU methodology and HCM methodology for the study intersections. Brief LOS definitions along with the corresponding volume to capacity ratio for the ICU methodology are shown in Table A1. The corresponding control delays for the HCM methodology for signalized and unsignalized intersections are shown in Tables A2 and A3, respectively.

The degree of congestion at an intersection is described by the level-of-service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. Table B provides a description of each specific LOS grade (LOS A through LOS F).

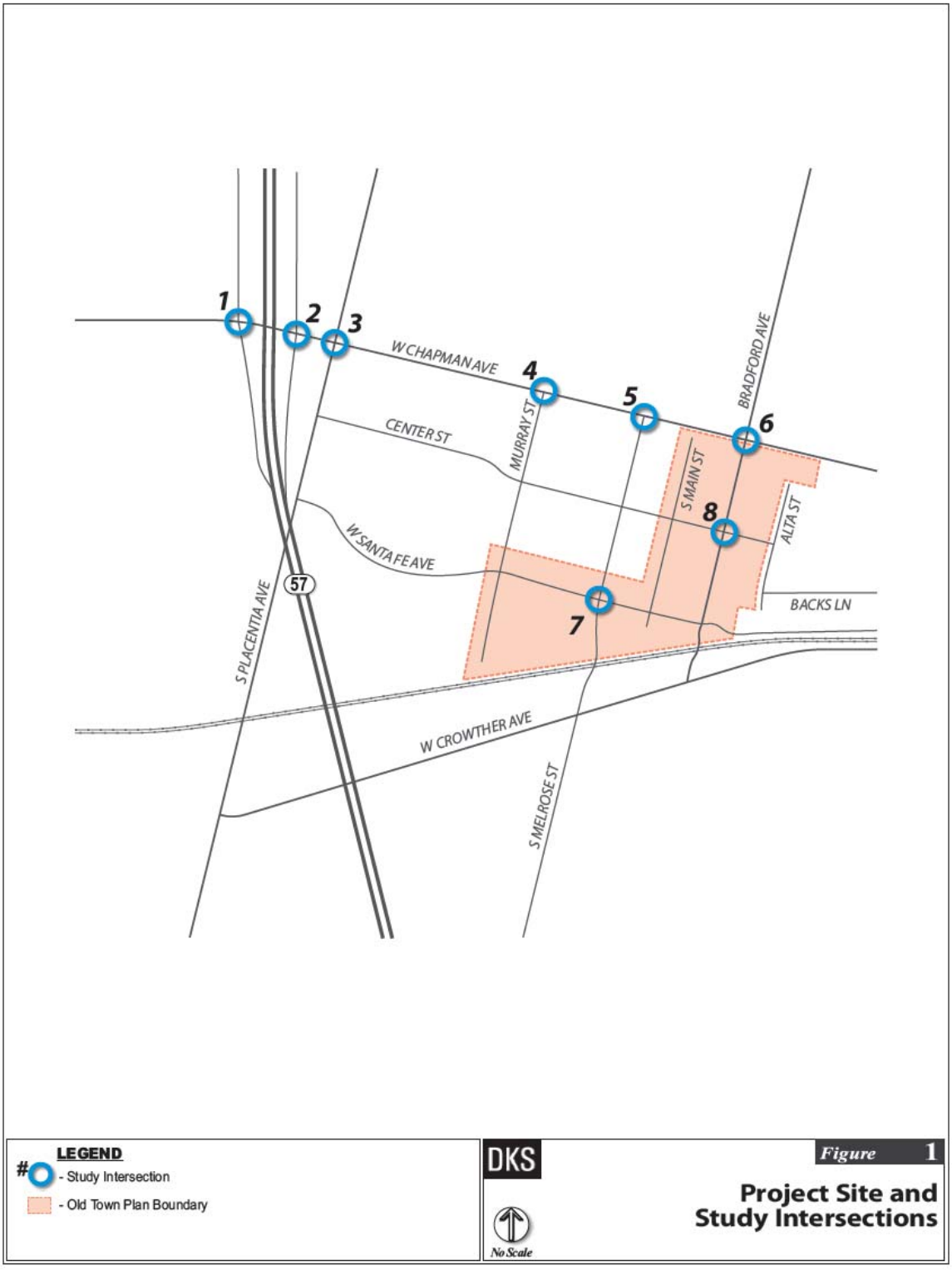
1
2
3
4
5
6
7
8
W CHAPMAN AVE
CENTER ST
MURRAY ST
BRADFORD AVE
S MAIN ST
ALTA ST
W SANTA FE AVE
BACKS LN
S PLACENTIA AVE
57
W CROWTHER AVE
S MELROSE ST
LEGEND
- Study Intersection
- Old Town Plan Boundary
DKS
No Scale
Figure 1
Project Site and Study Intersections

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Table A1 – Level of Service Definitions for Signalized Intersections Based on ICU V/C

Level of Service	V/C Ratio
A	0.00-0.60
B	0.61-0.70
C	0.71-0.80
D	0.81-0.90
E	0.91-1.00
F	1.01 or greater

SOURCE: Orange County Congestion Management Plan, 2015

Table A2 – Level of Service Definitions for Signalized Intersections Based on HCM Delay

Level of Service	Delay per Vehicle (in seconds)
A	≤ 0 - 10
B	> 10 -20
C	> 20 – 35
D	> 35 – 55
E	> 55 – 80
F	> 80

SOURCE: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Table A3 – Level of Service Definitions for Unsignalized Intersections Based on HCM Delay

Level of Service	Delay per Vehicle (in seconds)
A	≤ 0 - 10
B	> 10 -15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

SOURCE: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

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Table B – Level of Service Descriptions

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

SOURCE: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Significance Criteria

Based on the City of Placentia's Circulation Element, the acceptable level-of-service for all study intersections is LOS D or better. Therefore, any intersection operating at a LOS E or F will be considered deficient. An intersection is considered to be significantly impacted if the project related increase in the v/c ratio equals or exceeds 0.01, if it is operating at LOS E or LOS F.

For intersections under the jurisdiction of Caltrans, the significant impact criteria is based on the 'Caltrans Guide for the Preparation of Traffic Impact Studies' document. Caltrans maintains a target LOS at the transition between LOS C and LOS D using the HCM methodology. The project impact on a Caltrans intersection would be significant if the project either causes an intersection operating at LOS C to deteriorate to LOS D or worse or causes an intersection already operating at LOS D or worse to deteriorate to a worse level of service.

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2.0 EXISTING CONDITIONS

Key roadways in the study area are summarized in Table C along with their existing characteristics. As shown, all surrounding roadways within the study area network are under the jurisdiction of City of Placentia, with the exception of the SR-57 Freeway.

Table C – Existing Roadway Network Characteristics

Roadway	Roadway Jurisdiction	Roadway Classification	Cross-Section	Posted Speed	Pedestrian Facilities	Bicycle Facilities	Transit Facilities
Chapman Avenue	City of Placentia	Primary Arterial	4 Lanes	35/40 mph	Sidewalks	None	OCTA
Placentia Avenue	City of Placentia	Secondary Arterial	4 Lanes	40 mph	Sidewalks	None	OCTA
Murray Street	City of Placentia	Local Street	2 Lanes	25 mph	Sidewalks	None	None
Melrose Street	City of Placentia	Secondary Arterial	2 Lanes	25 mph	Sidewalks	None	None
Bradford Avenue	City of Placentia	Secondary Arterial	2 Lanes	25 mph	Sidewalks	None	OCTA
Center Street	City of Placentia	Local Street	2 Lanes	25 mph	Sidewalks	None	None
Santa Fe Avenue	City of Placentia	Local Street	2/4 Lanes	25/35 mph	Sidewalks	None	None
SR-57 Freeway	Caltrans	Freeway	10 Lanes	60 mph	None	None	None

Figure 2 illustrates the existing roadway conditions for the study area roadways. The number of through traffic lanes and the existing intersection controls are identified.

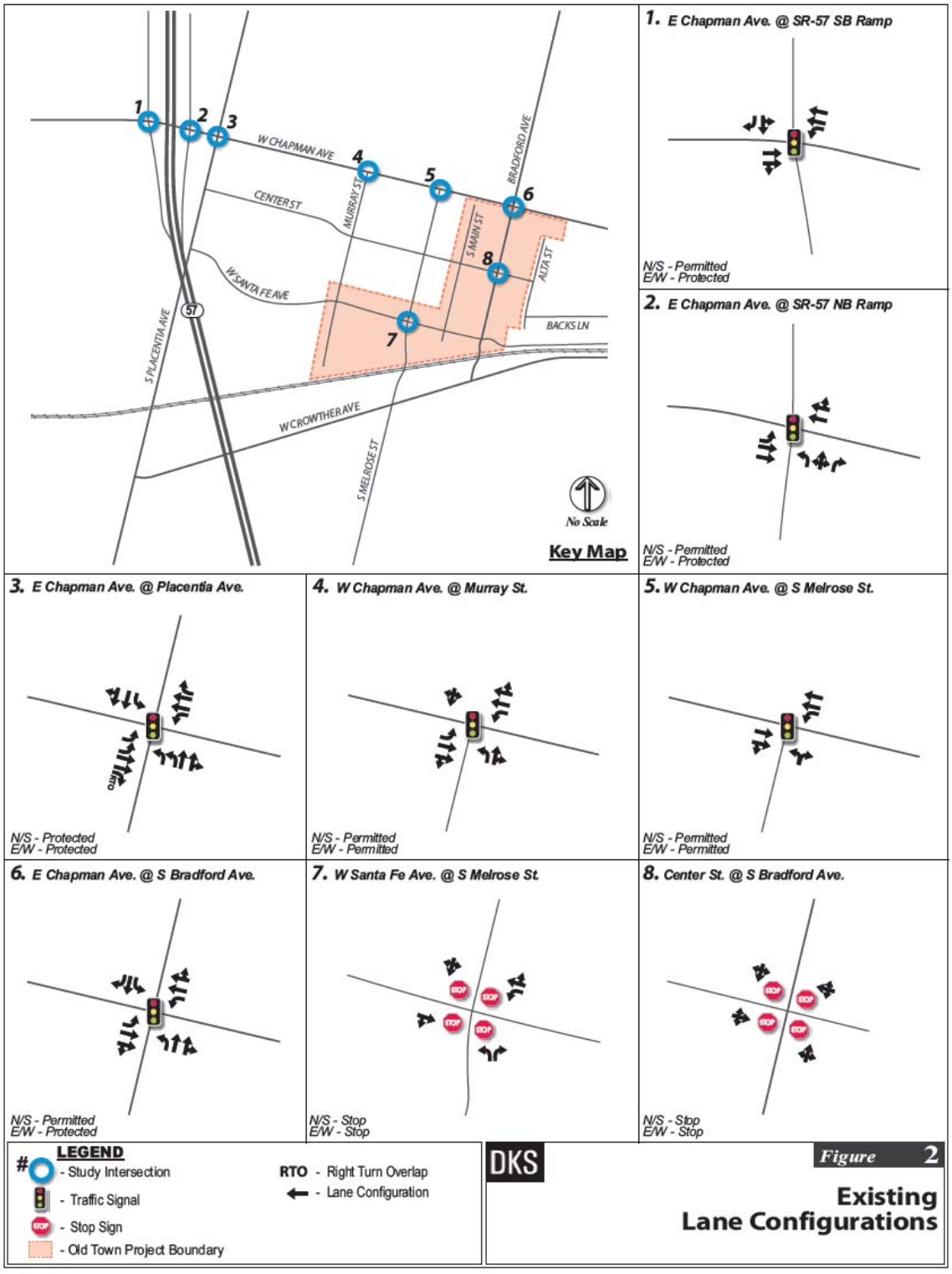
Existing (2017)

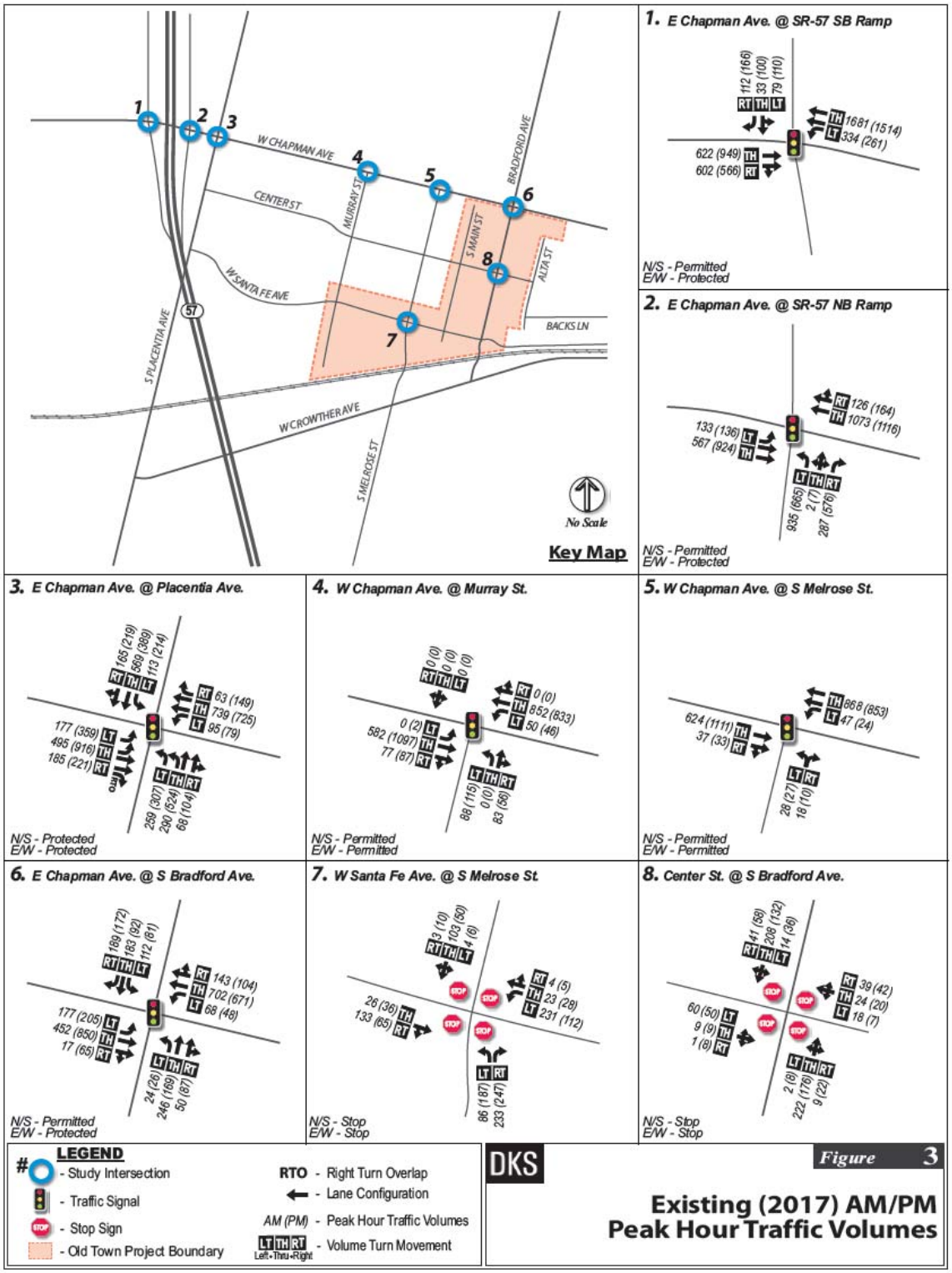
Traffic Volumes

Existing traffic volumes at all study intersections were collected on Wednesday, April 26, 2017. The peak hours were determined by combining the four highest adjacent 15 minute periods during the AM peak period (7:00-9:00 AM) and the PM peak period (4:00-6:00 PM) at the intersections. Figure 3 illustrates the existing AM and PM peak hour traffic volumes at the study intersections. The actual counts are provided in Appendix A.

Existing Level of Service

The existing level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections. The LOS summary is shown in Table D. As shown, all intersections operate at LOS C or better. LOS calculation sheets are provided in Appendix B.


1. E Chapman Ave. @ SR-57 SB Ramp
N/S - Permitted
E/W - Protected
2. E Chapman Ave. @ SR-57 NB Ramp
N/S - Permitted
E/W - Protected
W CHAPMAN AVE
CENTER ST
W SANTA FE AVE
W CROWTHER AVE
S PLACENTIA AVE
MURRAY ST
S MAIN ST
BRADFORD AVE
ALTA ST
BACKS LN
S MELROSE ST
57
No Scale
Key Map
3. E Chapman Ave. @ Placentia Ave.
N/S - Protected
E/W - Protected
4. W Chapman Ave. @ Murray St.
N/S - Permitted
E/W - Permitted
5. W Chapman Ave. @ S Melrose St.
N/S - Permitted
E/W - Permitted
6. E Chapman Ave. @ S Bradford Ave.
N/S - Permitted
E/W - Protected
7. W Santa Fe Ave. @ S Melrose St.
N/S - Stop
E/W - Stop
8. Center St. @ S Bradford Ave.
N/S - Stop
E/W - Stop
LEGEND
- Study Intersection
- Traffic Signal
- Stop Sign
- Old Town Project Boundary
RTO - Right Turn Overlap
- Lane Configuration
DKS
Figure 2
Existing
Lane Configurations


1. E Chapman Ave. @ SR-57 SB Ramp
112 (166) RT 33 (100) TH 79 (110) LT
622 (949) TH 602 (566) RT
TH 1681 (1514) LT 334 (261)
N/S - Permitted
E/W - Protected
2. E Chapman Ave. @ SR-57 NB Ramp
RT 126 (164) TH 1073 (1116)
133 (136) LT 567 (924) TH
LT TH RT
935 (665) 2 (7) 287 (576)
N/S - Permitted
E/W - Protected
Key Map
No Scale
W CHAPMAN AVE
CENTER ST
W SANTA FE AVE
W CROWTHER AVE
S PLACENTIA AVE
MURRAY ST
S MAIN ST
BRADFORD AVE
ALTA ST
BACKS LN
S MELROSE ST
57
3. E Chapman Ave. @ Placentia Ave.
165 (219) RT 569 (389) TH 113 (214) LT
63 (149) RT 739 (725) TH 95 (79) LT
177 (359) LT 495 (916) TH 185 (221) RT
259 (307) LT 290 (524) TH 68 (104) RT
N/S - Protected
E/W - Protected
4. W Chapman Ave. @ Murray St.
0 (0) RT 0 (0) TH 0 (0) LT
0 (0) RT 852 (833) TH 50 (46) LT
0 (2) LT 582 (1097) TH 77 (87) RT
88 (115) LT 0 (0) TH 83 (56) RT
N/S - Permitted
E/W - Permitted
5. W Chapman Ave. @ S Melrose St.
TH 668 (853) LT 47 (24)
624 (1111) TH 37 (33) RT
LT RT
28 (27) 18 (10)
N/S - Permitted
E/W - Permitted
6. E Chapman Ave. @ S Bradford Ave.
189 (172) RT 183 (92) TH 112 (81) LT
143 (104) RT 702 (671) TH 68 (48) LT
177 (205) LT 452 (850) TH 17 (65) RT
24 (26) LT 246 (169) TH 50 (87) RT
N/S - Permitted
E/W - Protected
7. W Santa Fe Ave. @ S Melrose St.
13 (10) RT 103 (59) TH 4 (6) LT
4 (5) RT 23 (28) TH 231 (112) LT
26 (36) TH 133 (65) RT
LT RT
86 (187) 233 (247)
N/S - Stop
E/W - Stop
8. Center St. @ S Bradford Ave.
141 (58) RT 208 (132) TH 14 (36) LT
39 (42) RT 24 (20) TH 18 (7) LT
60 (50) LT 9 (9) TH 1 (6) RT
LT TH RT
2 (8) 222 (176) 9 (22)
N/S - Stop
E/W - Stop
LEGEND
- Study Intersection
- Traffic Signal
STOP - Stop Sign
- Old Town Project Boundary
RTO - Right Turn Overlap
- Lane Configuration
AM (PM) - Peak Hour Traffic Volumes
LT TH RT - Volume Turn Movement
Left • Thru • Right
DKS
Figure 3
Existing (2017) AM/PM
Peak Hour Traffic Volumes

DKS

Table D: Existing (2017) Intersection Level of Service Summary[1]

Intersection	AM Peak Hour		PM Peak Hour	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
Caltrans - Signalized				
Chapman Avenue/SR-57 Southbound Ramps	12.7	B	15.4	B
Chapman Avenue/SR-57 Northbound Ramps	26.4	C	26.2	C
City of Placentia - Signalized				
Chapman Avenue/Placentia Avenue	0.611	B	0.679	B
Chapman Avenue/Murray Street	0.352	A	0.493	A
Chapman Avenue/Melrose Street	0.332	A	0.416	A
Chapman Avenue/Bradford Avenue	0.556	A	0.521	A
City of Placentia – All-Way Stop Controlled				
Santa Fe Street/Melrose Street	11.1	B	9.9	A
Center Street/Bradford Avenue	8.6	A	8.7	A

[1]Analysis Software: Traffix, Version 8.0. Per the Intersection Capacity Utilization methodology, overall volume to capacity ratios and levels of service are shown for intersections controlled by traffic signals. Per the Highway Capacity Manual (HCM 2000) methodology, overall average intersection delay and level of service are shown for intersections controlled by all-way stop and for intersections under the jurisdiction of Caltrans.

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3.0 PROJECT DESCRIPTION

Project Size and Description

Figure 4 illustrates the Old Town Placentia District Zoning Map. The revitalization project would add 525 residential units, 85,000 sf of commercial use, 40,000 sf of retail use, and a 50-room hotel. Based on discussions with the City, the proposed residential use will be a combination of apartments and townhomes. As a conservative approach, this analysis will assume 100% apartment use due to the greater trip generation rate compared to townhomes.

Currently, the Old Town area contains a mix of single-family residential use and various commercial uses. As we understand, the majority of properties in the area are developed. Therefore, the majority of the proposed land uses are expected to be infill development. While it can be expected that some existing land uses may be replaced, DKS is assuming the Old Town Revitalization Project consists of the proposed development, with all existing land uses to remain.

Project Traffic

Trip Generation Credit

Based on discussions with City staff, the City has approved the use of three trip credits, transit, pass-by, and internal capture. Due to the project's vicinity to transit facilities, including the proposed Placentia Metrolink Station, and the project's goal to develop a walkable urban environment, DKS applied a transit trip credit. The Orange County Congestion Management Program (CMP) highlights the benefits of utilizing pass-by and internal capture credits for mixed-used developments, such as the Old Town Revitalization Project. Pass-by traffic is retail traffic that is already on the road and driving by the site. The driver will stop at the retail shop on their way to their final destination. Internal capture is the portion of trips generated by a development that both begin and end within the site. Based on techniques outlined in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 9th Edition, pass-by and internal capture trip credits were estimated. As shown in Table E, a 34% pass-by credit can be applied to shopping center use and a 12% internal capture trip credit can be applied to the overall development.

Project Trip Generation

Trip generation estimates for the proposed project were developed using trip rates established in the ITE Trip Generation Manual, 9th Edition. As shown in Table E, the combination of the proposed development and the applied trip credits results in approximately 7,361 trip-ends per day, with 306 (115 inbound, 191 outbound) trips during the AM peak hour and 510 (281 inbound, 229 outbound) trips during the PM peak hour.

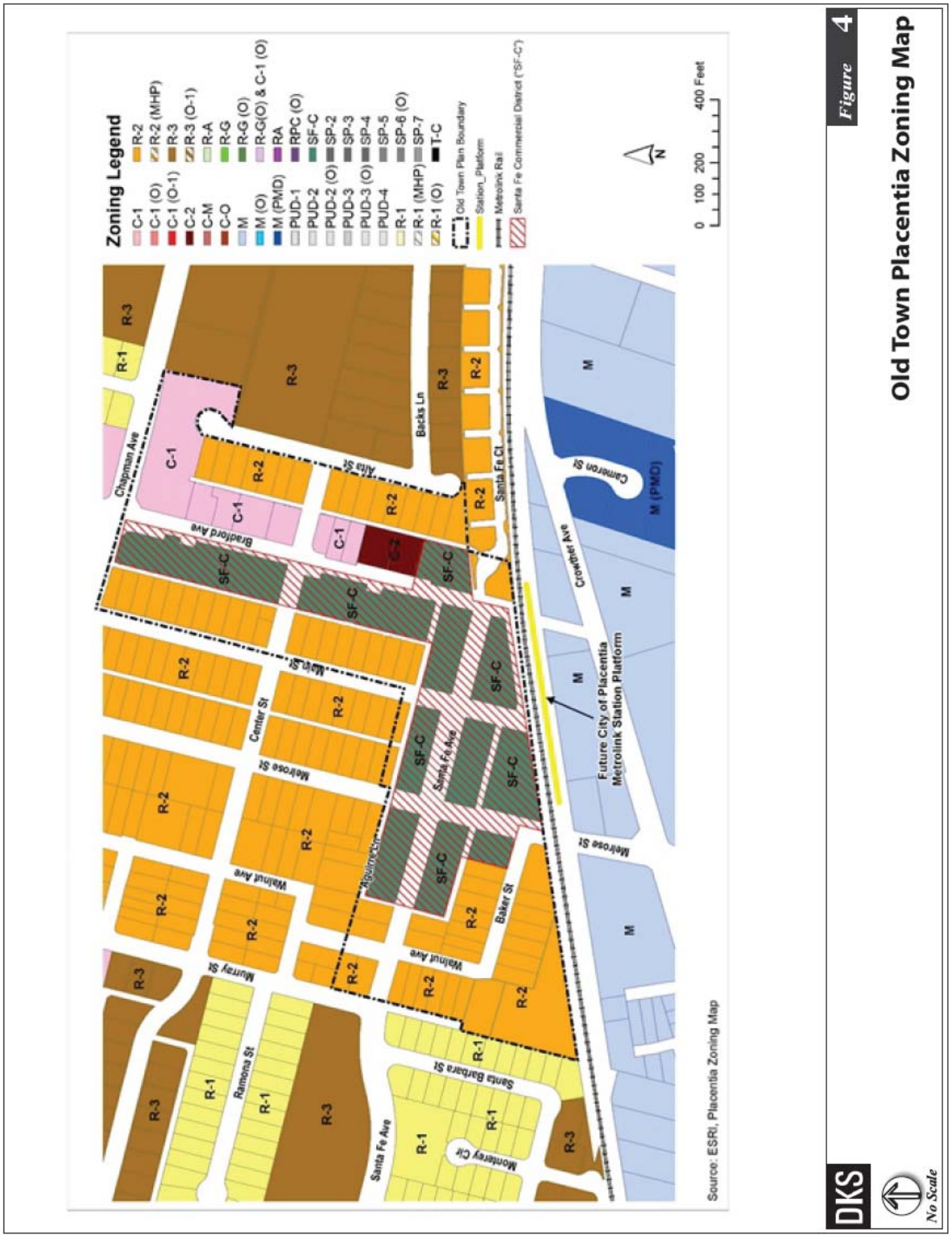


Figure 4

Old Town Placentia Zoning Map

DKS

No Scale

DKS

Table E: Project Trip Generation Summary

Land Use	ITE[1] Code	Size[2]		Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Rates										
Apartment	220	per	DU	6.65	0.10	0.41	0.51	0.40	0.22	0.62
Hotel	310	per	RM	8.17	0.31	0.22	0.53	0.31	0.29	0.60
Shopping Center (Retail/Commercial)	820	per	TSF	42.70	0.60	0.36	0.96	1.78	1.93	3.71
Trip Generation										
Trips										
Apartment		525	DU	3,491	53	215	268	210	116	326
Hotel		50	RM	409	16	11	27	15	15	30
Shopping Center (Retail/Commercial)		125.00	TSF	5,338	75	45	120	223	241	464
Gross Total Trips				**9,238**	**144**	**271**	**415**	**448**	**372**	**820**
Transit Reduction for Apartment (Less 25% Transit Trip)[3]				(873)	(13)	(54)	(67)	(53)	(29)	(82)
Pass-by Reduction for Retail/Commercial (Less 34% Pass-by Trip)[4]				-	-	-	-	(76)	(82)	(158)
Internal Capture Reduction for Development (12% Internal Trip)[5]				(1,004)	(16)	(26)	(42)	(38)	(32)	(70)
Net Project Trip Generation				**7,361**	**115**	**191**	**306**	**281**	**229**	**510**

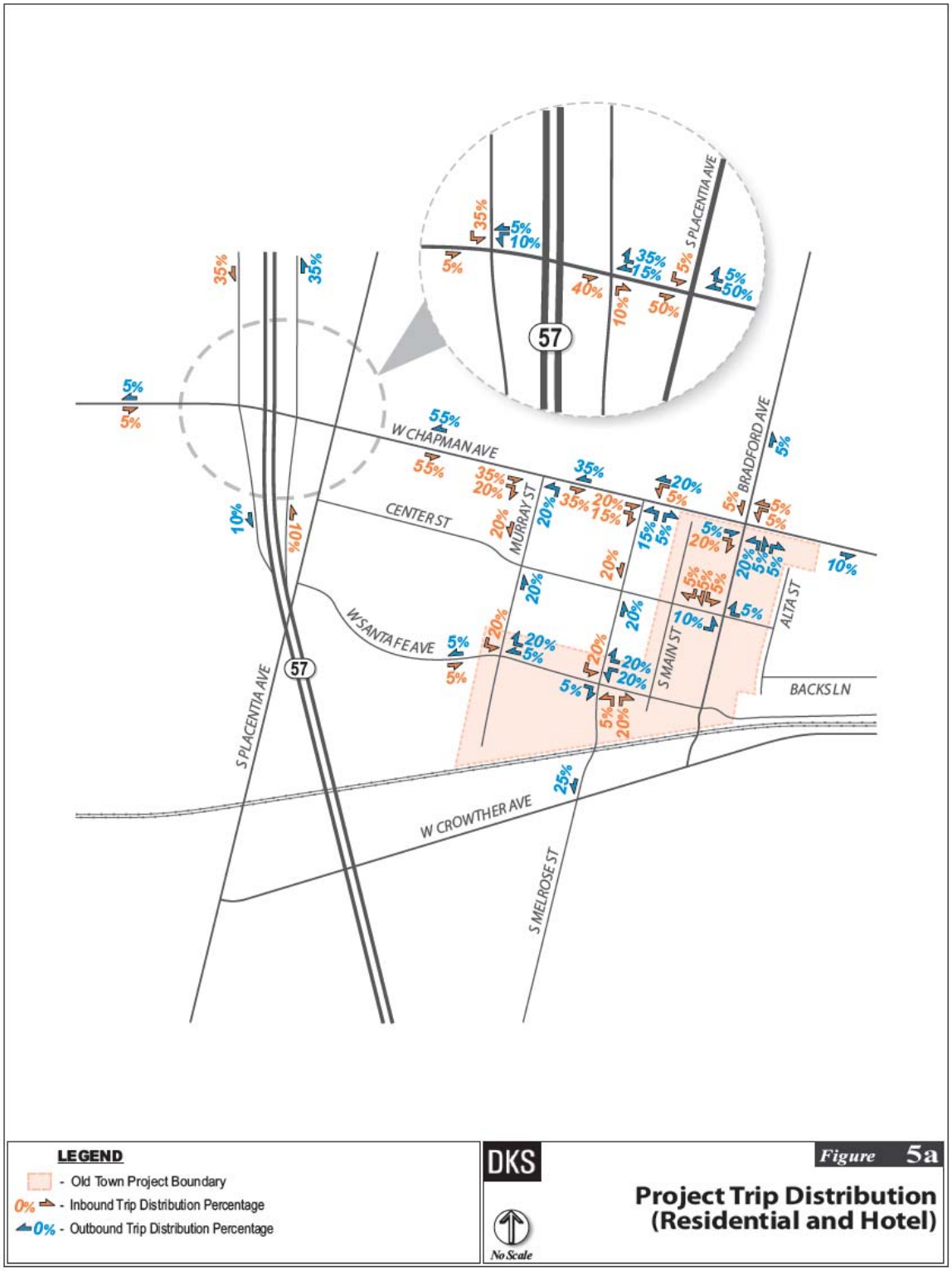
[1] ITE – Institute of Transportation Engineers
[2] TSF = Thousand Square Feet, DU = Dwelling Unit, RM = Room
[3] Due to the development's vicinity to local transit facilities, a 25% transit credit was applied.
[4] Pass-by traffic is retail commercial traffic that is already on the road and driving by the site. The driver will stop at the retail shop on their way to their final destination. A 34% pass-by reduction has been applied based on ITE Table 5.6 *Pass-by Trip for Land Use 820 – Shopping Center*. It should be noted that the trip credit can only be applied to the PM peak hour.
[5] A 12% internal capture reduction has been applied for the interaction of all land uses. The percentage was estimated using ITE Handbook Figure 7.2 *Multi-Use Trip Generation Calculation Table*.

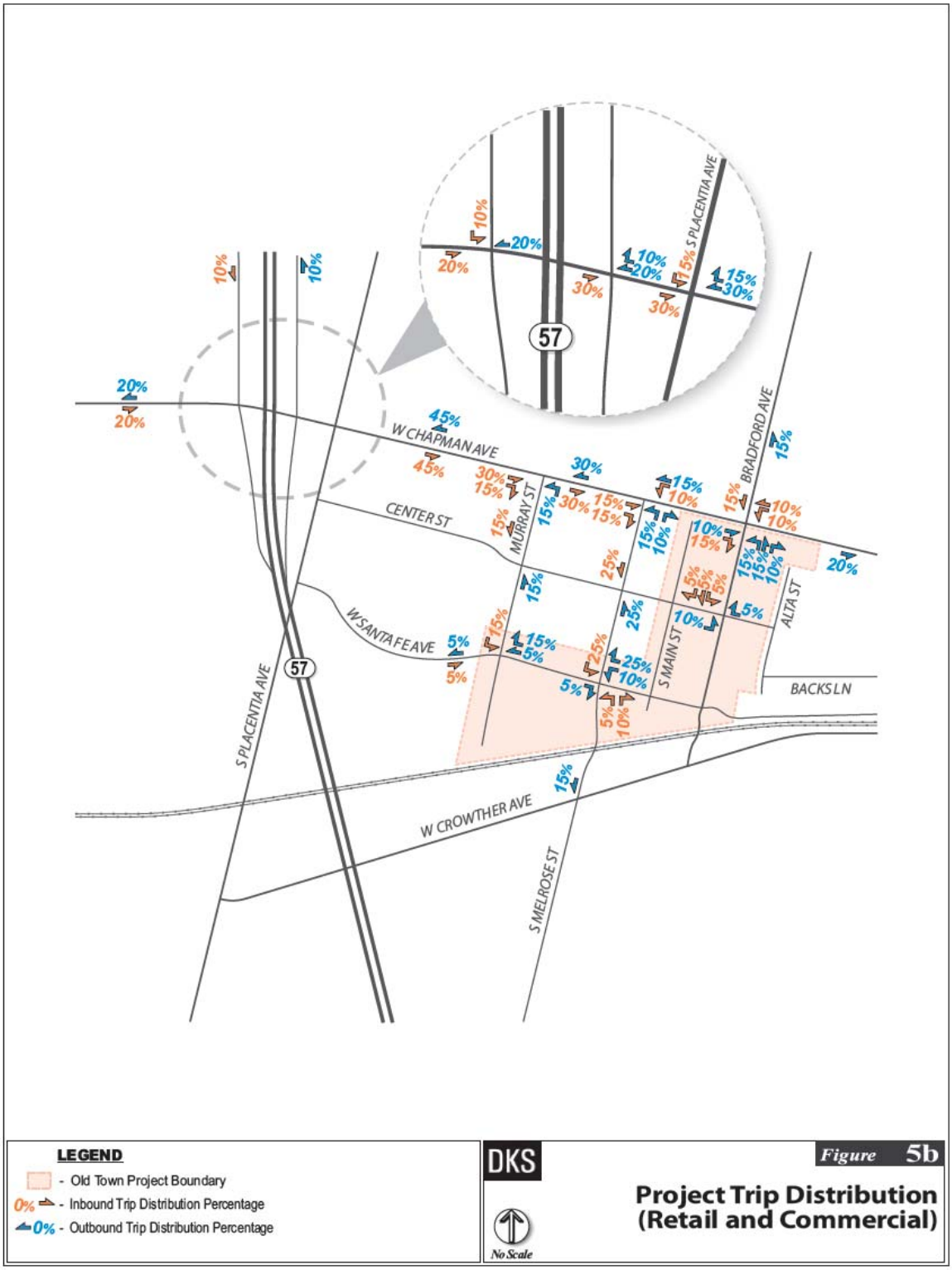
Trip Distribution and Assignment

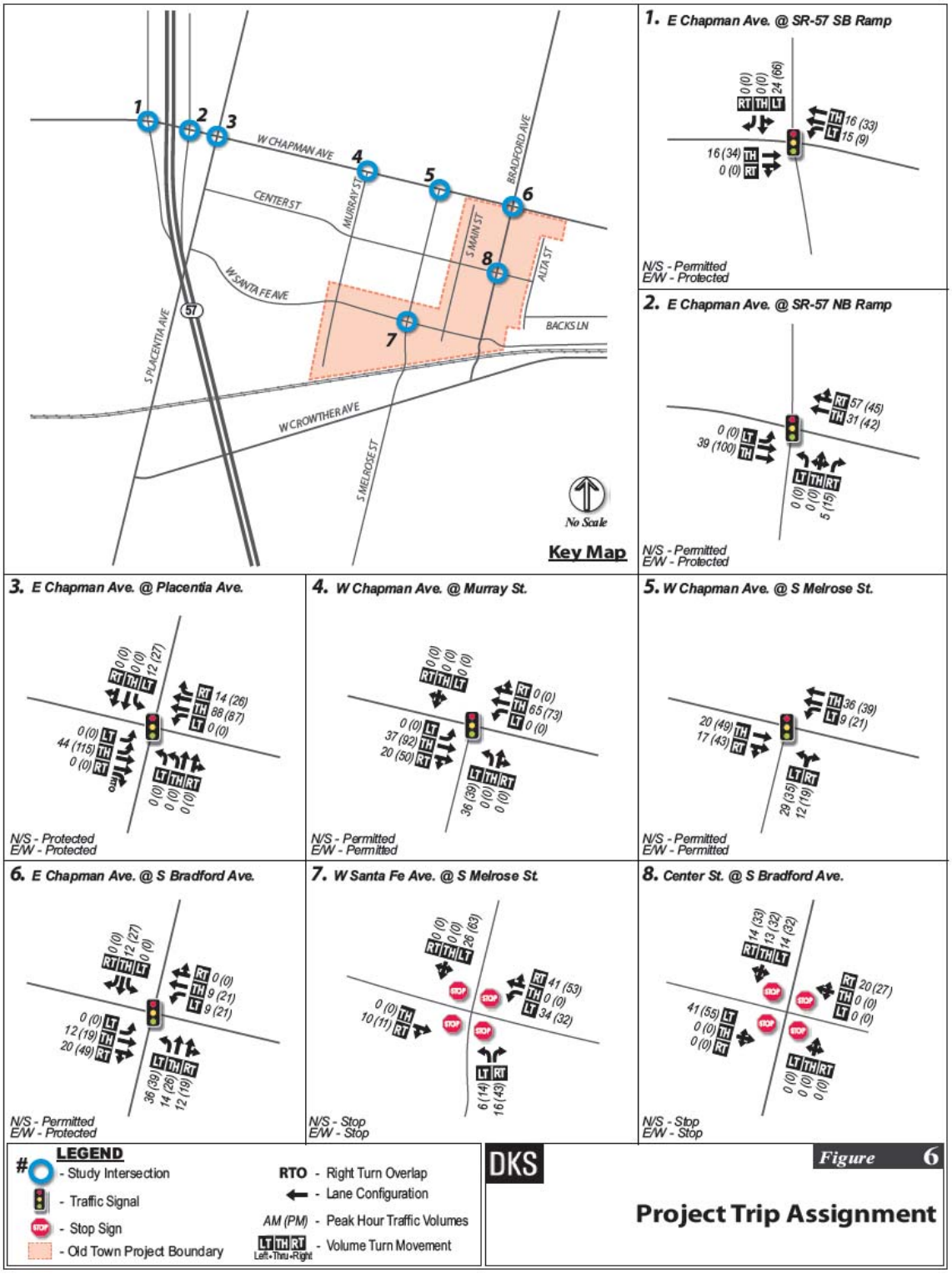
Project trip distribution patterns were based on factors such as: 1) transportation facility characteristics that impact travel demand (i.e. location of urban arterials, freeways, and interchanges); 2) location of employment and commercial facilities; and 3) existing traffic patterns. In addition, the trip distribution patterns were based on the preferred alternative circulation design (Option #3) for the Old Town Revitalization Project. The design proposes the following circulation modifications:

- One-Way Traffic
  - Southbound Bradford Avenue: Center Street to Santa Fe Avenue
  - Westbound Santa Fe Avenue: Bradford Avenue to Main Street

Figures 5a and 5b illustrate trip distribution percentages for the proposed project. Trip distribution percentages were applied to the proposed project's trip generation to calculate the traffic volumes which the project would generate at study intersections (i.e. trip assignment). The resulting AM and PM peak hour trip assignments used for the LOS analysis are shown in Figure 6. The trip distribution percentages were reviewed and approved by City staff.


S PLACENTIA AVE
57
W CHAPMAN AVE
CENTER ST
MURRAY ST
BRADFORD AVE
ALTA ST
S MAIN ST
BACKS LN
W SANTA FE AVE
S PLACENTIA AVE
57
W CROWTHER AVE
S MELROSE ST
LEGEND
- Old Town Project Boundary
0% - Inbound Trip Distribution Percentage
0% - Outbound Trip Distribution Percentage
DKS
No Scale
Figure 5a
Project Trip Distribution
(Residential and Hotel)


57
W CHAPMAN AVE
CENTER ST
W SANTA FE AVE
W CROWTHER AVE
S PLACENTIA AVE
S MELROSE ST
MURRAY ST
S MAIN ST
BRADFORD AVE
ALTA ST
BACKS LN
LEGEND
- Old Town Project Boundary
0% - Inbound Trip Distribution Percentage
0% - Outbound Trip Distribution Percentage
DKS
No Scale
Figure 5b
Project Trip Distribution
(Retail and Commercial)


1. E Chapman Ave. @ SR-57 SB Ramp
N/S - Permitted
E/W - Protected
2. E Chapman Ave. @ SR-57 NB Ramp
N/S - Permitted
E/W - Protected
Key Map
No Scale
W CHAPMAN AVE
CENTER ST
W SANTA FE AVE
W CROWTHER AVE
S PLACENTIA AVE
MURRAY ST
S MELROSE ST
S MAIN ST
BRADFORD AVE
AUTA ST
BACKS LN
57
3. E Chapman Ave. @ Placentia Ave.
N/S - Protected
E/W - Protected
4. W Chapman Ave. @ Murray St.
N/S - Permitted
E/W - Permitted
5. W Chapman Ave. @ S Melrose St.
N/S - Permitted
E/W - Permitted
6. E Chapman Ave. @ S Bradford Ave.
N/S - Permitted
E/W - Protected
7. W Santa Fe Ave. @ S Melrose St.
N/S - Stop
E/W - Stop
8. Center St. @ S Bradford Ave.
N/S - Stop
E/W - Stop
LEGEND
- Study Intersection
- Traffic Signal
- Stop Sign
- Old Town Project Boundary
RTO - Right Turn Overlap
- Lane Configuration
AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left•Thru•Right
DKS
Figure 6
Project Trip Assignment

DKS

Existing (2017) Plus Project

Traffic Volumes

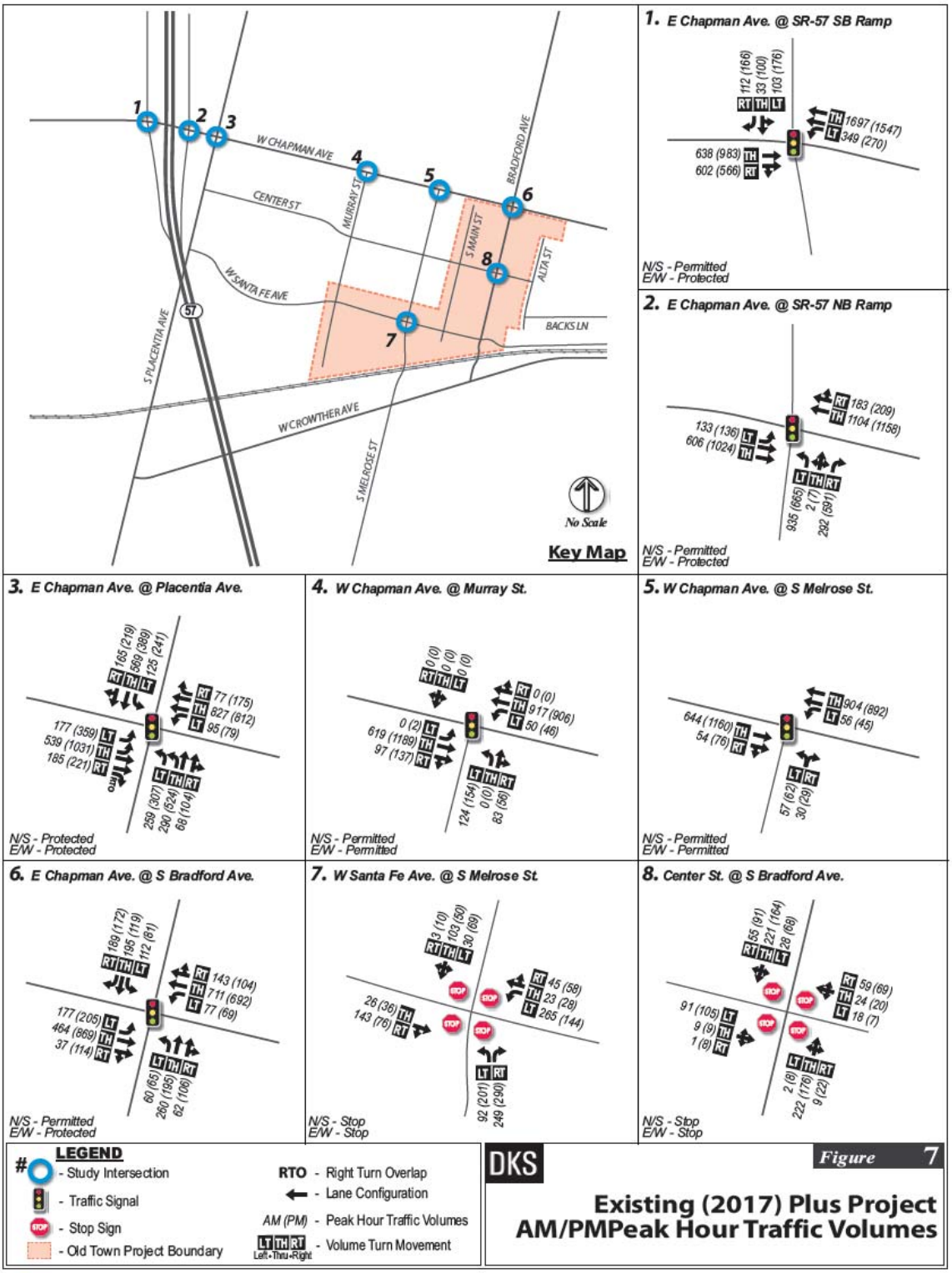
The trips generated from the project, as shown in Figure 6, were added to the existing traffic volumes shown in Figure 3 which result in the existing plus project traffic scenario. Figure 7 illustrates the Existing Year (2017) Plus Project traffic volumes.

Levels of Service

The existing level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections. The LOS summary for intersections is shown in Table F. As shown, all intersections operate at LOS C or better. LOS calculation sheets are provided in Appendix C.

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections under Existing (2017) Plus Project traffic conditions for both the AM and PM peak periods. Therefore, no mitigation measures are required on study intersections as part of the project.


1. E Chapman Ave. @ SR-57 SB Ramp
112 (166) RT
33 (100) TH
103 (176) LT
638 (983) TH
602 (566) RT
TH 1697 (1547)
LT 349 (270)
N/S - Permitted
E/W - Protected
2. E Chapman Ave. @ SR-57 NB Ramp
RT 183 (209)
TH 1104 (1158)
133 (136) LT
606 (1024) TH
LT TH RT
935 (665)
2 (7)
292 (591)
N/S - Permitted
E/W - Protected
W CHAPMAN AVE
CENTER ST
W SANTA FE AVE
W CROWTHER AVE
S PLACENTIA AVE
MURRAY ST
S MELROSE ST
S MAIN ST
BRADFORD AVE
ALTA ST
BACKS LN
57
No Scale
Key Map
3. E Chapman Ave. @ Placentia Ave.
165 (219) RT
569 (389) TH
125 (241) LT
RT 77 (175)
TH 827 (812)
LT 95 (79)
177 (359) LT
539 (1031) TH
185 (221) RT
LT TH RT
259 (307)
290 (524)
68 (104)
N/S - Protected
E/W - Protected
4. W Chapman Ave. @ Murray St.
0 (0) RT
0 (0) TH
0 (0) LT
RT 0 (0)
TH 917 (906)
LT 50 (46)
0 (2) LT
619 (1169) TH
97 (137) RT
LT TH RT
124 (154)
0 (0)
83 (56)
N/S - Permitted
E/W - Permitted
5. W Chapman Ave. @ S Melrose St.
TH 904 (892)
LT 56 (45)
644 (1160) TH
54 (76) RT
LT RT
57 (62)
30 (29)
N/S - Permitted
E/W - Permitted
6. E Chapman Ave. @ S Bradford Ave.
169 (172) RT
195 (119) TH
112 (81) LT
RT 143 (104)
TH 711 (692)
LT 77 (69)
177 (205) LT
464 (869) TH
37 (114) RT
LT TH RT
60 (65)
280 (195)
62 (106)
N/S - Permitted
E/W - Protected
7. W Santa Fe Ave. @ S Melrose St.
13 (10) RT
103 (50) TH
30 (69) LT
RT 45 (58)
TH 23 (28)
LT 265 (144)
26 (36) TH
143 (76) RT
LT RT
92 (201)
249 (290)
N/S - Stop
E/W - Stop
8. Center St. @ S Bradford Ave.
55 (91) RT
221 (164) TH
28 (68) LT
RT 59 (69)
TH 24 (20)
LT 18 (7)
91 (105) LT
9 (9) TH
1 (8) RT
LT TH RT
2 (8)
222 (176)
9 (22)
N/S - Stop
E/W - Stop
LEGEND
- Study Intersection
- Traffic Signal
STOP - Stop Sign
- Old Town Project Boundary
RTO - Right Turn Overlap
- Lane Configuration
AM (PM) - Peak Hour Traffic Volumes
LT TH RT - Volume Turn Movement
Left • Thru • Right
DKS
Figure 7
Existing (2017) Plus Project
AM/PMPeak Hour Traffic Volumes

DKS

Table F: Existing (2017) Plus Project Intersection Level of Service Summary[1]

Intersection	Existing				Existing Plus Project				Difference		Project Impact
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak	PM Peak	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	V/C or Delay (sec.)	
Caltrans - Signalized											
Chapman Ave/ SR-57 SB Ramp	12.7	B	15.4	B	13.5	B	17.7	B	2.7	2.3	NO
Chapman Ave/ SR-57 NB Ramp	26.4	C	26.2	C	27.3	C	27.3	C	0.9	1.1	NO
City of Placentia - Signalized											
Chapman Ave/ Placentia Ave	0.611	B	0.679	B	0.637	B	0.721	C	0.026	0.042	NO
Chapman Ave/ Murray St	0.352	A	0.493	A	0.393	A	0.558	A	0.041	0.065	NO
Chapman Ave/ Melrose St	0.332	A	0.416	A	0.367	A	0.494	A	0.035	0.078	NO
Chapman Ave/ Bradford Ave	0.556	A	0.521	A	0.566	A	0.541	A	0.010	0.020	NO
City of Placentia – All-Way Stop Controlled											
Santa Fe Ave/ Melrose St	11.1	B	9.9	A	12.2	B	11.1	B	1.1	1.2	NO
Center St/ Bradford Ave	8.6	A	8.7	A	9.2	A	9.9	A	0.6	1.2	NO

[1]Analysis Software: Traffix, Version 8.0. Per the Intersection Capacity Utilization methodology, overall volume to capacity ratios and levels of service are shown for intersections controlled by traffic signals. Per the Highway Capacity Manual (HCM 2000) methodology, overall average intersection delay and level of service are shown for intersections controlled by all-way stop and for intersections under the jurisdiction of Caltrans.

DKS

4.0 PROJECT BUILDOUT YEAR (2037) CONDITIONS

Project Buildout Year (2037) Without Project

Traffic Volumes

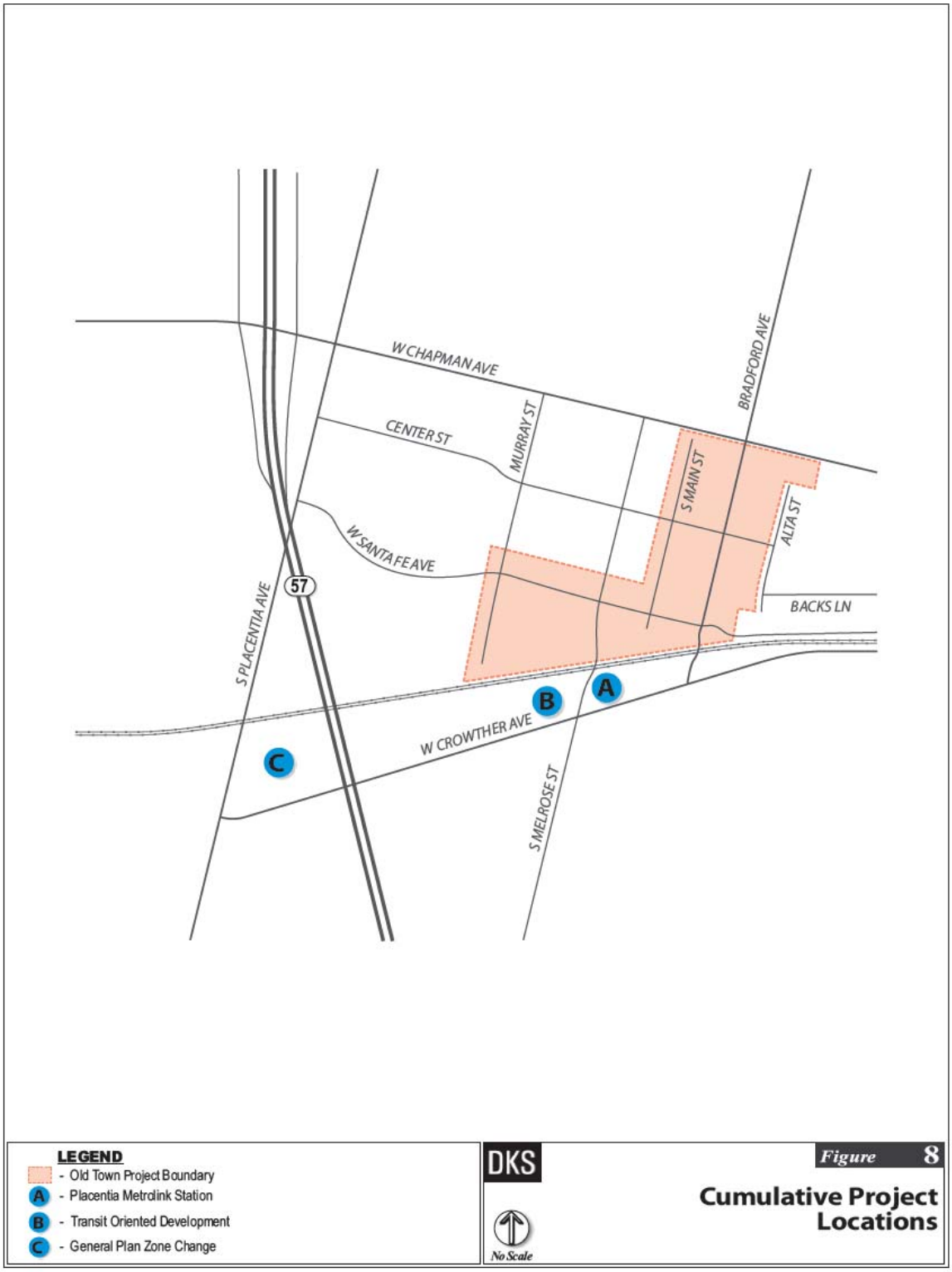
Future buildout traffic forecasts were developed in order to analyze the project traffic impacts during the buildout year of the project (2037). Based on discussions with the City staff, a 1% annual growth was added to the existing vehicular traffic volumes for a period of 20 years to determine the future 2037 traffic volumes at the study intersections. In addition, the City of Placentia provided a list and locations of cumulative projects to be used for the future 2037 analysis. Figure 8 illustrates the general location of these cumulative projects. The list of cumulative projects is presented in Table G.

Table G: List of Cumulative Projects

Cumulative Project	Description	Location
Placentia Metrolink Station	New Train Station	NEC of Melrose St/Crowther Ave
Transit Oriented Development (TOD)	752 Single-Family Residential Units	Melrose St/Crowther Ave Vicinity
General Plan Zoning Change	318,000 square feet of 'Industrial' to 'Commercial'	NEC of Placentia Ave/Crowther Ave

Cumulative volumes were developed and distributed to the roadway network. Trip generation estimates for the Placentia Metrolink Station and the TOD project were obtained from the *Traffic Impact Study for the Proposed Packing House Area Redevelopment* developed by Albert Grover & Associates (August 2016).

For the General Plan Zoning Change project, DKS developed traffic generation estimates for the eight (8) parcels located in the triangular area bound by Placentia Avenue, Crowther Avenue, and the SR-57 Freeway. The City proposes to change the zoning designation of the site from "Industrial" to "Commercial." The site is comprised of four (4) vacant parcels (119,000 sf), four (4) occupied parcels (63,780 sf), and additional site coverage (53,200 sf) totaling approximately 318,000 square feet.


W CHAPMAN AVE
BRADFORD AVE
CENTER ST
MURRAY ST
S MAIN ST
ALTA ST
W SANTA FE AVE
S PLACENTIA AVE
57
BACKS LN
A
B
C
W CROWTHER AVE
S MELROSE ST
LEGEND
- Old Town Project Boundary
A - Placentia Metrolink Station
B - Transit Oriented Development
C - General Plan Zone Change
DKS
No Scale
Figure 8
Cumulative Project Locations

DKS

Based on a methodology used in previous City of Placentia traffic studies, DKS estimated the net difference of trips as a result of the zoning change. In order to estimate the number of trips generated by the site assuming 100% industrial use without any vacant lots, DKS calculated the building coverage percentage of the existing four (4) occupied lots. Based on land use information provided by the City and an estimation of individual parcel square footage, DKS calculated that 46% of lot coverage is occupied by industrial building space and the remaining 54% is occupied by parking lots, landscaping, etc. As shown in Table H, the vacant lots are projected to occupy 54,740 sf of industrial use. Therefore, 118,520 sf of industrial use is estimated under the assumption of 100% occupancy.

Table H: General Plan Zoning Change – Industrial Use Estimates

Vacant Lot Address	Lot Size (sf)[1]	Average Building Coverage	Estimated Building Size (sf)
350 S. Placentia Ave.	6,000	46%	2,760
380 S. Placentia Ave.	78,000	46%	35,880
450 S. Placentia Ave.	18,000	46%	8,280
480 S. Placentia Ave.	17,000	46%	7,820
Projected Vacant Lot Occupancy			54,740
Total Existing Operation Use			63,780
Total Industrial Land Use			**118,520**

[1]Lot size estimations were based on Google Earth software aerials.

Similarly, DKS estimated the total square footage for 100% commercial use by surveying four (4) retail centers within a one (1) mile radius of the site. DKS chose these retail centers due to the variety of on-site land uses and due to their vicinity to project site. DKS considers this approach to be a reasonable basis on estimating building coverage for the proposed "Commercial" zoning designation. Based on lot coverage estimations of each individual retail center, DKS calculated that 29% of lot coverage is occupied by operational commercial building use. As shown in Table I, DKS assumed 92,220 sf of commercial use under the proposed "Commercial" zoning designation.

Table I: Commercial Use Building Coverage Estimates

Retail Center	Lot Size (sf)[1]	Building Coverage
Placentia Plaza (616 Chapman Avenue)	204,000	32%
Meadowbrook Plaza (629 Placentia Avenue)	97,000	29%
501 State College Boulevard Retail Center	83,700	25%
516 State College Boulevard Retail Center	367,000	30%
Average Building Coverage	-	29%
Project Site - 100% Commercial Use	**318,000 sf**	**92,220 sf (29%)**

[1]Lot size estimations were based on Google Earth software aerials.

DKS

As shown in Table J, the cumulative developments are projected to generate approximately 8,194 trip-ends per day, with 416 (105 inbound, 311 outbound) trips during the AM peak hour and 698 (388 inbound, 310 outbound) trips during the PM peak hour. Trip distribution details for the cumulative projects are included in Appendix E.

Table J: Cumulative Projects Trip Generation Summary

Cumulative Project	ITE Code	Size	Units[1]	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Placentia Metrolink Station	-	-	-	1,180	211	31	242	31	211	242
Transit Oriented Development (TOD)	220	752	DU	3,753	-65	259	194	261	60	321
Existing Zoning Designation – Industrial	110	118.520	TSF	-826	-96	-13	-109	-14	-101	-115
Proposed Zoning Designation – Commercial	826	92.220	TSF	4,087	55	34	89	110	140	250
Total Trips				**8,194**	**105**	**311**	**416**	**388**	**310**	**698**

ITE – Institute of Transportation Engineers
[1] DU = Dwelling Unit
TSF = Thousand Square Feet

Figure 9 shows the cumulative project volumes at study intersections. Figure 10 illustrates the Project Buildout Year (2037) Without Project AM and PM peak hour traffic volumes in the study area. Project Buildout Year (2037) traffic conditions include the existing peak hour intersection volumes plus the ambient growth rate (20 years at 1% growth per year) and cumulative traffic volumes.

Level of Service

The Project Buildout Year (2037) Without Project level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections. The LOS summary for intersections is shown in Table K. As shown, all intersections operate at LOS D or better. LOS calculation sheets are provided in Appendix E.

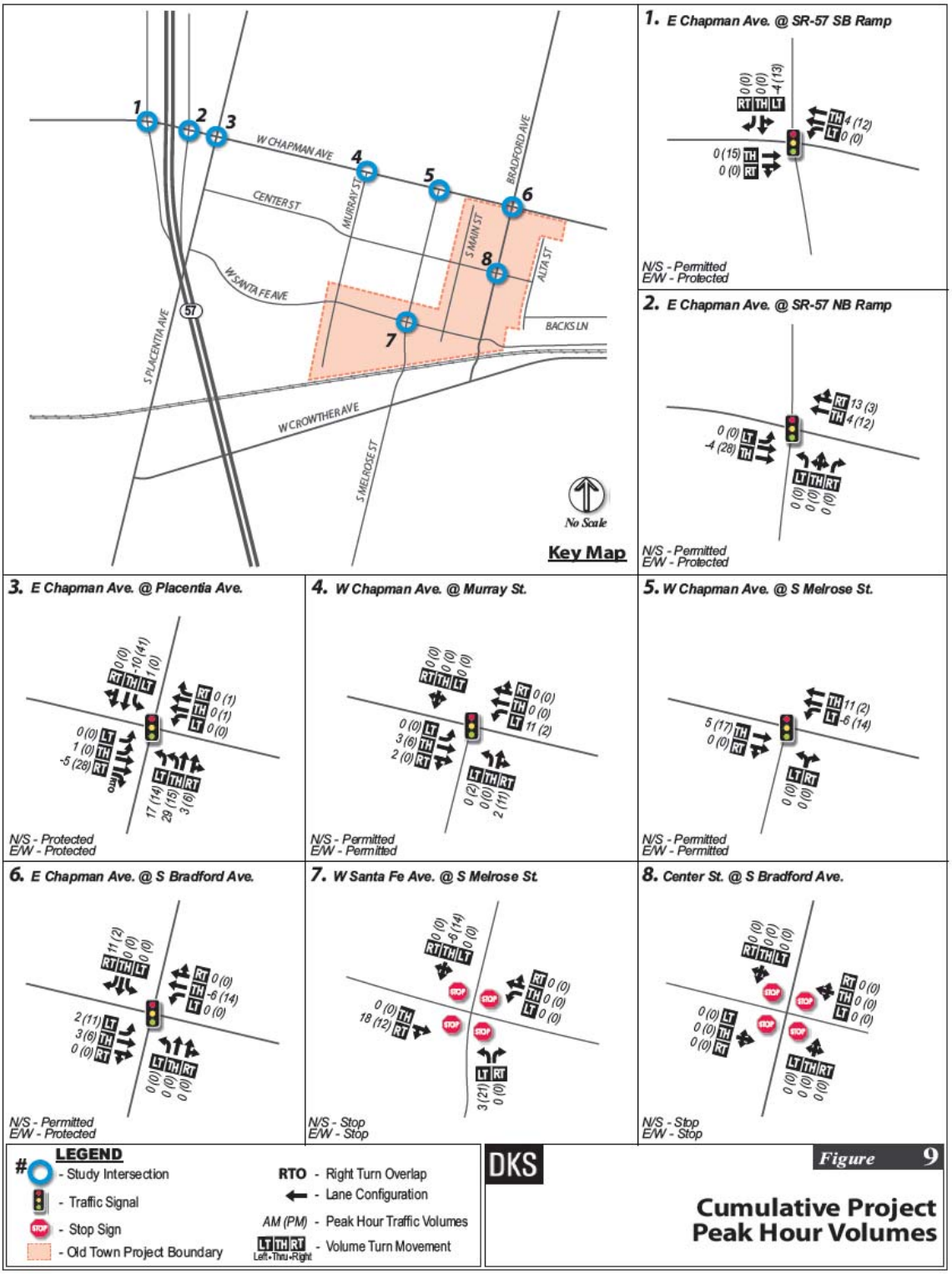


Figure 9

Cumulative Project Peak Hour Volumes

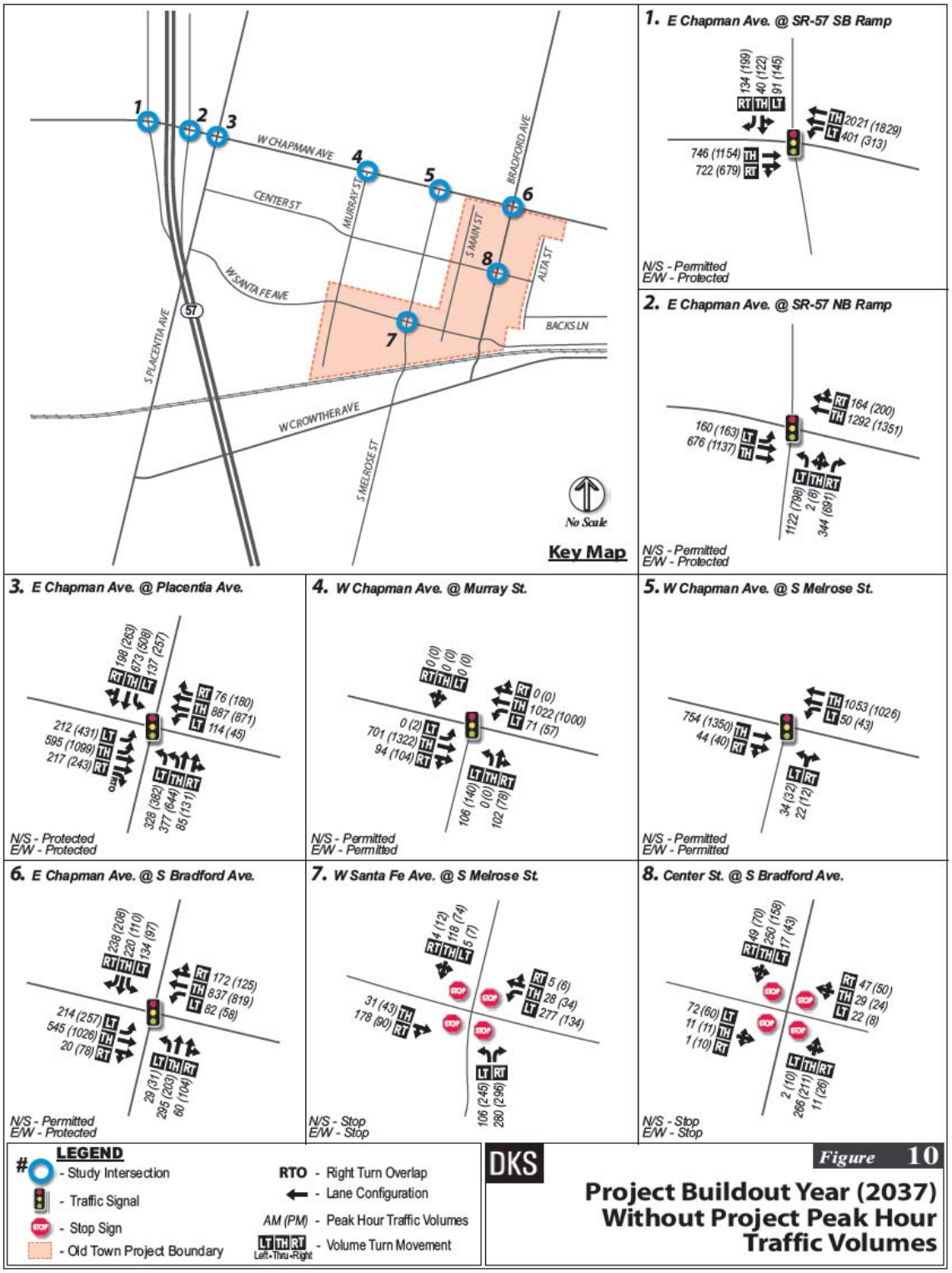


Figure **10**

Project Buildout Year (2037) Without Project Peak Hour Traffic Volumes

DKS

Table K: Project Buildout Year (2037) Without Project
Intersection Level of Service Summary

Intersection	AM Peak Hour		PM Peak Hour	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
Caltrans - Signalized				
Chapman Avenue/SR-57 Southbound Ramps	15.1	B	18.3	B
Chapman Avenue/SR-57 Northbound Ramps	39.1	D	40.8	D
City of Placentia - Signalized				
Chapman Avenue/Placentia Avenue	0.726	C	0.812	D
Chapman Avenue/Murray Street	0.413	A	0.586	A
Chapman Avenue/Melrose Street	0.392	A	0.510	A
Chapman Avenue/Bradford Avenue	0.656	B	0.626	B
City of Placentia – All-Way Stop Controlled				
Santa Fe Street/Melrose Street	13.1	B	11.3	B
Center Street/Bradford Avenue	10.3	B	9.4	A

[1]Analysis Software: Traffix, Version 8.0. Per the Intersection Capacity Utilization methodology, overall volume to capacity ratios and levels of service are shown for intersections controlled by traffic signals. Per the Highway Capacity Manual (HCM 2000) methodology, overall average intersection delay and level of service are shown for intersections controlled by all-way stop and for intersections under the jurisdiction of Caltrans.

DKS

Project Buildout Year (2037) With Project

Traffic Volumes

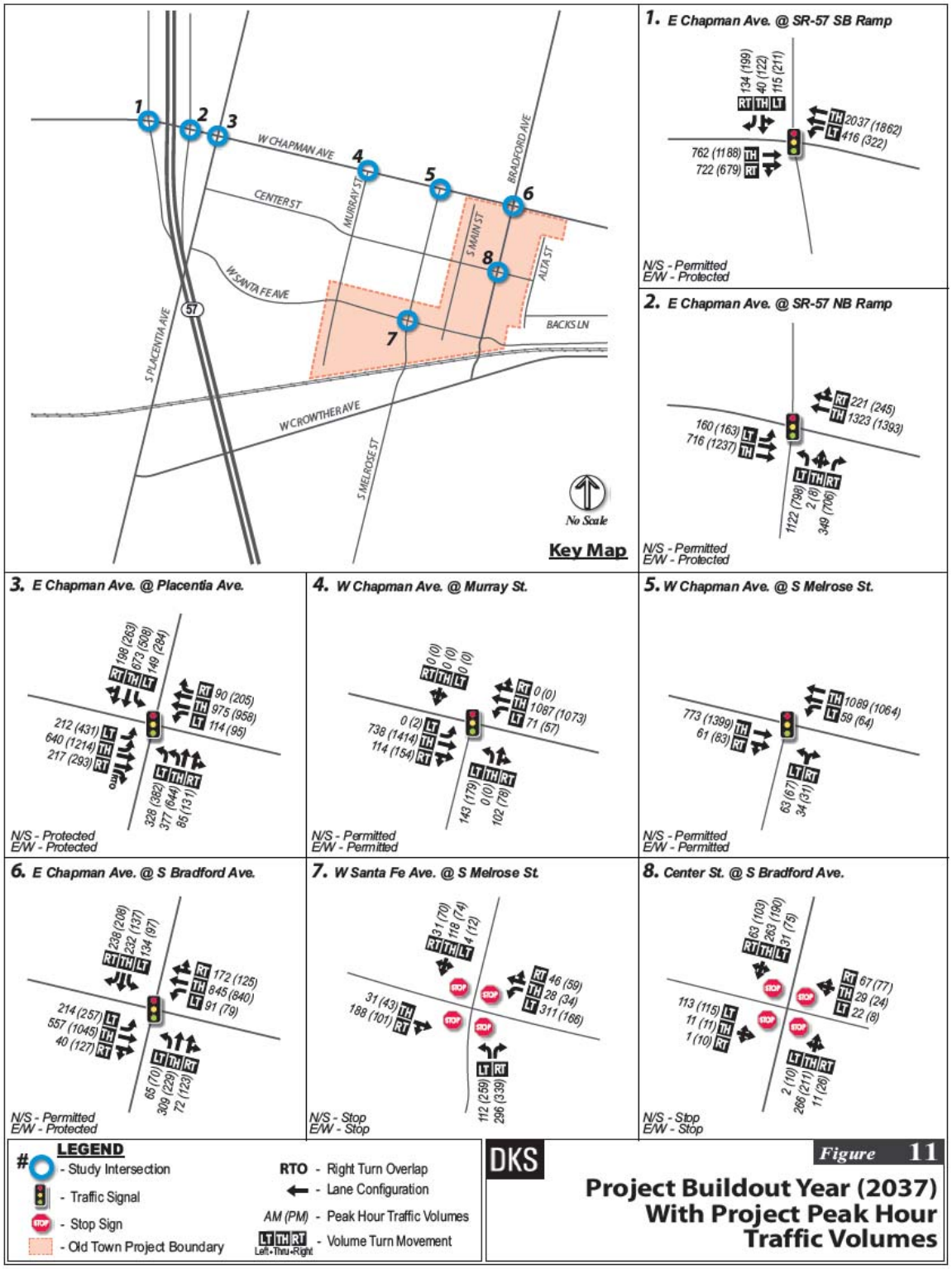
The trips generated from the project, as shown in Figure 6, were added to the Project Buildout Year (2037) Without Project traffic volumes shown in Figure 10, which results in the Project Buildout Year (2037) With Project traffic scenario. Figure 11 illustrates the Project Buildout Year (2037) With Project traffic volumes.

Level of Service

The Project Buildout Year (2037) With Project level of service has been evaluated at the study intersections based on the ICU methodology for signalized intersections and the 2000 HCM methodology for all-way stop controlled and Caltrans intersections. The LOS summary for intersections is shown in Table L. As shown, all intersections operate at LOS D or better. LOS calculation sheets are provided in Appendix F.

Significant Impact

Based on the threshold for significant impacts of the proposed project, the trips generated from the proposed project would not cause significant impact on any of the study intersections under Project Buildout Year (2037) Plus Project traffic conditions for both the AM and PM peak periods. Therefore, no mitigation measures are required on study intersections as part of the project.


1. E Chapman Ave. @ SR-57 SB Ramp
2. E Chapman Ave. @ SR-57 NB Ramp
3. E Chapman Ave. @ Placentia Ave.
4. W Chapman Ave. @ Murray St.
5. W Chapman Ave. @ S Melrose St.
6. E Chapman Ave. @ S Bradford Ave.
7. W Santa Fe Ave. @ S Melrose St.
8. Center St. @ S Bradford Ave.
W CHAPMAN AVE
CENTER ST
W SANTA FE AVE
W CROWTHER AVE
S PLACENTIA AVE
MURRAY ST
S MAIN ST
BRADFORD AVE
ALTA ST
BACKS LN
S MELROSE ST
57
No Scale
Key Map
N/S - Permitted
E/W - Protected
N/S - Protected
E/W - Protected
N/S - Permitted
E/W - Permitted
N/S - Stop
E/W - Stop
LEGEND
- Study Intersection
- Traffic Signal
- Stop Sign
- Old Town Project Boundary
RTO - Right Turn Overlap
- Lane Configuration
AM (PM) - Peak Hour Traffic Volumes
- Volume Turn Movement
Left-Thru-Right
DKS
Figure 11
Project Buildout Year (2037)
With Project Peak Hour
Traffic Volumes

DKS

Table L: Project Buildout Year (2037) With Project Intersection Level of Service Summary

Intersection	Year 2037 Without Project				Year 2037 With Project				Difference		Project Impact
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak	PM Peak	
	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	V/C or Delay (sec.)	
Caltrans - Signalized											
Chapman Ave/ SR-57 SB Ramp	15.1	B	18.3	B	16.1	B	21.0	C	1.0	2.7	NO
Chapman Ave/ SR-57 NB Ramp	39.1	D	40.8	D	43.1	D	45.2	D	4.0	4.4	NO
City of Placentia - Signalized											
Chapman Ave/ Placentia Ave	0.726	C	0.812	D	0.752	C	0.858	D	0.026	0.046	NO
Chapman Ave/ Murray St	0.413	A	0.586	A	0.454	A	0.650	B	0.041	0.064	NO
Chapman Ave/ Melrose St	0.392	A	0.510	A	0.427	A	0.581	A	0.035	0.071	NO
Chapman Ave/ Bradford Ave	0.656	B	0.626	B	0.666	B	0.646	B	0.010	0.020	NO
City of Placentia – All-Way Stop Controlled											
Santa Fe Ave/ Melrose St	13.1	B	11.3	B	14.7	B	12.9	B	1.6	1.6	NO
Center St/ Bradford Ave	10.3	B	9.4	A	11.2	B	11.0	B	0.9	1.6	NO

[1]Analysis Software: Traffix, Version 8.0. Per the Intersection Capacity Utilization methodology, overall volume to capacity ratios and levels of service are shown for intersections controlled by traffic signals. Per the Highway Capacity Manual (HCM 2000) methodology, overall average intersection delay and level of service are shown for intersections controlled by all-way stop and for intersections under the jurisdiction of Caltrans.

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5.0 CONCLUSION

Based on the results of the analysis, the proposed project generated trips would not cause significant impact at any of the study intersections for both Existing (2017) Plus Project and Project Buildout (Year 2037) With Project traffic conditions during the AM and PM peak periods. Therefore, no mitigation measures are required at any study intersection as a part of the proposed project.

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APPENDIX C
UTILITIES WORKSHEETS

INTRODUCTION TO UTILITY SCREENING TABLES

The following worksheets are used to evaluated the potential impacts of a project.

Table 1 Definition of Project

This Table is used to establish the proposed development parameters that are used the calculation of utilities usage. The independent variable to be entered is identified by shading. For residential development, the number of housing units should be entered in the shaded area. For non-residential development, the total floor area of development should be entered in the shaded area.

Tables 2 Summary of Project Impacts

Consumption/Generation Rates. This table indicates the development's projected electrical consumption, natural gas consumption, water consumption, effluent generation, and solid waste generation. No modifications should be made to this table.

Tables 3 through 7 Calculation of Project Impacts

Tables 3 through 7 indicate the results of the analysis.

Table 3 Electrical Consumption - This Table calculates the projected electrical consumption for new development. Default generation rates provided in the shaded areas may be changed.

Table 4 Natural Gas Consumption - This Table calculates the projected natural gas useagefor new development. Default generation rates provided in the shaded areas may be changed.

Table 5 Water Consumption - This Table calculates the projected water consumption ratesfor new development. Default generation rates provided in the shaded areas may be changed.

Table 6 Sewage Generation - This Table calculates the projected effluent generation rates for new development. Default generation rates provided in the shaded areas may be changed.

Table 7 Solid Waste Generation - This Table calculates the projected waste generation for new development. Default generation rates provided in the shaded areas may be changed.

Table 1 Project Name: Old Town Placentia Revitalization

Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development).

Land Use	Independent	Factor
Residential Uses	**Variable**	**Total Units**
Single-Family Residential	No. of Units	0
Medium Density Residential	No. of Units	0
Multiple-Family Residential	No. of Units	525
Mobile Home	No. of Units	0
Office Uses	**Variable**	**Total Floor Area**
Office	Sq. Ft.	0
Medical Office Building	Sq. Ft.	0
Office Park	Sq. Ft.	0
Bank/Financial Services	Sq. Ft.	0
Commercial Uses	**Variable**	**Floor Area/Rooms**
Specialty Retail Commercial	Sq. Ft.	0
Convenience Store	Sq. Ft.	0
Movie Theater	Sq. Ft.	0
Shopping Center	Sq. Ft.	125,000
Sit-Down Restaurant	Sq. Ft.	0
Fast-Food Restaurant	Sq. Ft.	0
Hotel	Rooms	50
Manufacturing Uses	**Variable**	**Total Floor Area**
Industrial Park	Sq. Ft.	0
Manufacturing	Sq. Ft.	0
General Light Industry	Sq. Ft.	0
Warehouse	Sq. Ft.	0
Public/Institutional	**Variable**	**Total Floor Area**
Public/Institutional	Sq. Ft.	0
Open Space	Sq. Ft.	0

Table 2: Projected Utility Consumption and Generation

Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table.

Utilities Consumption and Generation	Factor	Rates
Electrical Consumption	kWh/day	21,612
Natural Gas Consumption	cubic feet/day	6,763
Water Consumption	gallons/day	124,125
Sewage Generation	gallons/day	78,350
Solid Waste Generation	pounds/day	2,850

Table 3: Electrical Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**kWh**	**Variable**	**kWh/Unit/Day**
Single-Family Residential	0	5,625.00	kWh/Unit/Year	0.0
Medium Density Residential	0	5,625.00	kWh/Unit/Year	0.0
Multiple-Family Residential	525	5,625.00	kWh/Unit/Year	8,090.8
Mobile Home	0	4,644.00	kWh/Unit/Year	0.0
Office Uses	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Office	0	20.80	kWh/Sq. Ft./Year	0.0
Medical Office Building	0	14.20	kWh/Sq. Ft./Year	0.0
Office Park	0	20.80	kWh/Sq. Ft./Year	0.0
Bank/Financial Services	0	20.80	kWh/Sq. Ft./Year	0.0
Commercial Uses	**Sq. Ft./Rooms**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Specialty Retail Commercial	0	16.00	kWh/Sq. Ft./Year	0.0
Convenience Store	0	16.00	kWh/Sq. Ft./Year	0.0
Movie Theater	0	16.00	kWh/Sq. Ft./Year	0.0
Shopping Center	125,000	35.90	kWh/Sq. Ft./Year	12,295
Sit-Down Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Fast-Food Restaurant	0	49.10	kWh/Sq. Ft./Year	0.0
Hotel	50	8,955.00	kWh/Sq. Ft./Year	1,226.7
Manufacturing Uses	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Industrial Park	0	4.80	kWh/Sq. Ft./Year	0.0
Manufacturing	0	4.80	kWh/Sq. Ft./Year	0.0
General Light Industry	0	4.80	kWh/Sq. Ft./Year	0.0
Warehouse	0	4.80	kWh/Sq. Ft./Year	0.0
Public/Institutional	**Sq. Ft.**	**kWh**	**Variable**	**kWh/Sq. Ft./Day**
Public/Institutional	0	4.80	kWh/Sq. Ft./Year	0.0
Open Space	0	0.00	kWh/Sq. Ft./Year	0.0
Total Daily Electrical Consumption (kWh/day)				21,612.0

Sources:
Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993).
All other rates are from Common Forecasting Methodology VII Demand Forms, 1989

Table 4: Natural Gas Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Single-Family Residential	0	6,665.00	Cu. Ft./Mo./Unit	0.0
Medium Density Residential	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Multiple-Family Residential	525	4,011.50	Cu. Ft./Mo./Unit	5,770.0
Mobile Home	0	4,011.50	Cu. Ft./Mo./Unit	0.0
Office Uses	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Office	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Medical Office Building	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Office Park	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Bank/Financial Services	0	2.00	Cu. Ft./Mo./Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Rooms**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Specialty Retail Commercial	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Convenience Store	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Movie Theater	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Shopping Center	125,000	2.90	Cu. Ft./Mo./Sq. Ft.	993.2
Sit-Down Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Fast-Food Restaurant	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Hotel	50		Cu. Ft./Mo./Room	0.0
Manufacturing Uses	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Industrial Park	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Manufacturing	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
General Light Industry	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Warehouse	0	4.70	Cu. Ft./Mo./Sq. Ft.	0.0
Public/Institutional Use	**Sq. Ft.**	**Cu. Ft. of Nat. Gas**	**Variable**	**Cu. Ft./Day**
Public/Institutional	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Open Space	0	2.90	Cu. Ft./Mo./Sq. Ft.	0.0
Total Daily Natural Gas Consumption (cubic feet/day)				6,763.1

Sources:
South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993

Table 5: Water Consumption

Project Component	Units of Measure	Consumption Factor		Projected Consumption
Residential Uses	**No. of Units**	**Gals. of Water**	**Variable**	**Gals./Day**
Single-Family Residential	0	250.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	525	200.00	Gals./Day/Unit	105,000.0
Mobile Home	0	200.00	Gals./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Gals. of Water**	**Variable**	**Gals./Day**
Office	0	0.14	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.14	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.14	Gals./Day/Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Room**	**Gals. of Water**	**Variable**	**Gals./Day**
Specialty Retail Commercial	0	0.10	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.10	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.10	Gals./Day/Sq. Ft.	0.0
Shopping Center	125,000	0.10	Gals./Day/Sq. Ft.	12,625.0
Sit-Down Restaurant	0	0.40	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	0	0.11	Gals./Day/Sq. Ft.	0.0
Hotel	50	130.00	Gals./Day/Room.	6,500.0
Manufacturing Uses	**Sq. Ft.**	**Gals. of Water**	**Variable**	**Gals./Day**
Industrial Park	0	0.14	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.14	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.14	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.01	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	**Sq. Ft.**	**Gals. of Water**	**Variable**	**Gals./Day**
Public/Institutional	0	0.10	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.10	Gals./Day/Sq. Ft.	0.0
Total Daily Water Consumption (gallons/day)				124,125.0

Sources:

Source: Derived from Orange County Sanitation District rates (150% of effluent generation).

Table 6: Sewage Generation

Project Component	Units of Measure	Generation Factor		Projected Consumption
Residential Uses	**No. of Units**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Single-Family Residential	0	230.00	Gals./Day/Unit	0.0
Medium Density Residential	0	200.00	Gals./Day/Unit	0.0
Multiple-Family Residential	525	120.00	Gals./Day/Unit	63,000.0
Mobile Home	0	180.00	Gals./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Office	0	0.11	Gals./Day/Sq. Ft.	0.0
Medical Office Building	0	0.11	Gals./Day/Sq. Ft.	0.0
Office Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Bank/Financial Services	0	0.11	Gals./Day/Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Rooms**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Specialty Retail Commercial	0	0.08	Gals./Day/Sq. Ft.	0.0
Convenience Store	0	0.08	Gals./Day/Sq. Ft.	0.0
Movie Theater	0	0.08	Gals./Day/Sq. Ft.	0.0
Shopping Center	125,000	0.08	Gals./Day/Sq. Ft.	10,100.0
Sit-Down Restaurant	0	0.30	Gals./Day/Sq. Ft.	0.0
Fast-Food Restaurant	0	0.08	Gals./Day/Sq. Ft.	0.0
Hotel	50	105	Gals./Day/Room.	5,250.0
Manufacturing Uses	**Sq. Ft.**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Industrial Park	0	0.11	Gals./Day/Sq. Ft.	0.0
Manufacturing	0	0.11	Gals./Day/Sq. Ft.	0.0
General Light Industry	0	0.11	Gals./Day/Sq. Ft.	0.0
Warehouse	0	0.01	Gals./Day/Sq. Ft.	0.0
Public/Institutional Use	**Sq. Ft.**	**Gals. of Effluent**	**Variable**	**Gals./Day**
Public/Institutional	0	0.08	Gals./Day/Sq. Ft.	0.0
Open Space	0	0.08	Gals./Day/Sq. Ft.	0.0
Total Daily Sewage Generation (gallons/day)				78,350.0

Source: Orange County Sanitation Districts.

Table 7: Solid Waste Generation

Project Component	Units of Measure	Generation Factor		Projected Generation
Residential Uses	**No. of Units**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Single-Family Residential	0	4.00	Lbs./Day/Unit	0.0
Medium Density Residential	0	4.00	Lbs./Day/Unit	0.0
Multiple-Family Residential	525	4.00	Lbs./Day/Unit	2,100.0
Mobile Home	0	4.00	Lbs./Day/Unit	0.0
Office Uses	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Office	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Medical Office Building	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Office Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Bank/Financial Services	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Commercial Uses	**Sq. Ft./Rooms**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Specialty Retail Commercial	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Convenience Store	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Movie Theater	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Shopping Center	125,000	6.00	Lbs./Day/1,000 Sq. Ft.	750.0
Sit-Down Restaurant	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Fast-Food Restaurant	0	42.00	Lbs./Day/1,000 Sq. Ft.	0.0
Hotel	50		Lbs./Day/Room	0.0
Manufacturing Uses	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Industrial Park	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Manufacturing	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
General Light Industry	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Warehouse	0	6.00	Lbs./Day/1,000 Sq. Ft.	0.0
Public/Institutional Use	**Sq. Ft.**	**Lbs.of Waste**	**Variable**	**Lbs./Day**
Public/Institutional	0	4.00	Lbs./Day/1,000 Sq. Ft.	0.0
Open Space	0	3.00	Lbs./Day/1,000 Sq. Ft.	0.0
Total Daily Solid Waste Generation				2,850.0

Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981